Southern DHB Board Meeting

Board Room, Level 2, Main Block,Wakari Hospital Campus, Dunedin

08/04/2021 09:30 AM - 12:30 PM

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APOLOGIES

No apologies had been received at the time of going to print.

FOR INFORMATION/NOTING

Item: **Interests Registers**

Proposed by: Jeanette Kloosterman, Board Secretary

Meeting of: Board, 8 April 2021

Recommendation

That the Board receive and note the Interests Registers.

Purpose

To disclose and manage interests as per statutory requirements and good practice.

Changes to Interests Registers over the last month:

- David Perez – removed from register

Background

Board, Committee and Executive Team members are required to declare any potential conflicts (pecuniary or non-pecuniary) and agree how these will be managed. A member who makes a disclosure must not take part in any decision relating to their declared interest.

Interest declarations, and how they are to be managed, are required to be recorded in the minutes and separate interests register (s36, Schedule 3, NZ Public Health and Disability Act 2000).

Appendice

- Board and Executive Leadership Team Interests Registers

SOUTHERN DISTRICT HEALTH BOARD
INTERESTS REGISTER

Member	Date of Entry	Interest Disclosed	Nature of Potential Interest with Southern DHB	Management Approach
Pete Hodgson (Board Chair)	22.12.2020	Trustee, Koputai Lodge Trust (unpaid)	Mental Health Provider	
	22.12.2020	Chair, Callaghan Innovation Board (paid)		
	22.12.2020	Chair, Local Advisory Group, New Dunedin Hospital		
	22.12.2020	Member, Steering Group, New Dunedin Hospital		
	22.12.2020	Board Member, Otago Innovation Ltd (paid)		
	25.02.2021	Board Member, Quitta Ltd (unpaid)	Nicotine replacement therapy under development.	
Ilka Beekhuis	09.12.2019	Patient Advisor, Primary Birthing FiT Group for Dunedin Hospital Rebuild		
	09.12.2019	Member, Otago Property Investors Association		
	09.12.2019	~~Secretary~~, Member, Spokes Dunedin (cycling advocacy group)		Updated 22.10.2020
	15.01.2019	Paid member, Green Party		
	15.01.2019	Former employee of University of Otago (April 2012-February 2020)		
	07.07.2020	Trustee, HealthCare Otago Charitable Trust		
	12.09.2020	Co-Director, OffTrack MTB Ltd	No conflict (Husband's bike tourism company).	
John Chambers	09.12.2019	Employed as an Emergency Medicine Specialist, Dunedin Hospital		
	09.12.2019	Employed as Honorary Senior Clinical Lecturer, Dunedin School of Medicine	Possible conflicts between SDHB and University interests.	
	09.12.2019	Elected Vice President, Otago Branch, Association of Salaried Medical Specialists	Union (ASMS) role involves representing members (salaried senior doctors and dentists employed in the Otago region including by SDHB) on matters concerning their employment and, at a national level, contributing to strategies to assist the recruitment and retention of specialists in New Zealand public hospitals.	
	09.12.2019	Wife is employed as Co-ordinator, National Immunisation Register for Southern DHB		
	09.12.2019	Daughter is employed as MRT, Dunedin Hospital		
Kaye Crowther	09.12.2019	Life Member, Plunket Trust	Nil	
	09.12.2019	Trustee, No 10 Youth One Stop Shop	Possible conflict with funding requests.	
	09.12.2019	Employee, Findex NZ		
	14.01.2020	Trustee, Director/Secretary, Rotary Club of Invercargill South and Charitable Trust		

SOUTHERN DISTRICT HEALTH BOARD
INTERESTS REGISTER

Member	Date of Entry	Interest Disclosed	Nature of Potential Interest with Southern DHB	Management Approach
	14.01.2020	Member, National Council of Women, Southland Branch		
	07.10.2020	Trustee, Southern Health Welfare Trust	Trust for Southland employees - owns holiday homes and makes educational grants.	
Lyndell Kelly	09.12.2019	Employed as Specialist, Radiation Oncology, Southern DHB	Involved in Oncology job size and service size exercise and may be involved in employment contract negotiations with Southern DHB.	
	18.01.2020	Honorary Senior Lecturer, Otago University School of Medicine		
	18.01.2020	Daughter is Medical Student at Dunedin Hospital		
Terry King	28.01.2020	Member, Grey Power Southland Association Inc Executive Committee		
	28.01.2020	Life Member, Grey Power NZ Federation Inc		
	28.01.2020	Member, Southland Iwi Community Panel	ICP is a community-led alternative to court for low-level offenders. The service is provided by Nga Kete Matauranga Pounamu Charitable Trust in partnership with police, local iwi and the wider community.	
	14.02.2020	Receive personal treatment from SDHB clinicians and allied health.		
	03.04.2020	Client, Royal District Nursing Service NZ Ltd		
	12.01.2021	Nga Kete Matauranga Pounamu Trust Board Member		
Jean O'Callaghan	~~13.05.2019~~	~~Employee of Geneva Health~~	~~Provides care in the community; supports one long term client but has no financial or management input.~~	Resigned, effective August 2020
	13.05.2019	St John Volunteer, Lakes District Hospital	No involvement in any decision making.	~~Taking six months' leave.~~ Recommencing 22.08.2020.
Tuari Potiki	09.12.2019	Employee, University of Otago		
	09.12.2019	~~Chair, NZ Drug Foundation~~	(Chair role ended 04.12.2020)	
	09.12.2019	Chair, Te Rūnaka Otākou Ltd* (also A3 Kaitiaki Limited which is listed as 100% owned by Te Rūnaka Ōtākou Ltd)	Nil does not contract in health.	Updated to include A3 Kaitiaki Limited on 19 October 2020.
	09.12.2019	Member, Independent Whānau Ora Reference Group		
	~~08.09.2020~~	~~Member, District Licensing Committee, Dunedin City Council (1 September 2020 to 31 May 2023)~~		Resigned 06.11.2020
	09.12.2019	*Shareholder in Te Kaika		
Lesley Soper	09.12.2019	Elected Member, Invercargill City Council		
	09.12.2019	Board Member, Southland Warm Homes Trust		
	09.12.2019	Employee, Southland ACC Advocacy Trust		
	16.01.2020	Chair, Breathing Space Southland (Emergency Housing)		
	16.01.2020	Trust Secretary/Treasurer, Omaui Tracks Trust		
	19.03.2020	Niece, Civil Engineer, Holmes Consulting	Holmes Consulting may do some work on new Dunedin Hospital.	
	21.07.2020	Trustee, Food Rescue Trust		
	21.07.2020	Shareholder 1%, Piermont Holdings Ltd	Coporate Body for apartment, Wellington	

SOUTHERN DISTRICT HEALTH BOARD
INTERESTS REGISTER

Member	Date of Entry	Interest Disclosed	Nature of Potential Interest with Southern DHB	Management Approach
Moana Theodore	15.01.2019	Employee, University of Otago		
	15.01.2019	Co-director, National Centre for Lifecourse Research, University of Otago		
	15.01.2019	Member, Royal Society Te Apārangi Council		
	15.01.2019	~~Sister-in-law, Employee of SDHB (Clinical Nurse Specialist Acute Mental Health)~~	Removed 07/09/2020	
	15.01.2019	Shareholder, RST Ventures Limited		
	27.04.2020	Nephew, Casual Mental Health Assistant, Southern DHB (Wakari)		
	17.08.2020	Health Research Council Fellow		
Roger Jarrold (Crown Monitor)	16.01.2020 (Updated 28.01.2021)	~~CFO,~~ Advisor to Fletcher Construction Company Limited	Have had interaction with CEO of Warren and Mahoney, head designers for ICU upgrade.	
	16.01.2020 (Updated 28.01.2021)	~~Member~~, Chair, Audit and Risk Committee, Health Research Council		
	16.01.2020	Trustee, Auckland District Health Board A+ Charitable Trust		
	16.01.2020	Former Member of Ministry of Health Audit Committee and Capital & Coast District Health Board		
	23.01.2020	Nephew - Partner, Deloitte, Christchurch		
	16.08.2020	Son - Auditor, PwC, Auckland	PwC periodically undertake work for SDHB, eg valuations	

SOUTHERN DISTRICT HEALTH BOARD
INTERESTS REGISTER
EXECUTIVE LEADERSHIP TEAM

Management of staff conflicts of interest is covered by SDHB's Conflict of Interest Policy and Guidelines.

Employee Name	Date of Entry	Interest Disclosed	Nature of Potential Interest with Southern District Health Board
Hamish BROWN	22.09.2020	Nil	
Kaye CHEETHAM	~~08.07.2019~~	~~Ministry of Health Appointed Member of the Occupational Therapy Board~~	(05/08/2020 - Stood down from the Occupational Therapy Board)
Mike COLLINS	15.09.2016	Wife, NICU Nurse	
	01.07.2019	Capable NZ Assessor	Asked from time to time to assess students, bachelor and masters students final presentation for Capable NZ.
	21.05.2020	Director, New Zealand Institute of Skills and Technology	
	20.11.2020	Chair, South Island CIOs	
Matapura ELLISON	12.02.2018	Director, Otākou Health Ltd	Possible conflict when contracts with Southern DHB come up for renewal.
	12.02.2018	Director Otākou Healther Services Ltd	
	12.02.2018	Deputy Kaiwhakahaere, Te Rūnanga o Ngai Tahu	Nil
	12.02.2018	Chairperson, Kati Huirapa Rūnaka ki Puketeraki (Note: Kāti Huirapa Rūnaka ki Puketeraki Inc owns Pūketeraki Ltd - 100% share).	Nil
	12.02.2018	Trustee, Araiteuru Kokiri Trust	Nil
	12.02.2018	National Māori Equity Group (National Screening Unit)	
	12.02.2018	SDHB Child and Youth Health Service Level Alliance Team	
	12.02.2018	Otago Museum Māori Advisory Committee	Nil
	12.02.2018	Trustee, Section 20, BLK 12 Church & Hall Trust	Nil
	12.02.2018	Trustee, Waikouaiti Maori Foreshore Reserve Trust	Nil
	29.05.2018	Director & Shareholder (jointly held) - Arai Te Uru Whare Hauora Ltd	Possible conflict when contracts with Southern DHB come up for renewal.
Chris FLEMING	25.09.2016	Lead Chief Executive for Health of Older People, both nationally and for the South Island	
	25.09.2016	Chair, South Island Alliance Leadership Team	
	25.09.2016	Lead Chief Executive South Island Palliative Care Workstream	
	~~25.09.2016~~	~~Deputy Chair, InterRAI NZ~~	Removed 23.09.2020
	10.02.2017	Director, South Island Shared Service Agency	Shelf company owned by South Island DHBs

SOUTHERN DISTRICT HEALTH BOARD
INTERESTS REGISTER
EXECUTIVE LEADERSHIP TEAM

Employee Name	Date of Entry	Interest Disclosed	Nature of Potential Interest with Southern District Health Board
	10.02.2017	Director & Shareholder, Carlisle Hobson Properties Ltd	Nil
	26.10.2017	Nephew, Tax Advisor, Treasury	
	18.12.2017	Ex-officio Member, Southern Partnership Group	
	30.01.2018	CostPro (costing tool)	Developer is a personal friend.
	30.01.2018	Francis Group	Sister is a consultant with the Francis Group.
	20.02.2020	Member, Otago Aero Club	Shares space with rescue helicopter.
	23.09.2020	Arvida Group (aged residential care provider)	Sister works for Arvida Group (North Island only)
Lisa GESTRO	06.06.2018	Lead GM National Travel and Accommodation Programme	This group works on behalf of all DHBs nationally and may not align with SDHB on occasions.
	04.04.2019	NASO Governance Group Member	This group works on behalf of all DHBs nationally and may not align with SDHB on occasions.
	04.04.2019	Lead GM Perinatal Pathology	This group works on behalf of all DHBs nationally and may not align with SDHB on occasions.
Nigel MILLAR	04.07.2016	Member of South Island IS Alliance group	This group works on behalf of all the SI DHBs and may not align with the SDHB on occasions.
	04.07.2016	Fellow of the Royal Australasian College of Physicians	Obligations to the College may conflict on occasion where the college for example reviews training in services.
	04.07.2016	Fellow of the Royal Australasian College of Medical Administrators	Obligations to the College may conflict on occasion where the college for example reviews training in services.
	04.07.2016	NZ InterRAI Fellow	InterRAI supplies the protocols for aged care assessment in SDHB via a licence with the MoH.
	04.07.2016	Son - employed by Orion Health	Orion Health supplies Health Connect South.
	29.05.2018	Council Member of Otago Medical Research Foundation Incorporated	
	12.12.2019	Daughter employed by Harrison-Grierson	A NZ construction and civil engineering consultancy - may be involved in tenders for DHB or new Dunedin Hospital rebuild work

SOUTHERN DISTRICT HEALTH BOARD
INTERESTS REGISTER
EXECUTIVE LEADERSHIP TEAM

Employee Name	Date of Entry	Interest Disclosed	Nature of Potential Interest with Southern District Health Board
Nicola MUTCH		Chair, Dunedin Fringe Trust	Nil
	02.04.2019	Husband - Registrar and Secretary to the Council, Vice-Chancellor's Advisory Group, University of Otago	Possible conflict relating to matters of policies, partnership or governance with the University of Otago.
Patrick NG	17.11.2017	Member, SI IS SLA	Nil
	~~17.11.2017~~	~~Wife works for key technology supplier CCL~~	~~Nil~~
	~~18.12.2017~~	~~Daughter, medical student at Auckland University.~~	
	27.01.2021	Daughter, is a junior doctor in Auckland and is involved in orthopedic and general surgery research and occasionally publishes papers	
	23.07.2020	Wife, Chief Data Architect, Inde Technology	
Julie RICKMAN	31.10.2017	Director, JER Limited	Nil, own consulting company
	31.10.2017	Director, Joyce & Mervyn Leach Trust Trustee Company Limited	Nil, Trustee
	31.10.2017	Trustee, The Julie Rickman Trust	Nil, own trust
	31.10.2017	Trustee, M R & S L Burnell Trust	Nil, sister's family trust
	23.10.2018	Shareholder and Director, Barr Burgess & Stewart Limited	Accounting services
	04.08.2020	Shareholder and Director, Inversionne Limited	Nil, clothing wholesaler.
		Specified contractor for JER Limited in respect of:	
	31.10.2017	H G Leach Company Limited to termination	Nil, Quarry and Contracting.
	21.10.2019	Member, Chartered Accountants Advisory Group	
	28.01.2021	Member, National FPIM Governance Board	
	28.01.2021	South Island representative on Banking and Insurance Special Project Group	
Gilbert TAURUA	05.12.2018	Prostate Cancer Outcomes Registry (New Zealand) - Steering Committee	Nil
	05.04.2019	South Island HepC Steering Group	Nil
	03.05.2019	Member of WellSouth's Senior Management Team	Reports to Chief Executives of SDHB and WellSouth.
	21.12.2020	Te Whare Tukutuku	Te Whare Tukutuku is sponsored by the NZ Drug Foundation and Te Rau Ora. Programme is designed to increase education and awareness on Maori illicit drug use to primary care and in Maori communities funded by MoH Workforce NZ.

SOUTHERN DISTRICT HEALTH BOARD
INTERESTS REGISTER
EXECUTIVE LEADERSHIP TEAM

Employee Name	Date of Entry	Interest Disclosed	Nature of Potential Interest with Southern District Health Board
Gail THOMSON	19.10.2018	Member Chartered Management Institute UK	Nil
	22.11.2019	Deputy Chair Otago Civil Defence Emergency Management Group, Coordinating Executive Group	
Jane WILSON	16.08.2017	Member of New Zealand Nurses Organisation (NZNO)	No perceived conflict. Member for the purposes of indemnity cover.
	16.08.2017	Member of College of Nurses Aotearoa (NZ) Inc.	Professional membership.
	16.08.2017	Husband - Consultant Radiologist employed fulltime by Southern DHB and currently Clinical Leader Radiology, Otago site.	Possible conflict with any negotiations regarding new or existing radiology service contracts. Possible conflict between Southern DHB and SMO employment issues.
	16.08.2017	Member National Lead Directors of Nursing and Nurse Executives of New Zealand.	Nil
Greer HARPER	24.08.2020	Paul Harper (father) is the current Chair of HealthSource NZ which is owned by the four northern DHBs.	

Minutes of the Southern District Health Board Meeting

Tuesday, 2 March 2021, 9.30 am
Board Room, Southland Hospital Campus, Invercargill

Present:	Mr Pete Hodgson	Chair
	Ms Ilka Beekhuis	
	Dr John Chambers	
	Mrs Kaye Crowther	
	Dr Lyndell Kelly	
	Mr Terry King	
	Mrs Jean O'Callaghan	
	Mr Tuari Potiki	
	Miss Lesley Soper	
	Dr Moana Theodore	
In Attendance:	Mr Roger Jarrold	Crown Monitor
	Mr Chris Fleming	Chief Executive Officer
	Mr Mike Collins	Executive Director People, Culture and Technology
	Ms Kaye Cheetham	Chief Allied Health, Scientific and Technical Officer *(by Zoom)*
	Mrs Lisa Gestro	Executive Director Strategy, Primary and Community
	Dr Nigel Millar	Chief Medical Officer
	Dr Nicola Mutch	Executive Director Communications *(by Zoom)*
	Mr Patrick Ng	Executive Director Specialist Services
	Ms Julie Rickman	Executive Director Finance, Procurement and Facilities
	Mr Gilbert Taurua	Chief Māori Health Strategy and Improvement Officer
	Mrs Jane Wilson	Chief Nursing and Midwifery Officer
	Ms Jeanette Kloosterman	Board Secretary

1.0 KARAKIA AND WELCOME

The Chair welcomed everyone, and the meeting was opened with a karakia.

2.0 APOLOGIES

An apology was received from Mr Andrew Connolly.

Miss Lesley Soper tendered an apology for an early departure.

3.0 DECLARATION OF INTERESTS

The Interests Registers were circulated with the agenda (tab 2).

The Chair asked that any changes to the registers be sent to the Board Secretary and reminded everyone of their obligation to advise the meeting should any potential conflict arise during discussions.

Unconfirmed

4.0 PREVIOUS MINUTES

It was noted that reference to "Iwi" in item 8.0 should read "Rūnaka".

It was resolved:

> **"That, with the above correction, the minutes of the Board meeting held on 2 February 2021 be approved and adopted as a true and correct record."**

I Beekhuis/J Chambers

5.0 MATTERS ARISING

Dialysis Unit, Southland

The CEO reported that the business case for the dialysis chairs in Southland should be finalised by the next meeting. It would be a facility for people who could not dialyse at home and training would still occur mostly in Dunedin.

6.0 ACTION SHEET

The Board received the Action Sheet (tab 5) and management provided the following updates.

- *Staff Wellbeing* - This action related to the reported pressure on staff. The Patient Flow Taskforce had been tasked with addressing hospital bed block issues, and staff stress and burnout.
- *Enhanced Generalism Business Case and Medical Assessment Unit (MAU) Implementation* – The project had not started yet, so reporting would commence from May 2021.

  It was agreed that this item be transferred to the Hospital Advisory Committee for monitoring.
- *2020/21 Performance Summary* – A précis of engagement with the PHO concerning achievement of prevention service benchmarks would be submitted to the next meeting.
- *Master Site Planning* – The Strategic Refresh was scheduled to be completed by July 2021 and master site planning would cascade out of that.

7.0 ADVISORY COMMITTEE REPORTS

<u>Finance, Audit and Risk Committee</u>

Miss Soper, Deputy Chair of the Finance, Audit and Risk (FAR) Committee, gave a verbal report on the FAR Committee meeting held on 25 February 2021, during which she highlighted the following items.

- The meeting was the last chaired by the longstanding Independent Chair, Susie Johnstone, who was thanked for her professional approach and attention to detail.
- The Protected Disclosures/Whistle Blowing and Disclosure of Interest Policies were finalised for Board's approval.

Unconfirmed

- A paper on cyber security was considered, particularly in relation to the risk of working offsite and third party backup security.
- A revised Email, Internet and Computer Policy was reviewed and would be submitted to the Board in due course.
- Risk reporting was received, including a Clinical Risk Register, which would become a quarterly report, to ensure patient safety was maintained.
- The Strategic Risk Report provided a high level overview of strategic risks and the mitigations in place.
- The Health, Safety and Welfare, and Finance Reports were presented to the Committee.
- A brief update was provided on the 2021/22 budget.
- The Quality and Clinical Governance Report continued to be refined.
- A detailed capital report and project update was received.

Mr Jarrold, incoming FAR Committee Chair, acknowledged the contribution and astute observations made by Mrs Jean O'Callaghan during her term as Deputy Chair of the Committee. He advised that the focus of the Committee would be on audit and risk, in particular the health and safety of staff and patients.

Protected Disclosure/Whistle Blowing and Disclosures of Interest (Staff) Policies

It was noted that some of the clause numbering and punctuation in the Protected Disclosure/Whistle Blowing Policy needed to be corrected.

It was resolved:

> **"That the Board approve the following policies:**
>
> **1. Protected Disclosures/Whistle Blowing**
>
> **2. Disclosures of Interest (Staff)."**

Ms Karen Browne, Chair of the Community Health Council, and Ms Greer Harper, Principal Advisor to the CEO, joined the meeting at 10.00 am by Zoom for the following agenda item.

8.0 PATIENT FLOW UPDATE

A report summarising the progress of the Patient Flow Taskforce was circulated with the agenda (tab 8) and the Board received a presentation from the Chief Medical Officer, Chief Allied Health, Scientific and Technical Officer, Chief Nursing and Midwifery Officer, Chair of the Community Health Council, Principal Advisor to the Chief Executive Officer, and Chief Māori Health Strategy and Improvement Officer, recapping the purpose, vision and mission of the Patient Flow Initiative and summarising:

- The strategy and approach – what the Taskforce said they would do;
- Action – what the Taskforce had done to date;
- Progress and outcomes – what had been achieved, eg towards the goal of reducing the number of bed days occupied by super-stranded patients by 50%;
- The opportunities and challenges, which included constraints in obtaining metrics.

Unconfirmed

The team then reflected on the rapid improvements made, and the challenges and issues they had uncovered, noting that:

- The focus must have a sustainability element, ie it must not be a band-aid;
- It was important to embed best practices to result in success;
- Visible leadership was key; and
- It was important to show outcome measures quickly, and to all staff, including qualitative metrics such as staff and patient feedback.

The next steps planned by the Taskforce were to:

- Report on flow metrics, with balance metrics;
- Implement tools for evaluating patient and staff experience;
- Highlight patient safety issues that result from poor flow and contribute to delayed discharge;
- Ensure that engagement and momentum continues to build and accelerate at pace where the biggest gains can be made;
- Continue and spread the instilled culture of patient flow and improvement;
- Join up the whole system, connect primary care and rural initiatives to hospital patient journeys – from pre-presentation through to secondary and community follow-up at discharge.

Taskforce members then responded to questions on constraints, outcome metrics, and their view on progress.

The Board stressed the importance of the initiative and requested monthly progress reports through to mid-year.

In her concluding remarks, Ms Browne thanked the Board for involving consumers and expressed support for the Patient Flow Taskforce, noting the importance of getting the foundation right to ensure the health system worked well for all.

Mr Karl Rivett, SDHB Change Delivery Manager, Mr Peter Ganter, Digital Consultant, and Mr Shayne Hunter, Deputy Director-General (DDG) Data and Digital, Ministry of Health, joined the meeting at 11.00 am by Zoom for the following agenda item.

9.0 DIGITAL PROGRAMME STATUS UPDATE

The Board received a presentation from Mr Mike Collins, Executive Director People, Culture and Technology (EDPC&T) on the digital programme (tab 13). This included an outline of:

- The Digital Strategy's three goals for the Southern Health system
    1. Laying the foundations, providing secure, sustainable, and scalable digital environments
    2. Enabling the people of Southern Health to achieve better health, better lives, Whānau Ora via digital solutions
    3. Bringing our people and information together by capturing, storing, securing, and analysing data to provide digital insights
- The scope of the Digital Blueprint for the new Dunedin Hospital and the principles it was based on;

Unconfirmed

- A roadmap of Southern Health's digital future, which would include: a consumer engagement portal, electronic medical records, virtual consults, enterprise scheduling, wayfinding, check in and room management, clinic schedules and resource management, hospital operations, patient flow and real-time analytics, automation of hospital logistics and back of house, digital devices and electronic medical record, inpatient engagement, digital operating theatres, and remote monitoring;
- Examples of current projects;
- Equity and the digital divide and options to address that;
- A roadmap of works to implement the digital future, including the design and commissioning of the new Dunedin Hospital;
- The funding pathway;
- South Island regional partnership and programme of work;
- The next steps:
  - Complete the Indicative Business Case (IBC) – April Board meeting
  - Continue to develop the Detailed Business Case – draft June
  - Complete Tranche 1.2 funding application – May Board meeting
  - Continue communications and engagement with staff.

The EDPC&T, Digital Consultant and DDG Data and Digital then responded to questions and feedback on digital inequity, options for developing software, involvement of the disabled community, and the interface with primary care, rural trusts, etc.

Mr Hunter, DDG Data and Digital, Ministry of Health, advised that:

- The programme was ambitious, but it needed to be;
- The success of the programme would be dependent on its execution, which would require leadership and commitment;
- A new hospital could not be built without investing in technology to future proof it;
- Apart from the patient dimension, there was an issue around attracting and retaining workforce if the investment was not made;
- The Ministry was supportive of the process being worked through, recognising that it was ambitious.

Messrs Rivett, Ganter and Hunter were thanked for their attendance and left the meeting.

10.0 ADVISORY COMMITTEE REPORTS (Continued)

Community and Public Health Advisory Committee

The unconfirmed minutes of the Community and Public Health Advisory Committee (CPHAC) meeting held on 1 February 2021 (tab 6.2) were taken as read and Mr Tuari Potiki, CPHAC Chair highlighted the following items.

- The Committee requested that WellSouth, the Chief Māori Health Strategy and Improvement Officer and Executive Director Strategy, Primary and Community (EDSP&C) report back with a plan to address the low rate of Māori primary care enrolment.

Unconfirmed

- The Committee received a presentation from the EDSP&C on various Strategy, Primary and Community issues, which were listed in the minutes.

Disability Support Advisory Committee

The unconfirmed minutes of the Disability Support Advisory Committee (DSAC) held on 1 February 2021 (tab 6.3) were taken as read.

Dr Moana Theodore, DSAC Chair, informed the Board that the launch of the Disability Strategy was being planned for April 2021.

Hospital Advisory Committee

Mrs Jean O'Callaghan, Chair of the Hospital Advisory Committee (HAC), gave a verbal report of the HAC meeting held on 1 March 2021, during which she advised that the Committee:

- Received an excellent presentation from the Urology Service and were pleased to see the progress made by them;
- Also received a presentation on the hospital escalation pathway;
- Covered all the areas of concern in the Specialist Services monitoring and performance reports, noting that a radiology plan would be presented to the May 2021 meeting.

11.0 CHIEF EXECUTIVE OFFICER'S REPORT

The Chief Executive Officer's monthly report (tab 7) was taken as read and the following items were brought to the Board's attention.

- *Financial Result* – Overall, financial performance was very close to the core budget, with the variance being 0.14% of revenue, however there were still savings to be achieved in the second half of the financial year.
- *Volumes* – Volumes overall had been flat but there had been some mix changes.
- *Top Five Risks* – Board members provided feedback on the reporting of top risks. It was noted that this would be further considered at the Strategic Risk Workshop on 25 March 2021.
- *Annual Plan 2021/22* – The draft Annual Plan was due to be submitted to the Ministry by the end of the week and would be considered at the combined Board/Iwi Governance Committee workshop.
- *Patient Flow Taskforce* – The CEO responded to questions on his view of the patient flow work.
- *COVID Preparedness* – A project lead had been appointed and the team were gearing up for the mass vaccination programme.
- *Lead in Waikouaiti/Karitane Water Supply* – The public meeting planned for 5 March 2021 was deferred to 10 March 2021 due to the change to COVID alert level 2.
- *Independent Review of the Southern Mental Health and Addiction System Continuum of Care* – This was also impacted by the change in COVID alert levels, as the key people were based in Auckland. Some meetings were held electronically, and others deferred.

  Mr King declared an interest in this item.

Unconfirmed

The Board signalled it would be thoroughly engaging in the review and its findings.

- *Safe Staffing and Care Capacity Demand Management (CCDM)* – The CEO advised that the Minister's Letter of Expectations made it clear CCDM must be fully implemented.
- *Integrated Health and Wellness Hub* – A recommendation on the preferred option for partnering with an agency to develop an integrated health and wellness hub in South Dunedin would be submitted to the April Community and Public Health Advisory Committee meeting.
- *Primary Maternity Facilities* – Separate discussions had been held with the Wanaka and Central Otago midwives and the next step was to bring the two groups together to get a clearer alignment.
- *Staff Engagement Survey* – There had been an issue with the survey analytics but they should be available soon.

Management responded to questions on COVID-19 vaccination preparedness, the midwifery workforce in Wanaka, the scope of the Mental Health Review, CCDM reporting, and Allied Health staffing.

12.0 FINANCE AND PERFORMANCE

Finance Report

The financial report for the period ended 31 January 2021 (tab 9) was taken as read.

The Executive Director Finance, Procurement and Facilities (EDFP&F):

- Reiterated the observation made by the CEO that the year-to-date result had been influenced by some unbudgeted expenditures, including for COVID-19;
- The year-end forecast was being reviewed but the EDFP&F anticipated it would be close to the current prediction.

The EDFP&F then responded to questions on the financial report.

Performance

The volumes and performance reports (tabs 9.2 and 9.3) were taken as read and management responded to questions.

Annual Plan - Strategic Progress Reports

The Board received reports summarising progress towards achieving the strategic intentions in the 2020/21 Annual Plan (tab 9.4).

Progress Against Statement of Performance Expectations 2020/21

The Board received a report on performance against the Annual Plan Statement of Performance Expectations non-financial measures for quarter 2 2020/21 (tab 9.5).

In response to a question on cervical cancer screening, the EDSP&C advised that it was one of the key amenable mortality indicators that would be considered by the Community and Public Health Advisory Committee as part of system level measures planning.

Unconfirmed

13.0 CORRESPONDENCE

Letter of Expectations for 2021/22

A letter from the Minister of Health setting out the Government's expectations for District Health Boards (DHBs) for 2021/22 was circulated with the agenda (tab 11) and noted.

PUBLIC EXCLUDED SESSION

***At 12.55 pm it* was *resolved*:**

> **"That the public be excluded from the meeting for consideration of the following agenda items."**

General subject:	*Reason for passing this resolution:*	*Grounds for passing the resolution:*
Minutes of Previous Public Excluded Meeting	As set out in previous agenda.	As set out in previous agenda.
Public Excluded Advisory Committee Meetings: a) Finance, Audit & Risk Committee ▪ 28 January 2021 Minutes ▪ 25 February 2021 Verbal Report b) Community & Public Health Advisory Committee ▪ 1 February 2021 Public Excluded Minutes c) Iwi Governance Committee ▪ 1 February 2021 Minutes	Commercial sensitivity and to allow activities and negotiations to be carried on without prejudice or disadvantage	Sections 9(2)(i) and 9(2)(j) of the Official Information Act.
CEO's Report - Public Excluded Business	To allow activities and negotiations to be carried on without prejudice or disadvantage	Sections 9(2)(i) and 9(2)(j) of the Official Information Act.
Capex Requests ▪ Planned Care Improvement Action Plan Tranche One Projects	Commercial sensitivity and to allow activities and negotiations to be carried on without prejudice or disadvantage	Sections 9(2)(i) and 9(2)(j) of the Official Information Act.
Contract Approvals ▪ Strategy, Primary and Community ▪ New Zealand Blood Service	Commercial sensitivity and to allow activities and negotiations to be carried on without prejudice or disadvantage	Sections 9(2)(i) and 9(2)(j) of the Official Information Act.
New Dunedin Hospital	Commercial sensitivity and to allow activities and negotiations to be carried on without prejudice or disadvantage	Sections 9(2)(i) and 9(2)(j) of the Official Information Act.

***It* was *resolved*:**

> **"That the Board resume in open meeting and the business transacted in committee be confirmed."**

Unconfirmed

The meeting closed at 5.20 pm.

Confirmed as a true and correct record:

Chairman: _________________________________

Date: ___________________

Unconfirmed

Southern District Health Board

BOARD MEETING ACTION SHEET

As at 30 March 2021

DATE	SUBJECT	ACTION REQUIRED	BY	STATUS	EXPECTED COMPLETION DATE
Feb 2020 Updated Nov 2020	**Quantitative Performance Dashboard** (Minute item 6.0)	Draft quantitative dashboard to be presented to the Board.	CEO	Work in progress, ED tile completed & POC has been surfaced. The 6 hour target is currently being finalised with the SME. Each tile (total of 28) is taking a full sprint to complete (2 weeks) and there are currently 28 tiles.	August 2021
June 2020	**Population Based Funding Formula** (Minute item 4.0)	Management to provide an update and discussion document in preparation for the 2021 PBFF review.	EDSP&C	MoH PBFF review is on hold pending further work to be completed by Health and Disability System Review Transition Unit.	~~December 2020~~ June 2021
Feb 2021	(Minute item 5.0)	If time allows, presentation on PBFF to be put on March 2021 agenda.	CEO	Rory has PBFF presentation that was presented to the Board previously and can run through this with the Chair at a time that suits.	May 2021
Dec 2020	**2020/21 Performance Summary** (Minute item 9.0)	▪ Management instructed to engage with the PHO concerning achieving the benchmarks for prevention services according to their contractual obligations.	EDSP&C	This discussion is under way.	Complete
Mar 2021	(Minute item 6.0)	▪ Précis of activity to be submitted to April meeting.	EDSP&C	This has been referred to CPHAC and will be verbally updated to Board.	Complete

DATE	SUBJECT	ACTION REQUIRED	BY	STATUS	EXPECTED COMPLETION DATE
Feb 2021	**Radiology Services** (Minute item 8.0)	▪ Report on MRI access to be submitted to May HAC meeting and update on other radiology initiatives to improve access to be submitted to the March HAC meeting. ▪ Further development of Health Pathways for radiology to be followed up.	EDSS EDQCGS	Health Pathways Team have Radiology prioritised on their workplan. Radiology is embedded within condition specific pathways so will routinely be reviewed as BAU.	3 May 2021 Complete
Feb 2021	**Master Site Planning** (Minute item 9.0)	Master plan identifying issues and future needs relating to facilities at Southland Hospital to be developed.	CEO	Terms of Reference being developed currently.	To be determined

SOUTHERN DISTRICT HEALTH BOARD
FINANCE, AUDIT AND RISK COMMITTEE

25 February and 25 March 2021

RECOMMENDATIONS TO BOARD:

The Finance, Audit and Risk Committee recommends that the Board pass the following resolution.

Policies

"That Board approve the following policies:

1. Email, Internet and Information Security
2. Treasury"

6.1

E-mail, Internet and Information Security Policy (District)

Southern DHB is committed to ensuring that its valuable IT resources are used to support efficient core health services and are safeguarded from misuse. This Policy sets out clear expectations about protection of information, privacy and IT infrastructure and provides guidance about acceptable and unacceptable use.

1. Scope

This policy applies to:

1.1 all employees of Southern District Health Board (the DHB), including temporary, part time and fixed term employees and contractors;

1.2 any person involved in the operation of Southern DHB, including board members, joint appointments with third parties, volunteers and honorary or unpaid staff;

1.3 any other person(s) who have authorised access to Southern DHB information systems; and

1.4 all DHB electronic systems, IT infrastructure, and devices.

2. Purpose

This policy and the associated procedures set out responsibilities and obligations in relation to IT infrastructure use, email, internet, social media, and information security.

3. Principles

3.1 Infrastructure[1], internet, social media and email use should reflect the same standards of professional conduct and ethics that are expected of employees in all areas of their work.

3.2 Protection and respect of the privacy of others, including intellectual property and personal privacy rights is paramount.

3.3 Transmission or any other use that includes inappropriate[2], or offensive and objectionable[2] material is not permitted.

3.4 The security and continuity of the IT network, digital services and the information therein must be maintained.

3.4 Password protocols must be followed by everyone.

3.5 Material stored on electronic devices owned or operated on Southern DHB's behalf, is the property of Southern DHB.

3.6 Southern DHB has the right to monitor all traffic.

4. Policy statements

4.1 Acceptable Use

4.1.1 Email, IT resources and digital information are to be used for SDHB purposes. Their use must be:

- for the purposes of SDHB's business of providing health services;
- lawful and appropriate;
- responsible, professional and prudent;
- safe, secure and in keeping with all Privacy legislation and codes.

4.1.2 Their use must not involve:

- offensive or objectionable material;
- personal business purposes;
- any action that puts SDHB IT resources or reputation at risk;
- purporting to speak on behalf of the DHB unless within Delegated Authorities.

4.1.3 Personal use of DHB IT resources should be no more than occasional, and be limited to break periods or after hours.

4.2 Responsibilities

4.2.1 The DHB is responsible for ensuring:

- IT resources are safeguarded;
- this policy is followed and breaches are addressed;
- information and patient privacy is always protected.

4.2.2 Users of the system are responsible for ensuring:

- compliance with this policy and the associated procedures;
- passwords are not shared and protocols for password length and renewal are followed;
- information and patient privacy is always protected.

4.3 Noncompliance

Where an employee or other user of DHB IT infrastructure has not complied with this policy their user permissions may be suspended and disciplinary procedures will apply.

5. Definitions

Term	Definition
[1]Infrastructure	IT infrastructure includes hardware, software and the network
[2]Inappropriate, Objectionable or Offensive	Inappropriate, objectionable or offensive material includes, but is not limited to material that is: ▪ threatening physical or verbal harm ▪ discriminatory in any way in regard to gender, ethnicity, race, age, disability ▪ pornographic or sexually explicit

Associated Documents:

- Code of Conduct and Integrity (District) (18679)
- Release of Patient Information Policy (21414)
- Health Records Policy (Otago) (10798)
- Fraud Policy (25546)
- Retention Schedule - General Disposal Authority for District Health Boards (45026)
- Media Policy (16106)

Legislation

Legislation includes, but is not limited to:

- Health and Safety at Work Act 2015
- Crimes Amendment Act 2003
- Electronic Transactions Act 2002
- Privacy Act 1993
- Copyright Act 1994
- Health Information Privacy Code 1994
- Public Records Act 2005
- Official Information Act 198

Treasury Policy

This policy establishes a framework for Southern District Health Board (Southern DHB) to manage its treasury risks.

6.1

1. Scope

The policy focuses on the role of the treasury function, treasury responsibilities and how the treasury function relates to other activities of Southern DHB.

2. Purpose

The purpose of this document is to outline the Southern DHB Treasury Policy.

3. General Policy Statement

Southern DHB's treasury operations are managed in an efficient, risk-averse and non-speculative manner.

4. Objectives

Ensure the continued ability to satisfy liabilities in an orderly manner as and when they fall due in both the short and long term through adequate working capital management.

Manage the cost of borrowing to minimise the actual cost of borrowing.

Safeguard financial resources by establishing and regularly reviewing bank account credit limits and managing exposures within those limits.

Manage the investing of funds with suitable institutions with adequate credit ratings to balance security of investment and maximise returns.

Manage foreign exchange exposures to minimise the impact of exchange rate volatility on operational expenditure and on capital expenditure projects.

Maintain adequate internal control and staffing to minimise operational risk relating to treasury functions.

Monitor financing/borrowing covenants and ratios under the obligations of the DHB's agreements.

Maintain and enhance relationships with NZ Health Partnerships Limited and bankers.

Comply with any DHB legislative requirements relating to treasury functions.

Produce necessary information and reporting to the Board regarding treasury functions.

5. Responsibilities

The Board is responsible for ensuring the DHB has an effective policy for the management of its treasury risks. It also determines the level and nature of risks, which are acceptable to the DHB, given its underlying business and strategic objectives.

The Board has the following specific treasury risk responsibilities:

a) Approving this policy as required on recommendation of the Finance, Audit and Risk Committee (FARC).

b) Approving any activity outside the policy parameters on recommendation of the FARC.

c) Approving all proposed borrowing facilities and limits, including any renegotiation of existing facilities.

d) Approving any one-off submissions that are received from management, requesting approval to implement specific risk management strategies.

e) Approving the respective treasury authority levels as delegated and specified in the Delegation of Authority Policy (District) (21584).

The Finance, Audit and Risk Committee is a sub-committee of the Board with the responsibility to:

a) Discuss any amendments to this policy proposed by management and recommend these to the Board.

b) Confirm this policy after consideration of recommendations from the Executive Director Finance, Procurement and Facilities (EDFPF) and Chief Executive Officer, and to recommend any amendment to the Board following such review.

c) Monitor ongoing compliance with this policy by reviewing regular treasury reporting.

d) Monitor and review ongoing treasury risk management performance.

The Chief Executive Officer (CEO) has overall responsibility for treasury functions however delegates operational management to the (EDFPF).

The EDFPF has delegated authority from the CEO for the operational management of treasury functions and is responsible for:

a) Co-ordinating annual financial plans and cash requirements for recommendation to the CEO and Board.

b) Reviewing and making recommendations for financial policies including this Treasury Policy to the CEO and Board through FARC.

c) Operational management of the Treasury Policy requirements.

d) Undertaking primary responsibility for maintaining the banking and lending relationships with NZ Health Partnerships Limited which manages the day to day banking facility arrangements on behalf of Southern DHB with bankers.

e) Ensuring treasury reporting is provided in an adequate and timely manner as evidence of compliance with the policy.

6. Working Capital Management

Liquidity Risk Management

Liquidity risk is the risk that a DHB will be unable to meet its short-term cash requirements in an orderly manner as they arise, whereas **funding and investment risk** relates to managing the long-term funding issues facing a DHB. Liquidity risk management has the objective of ensuring that adequate funding sources and liquid assets are available at all times to meet both the short- and long-term commitments (through management of funding and investment risk) of the DHB as they arise in an orderly manner.

Liquidity risk management requirements are as follows:

a) The Board must approve all new debt funding and/or revision to the parameters of existing debt funding. NZ Health Partnerships Limited, in conjunction with Southern DHB are responsible for:

- Appropriate cash flow forecasting and reporting mechanisms being maintained to monitor the DHB's estimated liquidity position and requirements over a minimum of the next 12 months.

- Applying working capital facilities in compliance with legislation in terms of maximum limits and counterparty (section 10.13 of the MoH Operational Policy Framework).
- Managing bank account balances on a daily basis as close to zero as possible with surplus funds invested and drawn to optimise outcomes for the DHB sector.

6.1

Accounts Receivable

The Ministry of Health (MoH) Service Coverage Schedule (SCS) specifies publicly-funded services and user charges, and these can be subject to change from year to year.

A full description of the eligibility criteria applying to publicly-funded services is set out in the Eligibility Criteria for Personal Health and Disability Services issued by the Minister of Health and available publicly on the MoH website www.health.govt.nz.

In general terms, the DHB charges for the following services as allowed under the SCS:

- Non-residents (ineligible for publicly-funded services).
- Co-payments such as pharmaceutical prescriptions, aged residential care, or meals on wheels.
- Private patient referrals, such as imaging scanning or diagnostic testing.

Where it is determined that services or goods are chargeable, then the DHB shall ensure that adequate procedures exist to:

- Collect payment at the time of service delivery wherever possible through provision of EFT-POS and online banking.
- Raise valid tax invoices and ensure recognition of revenue or funds in the DHB's financial records on a timely basis.
- Collect payment by the 20th of the following month or in accordance with contract terms.
- Ensure any credit notes raised are duly authorised by the holder of the delegated authority.
- Maintain an Accounts Receivable trial balance (with accurate ageing of amounts owing) that is reconciled on a monthly basis to general ledger control accounts.
- Collection of Accounts Receivable efficiently and effectively to achieve good working capital management.

From time to time the DHB may experience difficulties in collecting Accounts Receivable because there is a dispute or the debtor is unable to pay.

The Finance team is responsible for the monthly follow-up of Accounts Receivable. Genuine disputes are to be referred back to initiator for prompt resolution. Only duly authorised credit notes are to be processed in accordance with the Delegation of Authority Policy. The inability to pay is not a valid reason for issuing a credit note, rather such circumstances are to be recognised as a bad or doubtful debt.

An Accounts Receivable account balance can be written-off as bad when all reasonable and economic means of collecting payment have been unsuccessful.

As a guideline, the point at which a debt may be considered bad would be 90 days after being transferred to a debt collection agency for collection. The bad debt write-off authority is specified in the **Delegation of Authority Policy (District)** (21584).

Doubtful debt provisioning is required on a quarterly basis to ensure the financial statements reflect the Accounts Receivable balance at initial fair value less impairment losses, in accordance with the DHB's accounting policies.

The EDFPF and the Finance team have the operational management responsibility for managing the Accounts Receivable function and adherence to this policy.

Accounts Payable

The objective for the Accounts Payable function is to minimise working capital requirements by ensuring duly authorised payments (as specified in the Delegation of Authority Policy) are made within the agreed terms of trade with the particular supplier, but no earlier, unless there is a financial benefit in doing so or there is a Ministerial or Government instruction on payments to suppliers.

All expenditure (whether capital or operating) is expected to be generated using the purchasing systems with valid order numbers or requisitioned in Oracle.

Where it is determined that services or goods are chargeable, then the DHB will ensure that adequate procedures exist to:

- Process valid tax invoices (in accordance with tax legislation and Inland Revenue guidelines) and ensure recognition of expenditure (capital or operating) in the DHB's financial records.
- Unless otherwise specified, pay funds owing by the 20th of the following month of invoice date (recognising differing terms do exist; weekly payments may also be made, where appropriate or as instructed by Government and/or Ministers).
- Ensure transactions are duly authorised by delegated authority by maintaining the Oracle automated invoice hierarchy approval system.
- Minimise transaction costs by using electronic payments wherever practical.
- Maintain an appropriate Accounts Payable trial balance with accurate ageing of amounts owing that is reconciled, on a monthly basis, to general ledger control accounts and supplier statements (only if applicable).
- Establish a robust supplier approval process to mitigate fraud risk and ensure procurement objectives are met in accordance with DHB policies.

To assist with financial and cash forecasting and in accordance with financial reporting standards, the Finance Team will accrue for liabilities on a monthly basis for invoices that have not been received.

The EDFPF and the Finance Team have the operational management responsibility for managing the Accounts Payable function and adherence to this policy.

Inventory

The DHB seeks to minimise working capital requirements by minimising its investment in inventory levels while maintaining levels commensurate with clinical risk.

Inventory levels are agreed between departments and the purchasing teams with 'imprest' levels replenished and maintained in accordance with the approved service level agreement, where held.

Inventory is to be counted, at a minimum, on an annual basis with adjustments recognised in the financial statements, as required. Inventory valuation shall be assessed in accordance with the DHB's accounting policies.

Bank Facilities

NZ Health Partnerships Limited is responsible for maintaining and managing appropriate cash resources for participating agencies as defined in the treasury services agreement with Southern DHB. NZ Health Partnerships Treasury Policy for Shared Banking Services (refer Associated Documents) dated May 2019 is the approved Shared Banking Treasury Policy. This policy documents the parameters for Treasury management on behalf of all DHBs and has been adopted by Southern DHB.

6.1

7. Borrowing of Funds (Non-working Capital)

Long-term Debt

Prior approval from the Ministers of Health and Finance is required if the DHB, or any subsidiary of the DHB, wishes to raise new private sector finance for long-term capital requirements (s160 and s162 Crown Entities (CE) Act 2004).

Finance Leasing

The DHB is permitted, with the prior authority of the Ministers of Health and Finance, to enter into finance leases from sources other than, and including, the Crown:

- With a market value of $10.0M or 20% of the DHB's gross total assets (including assets owned by DHB subsidiaries), whichever is the lesser; or
- With the potential to affect the performance of the DHB in a strategic way.

In addition to the above approval thresholds, the DHB may only enter into finance leases subject to the conditions that they:

- Comply with the Ministry of Health's Capital Assessment Guidelines December 2011.
- Comply with the conditions of any letter of comfort from Government Ministers.
- Comply with banking covenants.
- Satisfy any conditions imposed in the approval of the District Annual Plan (DAP).

Energy Efficiency and Conservation Authority (EECA) Loans

The DHB is permitted to obtain loans from EECA, which is a Crown entity that offers loans to government departments and publicly-funded bodies to finance energy efficiency investments at low interest rates.

8. Foreign Exchange Risk Management

Foreign exchange risk is the risk that the DHB may suffer financial loss due to a movement in foreign exchange rates relative to its domestic currency.

The DHB may enter into foreign currency transactions with overseas suppliers, both for operational purchases, e.g. clinical supplies, and capital purchases, e.g. clinical equipment.

The objective of managing foreign exchange is to minimise foreign exchange risk by proactively implementing management strategies that will meet budget parameters while considering the level of the exchange rate.

There are three types of foreign exchange risk:

- Transaction exposure – the risk that arises when receipts or payments in foreign currency are converted into New Zealand currency.
- Translation exposure – the risk that a financial loss can occur when translating foreign currency denominated assets, liabilities and offshore subsidiaries and operations into New Zealand currency for accounting purposes. The DHB will not generally face this risk.
- Economic exposure – the economic effect on the DHB as a result of a long-term trend in relevant foreign currencies.

Foreign exchange risk management requirements

a) The DHB is not permitted to hold foreign domiciled currency borrowings or investments.

b) The DHB is only permitted to hedge transaction exposure.

c) Foreign exchange options may be purchased only following approval of the relevant transaction and may not be purchased for speculative purposes.

d) Foreign exchange transaction exposures less than or equal to NZ$250,000 relating to a duly authorised transaction and with a transaction date within six months where the timing of payment is known may be hedged on a case by case basis, at the discretion of the EDFPF.

e) Foreign exchange transaction exposures of more than NZ$250,000 relating to a duly authorised transaction and with a transaction date within six months where the timing of payment is known may be 100% hedged if the current forward rate is better than the costing rate. The EDFPF shall be authorised to undertake such a transaction.

f) If the value of the foreign exchange transaction exposure is more than NZ $250,000 with a transaction date of greater than six months, then a strategy may be put in place to hedge the exposure and requires Board approval following review and recommendation by FARC.

The only approved foreign exchange risk management instruments are:

- Forward foreign exchange contracts
- Foreign exchange options
- Spot foreign exchange contracts

9. Operational Risk Management

Operational risk is defined as the risk of financial loss as a result of the operational activities of the treasury function.

This risk is inherent within several areas of the treasury function – systems, staffing, security, procedures, and controls.

It is necessary to manage the internal risk arising from treasury activities to prevent unauthorised activities, error, fraud, negligent behaviour, systems failure, or inadequate procedure controls that may result in financial loss.

Operational risk management requirements

a) Internal risk is to be managed by a system of controls designed to limit the potential impact of any risk situation. The DHB will use both organisational and procedural controls within the treasury function. Organisational controls enforce the segregation of duties and procedural controls relate to the flow of activities within the treasury function.

b) The EDFPF is responsible for monitoring the occurrence of new risk situations and, if existing controls do not provide adequate safeguards, implementing appropriate additional preventative safeguards.

c) Bank account balances must be reconciled, at a minimum, on a monthly basis.

d) The use of electronically stored signatures for banking transactions is not permitted and a stand-alone system for Southern DHB's digital framework is to be used (for example bank dongle system) for authorising payments.

e) Two authorised signatories are required for banking transactions and spot foreign exchange purchases.

f) Two authorised signatories, one of which must be that of the EDFPF or Financial Controller, are required for all duly authorised foreign exchange contracts.

g) Any derivative transactions must be maintained in a register by the Financial Controller and accounted for using NZ IAS39: Financial Instruments – Recognition and Measurement.

h) All leasing decisions, whether operating or finance leases, must be reviewed by a senior business analyst, Financial Controller or EDFPF.

i) Adherence to the Delegation of Authority Policy (District) (21584) is the responsibility of individuals holding such delegated authority. Any breach of limits by any individual with the Delegation of Authority Policy (District) (21584) is to be resolved in accordance with the procedures outlined in the Protected Disclosures Whistle Blowing Policy (19708).

6.1

10. Reporting

a) Treasury Reporting

Treasury reporting is an integral part of the treasury function. The EDFPF is required to provide timely, quality information on all key activities of treasury operations, to appropriate parties.

In order to make reporting systems effective, the following principles should be adopted:

- Conformity to the required objectives of management in terms of data to be reported, format and frequency.
- Exception reporting is to be followed wherever possible. A set of key exception criteria is established and reports produced only when these are breached.

b) Reporting Structure

The structure of the treasury reporting system may be classified into three main groupings that are:

- Operational treasury monitoring reports to the Financial Controller and EDFPF.
- Governance reporting to FARC and the Board.
- Exception reporting to inform of issues outside normal generally accepted operating procedures or breaches of defined policy. Exception reports are to be prepared on a timely basis.

c) Operational Reporting

The process includes:

- Daily cash management
- Monthly rolling 12-month cash forecast
- Ageing of Accounts Receivable (AR) and Accounts Payable (AP) balances and trend reporting
- Foreign exchange contracts
- Financial covenants

Monthly governance reporting requirements

The process includes:

- Income statement, month and year-to-date (YTD) actual v budget
- Balance sheet with actual, prior month and budget
- Ageing of AR & AP balances
- Exception reporting
- Forecast year end position (generally prepared from the end of the first quarter onwards).

Quarterly governance reporting requirements

The process includes:

- List of authorised signatories to transact
- List of authorised signatories to add/delete/amend authorised signatories
- Foreign exchange derivatives
- Financial covenants

- Investment profile and counterparty credit risk monitoring

Exception reporting requirements

Exception reporting as required, including any breaches of this Policy both existing and expected. Notification of current and forecast breaches, both minor and material, should include their cause, and actions taken to address the breach and to ensure future breaches are mitigated.

The Chair of FARC will be notified immediately in relation to more than minor breaches of this Policy. The CEO will determine the level of materiality that triggers this notification consistent with a policy of 'no surprises'.

11. Indemnities and Guarantees

The DHB must operate in a financially responsible manner (refer to section 41 of the New Zealand Public Health and Disabilities (NZPHD) Act 2000 and section 51 of the Crown Entities (CE) Act 2004). This includes prudently managing the giving of guarantees and indemnities in the normal course of business.

Indemnities and guarantees requirements

a) Subject to paragraph c), the DHB must keep a register of any indemnities or guarantees that are given, and insure for them accordingly.
b) For this purpose the DHB must maintain a contracts database register that contains the detail of contractual arrangements. Further the DHB national insurance arrangement shall insure the giving of indemnities and guarantees in the normal course of business.
c) The DHB may not (with or without a security), give a guarantee to, or indemnify, another person unless permitted in accordance with any regulation made under Part 4 of the CE Act, or with the joint gazetted approval of the Ministers of Health and Finance.

Authorised Indemnities and Guarantees

The DHB will comply with Regulations 14(1),(2) and (e)(3) of the Crown Entities (Financial Powers Regulations) 2005 made pursuant to section 173 of the Crown Entities (CE) Act 2004, governing the issuance of guarantees by the DHB.

12. Definitions

Term	Definition
DHB	Refers to the Southern DHB
Treasury Functions	Includes: ▪ Working capital management ▪ Bank account management and relationship ▪ Borrowing of funds from external sources ▪ Foreign exchange risk management ▪ Operational risk from treasury functions
Derivatives	Financial instruments whose value changes in response to the changes in underlying variables. The main purpose of derivatives is to reduce risk for one party.
Foreign exchange option	A derivative financial instrument where the owner has the right, but not the obligation, to exchange money denominated in one currency into another currency at an agreed exchange rate on an agreed future date.
Foreign exchange contracts	Forward Contracts involve two counterparties who agree to transact in foreign currencies at an agreed rate in a specified amount at an agreed future date. Spot contracts and the spot rate refer to the current market rate as determined by supply and demand.
Forward rate agreement	A contract between two parties where each party agrees to fix an interest rate (contract rate) for a specified future settlement date, based on an agreed amount. No principal is exchanged. The future settlement date is a maximum of 12 months.
NZ Health Partnerships Ltd.	Created by the 20 DHBs to identify and build shared services for the benefit of the health sector. The focus is on administrative, support and procurement activities that have direct and indirect clinical benefits. NZ Health Partnerships works collaboratively with a number of public and private sector organisations to ensure the successful delivery of programmes and services. The core services are DHB Procurement, Collective Insurance and Shared Banking, and Food Services, the Finance, Procurement and Information Management System and the Health System Catalogue (Procurement).

13. Associated Documents

- Delegation of Authority Policy (District) (21584)
- NZ Health Partnerships Treasury Policy Shared Banking Services
- Eligibility Criteria for Personal Health and Disability Services; Ministry of Health, Wellington.
- Capital Assessment Guidelines December 2011; Ministry of Health, Wellington
- MoH Service Coverage Schedule

14. Legislation

- Operational Policy Framework 2020/21
- Crown Entities (CE) Act 2004

- Crown Entities (Financial Powers) Regulations 2005
- New Zealand Public Health and Disability (NZPHD) Act 2000

General Notes

Scope of Practice: Ensure you are fully qualified to perform the role specified in any document.
Deviations: If you need to deviate from any procedure, policy, or guideline, make notes and follow up.
Caution - Printed Copies: Printed copies of this document cannot be relied on after the date at the bottom of the page. Check issue date and version number against the electronic version on MIDAS to ensure that they are current.
Disclaimer: This document meets the Southern District Health Board's specific requirements. The Southern DHB makes no representations as to its suitability for use by others, and accepts no responsibility for the consequences of such use.

COMMUNITY AND PUBLIC HEALTH ADVISORY COMMITTEE MEETING
7 April 2021

- Verbal report from Tuari Potiki, Chair of the Community and Public Health Advisory Committee

DISABILITY SUPPORT ADVISORY COMMITTEE MEETING
7 April 2021

- Verbal report from Moana Theodore, Chair of the Disability Support Advisory Committee

Southern District Health Board

Minutes of the Hospital Advisory Committee Meeting held on Monday, 1 March 2021, commencing at 1.30 pm in the Board Room, Community Services Building, Southland Hospital Campus

Present:	Mrs Jean O'Callaghan	Chair
	Ms Justine Camp	Committee Member *by zoom*
	Dr John Chambers	Committee Member
	Dr Lyndell Kelly	Committee Member
	Miss Lesley Soper	Committee Member
	Dr Moana Theodore	Committee Member
In Attendance:	Mr Roger Jarrold	Crown Monitor *by zoom*
	Ms Ilka Beekhuis	Board Member
	Tuari Potiki	Board Member
	Mrs Kaye Crowther	Board Member
	Mr Terry King	Board Member
	Mr Chris Fleming	Chief Executive Officer
	Mr Patrick Ng	Executive Director Specialist Services
	Dr Nigel Millar	Chief Medical Officer
	Ms Kaye Cheetham	Chief Allied Health Scientific and Technical Officer *by zoom*
	Dr Nicola Mutch	Executive Director Communications *by zoom*
	Mrs Jane Wilson	Chief Nursing and Midwifery Officer *by zoom*
	Mrs Joanne Fannin	Personal Assistant (minute taker)

1.0 WELCOME

Mrs Jean O'Callaghan, Chair of the HAC welcomed everyone to the meeting and an opening karakia was provided by Mr Tuari Potiki. The Chair acknowledged former Chair, Mr David Perez and noted the key areas for consideration are diagnostics, the improvement plan (the success of which is linked to the patient flow plan working and staffing issues being resolved), equity and the budget (managing staff costs, outsourcing and clinical supplies are key issues).

2.0 APOLOGIES

There were no apologies noted.

3.0 DECLARATION OF INTERESTS

The Interests Registers were circulated with the agenda (tab 2).

The Chair asked for any changes to the registers to be sent to the Minutes Secretary and reminded everyone of their obligation to advise the meeting should any potential conflict arise during discussions.

It was resolved:

"That the Interests Registers be received and noted."

Unconfirmed

4.0 PREVIOUS MINUTES

It was resolved:

> **"That the minutes of the meeting held on 21 December 2020 be approved and adopted as a true and correct record."**

5.0 MATTERS ARISING/REVIEW OF ACTION SHEET

The Committee reviewed the action sheet (tab 6). The Executive Director of Specialist Services advised the actions that were completed and provided the following update:

- An update will be provided on the improvements made to the wording of the Radiation Oncology letters as part of the presentation on the letters improvement work from the Executive Director, Quality and Clinical Governance Solutions (EDQCGS) service at the HAC meeting in May 2021.
- Clinical Risk Dashboard – this was referred to the Finance Audit and Risk Committee for inclusion in that agenda. An update on progress to date will be presented to the full Board meeting, by the Taskforce (led by the CMO), on 2 March 2021. The CEO suggested that the reporting whilst the 100 days work is progressing be at a Board level and that it be assigned back to the HAC once the next phase is set to progress.
- The Budget standardised intervention rates will be included in the HAC agenda for the meeting to be held on 3 May 2021.
- Radiology Services – following discussion with the former HAC Chair, agreement was reached to defer the action till the 3 May 2021 meeting. Benchmark reporting comparing CT, MRI and Ultrasound scanning rates per 10,000 with the rest of the South Island and nationally will be provided. A proposed workplan for Radiology access over the next 10 years, with a particular emphasis on the key access issues and an update on the Dunedin CT procurement and implementation is to be included in the report.
- Any change to timeframes is to include an explanatory note with the reason for the change.
- Valuing patient time (VPT) – in addition to the presentation to be made at the meeting, an action and support plan is to be identified for each area and an update and tabulation of progress by service is to be provided to the HAC meeting in May 2021 as part of the VPT and Taskforce updates.

Mr Alastair Hepburn, Clinical Director/Consultant Urologist and Mr James Goodwin, Urology Service Manager joined the meeting by zoom.

6.0 UROLOGY PRESENTATION

The Committee considered the presentation (included with the agenda as tab 4) by Mr Hepburn and Mr Goodwin and in discussion the following was highlighted:

- The Chair commended Mr Hepburn and Mr Goodwin on their excellent leadership skills and the manner in which Clinicians and Management have worked together to achieve the outstanding progress and integrated service.
- Senior Medical Officers (SMO) don't have access to the database that would show them the flow of the patient through the system. Dr Nigel Miller

Unconfirmed

advised that SMOs could be trained on how to use the Patient Administration System.

- A request was made for a letter of apology to go to the sole Urologist and this matter is to be considered by the Board Chair.
- The cultural change from a dysfunctional service to a service that is now an exemplar and the progress to achieve that through efforts at all levels.
- There is still work to be done. Additional consultants are required in Dunedin and Southland to bring the service up to code and aligned nationally.
- The Board Chair endorsed the comments made by the HAC Chair and commended the leadership of those involved in the transformation of the Urology Service.
- Consultants within the service must be given sufficient time to take their allocated leave.
- The Chair acknowledged the efforts of the leadership, noting the constant and relentless improvement, which is noted and valued by patients. Mr Hepburn noted the efforts of the entire team.
- The Crown Monitor noted the quality of the presentation and posed three question for response following the meeting:
  - How many patients are treated locally and how many are sent further north for treatment in a tertiary facility?
  - What effect has COVID had on the service – has there been any trends in delayed treatments?
  - How is the current bed block impacting the service and how are they dealing with that with the rest of the Clinicians?
- A cover sheet is to be provided for presentations included in the agenda, explaining the background to the paper and other relevant information.

Mr Alastair Hepburn and Mr James Goodwin left the meeting.

Ms Megan Boivin, General Manager Operations, joined the meeting.

7.0 DUNEDIN HOSPITAL ESCALATION PATHWAY

The Committee considered the presentation (included with the agenda as tab 5) by Ms Boivin and the Chief Medical Officer, Dr Nigel Millar and in discussion the following was highlighted:

- The CMO was tasked with assisting to progress the escalation plan.
- The Escalation Pathway needs to work both within and outside the normal working hours.
- Concerns over the delay in progressing the escalation plan and limited period for the trials, with a suggestion for the need to have a 24 hour trial. COVID delayed progress on the plan and the improvement plan should assist in mitigating the need for the escalation plan and management's accountability once the plans are in place.
- Management outlined the action that would need to be taken in the event of a code black event.
- Management is to provide the bed numbers for Dunedin Hospital.
- The CEO advised the need to distinguish between a physical bed and a resourced bed.

Unconfirmed

- The CMO advised that the Escalation Pathway work will be considered finished when management is confident that the escalation plan is workable and enough people are taking part in it to make it useable.
- The GM Operations advised on the suite of tools that management has available to them, including the capacity at a glance screen on the Dunedin site and the patient flow within the hospital and across the district is also looked at. A request was made for the Committee to view what management look at and the Chair requested that the HAC be advised on the actions taken by management when a Code Black is experienced.
- It was agreed that the dashboards already received by the Committee should be a good indication of whether or not the escalation plan is working.
- There is currently no Southland Hospital Escalation Pathway, but this is being looked at.
- The Committee advised the need to see both the Code Black and Code Red events and this is to be added to the Performance Dashboard. Requests to view are to go through the CEO.
- The Chair thanked Ms Boivin and Dr Millar for their presentation and advised that the Committee looks forward to seeing the Escalation Pathway work implemented.

Ms Megan Boivin, General Manager Operations, left the meeting.

8.0 REVIEW OF ACTION SHEET – INFORMATION PAPERS

The Committee considered the information papers attached to the Action Sheet (tab 6).

Sterile Services Department, Dunedin – rejection of trays

The Executive Director Specialist Services (EDSS) provided a verbal update and noted that the overarching solution to the problems is the new building which has been approved. Construction of the new area is scheduled to commence in June 2021 and should be completed by December 2021 with occupation expected early in 2022.

Clinical Council written response on the recommendation to defer elective surgery

The Chair expressed concern that the decision to defer elective surgery in the lead up to Christmas was based on comment rather than analysis and without consideration of the impact on the patients. The CEO responded to the concerns and advised on the events leading up to the decision, which was based on advice from the Clinical Council and the three ELT Chiefs.

A request for the Terms of Reference for the Clinical Council was made. Other requests for information related to the Clinical Council are outside the scope of the HAC and are to be progressed with the Clinical Council outside the meeting. The Clinical Council are to be advised that the HAC requires more detail and needs to know the basis behind decisions for future reports.

9.0 SPECIALIST SERVICES MONITORING AND PERFORMANCE REPORTS

Executive Director of Specialist Services Report

The EDSS monthly report (tab 7) was taken as read and the EDSS, Mr Patrick Ng, drew the Committee's attention to the following items:

Unconfirmed

Equity

The composition of the working group formed to look at equity. Based on percentages, Cardiology and Respiratory will be a focus. The EDSS recommended that the Board look at equity when considering investment priorities. The presentation by Mr Pat Snedden was inspiring and there are practical and immediate actions that can be taken that will make a difference. Outpatient activity and the "unable to attend" rates need to be a key area of focus. Managing the Māori and Pasifika wait lists as a subset of the total wait list and resourcing that and navigator roles to close out the issues would be a good and practical area to invest in. Mr Snedden had indicated it was not always about requiring new resources, but moving resources to where they are most needed. Discussion was held on the need for reliable data to effectively track progress over time and the EDSS advised that discussions had been held with the Executive Director of People Culture and Technology and his team around the need for access to good datasets.
The EDSS undertook to provide the following for the next HAC meeting:

- Confirm that there is access to good equity data.
- Clarify what resource is available to analyse the data.
- Provide good data equity distinctions from the dataset.

The Board Chair provided an update from the presentation by Pat Snedden, noting the need to rethink what can be done about attendance rates. Navigators need to move across the Primary/Secondary interface and there is potential to share the cost of the resource. There is potential to utilise a University of Otago Masters Student for purpose of evaluation. Members supported the change in terminology to "Unable to Attend".

Surgical Performance – Case Weights Discharges

Despite cancelling some Elective Surgery in December and January, there have been relatively high medical caseweight discharges for implants for ICDs and Tavis. On a year to date basis at the end of January, the service was still ahead of plan. The impact on the Orthopaedic service was outlined. A combined plan is being worked on by the Service Managers to address the long waits. Some COVID recovery funding will be available, but funding of additional activity will need to be a focus with the possibility of putting some Orthopaedic volumes through South Canterbury. Focus is needed to produce an overall plan.

Outpatient Performance ESPI 2

Following a deterioration in ESPI 2 performance over the December and January period, the Ministry of Health (MoH) prioritisation tool is being used to get the service back in balance over time. The recovery money will be paid out at the end of the financial year. Care will need to be taken with outpatient activity to ensure that volumes are met. The EDSS will write to the MoH explaining the delays and ensuring there is leeway in the new financial year to implement the initiatives, achieve and earn the volumes.

The Crown Monitor advised the need to match the FTEs on the ground against production and triangulate the data. Evidence showing a trend line is required and this could be done through the Finance Audit and Risk Committee. The CEO, Crown Monitor, and the MoH are to have a discussion as the constant attempt to align nursing staff to activity fails to recognise CCDM and safe staffing. Productivity is dropping because of safe staffing. Data is available and needs to be collated to tell the story. The Chief Nursing and Midwifery Officer advised on the availability of the Occupancy Forecasting Tool and she advised over the next couple of days the staffing won't match. When beds are reduced and patients are cancelled, the information is not necessarily captured to tell the retrospective story. The EDSS

Unconfirmed

advised the need to meet and progress the data definitions and develop some robust reporting.

Certain targets must be met to earn outpatient revenue. The CEO and EDSS are to come back to members with an update within a week on what the risks are and what risks management are prepared to take so that the Board can provide feedback if they are not happy with the proposed risk. It was agreed that the paper be withdrawn from the Board agenda to avoid duplication.

Inpatient Performance ESPI 5

With Queenstown Private Hospital opening between September and November 2021, there is potential to negotiate some Theatre capacity if they don't have a high caseload initially.

Medical Imaging Diagnostics

A 10-year strategic view is being worked on. The key areas where Southern DHB is challenged across the district are CT and MRI access in Dunedin and Ultrasonography in Dunedin and Southland and the key focus will be on those areas. There is a contract with the Ministry of Health for the CT in Dunedin included in the Board papers for the 2 March 2021 meeting. There are milestones associated with that and the MoH will fund the capital for the CT. An update was provided on progress with getting the additional CT into Dunedin within a 20 week timeframe and the role of Building and Property in the process.

Emergency Departments

Discussion was held on the disproportionate numbers admitted to Southland ED (1.5 x more than Dunedin ED, 2.28 x the number of non-admissions and 2.06 x the number of overall presentations) when compared to population size. Workshops and meetings have been held with the ED Clinicians and relevant Managers in Southland to understand the situation and the proposal to address the issue was outlined. A draft proposal will go to the ELT for approval. An additional 4.8 Nurses has been signed off for the ED in Southland and management is engaging with the Chief Executive of WellSouth PHN to explore a programme of work that would address the increase in patients into the ED in Southland.

Oncology

A verbal update was provided on the 31-day and 62-day target for Faster Cancer Treatment and the exercise underway for replicating the CDHB logic for calculating the 62-day target as outlined. Work is on-going to improve access for the 62-day target.

The waitlist for a First Specialist Appointment (FSA) for radiation oncology is double what it should be. Work is underway to quantify the impact that recruitment initiatives are projected to have on the waitlist and to assess whether outsourcing is required as well to assist in bringing the wait list back down to 70.

A small number of cases has been outsourced to St George in Christchurch.

Endoscopy

The internal digital referral has been built and goes live on 1 March 2021. This will ensure that all referrals are triaged in a timely way and enhancements to the reporting system will be made.

Unconfirmed

Reports have been developed and provided that show how much Theatre capacity has been utilised and how much facility capacity is available. The variability between Otago and Southland will continue to be monitored on a monthly basis. As HAC has bi-monthly meetings, reporting in the alternate months will be via the CEO's report to Board.

Financial Performance Summary

The EDSS presented the Specialist Services financial results (tab 7) for the month of January 2021, outlined the contributing factors to the adverse $1.8M variance for the month and responded to members' queries.

The CEO confirmed that the year-to-date adverse variance of $9.5M is 3% of budget and advised that Southern DHB does not have a Clinical Costing System due to an historic cost saving decision.

The CEO referenced Appendix 1 – Financial Report for the Hospital Advisory Committee (page 2 of the Financial Report – summary for HAC and page 108 of the agenda papers) when responding to a query regarding capacity in Southland. The report provides a split between Otago and Southland and there is merit in having a second table based on population, as that would capture the fact that the entire population is accessing services in Dunedin, e.g. the CathLab.

In discussion on the treatment of, access to and budgeting for Tavis, the CEO advised that he has asked the CMO at the MoH to clarify whether or not Tavis are entirely acute or not. The EDSS advised that Tavis are not budgeted for.

***It was resolved**:*

"That the reports to the Hospital Advisory Committee be noted.

Closing karakia by Mr Tuari Potiki.

Confirmed as a true and correct record:

Chair: ____________________________

Date: ____________________

Unconfirmed

FOR INFORMATION

Item: CEO Report to Board

Proposed by: Chris Fleming, Chief Executive

Meeting of: 8 April 2021

7

Recommendation

That the Board:

- **notes the attached report and**
- **discusses and notes any issues which they require further information or follow-up on.**

Purpose

This report is provided to update the Board on key issues and activities for the District Health Board (DHB). The intention is to raise key issues, but it is also to inform the Board on wider issues which are occurring within the Southern Health System.

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1. Organisational Performance

There are three papers on the agenda under finance and performance:

- Finance report
- High Level Volumes
- Performance Dashboard.

Financial performance for the month of February is a surplus of $2.759 million compared to a planned surplus of $4.403 million, and hence an adverse result against plan for the month of $1.644 million. Year to date (YTD) financial performance is a $8.185 million deficit against a planned surplus of $0.731 million, resulting in a year to date deficit against plan of $8.916 million. However, the budget for the year explicitly excluded three known factors which were to be reported separately:

- Impact of COVID
- Holidays Act
- Accelerated Depreciation of Dunedin Hospital once the detailed business case (DBC) was endorsed.

These three items are all impacting on the result as noted in the financial reports, however refining these results to core activities (which exclude the three items above), the core operating results, which reflects our operating business as usual results, are a deficit of $1.031 million compared to a planned surplus of $0.731 million so an adverse result of $1.762 million. This is incredibly close to plan with the variance being 0.22% of the actual business as usual revenue.

From a volumes perspective the following is a synopsis:

- Total case weighted discharges were down 132 or 2.8% for the month compared to the previous year, but up 93 or 0.24% year to date. It should be noted however that medical is down 1.42%, surgical is up 0.53% and maternity up 5.5% year to date

- Raw discharges are up 25 or 0.5% for the month, and down 0.57% year to date
- Emergency Department (ED) attendances were down 3.6% for the month, and now down 1.23% year to date, noting that for this month once again all EDs were quieter than the same month last year with Lakes down 6.64%, Southland down 5.19% and Dunedin being virtually the same as last February. On a year to date basis Dunedin presentations are down 1.0%, Lakes down 4.5% and Southland down 0.3%
- Mental Health bed days continue to be below last year's levels with a reduction of 5.3% for the month and now 4.9% year to date.

This paints a picture seen in the table below, which shows caseweights (CWD) being up marginally, but discharges down marginally with average caseweights per discharge being very similar. This continues to be counter to the pressure that staff are reporting. The most significant movement is the increase in acute surgery which has risen by 2.4% in caseweights and 4.6% in discharges, while medical acute caseweights are down 2.3% and discharges by 3.5%.

	Feb 2021 YTD			Feb 2020 YTD		
	CWD	Discharge	Average CWD Per Discharge	CWD	Discharge	Average CWD Per Discharge
Maternity	3,729	4,584	0.81	3,534	4,546	0.78
Medical	14,554	22,202	0.66	14,763	22,665	0.65
Surgical	20,142	13,754	1.46	20,035	13,562	1.48
Total	**38,425**	**40,540**	**0.95**	**38,332**	**40,773**	**0.94**

The concerning picture is that while in the previous year we saw a gradual reduction in both medical caseweights and raw discharges from the peak of July through extending all the way through to the lockdown in April, we have seen a gradual incline in both medical case weights and raw discharges since June 2020. It is anticipated that this will indeed be the impact of the COVID lockdown period, however the trend is not dissipating, and unless something can be done to improve flows through the hospital and understand the causes of this increase there are significant risks associated with this coming winter. The January drop off in medicine is the same trend as last year, but from a higher base.

2. Top Five Risks

Risk	Management of Risk Avenue	Effectiveness
Adverse clinical event causing death, permanent disability, or long term harm to patient	SAC system in place with all SAC 1 and 2 events being reviewed and reported to the Clinical Council, Executive Leadership Team and Finance, Audit and Risk Committee	Need to improve feedback loop and extend to near miss events
Adverse health and safety event causing death, permanent disability or long term harm to staff, volunteer or contractor	Health and Safety Governance Group with agreed charter and work programme reporting regularly to the Finance, Audit and Risk Committee	Need to improve feedback loop and extend to near miss events
Critical failure of facilities, IT or equipment resulting in Susdisruption to service	Interim works programme being implemented to maintain facilities, asset management plan	Moderate effectiveness, state of facilities in Dunedin well documented, Mental Health business case

	developed, IT digital transformation business case in development, disaster recovery plans in place to address critical failures	needed. Capacity issues in Southland.
Critical shortage of appropriately skilled staff, or loss of significant key skills	Workforce strategy developed however more robust action planning required	Further focus must be applied.
Misappropriation of financial resources provided by the Crown for optimising the health and well being of our community.	Delegations of authority policy, internal audit work programme, external audit. All reporting through the Finance, Audit and Risk Committee	Improvement through upgrading financial system will assist in more effective management of risk

7

3. Code Black 25 March 2021

On Thursday 25 March, as Chief Executive based on the occupancy of the hospital at 7:00am I determined that it was necessary to take some decisive actions to address the gridlock that was present at Dunedin Hospital. At that time there were 18 patients in ED beds (18 out of 31 – 58% of the department capacity) awaiting beds in the hospital for admission. At the same time there were only three beds available, there were elective admissions scheduled, and there were other patients being treated in ED for whom decisions to admit had yet to be made. The previous day the gridlock had also been very significant.

As the board are aware, we have been developing a hospital escalation plan and while it was still being finalised it was clear that the circumstances present on the day were such that we needed to take some decisive action. The result was spectacularly successful with the hospital being back in normal operations by the end of the day.

A review is being undertaken to identify what caused the situation to deteriorate to that point. At a high level there appears to have been fewer discharges over the long weekend (Otago Anniversary weekend) and a slightly higher than expected number of presentations on the Tuesday. The review is important with Easter being only a week later. The review and any recommendations are expected by the close of play on Tuesday 30 March to ensure we address any issues with urgency for the Easter weekend.

It is unfortunate that the media really latched onto the code black and extended this to the nationwide story of the pressures in EDs. The action we took was appropriate for the circumstances and was actually ultimately a good news situation where the organisation responded in a timely way to the crisis it found itself in and address the issues present within 10 hours.

4. Recruitment to Key Vacancies in the Executive Leadership Team

Nigel Trainor, Chief Executive of South Canterbury DHB, has been appointed to the role of Executive Director Finance, Procurement and Facilities. We are working through when Nigel will start and there will be a transition period where he will be doing some work with us while still transitioning out of his South Canterbury role. He will be able to spend some time at Southern DHB before Julie Rickman leaves in late April and then commence full-time shortly thereafter. Nigel previously worked for me in a similar role at South Canterbury DHB and then subsequently replaced me when I moved to Nelson Marlborough DHB. It is great to have a person of Nigel's calibre being appointed into the role

We are also at the short listing process for the appointment of an Executive Director Strategy, Primary Community

5. COVID-19 Vaccine Programme

In March an Emergency Operations Centre (EOC) was established to support the COVID-19 vaccination centres which will be responsible for the roll out the new COVID-19 vaccines.

Māori and Pasifika Providers

We were informed by Hon Peeni Henare, Associate Minister of Health, on 10 March that initial funding of approximately $39 million has been allocated to ensure Māori communities and providers are prepared for the roll out of the COVID-19 programme. An initial 40,000 courses of the COVID-19 vaccine will be provided specifically for Māori and Pasifika health providers. Giving the providers the flexibility to best meet the health needs of people they meet with.

The funding and vaccine allocation is as outlined:

- $24.5 million for the development of community-based vaccine support services that will support Māori Health Providers to engage and prepare their communities for the COVID-19 vaccination programme
- $11 million to be provided directly to Māori Health Providers to help build provider infrastructure and workforce capability
- $2 million for iwi to deliver dedicated and tailored communications campaigns to their whānau
- $1.5 million for workforce development
- 40,000 courses of the COVID-19 vaccine as a starting point for Māori and Pasifika health providers.

The Māori Health leadership team over the last couple of weeks has been developing a business case to be submitted to the Ministry for the local COVID-19 vaccination programme. The parameters of this business case have been unclear and in light of this recent communication we are assuming additional information will be made available shortly on how we might be able to access this fund.

6. Equity Analysis – Specialist Services

The team have looked into the data sets that are available for equity, and we have also looked at the Auckland Hospital Advisory Committee (HAC) report, and how they treat equity reporting. Unfortunately, the quality of our existing data sets is not great. We have also looked at Power BI reports that have previously been produced but have found that they do not give useful insights into the inequities that exist. Reflecting on one of the principles from the workshop with Pat Snedden – that you have to determine what data you need and work out how to capture it, we have decided to proceed as follows:

- Our Chief Māori Health Strategy and Improvement Officer (CMHSIO) will attempt to connect us to the business analysts and others in Auckland who produce the equity information which they use
- We will invite them to a Zoom workshop, and we will include key people such as our CMHSIO, our General Manager of Surgical Services and Radiology (who is leading our working group), our Executive Director Specialist Services (EDSS) and members of our Digital Team and other teams.
- The objective of the exercise will be to determine what constitutes good equity reporting, what needs to change in terms of the data collected and how will we go about collecting and analysing it.

This will then lead to improvements in the future that will enhance our ability to report on equity, which is key to creating a meaningful work programme to improve it. Although we are hoping to be able to invest in equity to move it further forward, working on the principles in the Auckland HAC report (of making equity 'business as usual' throughout services), we are also starting to think about what we can do, for example in planned care to monitor for equity issues / blockages across our entire outpatient and inpatient waiting lists. Our General Manager Surgical Services and Radiology is working on further reporting for the next HAC report and the workshop should allow us to think about how we can capture and build in equity related metrics as we move forward.

7. Radiology

A key focus for the radiology service is to get the new computed tomography (CT) scanner into Dunedin as quickly as possible. To this end, we have fast tracked the procurement and selection process, and have placed the order of the scanner. The lead in time is likely 20 weeks and our facilities team are working to ensure that the building work is completed within this timeframe.

It should be noted that in order to maximise the volumes we can put through the new scanner, further resources (medical imaging technologists and associated roles) will be required. This is going into the budget priorities under the header of 'investment in improving access to medical imaging'.

The other key piece of work that is occurring in this service is the development of the 10 year radiology strategy. Information gathering has been underway since key managers returned from leave in late January and a workshop will be held shortly. Key information required by the strategy includes:

- Projected growth in demand for the core modalities – CT, magnetic resonance imaging (MRI) and Ultrasonography (we are not focusing on digital / plan film X-ray as there is a good level of access to these modalities)
- Current intervention rates and how these compare regionally and nationally
- Tactics for increasing access in the short term (e.g. outsourcing and how much capacity is available), and strategies for increasing access in the longer term (e.g. joint venture options for an MRI within the community)
- Capital replacement programme (connected to the life of the building), e.g. it may be sensible to 'sweat' some assets at the end of their lives before the new ambulatory block comes on stream.

We hope to demonstrate the short-term demands and to give a sense of how these could be funded (e.g. by prioritising outsourcing expenditure for ongoing improvement action planning funding), whilst also giving an indication of what needs to be done in the longer term, e.g. finding a way to put a second MRI machine into Dunedin. The strategy will be written as a guiding document and if agreed to will then be used as the basis for creating proposals to support further investment into resourcing and capital equipment.

8. Elective Surgery and Wait Time (ESPI) Performance

Our elective surgery delivery has continued to be challenging. We need to support the taskforce, but we also need to systematically address the nurse gaps which are causing beds to be closed and leading to a loss of surgery. To this end we have drafted a four quadrant dashboard. The first quadrant tells us how well utilised our physical and resourced beds are, the second quadrant tells us what our 'on the day' roster gaps were across am, pm and evening shifts, the third quadrant tells us the extent to which the roster gaps were closed out (e.g. with variance response management – flexible resources), and the remaining quadrant tells us what the net impact all of this had on beds (bed closures), and in turn what impact this had on elective surgery postponements or light list bookings. This information is not necessarily available from source systems (i.e. some may need to be captured manually), and we will build a data store that will enable us to capture this information on a daily basis and then see it in a Power BI report daily, rolled up for weekly and rolled up for monthly. The intention is that this dashboard should allow us to have a more global picture of where our problems are, and to triangulate, e.g. roster gaps to bed closures to cancelled surgery. The dashboard is at ward level but rolls up to give a total view.

There may be a bit of trial and error involved, but once we get it working well, we hope to clearly see where our challenges are, which will then enable us to target them for closure, e.g. via Care Capacity Demand Management (CCDM), or appropriately increase permanent resourcing, e.g. to offset the long-term ACC sickness trend which would otherwise be covered by working up and overtime.

On the face of it the signals are good that we will start to see some improvement in nursing availability – in particular, the nurses who were hired to replace vacancies in January (graduate intake) are about to come off 'super numery' (where they don't count in the rosters because they are still going to training sessions etc). However, this needs to be monitored closely and we need to ensure we start to respond by filling our elective lists again to get the most out of our elective surgery. We will continue to refine and monitor the dashboards we build and if built well and meaningfully, we will see improved access to nursing translate into higher levels of surgery in the metrics in our dashboard.

We have received further clarity from the Ministry about recovery funding. The recovery funding is split circa 50:50 between inpatient (elective surgeries), and outpatient (first specialist appointment (FSA), follow up and medical imaging), which is to be paid after the end of the financial year.

For inpatients, we have clarified that the additional funding kicks in after the 'business as usual' elective plan volumes are delivered, i.e. even though the cheque has been written for quarter one inpatient volumes and is about to be written for quarter two volumes, under delivery of the elective plan will wash against the delivered recovery volumes which leaves us able to recognise our elective plan revenues year to date but essentially means we have not achieve recovery volumes because of the overall volumes delivered year to date. This gives us a strong incentive to maximise outsourcing volumes and we will try to get as much done as we can via outsourcing (i.e. because every caseweights delivered above the elective plan will be funded from recovery funding).

For outpatients, our Ministry colleagues have calculated that we are on track to earn in the region of half of the $2.6m available for outpatient activity, based on the volumes we delivered for the first six months of the year. To maximise what we can earn, the additional volumes we do will be funded on the volume delivered. We therefore need to get as much additional volume done as we can. Given the length of time it took to get the plan agreed to, and the time required to ramp up volumes in some services (e.g. where locums etc are not freely available), we have said that we will write to the Ministry and propose that some of the trajectories get extended beyond the financial year, running in parallel with the new financial year (which will have its own improvement action plan). This would enable us to maximise volumes delivered for additional funding earned.

One of the services we are particularly concerned about from an elective perspective is the orthopaedic service. We had accumulated a large wait list during and immediately after COVID because elective surgery essentially came to a halt for two months, and our subsequent challenges with our inability to resource inpatient beds has hit this service particularly hard at both sites (because, e.g. joints in particular, usually require several nights of inpatient stay). Although access to inpatient beds now seems to be improving, we have a significant wait list which may take us a couple of years to truly get on top of. To address this the two service managers who are responsible (for Dunedin Orthopaedics and Southland Orthopaedics respectively) are working on a joint proposal to maximise use of the capacity across the district, using a range of initiatives. The two managers, the planned care manager and the EDSS visited South Canterbury DHB and discussed the possibility of moving our boundaries to get some of our case load done there. They have perioperative and inpatient bed capacity, but no surgeon and anaesthetic technician availability. We believe we can supply both for a semi-regular list from May onwards and are working through how we can make this work. We are also looking to use them to get access to their private hospital arrangement which is on good commercial terms compared to our arrangements elsewhere. And we have signalled to the Chief Operating Officer at Southern Cross that when the new hospital opens in Queenstown at the end of this year we would like to focus on orthopaedic surgery. We will continue to develop the plan, including the means of funding the activity, which will be a combination of future improvement action plan funding from the Ministry and our own outsourcing budget.

9. Emergency Departments

We are continuing to develop our proposal for fit for purpose ED spaces in Southland and to justify a small expansion of the ED space (increasing to four medical assessment unit beds or ED beds). To justify this, benchmarking and good data will be key, so that we can demonstrate that we are not over-resourcing the department relative to what the demands on the department should be (as opposed to what they currently are). We recently ran a modelling exercise to show how the patients would flow through the department with a medical assessment unit (MAU) or ED beds during a busy day (using an historic actual busy day and moving the cases through on the whiteboard). The MAU beds appeared to be the most effective at generating a positive flow. It was interesting to note how under pressure the ED was at peak times even with the fit for purposes spaces and four beds factored in, but this is a factor of the broader issues we have to work through – what are the appropriate volumes and how do we partner with primary care to manage them down?

We have assembled all of the information that we have collected to date into a Better Business Case format, i.e. it is assembled under the headers of strategic case (why are we changing), economic case (options analysis and preferred option clearly stated), commercial case (how would we engage our build partners), financial case (financial implications) and management case (how would we manage the disruption from the building work and any method of working change considerations). We are now working on the benchmarking, including getting a sense for what the volumes should be, prior to engaging with primary care with the aspiration of forming a work programme to get the volumes down.

We recently ran the same data used for the modelling exercise across a territorial local authority (TLA) filter to see where the volumes are coming from. Interestingly, for those admitted into the ED, 60% appear to originate from within Invercargill city (i.e. comprise part of the circa 56,000 population), and 40% appear to be coming from out of the immediate Invercargill district. This needs further investigation, bridging and analysis, but is likely to be a contributing explanation for why the volumes are so high into the Southland ED. Once we have accounted for these sorts of impacts, we should then be in a position where we can robustly benchmark the volumes being received with what should be received.

The next key step for improving the performance of Dunedin ED is the development of the medical assessment unit. Our building and property service have been working on what the de-cant plan needs to look like and will be reporting back on this soon.

10. Oncology

Following a report to the Clinical Council which highlighted key performance issues and resourcing needs for medical oncology in particular, but also for radiation oncology, the EDSS has proposed to the medical oncology clinical leader that a small working group be established to systematically work out what changes, improvements, support and ultimately resourcing is required for the service. This working group will get underway shortly. Similar discussions have been had with the Cancer Control Agency and the Ministry and we have proposed the development of a short-term recovery plan for Radiation Oncology, and a 10 year strategic plan (to be developed over the course of this year and with key Cancer Control Agency input) for each of the medical oncology and radiation oncology services. The working group will be established in a manner that contributes to the overall picture that is required for the strategic plan. The EDSS and Chief Medical Officer (Chief Medical Officer) are also meeting with the medical oncology clinical leader to determine what immediate investment may be required so that an investment proposal can be constructed and fed into the budget prioritisation process. In the meantime, we have been able to fund a locum from improvement action plan funding to immediately reduce at least some of the pressure being felt by the medical oncology team.

11. Gastroenterology

We are continuing to progress our improvement programme. We went live with the new digital internal referral earlier this month. The new referral has compulsory information which will increase the quality of the referral. It also clarifies whether a junior consultant is requesting a colonoscopy for their senior medical officer (SMO) or on their own. This is an important distinction because it has been agreed that any requests by a gastro-intestinal (GI) specialist will be automatically accepted. We are also continuing to define our reporting to show what our scoping capacity is, and how much scoping capacity is being used. The service remains on top of urgent and semi-urgent scoping requests but is continuing to work through a backlog of surveillance scopes. On current projections this backlog will be completely caught up by September, but this is likely to improve once new Ministry guidelines (allowing longer time frames for certain types of cases) have been implemented.

As mentioned in previous reporting, we successfully implemented a colonoscopy referral code in our patient administration system which has allowed us to differentiate the colonoscopy wait list from other scoping types. Our next step is to hold a workshop to see if we can introduce further codes. These codes would allow us to further breakdown the journey of a colonoscopy request and to see the pathway that is taken for requests that are ultimately declined after going through the second review process.

In conjunction with our sponsor (Andrew Connolly) we are likely to propose a small increase in resources in the near future to allow us to do more scoping. The reports we have developed and are developing are important as they demonstrate where this additional resource would be of value.

Colonoscopy performance reporting for February 2021 is as below.

Colonoscopy performance for February 2021

Performance on Ministry Targets - Region combined

End of Month	Diag Urgent 14 days(90%)	Var Urgent	Non Urgent 42 days (70%)	Var Non Urgent	NBSP 45 Days (95%)	NBSP Var
31 July 2020	91.23%	1.23%	68.73%	-1.27%	97.78%	2.78%
31 August 2020	85.71%	-4.29%	74.52%	4.52%	97.25%	2.25%
30 September 2020	89.80%	-0.20%	82.79%	12.79%	97.25%	2.25%
31 October 2020	92.59%	2.59%	84.82%	14.82%	96.63%	1.63%
30 November 2020	100.00%	10.00%	79.12%	9.12%	100.00%	5.00%
31 December 2020	92.86%	2.86%	90.79%	20.79%	98.67%	3.67%
31 January 2021	78.95%	-11.05%	71.01%	1.01%	98.46%	3.46%

Colonoscopy waiting times as of 1 March 2021

Real time waitlist - combined

Priority new	No of Waiting Patients	Average waiting time	Median Wait time	Longest Wait
Diag Urgent	5	6.00	7.00	7
Diag Non-Urgent	131	22.40	19.00	96
Diag Planned and Staged	56	31.14	25.00	130
NBSP	32	18.91	14.00	95
SURV	541	107.54	94.00	376

Real time waitlist - by region

Hospital	No of Waiting Patients	Average waiting time	Median Wait time	Longest Wait
Dunedin				
Diag Urgent	3	6.67	7.00	7
Diag Non-Urgent	90	18.58	17.00	96
Diag Planned and Staged	30	32.13	25.00	130
NBSP	25	17.36	14.00	95
SURV	208	64.97	56.50	376
Southland				
Diag Urgent	2	5.00	5.00	7
Diag Non-Urgent	41	30.78	24.00	88
Diag Planned and Staged	26	30.00	25.00	117
NBSP	7	24.43	18.00	70
SURV	333	134.13	134.00	348

Maximum Wait time Breach

Hospital	Urg >30	Non urg >90	SURV >120	NBSP > 45
Dunedin		1	19	1
Southland			186	1
Total		**1**	**205**	**2**

Recovery

Of concern are the 205 surveillance patients over the 'maximum' waiting time, however this is a significant improvement, and the trajectory is signalling that we will have no patients waiting over the maximum time by September 2021. Dunedin Hospital has almost recovered completely, and the primary focus is on Southland Hospital, ensuring that all lists are filled and Saturday lists undertaken where able. Given the limited physical capacity we are also looking to offer all patients an appointment in Dunedin, where they are able to travel.

The recommendations of the Bissett report have largely been enacted with significant progress made on developing reporting and referral practices. Refinements are now being made to improve the quality and accuracy of reporting.

Urgent 82%	Fell below target but represents three patients.
Non-urgent 89%	Meets target.
Surveillance 41%	Performance improved but way below 70% target. Patients least at risk of delay in this group however will be next focus of recovery. Only 19 patients in Dunedin exceeding 120 day maximum wait but over 100 in Southland. Focus on Southland recovery with appointments being offered in Dunedin. High risk (1 year) surveillance patients prioritised.
NBSP 98%	Below 100% target but very few patients

12. Generalism

Following the approval of the Generalism business case in December the team has made good progress with recruitment – two registered medical officers (RMOs), two of the 3.7 SMOs and the change manager have now been successfully recruited. The change manager starts next week. The first priority for the change manager is to develop the project plan (with work break down structure), change plan and benefit realisation plan. Per the Board action on this topic we are due to report to the board on benefit realisation in May and the project manager's first two weeks will be focused on creating the planning that will enable this first report to be produced.

13. Māori Business Procurement

On 3 December 2020, following Cabinet agreement, the Government announced a new progressive procurement policy with a focus on Māori businesses. This policy requires all government agencies that are subject to the Government Procurement Rules to set and report against a target that at least 5% of the total number of their annual procurement contracts are awarded to Māori businesses. For the purposes of this procurement policy, a Māori business is defined as either a Māori authority as classified by the Inland Revenue Department or one that has at least 50% Māori ownership. This policy is intended to increase the diversity of suppliers engaged by government agencies and to provide more opportunities for Māori businesses to tender for government contracts. An internal Southern DHB meeting was held on 16 March to look at the issues associated with this new instruction. As a result, we will be reaching out to other DHBs, Te Puni Kōkiri, Te Rūnanga o Ngāi Tahu and the Ministry of Business, Innovation and Employment to seek further clarification that will feed into a new procurement policy set down for the Finance, Audit and Risk Committee meeting in May.

14. Independent Review of the Southern Mental Health and Addiction System Continuum of Care

The Māori Health leadership team are working with Synergia to run three Māori community consultation huis in Dunedin and Invercargill in April. The huis will be facilitated by two contractors, Kiritapu Murray and Tuari Potiki, and will involve some of the Synergia team, including Matire Haywood. Two additional huis via Zoom are planned with the secondary Māori Mental Health team and then our kaupapa Māori health providers, including PACT and Kakakura Trust.

15. Iwi Governance Committee Partnership Agreement Signing

Representatives of the Southern DHB Iwi Governance Committee signed the 'Principles of Relationship Agreement' with the Southern DHB and WellSouth Primary Health Network at Otakou marae on 15 March. This marks the formalised relationship and a renewed commitment to improving Māori health and equity across our district.

16. Southern Future

The People and Culture Forum met in February, focus continues on staff wellbeing and how the members of the forum can enable this.

The People Dashboard is being finalised and will provide managers with information in one place to monitor any areas of concern.

17. Communications

When comparing communications volumes with 2020, we can see the entry of last year's COVID outbreak enter the graph below.

This year, over the past month, focal areas have included the roll out of the COVID vaccine, including the first vaccinations in our district. The results from blood testing following possible lead contamination in the Waikouaiti water supply were communicated at a public meeting at; and the continued pressure on the hospital system including the escalation to 'Code Black' at Dunedin Hospital on 24 March. This pressure has also been reflected in media interest in maternity services in the Central Lakes area, in relation to transfers to secondary care in the context of very busy hospitals and a shortage of midwifery staff.

Other areas of interest have included the signing of the partnership agreement by Murihiku and Āraiteuru rūnaka, Southern DHB and WellSouth on 15 March. We announced the appointment of a Mental Wellbeing Navigator in the Central Lakes area, the result of a cross-partnership initiative focused on COVID recovery.

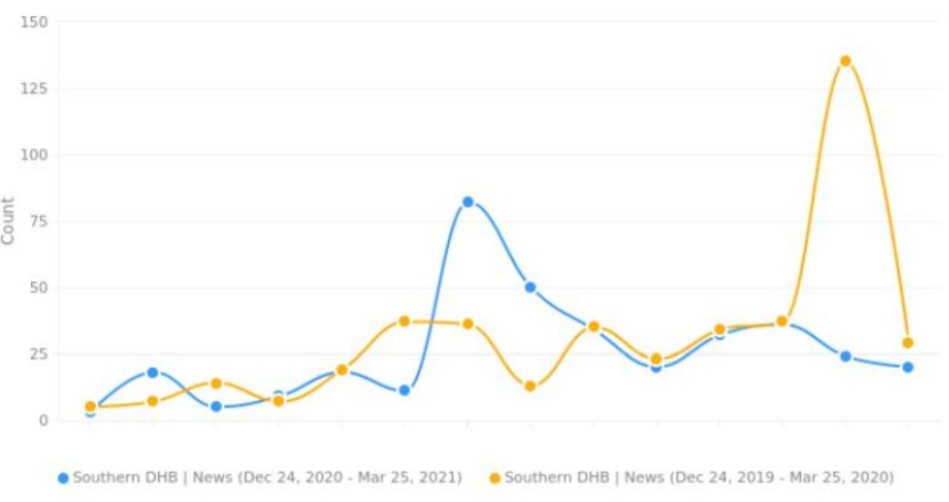
The communications team is also working with the Patient Flow Taskforce and others in specialist services to support efforts to reduce delays in our hospital systems and respond to the community's concerns.

COVID communications focus

The communications team is prioritising its work supporting the emergency operations centre (EOC) and the roll-out of the COVID vaccine. This includes staff and stakeholder updates, public facing information, and targeted communications for the populations prioritised in line with the Ministry of Health's sequencing framework.

In addition, the team alongside the Māori Health directorate is working with other South Island DHBs and Mokowhitu consultancy to develop communications specific for our Māori communities. We are focusing on storytelling relating to the achievements of Māori health providers in supporting the response to date and building on this to accomplish our vaccination goals.

The anniversary of the COVID outbreak last year has seen reflections, including acknowledgement of the role of Southern health system staff in managing this unprecedented situation.



Chris Fleming
Chief Executive Officer

30 March 2021

FOR APPROVAL

Item: Financial Report for the period ended 28 February 2021.

Proposed by: Julie Rickman, Executive Director Finance, Procurement & Facilities

Meeting of: Board, 8 April 2021

Recommendation

That the Board approves the Financial Report for the period ended 28 February 2021.

Purpose

1. To provide the Board with the financial performance of the DHB for the month and year to date ended 28 February 2021.

Specific Implications for Consideration

2. Financial

- The historical financial performance impacts on the options for future investment by the organisation as unfavourable results reduce the resources available.

Next Steps & Actions

The Finance team are continuing to refine and develop the presentation and content of the Financial Report to improve transparency and understanding of the financial performance and position of the organisation. This work is being undertaken with guidance from the Chair and Deputy Chair of the Finance, Audit & Risk Committee.

Appendices

Appendix 1 Financial Report for the Board

Southern DHB Financial Report

Financial Report for:	28 February 2021
Report Prepared by:	Finance
Date:	12 March 2021

Report to Board

This report provides a commentary on Southern DHB's Financial Performance and Financial Position for the period ending 28 February 2021.

The net surplus for the month of 28 February 2021 was $2.8m, being $1.6m unfavourable to budget. The result includes a one-off $0.6m reduction in revenue related to under-delivery of the Improvement Action Plan. The expenditure includes COVID-19, Holidays Act 2003, New Dunedin Hospital Accelerated Depreciation and Digital Hospital Project Costs, totalling $1.7m.

Revenue was $1.5m favourable to budget.

Government Funding included unbudgeted revenue COVID-19 funding of $0.4m for Community Pharmaceuticals and $0.6m for Surveillance & Testing, $0.2m for Mental Health funding and $0.2m for IDF funding.

The revenue for COVID-19 Surveillance & Testing has been recognised to match expenditure. However as it is subject to a wash-up there is an inherent risk the funding may not be approved by the Ministry of Health. The current exposure is $1,564k.

Expenses were $3.1m unfavourable to budget.

The Workforce costs were $2.1m unfavourable inclusive of $0.6m additional Holidays Act 2003 provision and higher than expected costs in Medical RMOs, Nursing and Management/Admin.

The Clinical Supplies were $0.4m unfavourable, reflecting higher treatment disposables and pharmaceuticals expenditure which was offset by lower implants & prostheses costs. Depreciation was $0.1m unfavourable due to accelerated depreciation on the Dunedin Public Hospital. Provider Payments were $1.4m unfavourable, reflecting COVID-19 Surveillance and Testing expenses and higher Residential Care payments. Capital Charge Expense was $0.4m favourable.

Financial Performance Summary

SOUTHERN DISTRICT HEALTH BOARD
Statement of Financial Performance
For the period ending 28 February 2021

Month Actual $000	Month Budget $000	Variance $000			YTD Actual $000	YTD Budget $000	Variance $000		LY Full Year Actual $000	Full Year Budget $000
				REVENUE						
97,574	96,250	1,324	F	Government & Crown Agency	787,909	770,544	17,365	F	1,089,019	1,155,951
1,010	878	132	F	Non-Government & Crown Agency	9,229	7,019	2,210	F	11,047	10,528
98,584	97,128	1,456	F	*Total Revenue*	797,138	777,563	19,575	F	1,100,066	1,166,479
				EXPENSES						
37,411	35,313	(2,098)	U	Workforce Costs	310,824	301,269	(9,555)	U	484,392	462,125
3,489	3,698	209	F	Outsourced Services	30,642	29,093	(1,549)	U	41,837	43,556
8,044	7,628	(416)	U	Clinical Supplies	73,375	64,804	(8,571)	U	99,345	96,871
4,507	4,781	274	F	Infrastructure & Non-Clinical Supplies	39,805	39,953	148	F	63,258	60,354
39,220	37,808	(1,412)	U	Provider Payments	326,469	315,494	(10,975)	U	466,737	474,021
3,154	3,497	343	F	Non-Operating Expenses	24,208	26,219	2,011	F	34,951	40,469
95,825	92,725	(3,100)	U	*Total Expenses*	805,323	776,832	(28,491)	U	1,190,520	1,177,396
2,759	4,403	(1,644)	U	**NET SURPLUS / (DEFICIT)**	(8,185)	731	(8,916)	U	(90,454)	(10,917)

8.1

Revenue (Year to Date)

Overall, Revenue is $19.6m favourable to budget year to date.

Government and Crown Agency revenue is $17.4m favourable, including additional funding for COVID-19 $6.8m, Primary Mental Health & Addiction $2.4m and Community Pharmaceuticals $3.4m. These revenue streams have a direct connection to expenditure. The Capital Charge funding has been reduced by $1.4m to align with the change in the Treasury rate from 6% to 5%.

Non-Government & Crown Agency revenue is $2.2m favourable to budget. The recognition of the donated clinical equipment and PPE from the Ministry of Health of $2.9m has been offset for the most part by the lower Non Resident revenue of $0.5m.

Expenditure (Year to Date)

Total Expenses year to date are $805.3m, which is $28.5m unfavourable to budget.

The Workforce costs are $9.6m unfavourable year to date. This includes $5.1m of Holidays Act 2003 liability which was not budgeted.

Outsourced Clinical Services are $1.5m unfavourable year to date reflecting additional costs incurred for delivery of the Improvement Action Plans.

Clinical Supplies are $8.6m unfavourable year to date for hospital clinical activity to deliver Business as Usual and the Improvement Action Plan. The major contributors include Treatment Disposables, Instruments & Equipment and Pharmaceuticals.

Provider Payments are $11.0m unfavourable year to date; comprising payments to NGOs supporting COVID-19 activity, including $6.3m COVID-19 testing in the community, $1.7m for Mental Health & Addiction and $0.4m for Community Pharmaceuticals. The Disability Support payments for Residential Care are $2.1m unfavourable as there has been a higher than expected volume of hospital level care for patients.

Year to Date Results – By Key Drivers

The Financial Performance includes unbudgeted expenditure outside the normal Business as Usual (BAU). The year to date Financial Performance table below indicates the split of financial performance across unbudgeted activities and Business as Usual (BAU).

SOUTHERN DISTRICT HEALTH BOARD
Summary of YTD Results - By Key Drivers
For the period ending 28 February 2021

	YTD Actual Total $000	YTD COVID-19 $000	YTD Holidays Act $000	YTD ODPH Accelerated Depreciation $000	YTD NDPH $000	YTD BAU $000	YTD Budget Total $000	YTD BAU Variance $000	
REVENUE									
Government & Crown Agency	787,909	6,807	-	-	-	781,102	770,544	10,558	F
Non-Government & Crown Agency	9,229	2,984	-	-	-	6,245	7,019	(774)	U
Total Revenue	797,138	9,791	-	-	-	787,347	777,563	9,784	F
EXPENSES									
Workforce Costs	310,824	885	5,034	-	908	303,997	301,269	(2,728)	U
Outsourced Services	30,642	(3)	-	-	-	30,645	29,093	(1,552)	U
Clinical Supplies	73,375	604	-	-	-	72,771	64,804	(7,967)	U
Infrastructure & Non-Clinical Supplies	39,805	131	-	1,156	235	38,283	39,953	1,670	F
Provider Payments	326,469	7,995	-	-	-	318,474	315,494	(2,980)	U
Non-Operating Expenses	24,208	-	-	-	-	24,208	26,219	2,011	F
Total Expenses	805,323	9,612	5,034	1,156	1,143	788,378	776,832	(11,546)	U
NET SURPLUS / (DEFICIT)	(8,185)	179	(5,034)	(1,156)	(1,143)	(1,031)	731	(1,762)	U

Financial Position Summary

SOUTHERN DISTRICT HEALTH BOARD
Statement of Financial Position
As at 28 February 2021

Actual 30 Jun 2020 $000		Actual 28 Feb 2021 $000	Budget 28 Feb 2021 $000	Actual 31 Jan 2021 $000	Budget 30 Jun 2021 $000
	CURRENT ASSETS				
31,011	Cash & Cash Equivalents	27,472	7	25,065	7
49,819	Trade & Other Receivables	57,037	53,965	54,054	48,830
6,095	Inventories	6,301	5,122	6,320	5,235
86,925	*Total Current Assets*	90,810	59,094	85,439	54,072
	NON-CURRENT ASSETS				
326,463	Property, Plant & Equipment	327,788	348,155	328,971	355,122
3,307	Intangible Assets	4,145	17,854	4,261	20,149
329,770	*Total Non-Current Assets*	331,933	366,009	333,232	375,271
416,695	**TOTAL ASSETS**	422,743	425,103	418,671	429,343
	CURRENT LIABILITIES				
-	Cash & Cash Equivalents	-	6,374	-	16,259
64,666	Payables & Deferred Revenue	73,278	64,607	73,280	64,494
962	Short Term Borrowings	460	1,021	607	955
88,645	Employee Entitlements	88,787	78,460	87,947	85,533
154,273	*Total Current Liabilities*	162,525	150,461	161,834	167,241
	NON-CURRENT LIABILITIES				
1,091	Term Borrowings	891	1,046	900	1,018
75,528	Holidays Act 2003	80,562	31,542	79,933	-
19,810	Employee Entitlements	19,811	19,810	19,810	19,810
96,429	*Total Non-Current Liabilities*	101,264	52,398	100,643	20,828
250,702	**TOTAL LIABILITIES**	263,789	202,859	262,477	188,069
165,993	**NET ASSETS**	158,954	222,245	156,194	241,274
	EQUITY				
485,955	Contributed Capital	487,101	501,073	487,101	531,750
108,500	Property Revaluation Reserves	108,500	108,502	108,500	108,502
(428,462)	Accumulated Surplus/(Deficit)	(436,647)	(387,330)	(439,408)	(398,978)
165,993	*Total Equity*	158,954	222,245	156,194	241,274

Statement of Changes in Equity

Actual 30 Jun 2020 $000		Actual 28 Feb 2021 $000	Budget 28 Feb 2021 $000	Actual 31 Jan 2021 $000	Budget 30 Jun 2021 $000
172,410	Opening Balance	165,993	206,398	165,993	206,398
(90,454)	Operating Surplus/(Deficit)	(8,185)	731	(10,945)	(10,917)
84,744	Crown Capital Contributions	1,146	15,116	1,146	46,500
(707)	Return of Capital	-	-	-	(707)
165,993	Closing Balance	158,954	222,245	156,194	241,274

Cash Flow Summary

SOUTHERN DISTRICT HEALTH BOARD

Statement of Cashflows

For the period ending 28 February 2021

	YTD Actual $000	YTD Budget $000	Variance $000	Full Year Budget $000	LY YTD Actual $000
CASH FLOW FROM OPERATING ACTIVITIES					
Cash was provided from Operating Activities:					
Government & Crown Agency Revenue	785,634	771,744	13,890	1,156,983	738,119
Non-Government & Crown Agency Revenue	7,157	6,864	293	10,296	7,272
Interest Received	245	155	90	232	201
Cash was applied to:					
Payments to Suppliers	(474,777)	(458,460)	(16,317)	(675,364)	(445,782)
Payments to Employees	(299,775)	(313,851)	14,076	(499,568)	(285,441)
Capital Charge	(4,124)	(6,263)	2,139	(12,605)	-
Goods & Services Tax (net)	847	282	565	(486)	4,798
Net Cash Inflow / (Outflow) from Operations	15,207	471	14,736	(20,512)	19,167
CASH FLOW FROM INVESTING ACTIVITIES					
Cash was provided from Investing Activities:					
Sale of Fixed Assets	3	-	3	-	4
Cash was applied to:					
Capital Expenditure	(19,185)	(52,394)	33,209	(72,294)	(23,394)
Net Cash Inflow / (Outflow) from Investing Activity	(19,182)	(52,394)	33,212	(72,294)	(23,390)
CASH FLOW FROM FINANCING ACTIVITIES					
Cash was provided from Financing Activities:					
Crown Capital Contributions	1,145	15,116	(13,971)	45,763	
Cash was applied to:					
Repayment of Borrowings	(710)	(572)	(138)	(220)	3,798
Repayment of Capital	-		-		
Net Cash Inflow / (Outflow) from Financing Activity	435	14,544	(14,109)	45,543	3,798
Total Increase / (Decrease) in Cash	(3,540)	(37,379)	33,839	(47,263)	(425)
Net Opening Cash & Cash Equivalents	31,011	31,012	(1)	31,011	(9,888)
Net Closing Cash & Cash Equivalents	27,471	(6,368)	33,839	(16,252)	(10,313)

Cash flow from Operating Activities is favourable to budget by $14.7 million. Revenue received and Payments to Suppliers are in line with the Statement of Financial Performance, however Payments to Employees is favourable as the budget included payments for the Holidays Act 2003 and the Capital Charge payment is lower than budgeted with the reduction in rate from 6% to 5%.

Cash flow from Investing Activities is favourable to budget by $33.2m. The Capital Expenditure cash spend reflecting the timelines for approval and supply chain delivery for capital expenditure.

Cash flow from Financing Activities is unfavourable to budget by $14.1m. The Annual Plan included funding budget to offset the Holidays Act 2003 payment.

Overall, Cash flow is favourable to budget by $33.8m, primarily the result of the variance in timing of capital expenditure.

Capital Expenditure Summary

SOUTHERN DISTRICT HEALTH BOARD
Capital Expenditure - Cash Flow
For the period ending 28 February 2021

Description	YTD Actual $000	YTD Budget $000	Variance $000	Over Under Spend	LY YTD Actual $000
Land, Buildings & Plant	4,304	18,283	13,980	U	9,388
Clinical Equipment	10,088	11,006	918	U	8,830
Other Equipment	350	731	381	U	322
Information Technology	2,224	7,838	5,613	U	2,417
Motor Vehicles	14	-	(14)	-	3
Software	2,203	14,536	12,332	U	2,433
Total Expenditure	19,185	52,394	33,210	U	23,393

At 28 February 2021, our Financial Position on page 5 shows Non-Current Assets comprising Property, Plant & Equipment and Intangible Assets totalling $331.9m, which is $34.1m less than the budget of $366.0m.

Land, Buildings & Plant variance of $14.0m YTD reflects changes to the timing of the following projects Critical Infrastructure Works, the new Sterile Services Facility, the Tenth Operating Theatre/PACU and Southland Chillers for general air-conditioning.

Information Technology and Software variance combined at $17.9m reflects delays to date in the Vocera Hands Free Clinical Communications and South Island Patient Information Care System (SIPICS) projects. In addition, the Patientrack project has been cancelled.

SERVICE PROVIDER CASWEIGHTED DISCHARGES

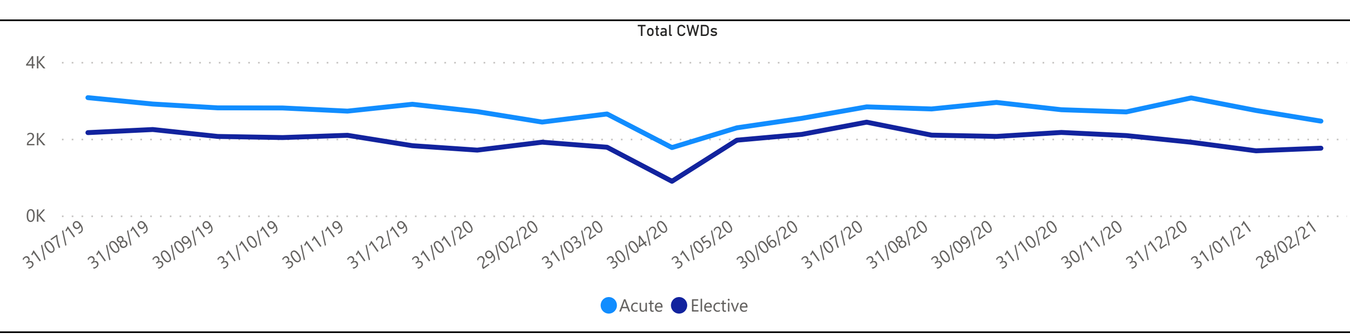
Caseweights	MTD Actual	MTD Target	MTD Variance	% Variance (MTD)	MTD LY Actual	Year On Year Monthly Variance	YTD Actual	YTD Target	YTD Variance	% Variance (YTD)	YTD LY Actual	Year On Year YTD Variance
Maternity Caseweights												
Maternity Acute	122	81	41	50	73	49	777	708	69	10	801	-24
Maternity Elective	356	322	34	11	301	55	2,952	2,798	154	5	2,732	219
Total	**479**	**403**	**75**	**19**	**375**	**104**	**3,729**	**3,506**	**223**	**6**	**3,534**	**195**
Medical Caseweights												
Medical Acute	1260	1,315	-55	-4	1,257	3	11,827	11,397	430	4	12,107	-280
Medical Elective	316	265	51	19	399	-82	2,727	2,276	451	20	2,656	71
Total	**1576**	**1,580**	**-3**	**0**	**1,656**	**-79**	**14,554**	**13,673**	**881**	**6**	**14,763**	**-209**
Surgical Caseweights												
Surgical Acute	1075	1,148	-73	-6	1,103	-28	9,649	9,640	10	0	9,421	229
Surgical Elective	1080	1,244	-164	-13	1,209	-129	10,492	10,537	-45	0	10,614	-122
Total	**2155**	**2,392**	**-237**	**-10**	**2,312**	**-157**	**20,142**	**20,177**	**-35**	**0**	**20,035**	**107**
			-165	**-4**		**-132**			**1,068**	**3**		**93**

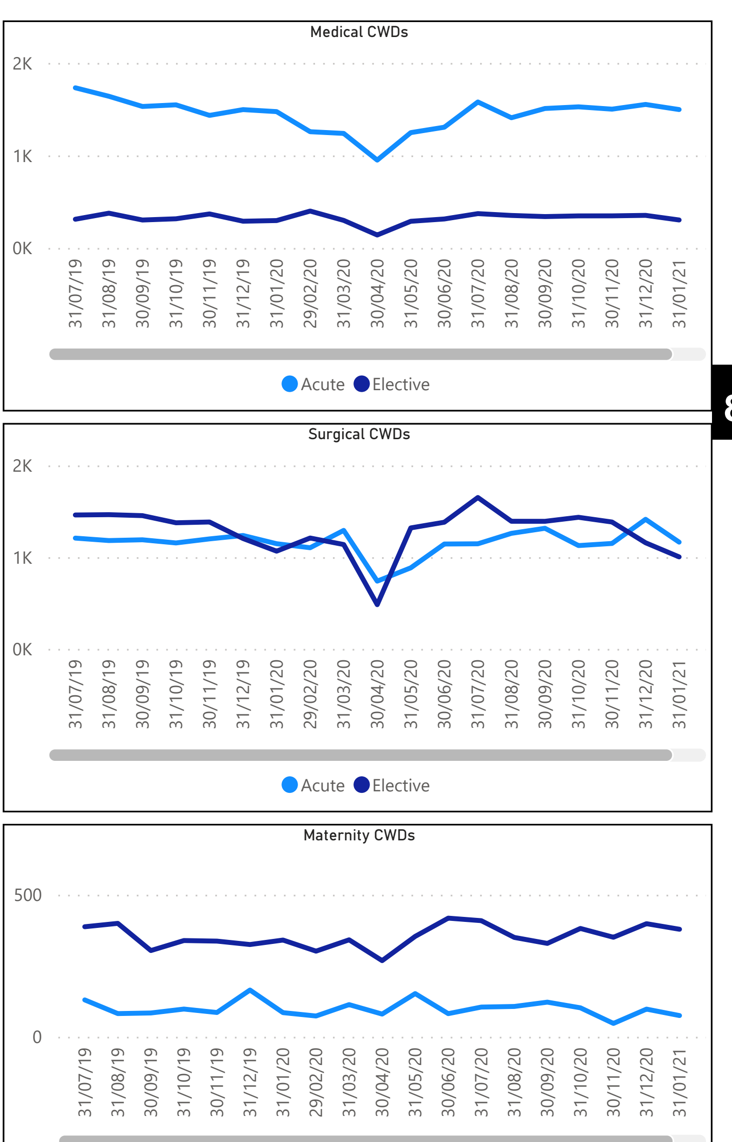
TOTALS

	MTD Actual	MTD Target	MTD Variance	% Variance (MTD)	MTD LY Actual	Year On Year Monthly Variance	YTD Actual	YTD Target	YTD Variance	% Variance (YTD)	YTD LY Actual	Year On Year YTD Variance
Elective	1753	1,831	-78	-4	1,676	-157	16,171	15,611	560	4	16,003	168
Acute	2457	2,544	-87	-3	3,010	24	22,254	21,745	509	2	22,329	-75
Total	**4210**	**4,375**	**-165**	**-4**	**4,686**	**-132**	**38,425**	**37,356**	**1,068**	**3**	**38,332**	**93**

TOTALS excluding Maternity

	MTD Actual	MTD Target	MTD Variance	% Variance (MTD)	MTD LY Actual	Year On Year Monthly Variance	YTD Actual	YTD Target	YTD Variance	% Variance (YTD)	YTD LY Actual	Year On Year YTD Variance
Elective	1,396	1,509	-113	-7	1,608	-212	13,219	12,813	406	3	13,270	-51
Acute	2,335	2,463	-128	-5	2,360	-25	21,477	21,037	440	2	21,528	-51
Total	**3,731**	**3,972**	**-241**	**-6**	**3,968**	**-237**	**34,696**	**33,850**	**846**	**2**	**34,798**	**-102**





8.2

SERVICE PROVIDER RAW DISCHARGES

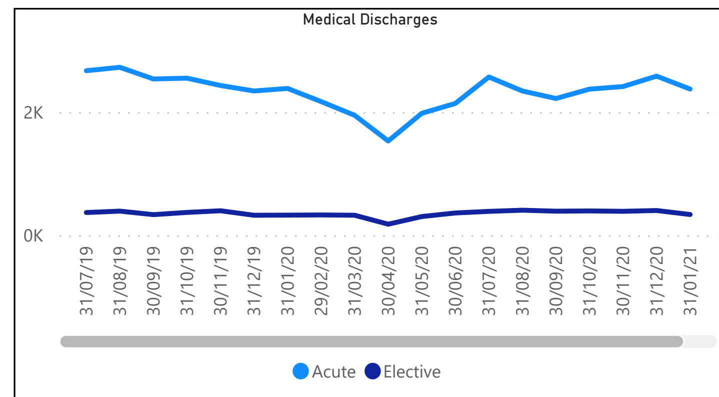
Discharges	MTD Actual	MTD Target	MTD Variance	% Variance (MTD)	MTD LY Actual	Year on Year Monthly Variance	YTD Actual	YTD Target	YTD Variance	% Variance (YTD)	YTD LY Actual	Year on Year YTD Variance
Maternity Discharges												
Maternity Acute	78	73	5	7	72	6	709	631	78	12	681	28
Maternity Elective	482	431	51	12	444	38	3875	3,744	131	4	3865	10
Total	**560**	**503**	**57**	**11**	**516**	**44**	**4584**	**4,375**	**209**	**5**	**4546**	**38**
Medical Discharges												
Medical Acute	2238	2,099	139	7	2,170	68	19111	18,227	884	5	19810	-699
Medical Elective	375	307	68	22	331	44	3091	2,647	444	17	2855	236
Total	**2613**	**2,406**	**207**	**9**	**2,501**	**112**	**22202**	**20,874**	**1,328**	**6**	**22665**	**-463**
Surgical Discharges												
Surgical Acute	776	743	33	4	768	8	6511	6,245	266	4	6226	285
Surgical Elective	762	872	-110	-13	901	-139	7243	7,383	-140	-2	7336	-93
Total	**1538**	**1,615**	**-77**	**-5**	**1,669**	**-131**	**13754**	**13,628**	**126**	**1**	**13562**	**192**
			186	**4**		**25**			**1,663**	**4**		**-233**

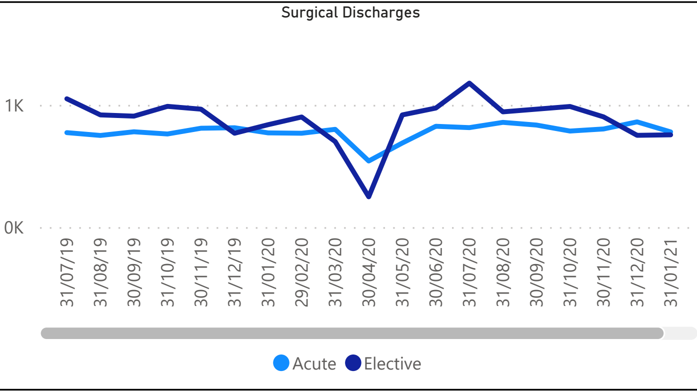
TOTALS

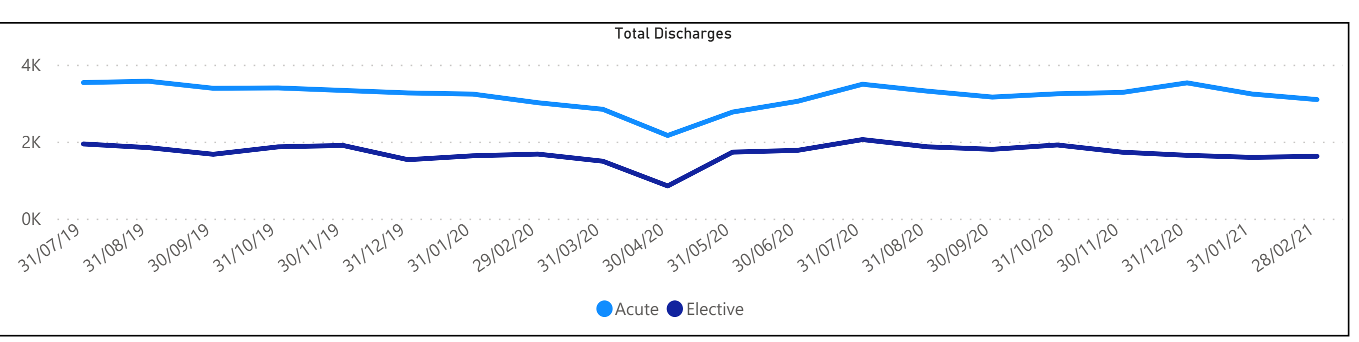
Acute	3092	2,915	177	6	3,010	82	26331	25,103	1,228	5	26717	-386
Elective	1619	1,610	9	1	1,676	-57	14209	13,774	435	3	14056	153
Total	**4711**	**4,525**	**186**	**4**	**4,686**	**25**	**40540**	**38,877**	**1,663**	**4**	**40773**	**-233**

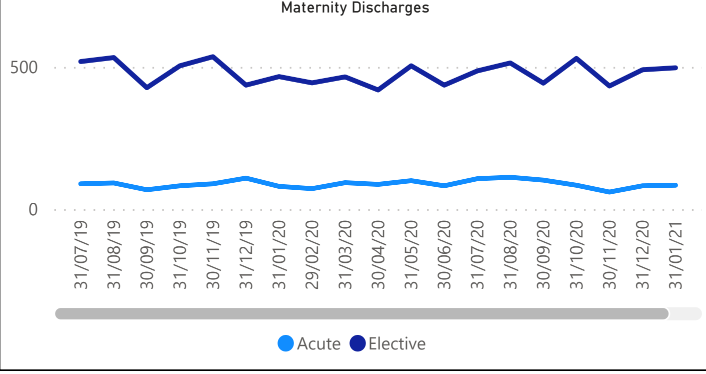
TOTALS excluding Maternity

Acute	3014	2,842	172	6	2938	76	25622	24,472	1,150	5	26036	-414
Elective	1137	1,180	-43	-4	1232	-95	10334	10,030	304	3	10191	143
Total	**4151**	**4,022**	**129**	**3**	**4170**	**-19**	**35956**	**34,502**	**1,454**	**4**	**36227**	**-271**



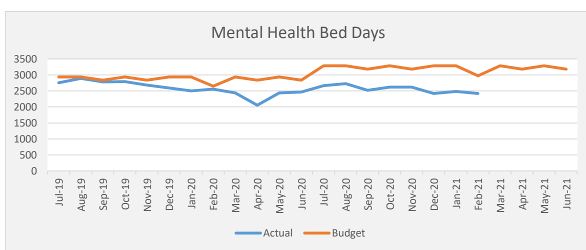




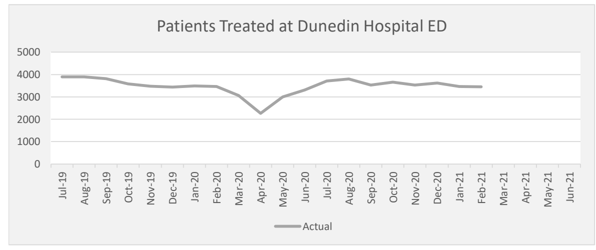


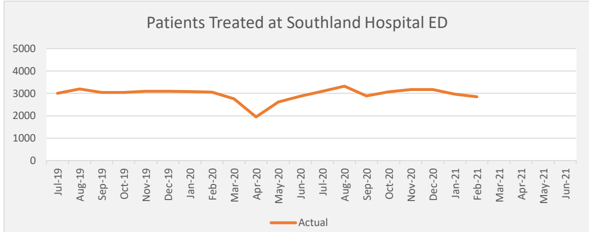
OTHER ACTIVITY

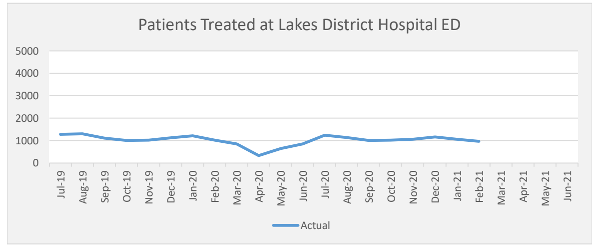
Feb-21				Feb-20	YEAR ON YEAR		YTD 2020/2021				YTD Feb-20	YEAR ON YEAR
Actual	Budget	Variance	% Variance	Actual	Monthly Variance		Actual	Budget	Variance	% Variance	Actual	YTD Variance
2,424	2,968	(544)	-18%	2,559	(135)	**Mental Health bed days**	20,484	25,758	(5,274)	-20%	21,545	(1,061)

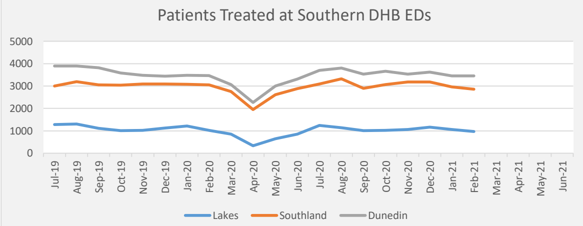


Feb-21	Feb-20	YEAR ON YEAR	Treated Patients (excludes DNW and left before seen)	YTD 2020/2021	YTD Feb-20	YEAR ON YEAR
Actual	Actual	Monthly Variance		Actual	Actual	YTD Variance
			Emergency department presentations			
3,455	3,469	(14)	Dunedin	28,768	29,060	(292)
967	1,020	(53)	Lakes	8,662	9,072	(410)
2,852	3,055	(203)	Southland	24,545	24,612	(67)
7,274	7,544	(270)	**Total ED presentations**	61,975	62,744	(769)









FOR INFORMATION

Item:	Quality Dashboard – February 2021
Prepared by:	Gail Thomson, Executive Director Quality & Clinical Governance
	Patrick O'Connor, Quality Improvement Manager
	Philippa Edwards, Business Support Manager
Meeting of:	Board – 8 April 2021

8.3

Recommendation

That the Board **notes** the attached quality dashboards

That the Board **notes** the attached dashboards will be referred to as Quality Dashboards from February 2021 onwards, no longer performance dashboards.

Purpose

The Executive Quality Dashboard presents key metrics for the Southern region across the dimensions of effectiveness, patient experience, efficiency and timeliness. It is intended to highlight clinical quality risks, issues and performance at a system wide level.

Specific Implications for Consideration

1. Financial
   - The cost of harm to patients is substantial and derived from additional diagnostics, interventions, treatments and additional length of stay.
2. Workforce
   - Sickness and absence reporting is currently being rolled out. We expect that to be available by the end of the first quarter.
3. Equity
   - No obvious issues with equity have been identified during February from the quality dashboard, but further analysis would be required to fully understand this.
4. Other
   - Please note comments in the discussion section

Background

5. The Executive Quality Dashboard was created in 2019. It presents key metrics for the Southern region across the dimensions of effectiveness, patient experience, efficiency, and timeliness. It is intended to highlight clinical quality risks, issues and performance at a system wide level.

6. The dashboard elements have recently been transitioned into Power BI and is widely available to staff via the PowerBi reporting platform. There are still some design features that require

fine tuning and consistency such as axis naming conventions, easy to read axis and some other individual features. The IT reporting team are working on this and expect improvements to be noted each month.

7. Changes to dashboards and/or creation of new indicators or charts take one full time IT/reporting analyst two weeks to complete. To help the IT/reporting team prioritise the most important work requests, the ED Quality and Clinical Governance Solutions has established a weekly prioritisation meeting. The team are finding this very helpful to date.

8. Please note: Southern includes hospitals in the Southern Region. Dunedin relates to Dunedin Public Hospital. Wakari is included in the Southern Region reporting. Unless otherwise stated any definitions in the commentary for Southern apply to Dunedin and Invercargill

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Discussion

9. There appears to have been a significant jump in complaints in Invercargill from January to February 21. While the February 21 data is broadly in line with the no of complaints in February 20 it is unclear why complaints in January 21 were so low. They were nearly half of January 20. We are currently looking into this to see if there is a specific reason or if we are just seeing natural variation

10. Cleaning time for theatres still needs to be included and a standardised time will be included in the next report.

11. Please note the drop off short notice postponements. This is primarily driven by less elective surgeries being performed. This can be seen by the drop in operating hours in the theatre utilisation graphs

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Next Steps & Actions

Cleaning time for theatres to be include in next month's theatre utilisation report

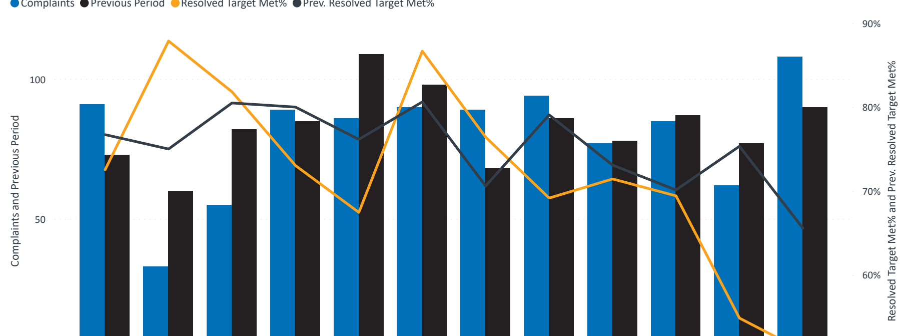
Investigate reason for low number of complaints in January 21

Appendices

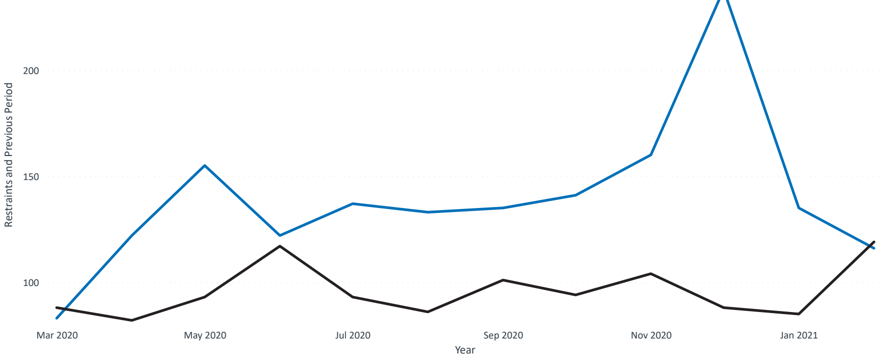
Appendix 1	Executive Quality Dashboard – Southern Region, Dunedin Hospital and Invercargill Hospital

Executive Dashboard - Patient Experience

(Southern)

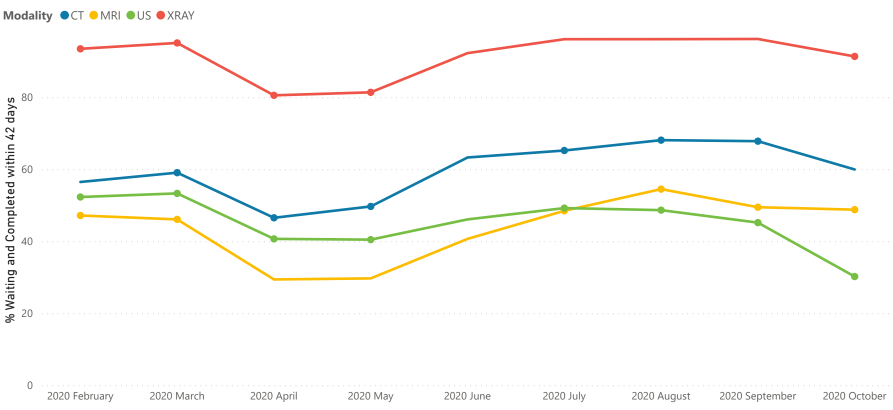


Safety 1st data.
Complaints
The number of internal complaints (from website, phone, email, letter, health and disability advocacy, comment form, etc) per month.
Resolutions
There is a one month (20 working days) time period for complaints to be resolved, or to communicate additional time required to the patient. For that reason the current reporting month will always appear as a lag.



Restraints
Safety 1st data. The number of restraint events per month.
Restraints data includes Dunedin, Invercargill, Wakari & Lakes.

Seclusions
iPM and HCS data. The number of seclusion events per month.



Percentage Waiting and Completed within 42 Days
Percentage of patients completed or waiting for their reports within 42 days as at end of the month

The Service Manager, Radiology, has reported that there continue to be issues getting correct data out of the new Karisma system. A timeframe for resolution is unclear at this stage

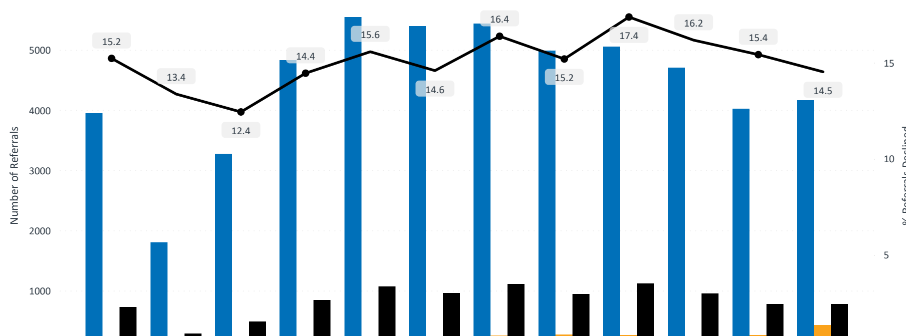
Executive Dashboard - Effectiveness

(Southern)

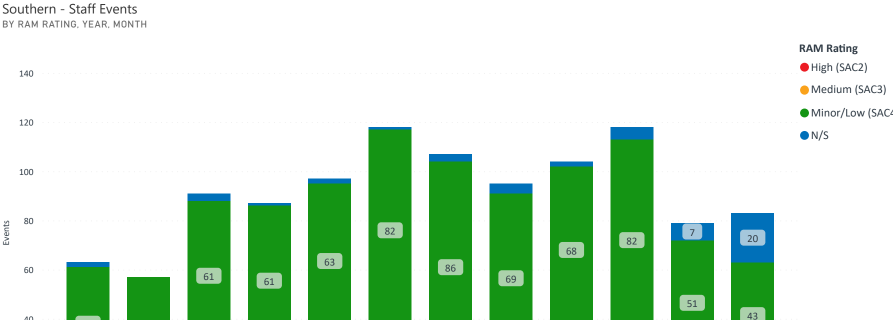
Southern - Deaths
NUMBER OF PATIENTS DECEASED BY DISCHARGE MONTH

Number of Patients
0
10
20
30
40
50
60
49
50
62
53
62
67
53
63
50
63
65
54
2020 March
2020 April
2020 May
2020 June
2020 July
2020 August
2020 September
2020 October
2020 November
2020 December
2021 January
2021 February

Deaths
Number of patients deceased by discharge month.



Referrals accepted (authorised), awaiting outcome or declined by month.
% referrals declined



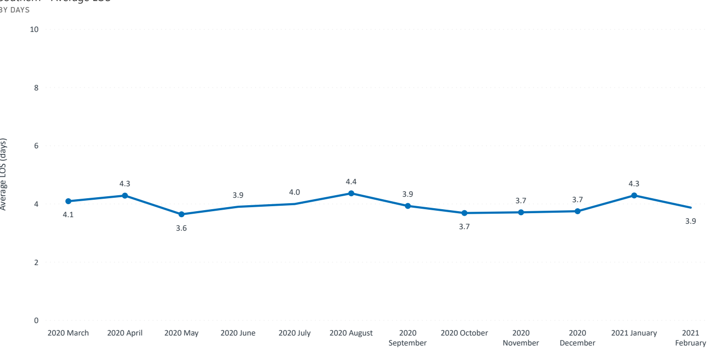
Safety 1st data.
The monthly number of reported staff adverse events
Categorised by severity assessment codes 1-4 and by 'N/S' (Not Specified).

Staff events have historically included a small number of Employee events which appear as not scored. These relate to Privacy/Confidentiality, Building and Property, Security, Falls forms (visitor falls) which are not associated with clinical practice. These events are not assessed in the same way as clinical events and do not receive a risk assessment score and thus have appeared as "not scored".

Executive Dashboard - Efficiency

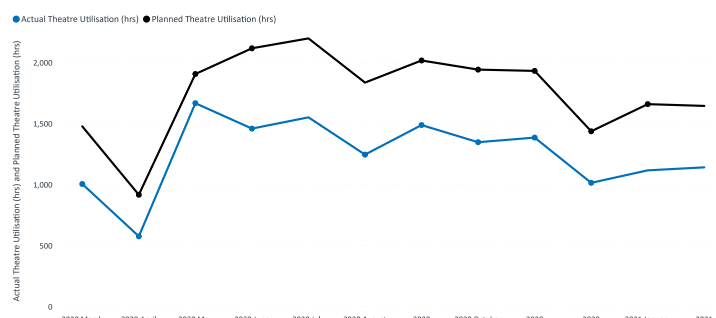
(Southern)

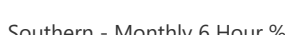
Southern - Average LOS
BY DAYS



Average Length of stay
Average Length of stay by specialty of all patients present in the hospital at any point of time

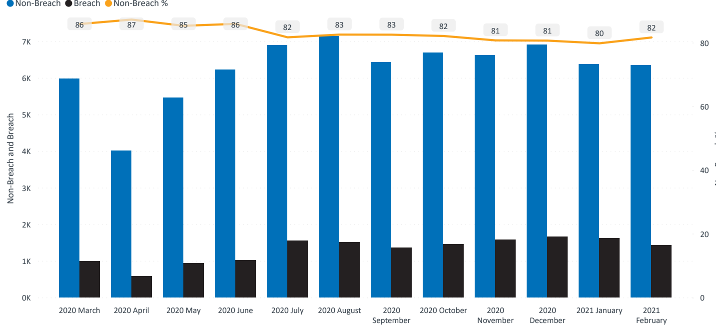
Southern - Planned vs Actual Theatre Utilisation (hrs)
BY HRS





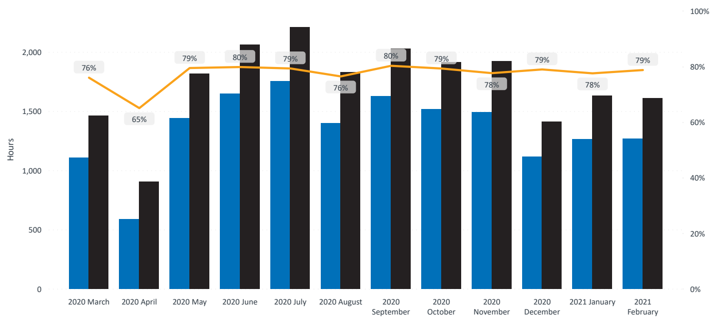
Actual Theatre Utilisation
Actual theatre utilisation given by CaseLength Time = Anaesthetic Time + Procedure Time
Anaesthetic Time = Time duration between "Anaesthetic Start Time" and "Patient Ready for Procedure Time"
Procedure Time = Time duration between "Procedure Start Time" and "Procedure Complete Vs the scheduled / planned theatre time given by the scheduled session time

Southern - Monthly 6 Hour %



Monthly 6 Hour %
Short Stay in ED (SSED) time given by the percentage of patients discharged from ED within 6 hours of their Triage at ED. This excludes the time spent in ED observation

Southern - Average Theatre Utilisation (%)



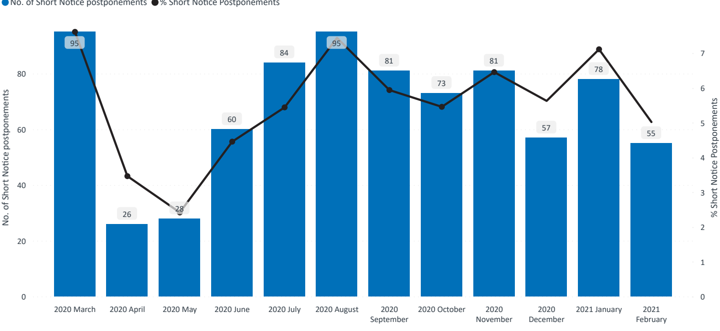
Average Theatre Utilisation (%)

Numerator: Planned and acute operations from when the patient is brought into operating theatre to the patient leaves

Denominator: Planned session time

Excluded: overruns (where an operation runs over the planned session time); out of theatre anesthetic

Southern - Short Notice Postponements

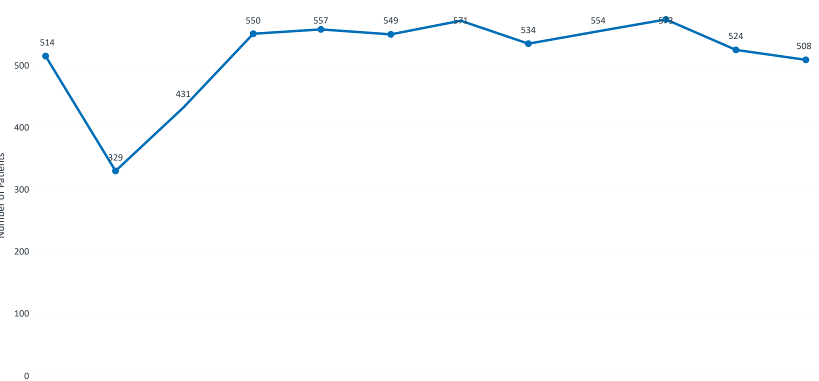


Short Notice Postponements
Theatre postponements within 24 hours of the scheduled procedure

Executive Dashboard - Timely

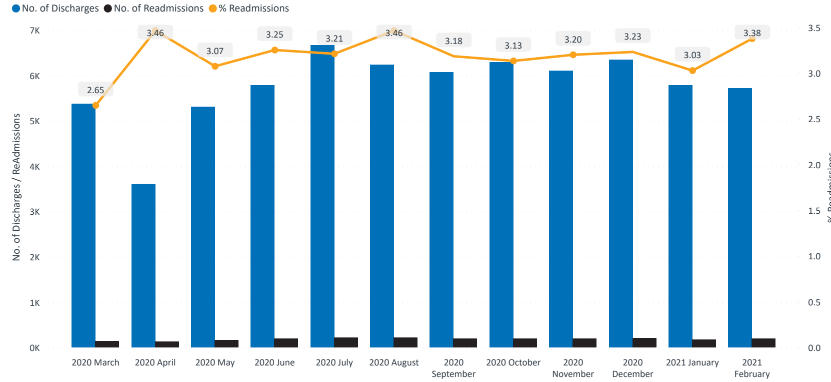
(Southern)

Southern - Number of Patients with LOS > 7 days



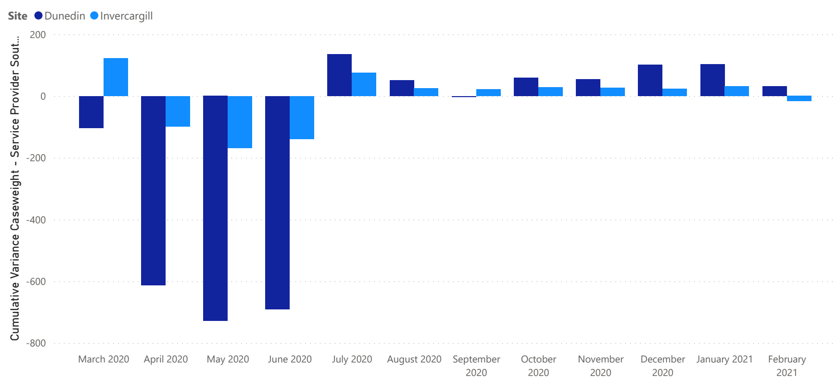
Number of Patients with LOS > 7 Days
Number of patients in hospital at any point of time when they have exceeded 7 days since admission

Southern DHB - Unplanned Hospital Readmissions within 7 days



Unplanned Hospital Readmissions within 7 Days
Acute / Unplanned readmissions within 7 days of the initial discharge from hospital organised on the basis of the month of discharge

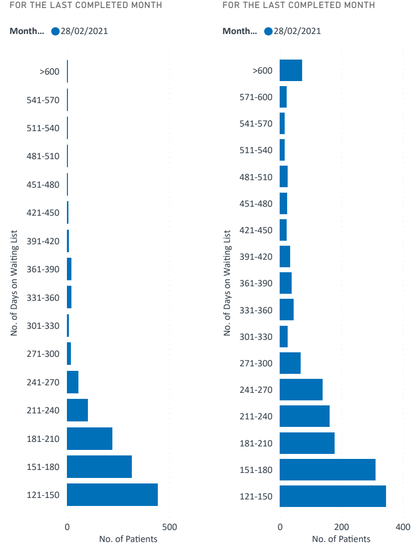
Cumulative Variance Caseweight - Service Provider Southern
BY CALENDARMONTHYEAR, SITE



Cumulative Variance Caseweight
Column chart has cumulative variance case weight for Service provider which compares case weight with production plans based on MoH targets and work done in Southern DHB facilities, the Southern DHB's own population minus outflows plus inflow.
The graph shows how ahead or behind the actuals for Dunedin and Invercargill with 33 purchase units within the elective initiative in the last 12 months.

Southern - ESPI 2 Breaches
FOR THE LAST COMPLETED MONTH

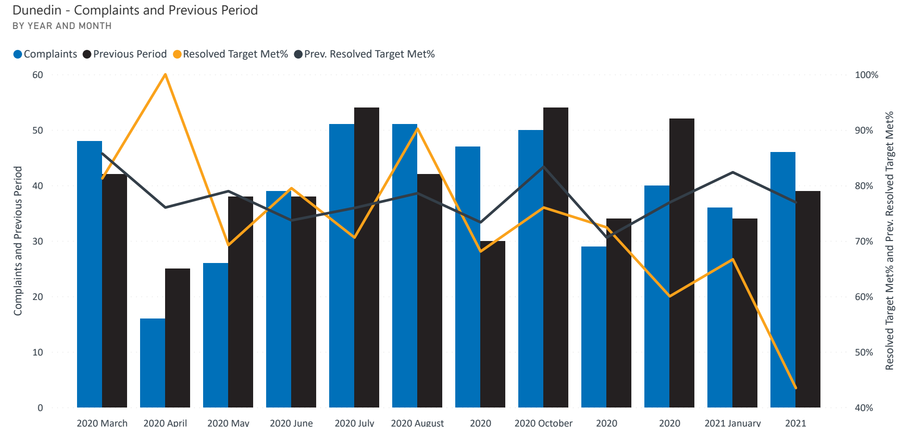
Southern - ESPI 5 Breaches
FOR THE LAST COMPLETED MONTH



ESPI 2 and ESPI 5
ESPI 2 and ESPI 5 waitlists organised into the given time buckets

Executive Dashboard - Patient Experience

(Dunedin)



Safety 1st data.

Complaints

The number of internal complaints (from website, phone, email, letter, health and disability advocacy, comment form, etc) per month.

Resolutions

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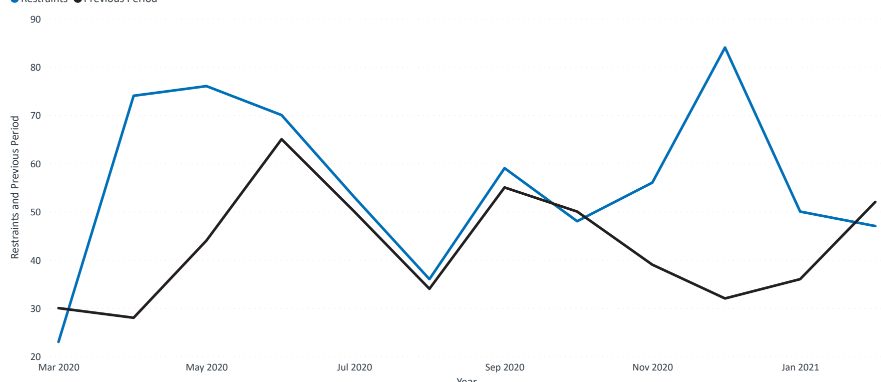
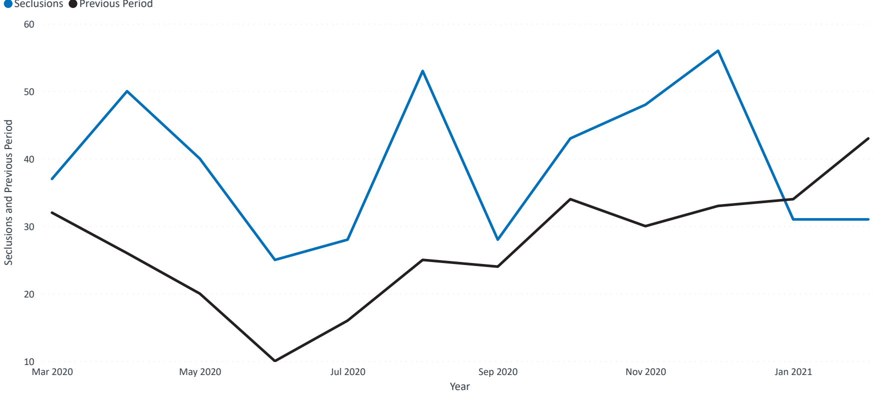


Restraints

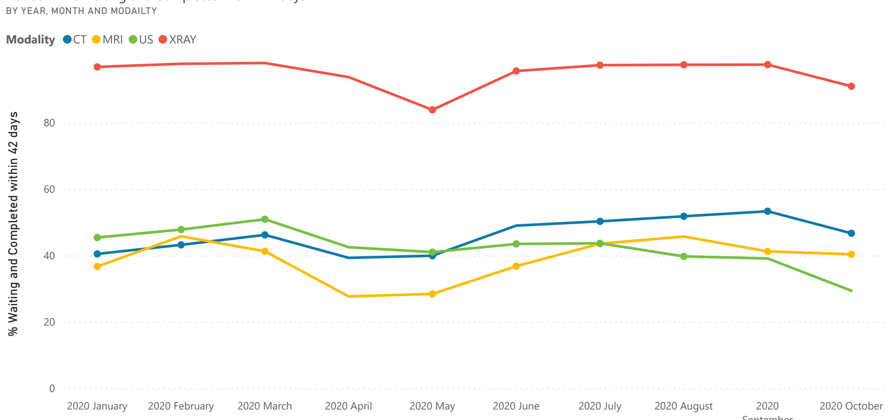
Safety 1st data. The number of restraint events per month.

Restraints data for Dunedin only.



Seclusions

iPM and HCS data. The number of seclusion events per month.

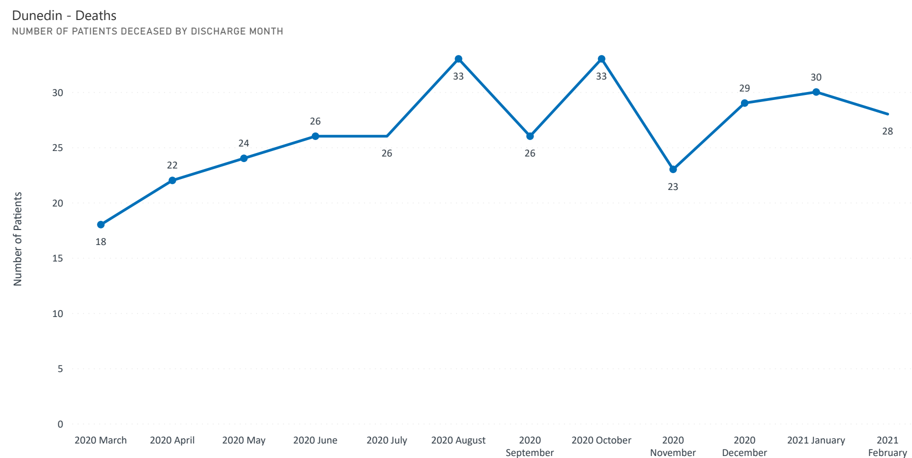


Percentage Waiting and Completed within 42 Days

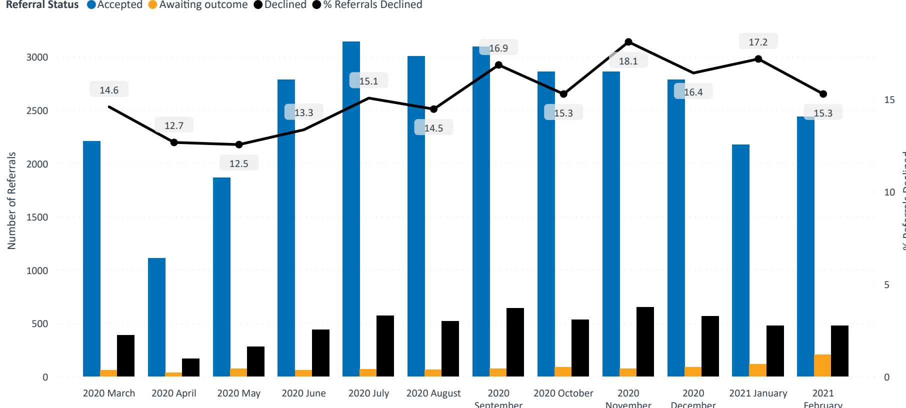
Percentage of patients completed or waiting for their reports within 42 days as at end of the month

Executive Dashboard - Effectiveness

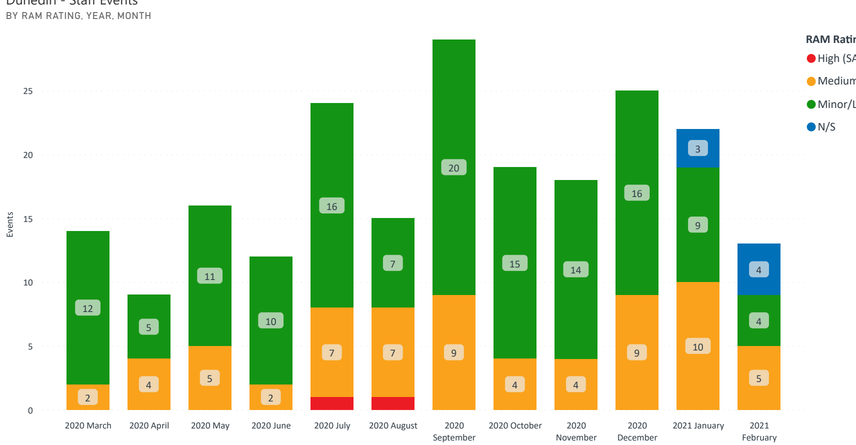
(Dunedin)



Deaths
Number of patients deceased by discharge month.



Referrals accepted (authorised), awaiting outcome or declined by month.
% referrals declined



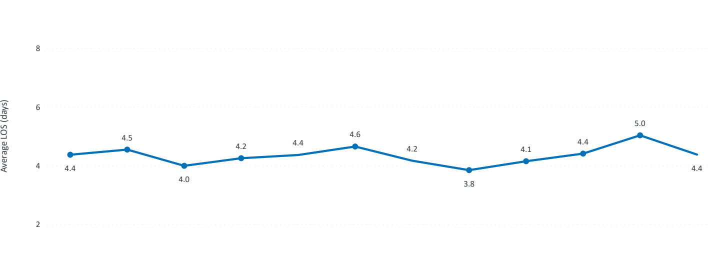
Safety 1st data.
The monthly number of reported staff adverse events
Categorised by severity assessment codes 1-4 and by 'N/S' (Not Specified).

Executive Dashboard - Efficiency

(Dunedin)

Dunedin - Average LOS

BY DAYS

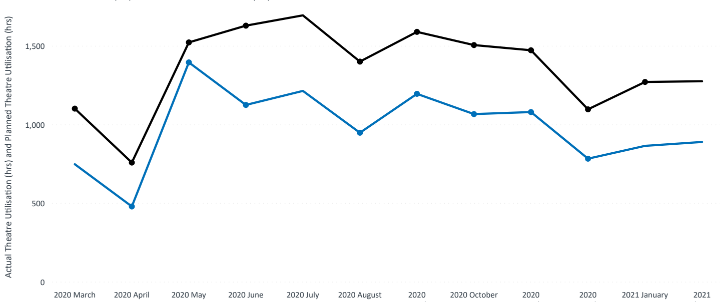


Average Length of stay

Average Length of stay by specialty of all patients present in the hospital at any point of time

Dunedin - Planned vs Actual Theatre Utilisation (hrs)

● Actual Theatre Utilisation (hrs) ● Planned Theatre Utilisation (hrs)



Actual Theatre Utilisation

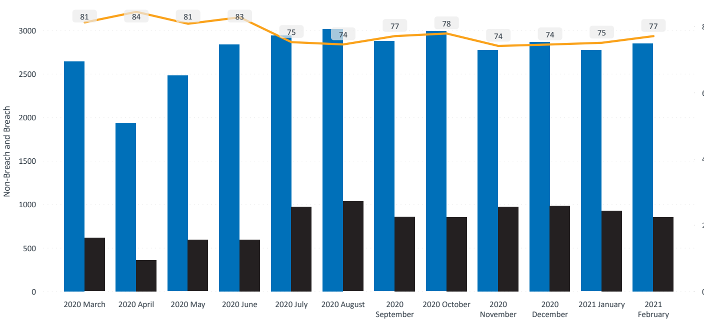
Actual theatre utilisation given by

CaseLength Time = Anaesthetic Time + Procedure Time

Anaesthetic Time = Time duration between "Anaesthetic Start Time" and "Patient Ready for Procedure Time"

Procedure Time = Time duration between "Procedure Start Time" and "Procedure Complete Vs the scheduled / planned theatre time given by the scheduled session time

Dunedin - Monthly 6 Hour %

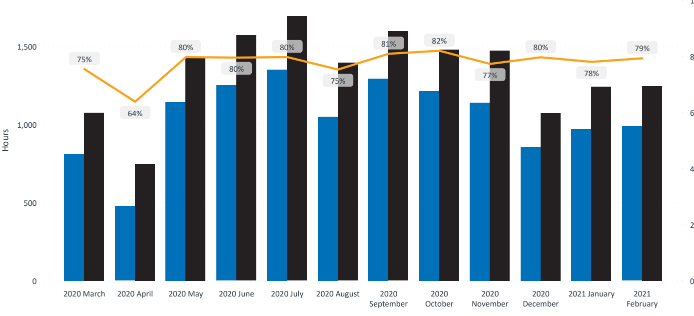


Monthly 6 Hour %

Short Stay in ED (SSED) time given by the percentage of patients discharged from ED within 6 hours of their Triage at ED. This excludes the time spent in ED observation

Dunedin - Average Theatre Utilisation (%)

● Total Operation Hours ● Total Planned Hours ● % Utilisation



Average Theatre Utilisation (%)

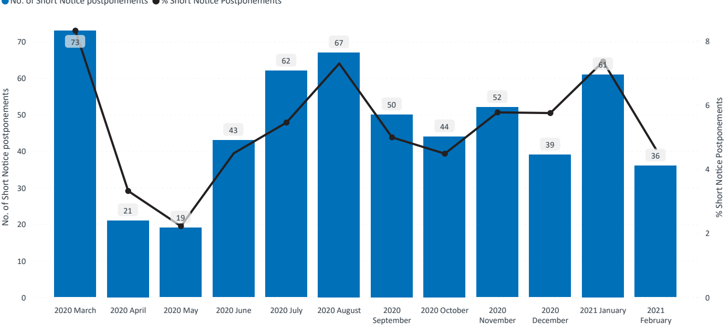
Numerator: Planned and acute operations from when the patient is brought into operating theatre to the patient leaves

Denominator: Planned session time

Excluded: overruns (where an operation runs over the planned session time); out of theatre anesthetic

Dunedin - Short Notice Postponements

● No. of Short Notice postponements ● % Short Notice Postponements



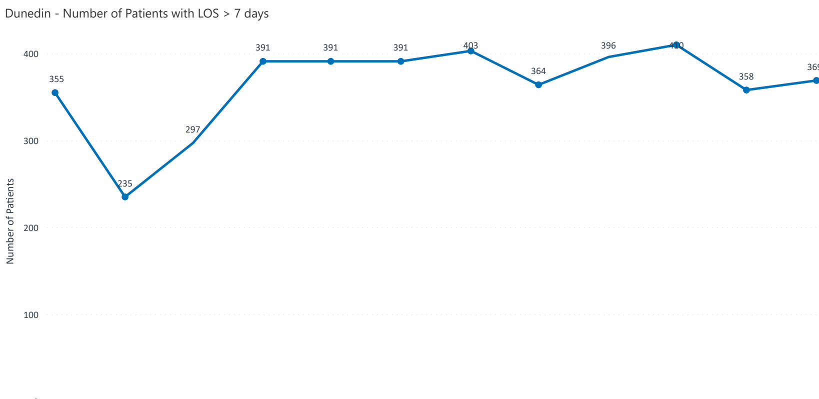
Short Notice Postponements

Theatre postponements within 24 hours of the scheduled procedure

Executive Dashboard - Timely

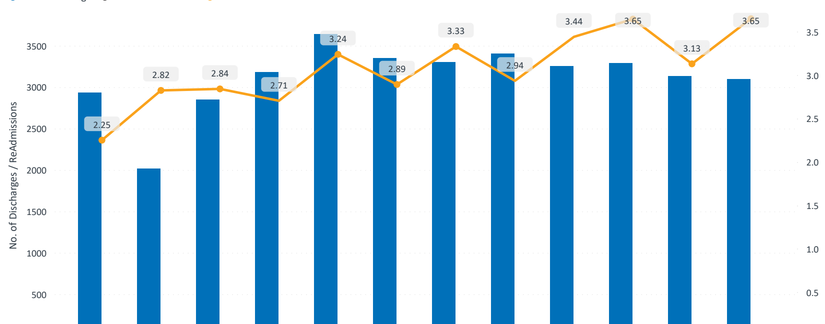
(Dunedin)

Dunedin - Number of Patients with LOS > 7 days



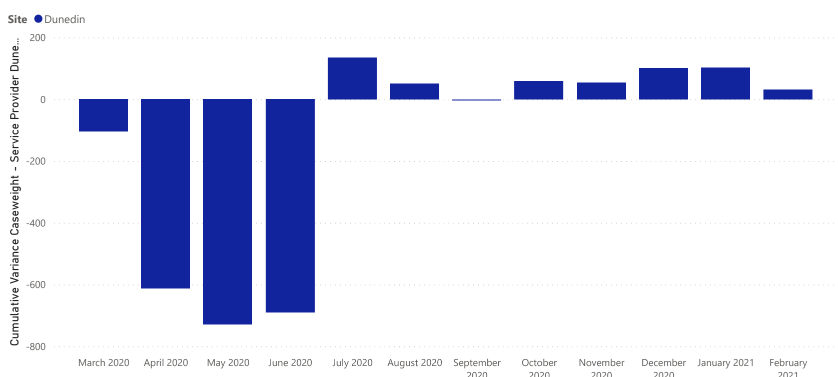
Number of Patients with LOS > 7 Days
Number of patients per month who have a LOS > 7 days

Dunedin - Unplanned Hospital Readmissions within 7 days



Unplanned Hospital Readmissions within 7 Days
Acute / Unplanned readmissions within 7 days of the initial discharge from hospital organised on the basis of the month of discharge

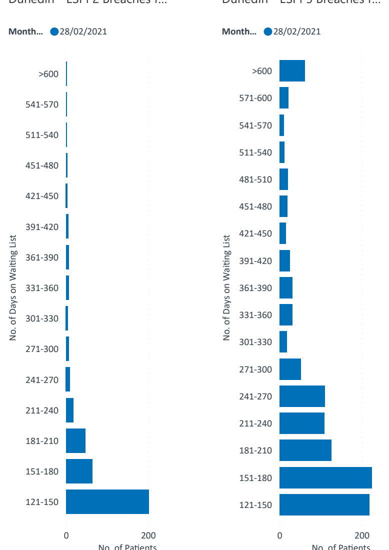
Cumulative Variance Caseweight - Service Provider Dunedin
BY CALENDAR, MONTH, YEAR AND SITE



Cumulative Variance Caseweight
Column chart has cumulative variance case weight for Service provider which compares case weight with production plans based on MoH targets and work done in Southern DHB facilities, the Southern DHB's own population minus outflows plus inflow.
The graph shows how ahead or behind the actuals for Dunedin and Invercargill with 33 purchase units within the elective initiative in the last 12 months.

Dunedin - ESPI 2 Breaches f...

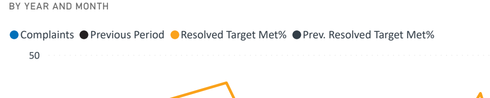
Dunedin - ESPI 5 Breaches f...

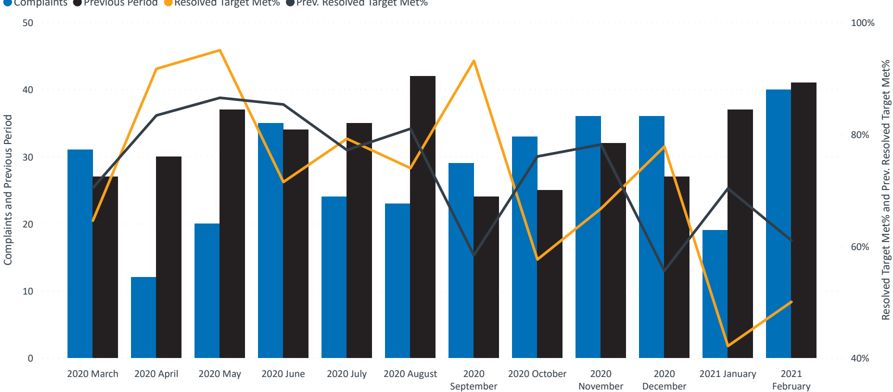


ESPI 2 and ESPI 5
ESPI 2 and ESPI 5 waitlists organised into the given time buckets

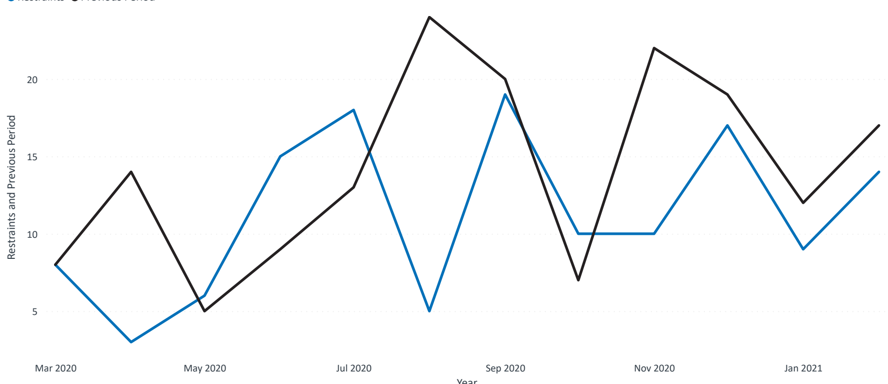
Executive Dashboard - Patient Experience

(Invercargill)



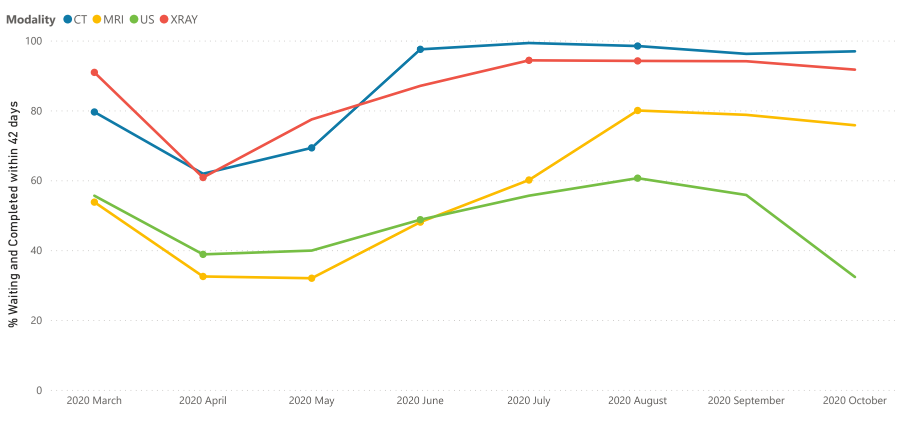


Safety 1st data.
Complaints
The number of internal complaints (from website, phone, email, letter, health and disability advocacy, comment form, etc) per month.
Resolutions
There is a one month (20 working days) time period for complaints to be resolved, or to communicate additional time required to the patient. For that reason the current reporting month will always appear as a lag.



Restraints
Safety 1st data. The number of restraint events per month.
Restraints data for Invercargill only.

Seclusions
iPM and HCS data. The number of seclusion events per month.

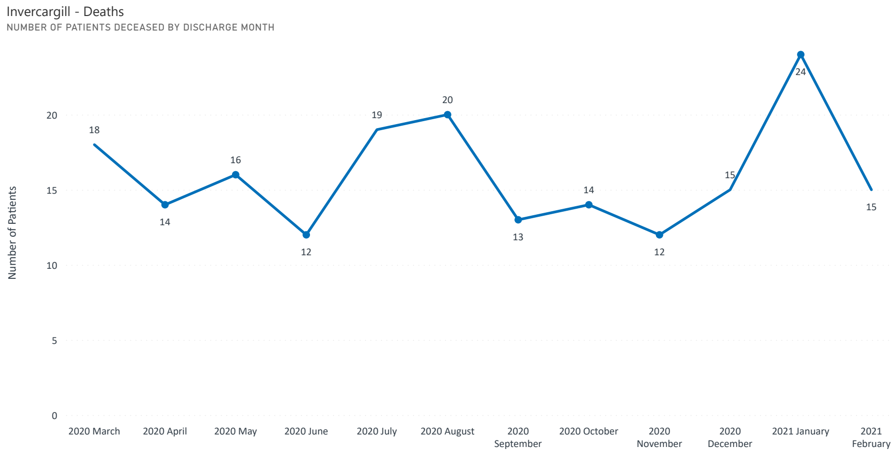


Percentage Waiting and Completed within 42 Days
Percentage of patients completed or waiting for their reports within 42 days as at end of the month

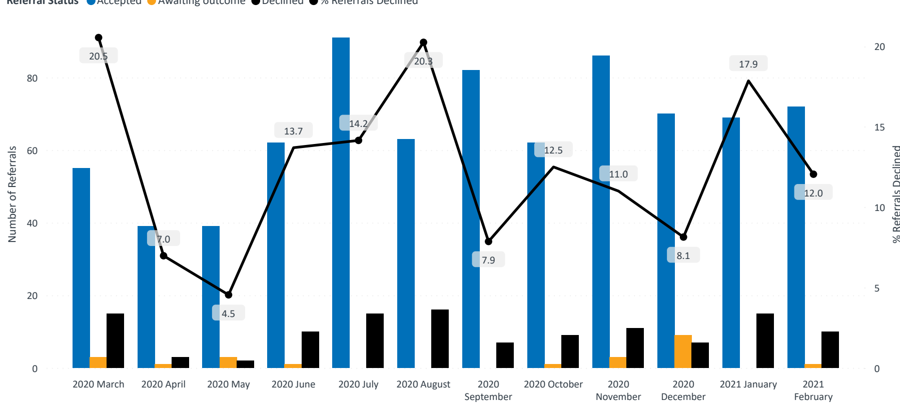
8.3

Executive Dashboard - Effectiveness

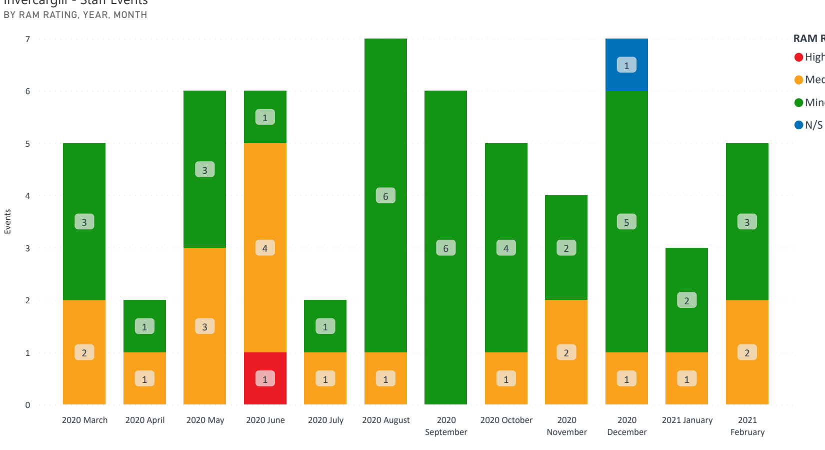
(Invercargill)



Deaths
Number of patients deceased by discharge month.



Referrals accepted (authorised), awaiting outcome or declined by month.
% referrals declined



Safety 1st data.
The monthly number of reported staff adverse events
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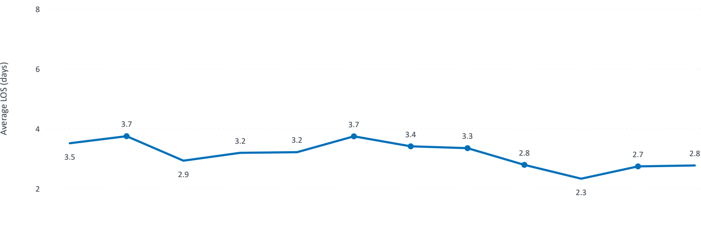
Executive Dashboard - Efficiency

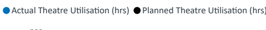
(Invercargill)

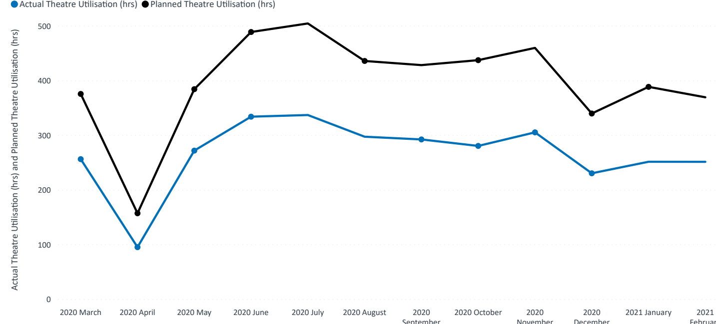
Invercargill - Average LOS (days)



Average Length of stay
From Triage Time in ED(if admitted from ED) or admission to ward to discharge from ward for each episode of care. No specialities are excluded. Only patients discharged in that month are included in each months data

Invercargill - Planned vs Actual Theatre Utilisation (hrs)





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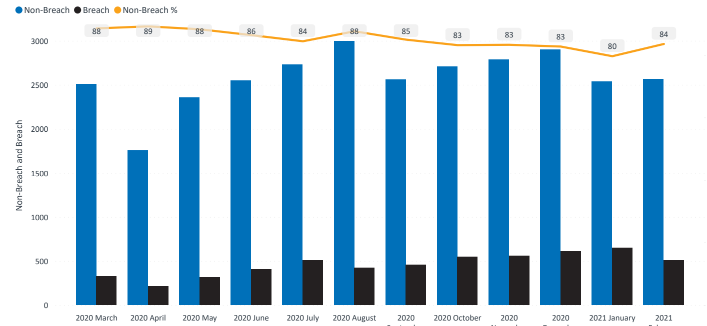
Invercargill - Monthly 6 Hour %



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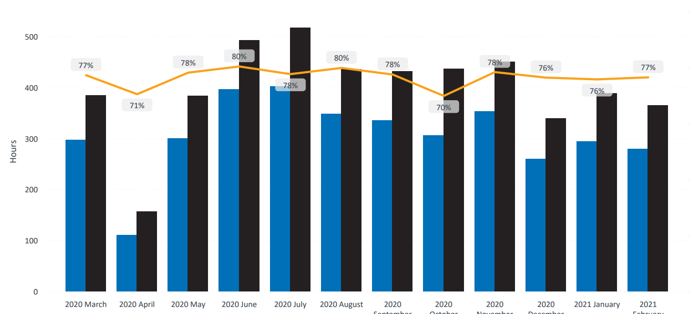

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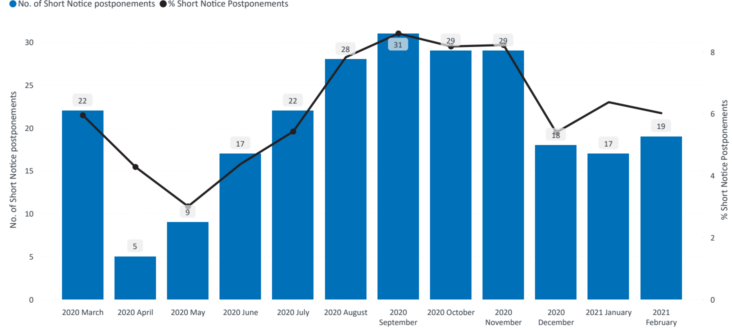
Invercargill- Short Notice Postponements

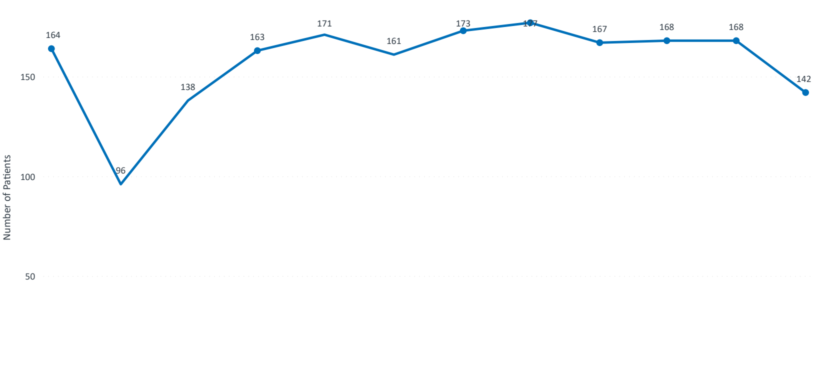


Short Notice Postponements
Theatre postponements within 24 hours of the scheduled procedure

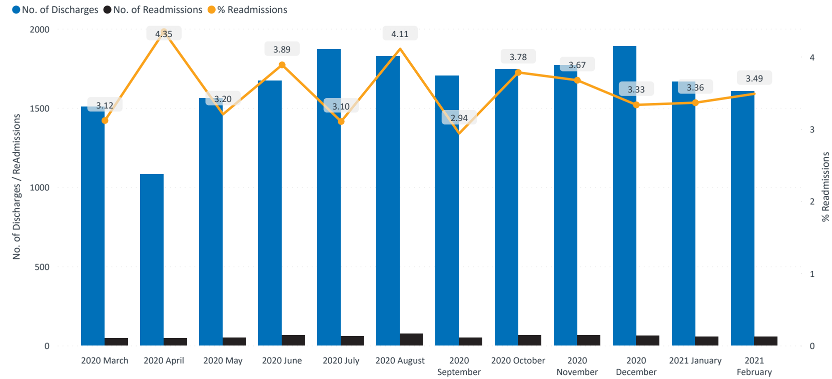
8.3

Executive Dashboard - Timely

(Invercargill)



Number of Patients with LOS > 7 Days
Number of patients per month who have a LOS > 7 days



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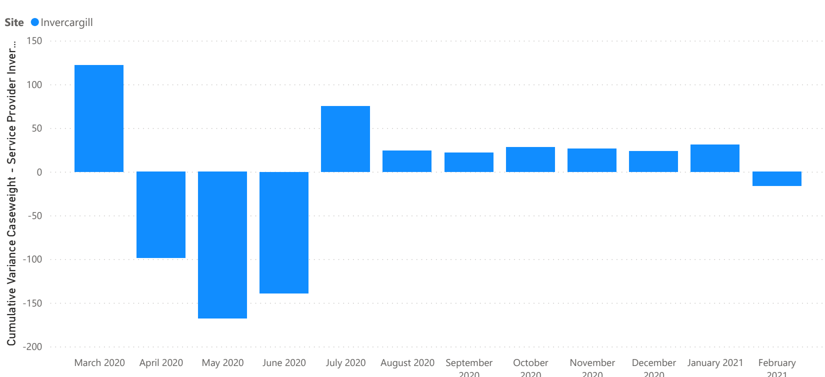

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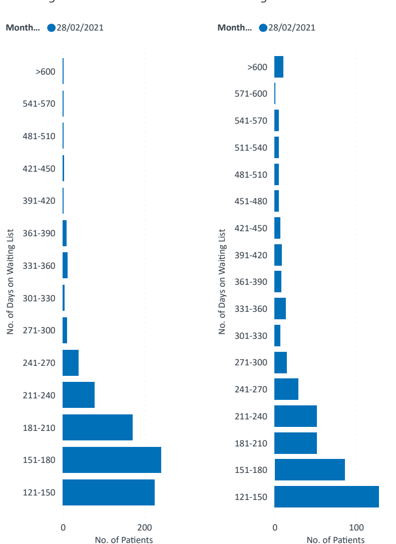

ESPI 2 and ESPI 5
ESPI 2 and ESPI 5 waitlists organised into the given time buckets

FOR INFORMATION

Item:	Quarter Two 2020/21 Reporting: Southern DHB Performance Reporting to the Ministry Of Health
Proposed by:	Lisa Gestro, Executive Director, Strategy, Primary and Community
Meeting of:	8 April 2021

8.4

Recommendation

That the Board notes the content of these papers.

Purpose

1. To provide an overview of DHB Performance Reporting to the Ministry of Health for Quarter Two 2020/21, including comment where targets or expectations have not been met.

Specific Implications For Consideration

2. Financial

   - Recovery due to missed targets may have financial implications.

3. Quality and Patient Safety

   - Reports may signal need for improvements in service quality.

4. Operational Efficiency

   - Reports may signal need for improvements in operational efficiency.

5. Workforce

   - Recovery due to missed targets may have workforce implications.

6. Equity

   - Gaps in equity are highlighted in some reports. Gaps need to be addressed to meet targets and ensure that there is equitable service delivery in the Southern district to improve outcomes for Māori and other vulnerable populations.

7. Other

   - Not identified

Background

8. The monitoring framework sets out DHB requirements to report achievement against Non-Financial Performance Measures and Crown Funding Agreements (CFA). Progress towards each measure is assessed and reported to the Minister of Health according to the reporting frequency outlined in the indicator dictionary for each measure.

Discussion

9. The document, *Quarter Two 2020/21 Reporting: Southern DHB Performance Reporting to the Ministry Of Health*, summarises quarter two Performance Reporting to the Ministry of Health. This report includes comment where targets or expectations have not been met.

Next Steps & Actions

Southern DHB will submit quarter three performance monitoring reports to the Ministry of Health on 20 April. The compiled document, *Quarter Three 2020/21 Reporting: Southern DHB Performance Reporting to the Ministry Of Health*, will be submitted to ELT following Ministry of Health ratings and final feedback.

Appendices

Appendix 1 Performance Monitoring Report Q2 2021

Southern DHB Performance Reporting Q2 2020.21

The monitoring framework sets out DHB requirements to report achievement against Performance Measures and Crown Funding Agreements (CFA).

Performance Measure Reporting
Performance Measures are categorised into five different areas related to Government priorities. Government priorities for Performance Measures include:

- Better population health outcomes supported by strong and equitable public health services
- Improving mental wellbeing
- Improving wellbeing through prevention
- Better population health outcomes supported by primary health care
- Improving child wellbeing

Progress towards each measure will be assessed and reported to the Minister of Health according to the reporting frequency outlined in the indicator dictionary for each measure (found on the NSFL https://nsfl.health.govt.nz/accountability/performance-and-monitoring/performance-measures/performance-measures-201920)
A resolution plan, that outlines the actions being taken to address poorer than planned performance, must be supplied where performance does not meet the agreed expectation. Where a performance measure description does not include specific assessment criteria, the following criteria will apply:

Assessment Criteria/Ratings for Performance Measures

Rating	Abbrev	Criteria
Outstanding performer/sector leader	O	1. This rating indicates that the DHB achieved a level of performance considerably better than the agreed DHB and/or sector expectations. 2. This rating is applied when the DHB has met the target agreed in its Annual Plan and has achieved the target level of performance for the Māori population group, and the Pacific population group. Note: this rating can only be applied in the fourth quarter for measures that are reported quarterly or six-monthly. Measures reported annually can receive an 'O' rating, irrespective of when the reporting is due.
Achieved	A	1. Deliverable demonstrates targets / expectations have been met in full. 2. In the case of deliverables with multiple requirements, all requirements are met. 3. For those measures where reporting by ethnicity is expected, this rating should only be applied when the DHB has met the target agreed in its Annual Plan and has achieved significant progress for the Māori population group, and the Pacific population group. 4. Data, or a report confirming expectations have been met, has been provided through a mechanism outside the Quarterly Reporting process, and the assessor can confirm.
Partial achievement	P	1. Target/expectation not fully met, (including not meeting expectations for Māori and Pacific population groups) but the resolution plan satisfies the assessor that the DHB is on track to compliance. 2. A deliverable has been received, but some clarification is required.

		3. In the case of deliverables with multi-requirements, where all requirements have not been met at least 50% of the requirements have been achieved, and a resolution plan satisfies the assessor that the DHB is on track to compliance for the requirements not met.
Not achieved – escalation required	N	1. The deliverable is not met. 2. There is no resolution plan if deliverable indicates non-compliance. 3. A resolution plan is included, but it is significantly deficient. 4. A report is provided, but it does not answer the criteria of the performance indicator. 5. There are significant gaps in delivery. 6. It cannot be confirmed that data or a report has been provided through channels other than the quarterly process.

Notes: 1) NR refers to 'No report has been received' 2) NA refers to 'Not applicable'

Annual Plan Reporting

Reporting against Annual Plan actions is provided through Status Update Reports. Reporting is categorised according to Planning Priority area.

CFA Variation Reporting

Assessment criteria are different to the criteria applied to health targets and performance measures. The progress and developmental reporting nature for CFA variations is more compliance based, and therefore the target-oriented nature of performance measure assessment is not considered appropriate. The assessment criteria detailed below reflect the more qualitative nature of this component.

Assessment Criteria/Ratings for CFA Variations

Category	Abbrev	Criteria
Satisfactory	S	1. The report is assessed as up to expectations 2. Information as requested has been submitted in full
Further work required	B	1. Although the report has been received, clarification is required 2. Some expectations are not fully met
Not Acceptable	N	1. There is no report 2. The explanation for no report is not considered valid.

Confirmed Ministry of Health Ratings: If a DHB receives a rating of P, B or N for a particular measure or CFA Variation, the Ministry's assessor will outline the reasons in the Ministry feedback section and the DHB will be expected to submit an updated report/further comment during the confirmed reporting round. Supplying the requested information may result in the DHB receiving an improved score in the Confirmed Assessment round. However, this is not guaranteed.

Poor Performance Reporting: If a DHB fails to submit a required report against any health target, performance measure or CFA Variation, receives an 'N' rating in the Confirmed assessment round, or is determined to have significant emerging performance issues or service coverage issues, these issues will be highlighted to the Minister in the Performance Issues Section of the DHB's Quarterly Dashboard Performance Report.

Index of reports

Item	Page
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Key to Owner Initials	5
Summary of Reports with 'N' Ratings	5
Summary of Quarter 2 Ratings	6
All Reports - Southern DHB Performance Reporting	9

8.4

Key to Owner Initials

Initial	Owner	Title/Directorate
LG	Lisa Gestro	Executive Director Strategy, Primary & Community
PN	Patrick Ng	Executive Director Specialist Services
MC	Mike Collins	Executive Director People Culture & Technology
GiT	Gilbert Taurua	Chief Māori Health Strategy & Improvement Officer
GaT	Gail Thomson	Executive Director Quality & Clinical Governance Solutions
JW	Jane Wilson	Chief Nursing and Midwifery Officer
JR	Julie Rickman	Executive Director Finance, Procurement and Facilities

Executive Summary: Southern DHB Non-Financial Performance Reporting

Performance Measures Overview

Performance area	Number of outstanding measures	Number of achieved measures	Number of partially achieved measures	Number of not achieved measures	Unreported measures	Total number of measures
Improving Child Wellbeing	**0**	**4**	**2**	**1**	**0**	**7**
Improving Mental Wellbeing	**0**	**6**	**5**	**0**	**0**	**11**
Better Population Health Outcomes supported by Strong and Equitable Public Health Services	**0**	**10**	**5**	**3**	**0**	**18***
Better Population Health Outcomes supported by Primary Health Care	**0**	**2**	**2**	**0**	**0**	**4**
Improving wellbeing through Prevention	**0**	**0**	**0**	**1**	**0**	**1**
Status Update Reports – Annual Plan Actions	**0**	**2**	**3**	**2**	**0**	**7**

*There are 19 measures but MoH did not allocate ratings to one measure this quarter

Crown Funding Agreements

	Number of satisfactory ratings	Number of further work required ratings	Number of not acceptable measures	Unreported	Total number
CFA agreements	5	0	1	0	6*

*MoH did not allocate ratings to two CFA reports this quarter (nationally)

Summary of Reports with 'N' Ratings

Code	Performance Measure	Final Rating	Change from previous rating	Page number	Owner initials
Child Wellbeing					
CW09	Better help for smokers to quit (maternity)	N	→	11	LG
Better population health outcomes supported by strong and equitable public health services					
SS07	Planned Care Measures	N	↓	17	PN
SS10	Shorter stays in emergency departments	N	→	25	PN
SS11	Faster Cancer Treatment (62 days)	N	→	29	PN
Improving wellbeing through prevention					
PV01	Improving breast screening coverage and equity for priority women	N	→	35	LG
Status Update Reports – Annual Plan Actions					
Updates	Annual Plan actions: Improving wellbeing through prevention	N	↓	39	LG
Updates	Annual Plan actions: Better population health outcomes supported by strong and equitable public health services	N	↓	39	PN
Crown Funding Agreements					
CFA	Primary Health Care Services	N	↓	**41**	LG

8.4

Summary of Quarter 2 ratings 2020/21

Code	Performance Measure	Final Rating	Change from previous rating	Page number	Owner initials
Child wellbeing					
CW09	Better help for smokers to quit (maternity)	N	→	11	LG
CW05	Immunisation coverage: FA1 8-month old immunisation coverage	P	→	9	LG
CW05	Immunisation coverage: FA2 5-year old immunisation coverage	P	→	10	LG
CW07	Improving newborn enrolment in General Practice	A	→	11	LG
CW08	Increased immunisation at 2 years of age	A	↑	11	LG
CW10	Raising healthy kids	A	→	12	LG
CW12	Youth mental health initiatives (Initiative 1 SBHS, Initiative 2 Youth primary mental health, Initiative 3 Improve the responsiveness of primary care to youth)	A	→	12	LG
Improving mental wellbeing					
MH02	Improving mental health services using wellness and transition (discharge) planning	P	→	12	LG
MH03	Shorter waits for non-urgent mental health and addiction services for 0-19 years of age	P	→	13	LG
MH04	Mental Health and Addiction Service Development: FA3 Improving Crisis Response Services	P	→	14	LG
MH04	Mental Health and Addiction Service Development: FA5 Improving employment and physical health needs of people with low prevalence conditions	P	↓	14	LG
MH05	Reduce the rate of Māori under the Mental Health Act: section 29 community treatment orders	P	→	15	LG
MH01	Improving the health status of people with severe mental illness through improved access	A	→	12	LG
MH04	Mental Health and Addiction Service Development: FA1 Primary Mental Health	A	↑	14	LG
MH04	Mental Health and Addiction Service Development: FA2 District Suicide Prevention and Postvention	A	→	14	LG
MH04	Mental Health and Addiction Service Development: FA4 Improve outcomes for children	A	→	14	LG
MH06	Mental health output delivery against plan	A	→	15	LG
MH07	Improving the health status of people with severe mental illness through improved acute inpatient post discharge follow-up rates	A	→	16	LG
Better population health outcomes supported by strong and equitable public health services					
SS07	Planned Care Measures	N	↓	17	PN
SS10	Shorter stays in emergency departments	N	→	25	PN
SS11	Faster Cancer Treatment (62 days)	N	→	29	PN
SS01	Faster cancer treatment (31 days) indicator	P	↓	16	PN

SS05	Ambulatory sensitive hospitalisations (ASH adult)	P	→	17	LG
SS09	Improving the quality of identity data within the National Health Index (NHI) and data submitted to National Collections: FA2 Improving the quality of data submitted to National Collections	P	→	24	MC
SS13	Improved management for long term conditions: FA5: Stroke service	P	→	31	LG
SS15	Improving waiting times for colonoscopies	P	→	34	PN
SS02	Delivery of Regional Service Plans	A	→	16	LG
SS03	Ensuring delivery of service coverage	A	→	16	PN
SS04	Implementing the Healthy Ageing Strategy	A	→	17	LG
SS09	Improving the quality of identity data within the National Health Index (NHI) and data submitted to National Collections: FA1 Improving the quality of identity data within the NHI	A	→	24	MC
SS09	Improving the quality of identity data within the National Health Index (NHI) and data submitted to National Collections FA3 Improving the quality of the Programme for the Integration of Mental Health data (PRIMHD)	A	→	25	MC
SS12	Engagement and obligations as a Treaty partner	A	→	31	GiT
SS13	Improved management for long term conditions FA1: Long Term Conditions	A	→	31	LG
SS13	Improved management for long term conditions FA2: Diabetes services	A	→	31	LG
SS13	Improved management for long term conditions: FA3: Cardiovascular health	A	↑	31	LG
SS13	Improved management for long term conditions: FA4: Acute heart service	A	→	31	PN
	Care capacity demand management calculation	*		16	JW
Improving wellbeing through prevention					
PV01	Improving breast screening coverage and equity for priority women	N	→	35	LG
Better population health outcomes supported by primary health care					
PH03	Improving Maori enrolment in PHOs to meet the national average of 90%	P	→	36	LG
PH04	Better help for smokers to quit (primary care)	P	↑	37	LG
PH01	Improving system integration and SLMs	A	→	35	LG
PH02	Improving the quality of ethnicity data collection in PHO and NHI registers	A	→	35	LG
Status Update Reports – Annual Plan Actions					
Updates	Annual Plan actions: Improving wellbeing through prevention	N	↓	39	LG
Updates	Annual Plan actions: Better population health outcomes supported by strong and equitable public health services	N	↓	39	PN
Updates	Annual Plan actions: Improving child wellbeing	P	↓	39	LG
Updates	Annual Plan actions: Improving mental wellbeing	P	→	39	LG
Updates	Annual Plan actions: Better population health outcomes supported by primary health care	P	↓	39	LG
Updates	Annual Plan actions: Improving sustainability	A	→	40	JR
Updates	Annual Plan actions: Give Practical effect to He Korowai Orange – the Māori Health Strategy	A	→	40	GiT

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Crown Funding Agreements (CFA) Variations						
CFA	Primary Health Care Services	N	↓	41	LG
CFA	B4 School Check Services	S	→	42	LG
CFA	Well Child Tamariki Ora Services	S	→	42	LG
CFA	DHB level service component of the National SUDI Prevention Programme	S	→	42	LG
CFA	National Immunisation Register (NIR) Ongoing Administration Services	S	→	42	LG
CFA	Immunisation Coordination Service	S	→	42	LG
CFA	Health services for Emergency Quota Refugees	S	→	42	LG
CFA	COVID-19 DHB Digital Enablement Funding Support	*		43	LG
CFA	COVID-19 Primary Care Digital Enablement Funding Support	*		43	LG

NA=Not applicable; FA=Focus area; NR=No report * MoH has not given ratings this quarter

Southern DHB Performance Reporting – Quarter 2 2019/20

Measures of DHB Performance			
Measure	**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
Child Wellbeing			**Achieving Government's priority goals/objectives and targets**
CW05: Immunisation coverage: FA1 eight-month old immunisation coverage	**P**	**LG**	Results: 93.3% total coverage; Māori infant immunisation coverage at 90.6%. Rank 4th out of 20 DHBs (total coverage). National result percent is 89.3% (total coverage). Target: 95% MoH feedback: • Congratulations on the coverage that you have achieved this quarter, which is the most consistent across all DHBs. • Total (national)immunisation coverage at eight months has increased by 0.1 percent this quarter but coverage for tamariki Māori has decreased by a further 0.8 percent. • The Ministry acknowledges the impact of the COVID-19 response on service delivery and appreciates the dedication of the vaccinator workforce. However, the decline in coverage for tamariki Māori is not solely attributable to an increase in vaccine hesitancy and demonstrates that tamariki Māori have been disproportionately affected by the disruption to service delivery. All DHBs need to ensure that service delivery models are urgently reviewed, and appropriately funded, to reverse this trend. We have noted an increase in outreach service utilisation in other DHBs, and some are increasing staffing and available hours in response. Southern DHB report: • It is pleasing to acknowledge the hard work undertaken by all involved with immunisations. This is evident in quarter 2 where gains have been maintained and the Maori population equity gap has decreased by 4% with increased coverage across all ethnicities • In quarter 2, 135 of 149 eligible Maori were fully immunised at 8 months of age, this is a 3% coverage increase from quarter 1. There were 5.5% declines and 4% missed. • In quarter 2, 29 of 31 eligible Pacific were fully vaccinated at 8-month of age, this is an increase of 3% coverage from quarter 1. There were 6.1% declines and 6.5%. • In quarter 2, 642 of the eligible 684 Non-Maori population were fully vaccinated at 8 months of age. • The quarter 2 equity gap between Maori and non-Maori has decreased by 4%. • Total population coverage for 8 months was 93.3%, therefore Southern DHB did not achieve the 8-month target this quarter. • Opt offs – 0.4% Actions to address issues/barriers impacting on performance

8.4

Measures of DHB Performance			
Measure	Final Rating	Owner initials	Ministry of Health Feedback and DHB Responses
			• The 95% target has not been achieved. Immunisation Services have re-emphasised a Maori and Pacific focus. It is worth noting the decrease equity gap. • Several children are not enrolled with a GP. NIR staff produce reports to identify children who are close to missing their milestone immunisation. These reports are utilised to enable Outreach Services to organise Outreach clinics. • Staff sickness and recruitment have impacted for this quarter which has been resolved. • October 2020 schedule changes have resulted in increased referrals to Outreach Services where resources have been reallocated. New initiatives and successes • The implementation and development of a Health Care Assistant role to support Outreach Services. • NIR Co-ordinator requested the MoH to add ethnicity to overdue reports. This supports equity focus.
CW05 Immunisation coverage FA2: 5-year old immunisation coverage	**P**	**LG**	Results: 91.4% for total population and 93.6% for Māori population. Rank 4th out of 20 (total population). Target: 95%. National result is 86.9%. MoH feedback: • At age five years the total (national) coverage has decreased by 1.8 percent and coverage for tamariki Māori has decreased by 4.8 percent. • Congratulations on the coverage that you have achieved this quarter, which is the most consistent across all DHBs. • The Ministry acknowledges the impact of the COVID-19 response on service delivery and appreciates the dedication of the vaccinator workforce. However, the decline in coverage for tamariki Māori is not solely attributable to an increase in vaccine hesitancy and demonstrates that tamariki Māori have been disproportionately affected by the disruption to service delivery. All DHBs need to ensure that service delivery models are urgently reviewed, and appropriately funded, to reverse this trend. We have noted an increase in outreach service utilisation in other DHBs, and some are increasing staffing and available hours in response. Southern DHB progress report: • It is pleasing to acknowledge the equity gap between Maori and Non-Maori was -3% • In quarter 2, 146 of 156 eligible Maori were fully immunised at 5 years of age. There were 3.8% declined and 2.6% missed. • In quarter 2, 34 of 38 eligible Pacific 5-year olds were fully vaccinated. There were 7.9% declines and 2.6% missed. • In quarter 2, 745 of the 819 eligible Non-Maori, were fully vaccinated at 5 years (91%) • Southern DHB did not achieve the 5-year target for this quarter. • Opt offs – 0.9%

Measures of DHB Performance			
Measure	**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
			Actions to address issues/barriers impacting on performance • The 95% target has not been achieved. It is worth noting the decrease equity gap. Immunisation Services have re-emphasised a Maori and Pacific focus. NIR staff work closely with Outreach Nurses running reports to identify children who are close to missing their milestone immunisation and those who are no longer Southern DHB domiciled. • Staff sickness and recruitment have impacted for this quarter which has been resolved. • October 2020 schedule changes have resulted in increased referrals to Outreach Services where resources have been reallocated New initiatives and successes • The implementation and development of a Health Care Assistant role to support Outreach Services. • NIR Co-ordinator requested the MoH to add ethnicity to overdue reports. This supports equity focus. • NIR now has a designated staff member to be accountable for this age group.
CW07: Improving newborn enrolment with General Practice	**A**	**LG**	
CW08: Increased immunisation at 2 years of age	**A**	**LG**	
CW09: Better help smokers to quit- Maternity	**N**	**LG**	Results: Overall result is 77.5% and the Māori wāhine result is 76.9% of pregnant women were given brief advice and support to quit smoking. Target: 90 percent Ministry of Health comment: • This quarter the overall result was 77.5% and the Māori wāhine result was 76.9 of pregnant women were given brief advice and support to quit smoking. This was a decrease from last quarter. Your DHB employed midwives' result was 100% but the MMPO affiliated LMCs provide brief advice to 27 women, but 36 of them indicated that they were smokers at first presentation. In your opinion what is the reason why LMCs are either not providing brief advice and support to quit or not documenting it? • Keep up the good work. The number of events is likely to be lower than the number of births recorded in any one quarter; however until the National Maternity Record is fully operational (approx 2023) then reporting on this indicator will be from data collected from MMPO and DHB employed midwifes and remains developmental.

<table>
<tr><th colspan="4">Measures of DHB Performance</th></tr>
<tr><th>Measure</th><th>Final Rating</th><th>Owner initials</th><th>Ministry of Health Feedback and DHB Responses</th></tr>
<tr><td></td><td></td><td></td><td>Southern DHB response to MoH feedback:
• It has been difficult to influence the documentation of LMC midwives' brief advice to women to quit. In conversation with LMCs. They assure me that they are having these conversations and over a period of time but also tell me that many women who currently use tobacco are aware of the impact on themselves and on their babies but are not interested in a referral to smoke cessation services. My sense is that we need an increased focus on pre-conception levers to decrease the number of women (and particularly Maori wahine) who are using tobacco and at the same time increase the proportion of pregnancies that are planned.</td></tr>
<tr><td>CW10: Raising healthy kids</td><td>A</td><td>LG</td><td></td></tr>
<tr><td>CW12: Youth mental health initiatives</td><td>A</td><td>LG</td><td></td></tr>
<tr><td colspan="2">Improving mental wellbeing</td><td></td><td>Achieving Government’s priority goals/objectives and targets</td></tr>
<tr><td>MH01: Improving the health status of people with severe mental illness through improved access</td><td>A</td><td>LG</td><td></td></tr>
<tr><td>MH02: Improving mental health services using well and transition (discharge) planning</td><td>P</td><td>LG</td><td>Results:
<table>
<tr><td>Community</td><td>Percent of clients with a transition (discharge) plan</td><td>Target</td><td>Percent of clients with a wellness plan</td><td>Target</td></tr>
<tr><td></td><td>60.3%</td><td>95%</td><td>84.3%</td><td>95%</td></tr>
<tr><td>Inpatient</td><td>Percent of clients with a transition (discharge) plan</td><td></td><td></td><td></td></tr>
<tr><td></td><td>100%</td><td>95%</td><td></td><td></td></tr>
</table>
Notes: Report is based on DHB data, rolling 1 year (3 months in arrears). The data being referenced covers the period Oct 2019 to Sep 2020.

MoH feedback:</td></tr>
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<table>
<tr><th colspan="4">Measures of DHB Performance</th></tr>
<tr><th>Measure</th><th>Final Rating</th><th>Owner initials</th><th>Ministry of Health Feedback and DHB Responses</th></tr>
<tr><td></td><td></td><td></td><td>

- Thank you for your report. Please outline when quality audits of the plans will begin.

Southern DHB response to MoH feedback:

- Auditing of plans has commenced and progress will be reported on in Q3

Southern DHB report:
DHB commentary re community clients:

- A more up-to-date analysis of community clients (current and discharged) is provided here that shows improvements that will be borne out in MoH Quarterly reporting over time.

DHB commentary re Inpatient clients:

- All clients discharged from inpatient settings have in place a discharge plan that is uploaded into the clinical workstation (Health Connect South), accessible also by GPs / PHOs via HealthOne.

</td></tr>
<tr><td>MH03: Shorter waits for non-urgent mental health and addiction services for 0-19 year olds</td><td>P</td><td>LG</td><td>

Results:

<table>
<tr><th></th><th>Percent of 0-19 year olds were seen within 3 weeks</th><th>Target</th><th>Percent of 0-19 year olds were seen within 8 weeks</th><th>Target</th></tr>
<tr><td>Mental Health Provider Arm</td><td>70.7%</td><td>80%</td><td>89.3%</td><td>95%</td></tr>
<tr><td>Addictions (Provider Arm and NGO)</td><td>81.0%</td><td>80%</td><td>95.2%</td><td>95%</td></tr>
</table>

Rolling annual waiting time data is provided from PRIMHD (3 months in arrears). The most recent data being referenced covers the period October 2019-September 2020

Southern DHB report:
Identify what processes have been put in place to reduce waiting times

- Services across the Southern region continue to monitor wait times within their teams and looking at causative factors; this includes number of referrals and vacancies

</td></tr>
</table>

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Measures of DHB Performance				
Measure		**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
MH04: Mental Health and Addiction Service Development	FA1:	A	LG	FA1: Primary mental health
	FA2:	A	LG	FA2: District suicide prevention and postvention
	FA3:	P	LG	FA3: Improving crisis response services MoH feedback: We note that in December 2020, the service appointed a 0.7 FTE Educator to initially cover the two main Emergency Departments in Dunedin and Invercargill. You report that the next stage of implementation will include expanding to the districts rural hospital emergency departments which will likely be in the next quarter. You also report that although the role is aligned with the Mental Health Addictions service the intention is for the appointee to be positioned and present in the ED environment(s). We will be looking forward to future progress reports and evaluations in upcoming quarterly reports. Southern DHB report: The service appointed a 0.7 FTE Educator who commenced December 2020. The initial period of employment has involved a staged orientation plan focusing on the two main Emergency Departments in the district while also identifying where and how the role will be most effective across the district considering it is a relatively small resource for an expansive area to cover.
	FA4:	A		FA4: Improve outcomes for children
	FA5:	P		FA5: Improving employment and physical health needs of people with low prevalence conditions MoH feedback: • Thank you for your report. Are there any activities being undertaken to respond to and improve the physical health needs of people with low prevalence conditions? Southern DHB report • We have been advised that the University of Otago Ethics Committee has deferred a decision on whether to approve this research given that Southern DHB this application relates to an Auckland Health Research Ethics Committee approved application. The Otago Ethics committee has requested clarification on whether this particular part of the study (although based in Otago) should in fact have gone to the Auckland committee as an amendment to the original approval. • We are working with Te Pou to clarify what steps are necessary to seek the appropriate approval and hope to have resolved this in the early part of 2021. Southern DHB response to MoH feedback

Measures of DHB Performance			
Measure	**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
			• One of our major areas of activity during the past 12 months is working working with our PHO (wellsouth) on implementing the Integrated Primary Mental Health Programme in primary care (Access and Choice). this programme has a focus on general health not just mental health in primary care settings. We presently have the programme established in 17 General Practices across the district with the roles of HIPs, HC, and CSWs. We expect this area of activity to continue to be one of our major focus areas and we will (hopefully) be able to extend the programme into more General Practices in the 21/22 FY (dependant on funding).
MH05: Reduce the rate of Māori under the Mental Health Act: section 29 community treatment orders	**P**	**LG**	Results*:* For the period between 1 Jul 20 and 30 Sep 20, the percentage (of DHB population) of patients under section 29 in Southern DHB who are: • 0.24% (Māori) • 0.08% (Non-Māori) • 0.10% (total) Due to data availability, data are 3 months in arrears for each quarter. Southern DHB report: • Following the review of the Southern DHB Maori Directorate Maori health staff have been allocated to the range of MHAID services, while maintaining a team base. Although many orientations to their respective new services have been interrupted by the COVID period, the majority are settling into their roles, and we hope with this approach we will achieve better integration and access to cultural care, particularly where Maori may present in crisis, and in the CMHT settings. MHA client numbers by ethnicity (including Māori) continue to be incorporated into SMO annual performance reviews to raise awareness of personal and relative numbers of Māori under the MH Act. • While this data is subject to ongoing scrutiny and monitoring, the Zero Seclusion strategy group is also currently being re-energised, with a continued focus on the point of admission through the crisis teams and CMHT's, and emphasis on the quality of EWS and RPP's. It is hoped the combination of this focus and increased cultural access may help to reduce use of the MH Act at the point of relapse or crisis and/or during the course of their inpatient stay overall, but in particular for Maori. • The DAMHS is undertaking a review of Maori who have been on section 29's for longer than 5 years.
MH06: Mental health output delivery against plan	**A**	**LG**	

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Measures of DHB Performance			
Measure	**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
MH07: Improving the health status of people with severe mental illness through improved acute inpatient post discharge community care	**A**	**LG**	
Better population health outcomes supported by strong and equitable public health services			**Achieving Government's priority goals/objectives and targets**
Care capacity demand management calculation		**JW**	MoH has not allocated ratings this quarter
SS01: Faster cancer treatment (31 days)	**P**	**PN**	Results: 84.8% achievement (target 85%), ranked 18th out of 20 DHBs. National result: 89.6% This report is based on patients who received their first cancer treatment (or other management) between 1 Jan 2020 and 30 Jun 2020). Ministry feedback: Thank you for your comprehensive report Southern DHB report: • Please refer to SS11
SS02: Delivery of Regional Service Plans	**A**	**LG**	SIAPO reports on activity and progress on the South Island Health Services Plan.
SS03: Ensuring delivery of Service Coverage	**A**	**PN**	

Measures of DHB Performance				
Measure		**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
SS04: Implementing the Healthy Ageing Strategy		**A**	**LG**	
SS05: Ambulatory sensitive hospitalisations (ASH adult)		**P**	**LG**	Results: Non-Standardised ASH rates, 12 months to September 2020 for those aged 45 to 64 years Southern total (2,905/100,000), Southern Māori (4,472/100,000). National total rate: 3,660 per 100,000 ASH target for Southern DHB: 2925/100,000 (total rate for 45-64 year olds). MoH feedback: • Thanks for the notes and your SLM report. To clarify reporting on standardised and non-standardised rates - this is because for a district, you are interested in the actual rate. For comparison between districts, standardised rates are appropriate to account for variation in the age structure of populations. Southern DHB report: • The SDHB target was to reduce the Māori ASH rate for all conditions to <4876. The SDHB achieved this target; the rate at September 2020 is 4472. For a list of actions please refer to the SLM plan Acute Hospital Bed Days per Capita. This ASH rate is a contributory measure for this SLM.
SS07 Planned Care Measures	Planned Care Measure 1:	**N**	**PN**	MoH overall feedback on Planned Care Measures • Several services are behind Improvement Action Plan trajectories, we look forward to receiving a completed template by the due date of 17 February 2021. Noted some reporting provided around diagnostics and acute. Results Planned care measure 1: Planned Care Interventions

Procedure	Result	Target	Actions to achieve compliance:	When will compliance be achieved
Inpatient Surgical Discharges	97.8%	95%	No report required	
Minor Procedures	89.1%	95%	There is a delay in reporting of the community minor operations which affects our performance. For 2020/21 skin lesions previously treated in the hospital will be seen and treated in the community which will increase	We forecast that the target will be achieved by the fourth quarter once reporting is up to date

Measures of DHB Performance			
Measure	Final Rating	Owner initials	Ministry of Health Feedback and DHB Responses

	Quarter result	Target	Actions to achieve compliance	When will compliance be achieved
			the number of community minor operations by approximately 800-1000 for 2020/21	
Inpatient CWDs	100.1%	95%	No report required	
Planned care interventions	93.4%	100%	• Inpatient Surgical Discharges - from February to June there will be a planned increase in outsourcing and outplacing. • Minor Procedures - as above. • Non-surgical interventions - although a successful programme was completed in the 2019/20 period the service has struggled to attract appropriately skilled staff. The Allied Health Directorate are reviewing how this programme of work could be completed.	Discharges are planned to meet the target by the fourth quarter

Planned Care Measure 2:

Results: Planned care measure 2: Elective Service Patient Flow Indicators

	Quarter result	Target	Actions to achieve compliance	When will compliance be achieved
ESPI 1	100.0%	90%	No report required	
ESPI 2	16.8%	100%	Actions that are part of the improvement action plan are to • introduce the MOH prioritisation tool to balance capacity and demand for FSA appointments • run additional clinics with current staff, to employ Fellow's for Orthopaedics and General Surgery for 12 months • use the acuity tool to ensure that long wait patients are seen • waitlist maintenance i.e. regular checking of longwaiting patients	The trajectories for recovery of ESPI 2 breaches are as per the Improvement Action Plan and successful achievement will vary by service and is planned to occur in 20/21 and 21/22.

Measures of DHB Performance			
Measure	**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**

			• employ specialist nurses for general surgery and orthopaedics to see patients within their scope which allows SMOs to see FSA patients, ensure that clinics are booked with a minimum number of FSA's.	
ESPI 3	0.5%	0%	No report required	
ESPI 5	30.7%	100%	Actions that are part of the improvement action plan are to apply additional funding for private hospital lists to focus on long wait patients From July 20 to Dec 20 we are • running Saturday elective surgery lists for long wait patients • daily meetings to review elective list utilisation, • additional 16 hours of acute theatre time each week to reduce the number of elective cancellations, • list maintenance to ensure that long wait patients are prioritised, • evening lists being run to add one additional patient for orthopaedics, • introduction of the CPAC score for Urology and employment and to introduce the prioritisation tool into ESPI 2 which will reduce the conversion rate to the inpatient surgical waitlist	The trajectories for recovery of ESPI 2 breaches are as per the Improvement Action Plan and successful achievement will vary by service and is planned to occur in 20/21 and 21/22
ESPI 8	99.1%	100%	No report required	

Expectations:
ESPI 1 target: DHB services will appropriately acknowledge and process more than 90% of referrals in 15 calendar days or less.
ESPI 2 target: No patients are waiting longer than four months for their first specialist assessment (FSA.)
ESPI 3 target: 0 patients in Active Review with a priority score > the aTT (Patients waiting without a commitment to treatment whose priorities are higher than the actual treatment threshold (aTT)
ESPI 5 target: 0 Assured patients are waiting over 120 days (Patients given a commitment to treatment but not treated within four months)

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Measures of DHB Performance				
Measure		**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
				ESPI 8 target: 100% of patients were prioritised using nationally recognised processes or tools
	Planned care measure 3:			Planned care measure 3: Diagnostics waiting times Results: • Southern DHB did not achieve the 2018/2019 CT and MRI indicators: 95 and 90% of referrals (respectively) receiving their scan within 42 days of acceptance during quarter one of 2020/21. Target was achieved for angiography. • Due to RIS replacement across the DHB from mid November – December 2020, data for these two months is unavailable. Southern DHB is working to redevelop its reporting tools using data from the new RIS and this is likely to be available in early 2021.

Diagnostic waiting times – Quarter 2 results

Diagnostic	Result	Target	Actions to achieve compliance	When will compliance be achieved
Angiography	97.1%	95%	No report required	
CT	46.1%	95%	• Result driven by Dunedin CT. While reporting systems are not yet established for the new RIS, a rough count was undertaken of CT elective and planned patients waiting at the two sites. This suggests that Southland has deteriorated but Dunedin has held steady – possibly slightly improving. • Southern DHB has two initiatives underway to address the issues principally being experienced at Dunedin: 1) Additional CT sessions – weekday evenings Mon-Thu. These have commenced, as has training staff in the use of the NM SPECT/CT. A proposal for change to finalise these sessions is currently being undertaken and is expected to be completed mid October 2020.	First Quarter 2021/22

Measures of DHB Performance				
Measure		Final Rating	Owner initials	Ministry of Health Feedback and DHB Responses

			2) Invest in second diagnostic CT for Dunedin – on approved Capital list for 2020/21 year. Equipment and location selected, building works planning to commence Feb 21	
MRI	36.8%	90%	• While data are currently unavailable, anecdotal advice is that wait times for MRI at Dunedin have held steady, although large volumes of planned cases due for examination in February 2021 are likely to increase this. At Southland anecdotal feedback is that the waitlist continues to improve. • While reporting systems are not yet established for the new RIS, a rough count was undertaken of MRI elective and planned patients waiting at the two sites. This suggests that Southland has improved but Dunedin has deteriorated. • Southland is completing the remaining building works planned for the scanner replacement / MRI suite refit and this is expected to be complete early March 2020. At this point it is envisaged that the border change can proceed. • The variance in MRI from the required target is explained primarily by - Demand for both acute and elective MRI exceeds capacity at Dunedin	First Quarter 2021/22

Additional commentary CT:

8.4

<table>
<tr><th colspan="5">Measures of DHB Performance</th></tr>
<tr><th colspan="2">Measure</th><th>Final Rating</th><th>Owner initials</th><th>Ministry of Health Feedback and DHB Responses</th></tr>
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- CT performance is likely to have continued to have declined, throughout the quarter, although data for November and December is not available in its entirety. There was high acute demand for CT in November and December coupled with two lengthy breakdowns at Dunedin which placed pressure on elective throughput.
- Additional sessions in evenings, an earlier start time and some use of the NM SPECT/CT were all underway throughout this period at Dunedin. The procurement process for the planned additional CT was underway during this period with a preferred vendor and model being identified. Southern DHB has also approved a location to site the new equipment.
- Demand/Supply mismatch continues to result in undesirably long wait times for Dunedin domiciled patients.

Additional commentary MRI:

- While the result for October was down on the previous month, partial data suggests a reasonable recovery in performance at Dunedin in November. With Southland scanner conducting additional sessions and no break downs occurring at either site during this period is it possible that improvement has improved over Q2.
- The variance in MRI from the required target is explained primarily by – Demand for both acute and elective MRI exceeds capacity at Dunedin.
- Southern DHB intends to address the issues principally being experienced at Dunedin through:
  - Outsourcing of long waiting Cardiac MRI examinations to a private provider
  - Border change to direct some rural patients to Southland Hospital for MRI

</td></tr>
<tr><td></td><td>Planned Care Measure 4:</td><td></td><td>PN</td><td>

Planned care measure 4: Ophthalmology Follow-up Waiting Times

	Quarter result:	Target	Actions to achieve compliance	When will compliance be achieved
Ophthalmology FU	16.6%	0%	Actions that are part of the improvement action plan are to provide locums, run additional clinics and utilise community optomertrists. Currently fully staffed on both sites however it will likely take most of the year to recover (without further COVID resurgence). Ophthalmology is particularly susceptable to reductions during COVID due to overcrowding in waiting rooms and close	• The recovery trajectory as part of the improvement action plan sees the follow up waiting list reduced to zero by December 2021. • Currently the waiting list for the district is 4,540 patients and we plan to have reduced this by 2,279 to a total waitlist of 2,261 by June 2021. • We continue to run extra clinics to ensure our numbers do not deteriorate. • We are monitoring closely and ensuring we are booking the most in need/overdue off our robust acuity tool.

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Measures of DHB Performance				
Measure		**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**

	Quarter result	Target	Actions to achieve compliance	When will compliance be achieved
			proximity during outpatient clinics.	

Expectation: No patient will wait more than or equal to 50% longer than the intended time for their appointment.

Measure		Final Rating	Owner initials
	Planned Care Measure 5:		**PN**

Planned care measure 5: Cardiac Urgency Waiting Times

	Quarter result	Target	Actions to achieve compliance	When will compliance be achieved
Cardiac delivery		100%	No report required	
Cardiac wait times	15	0	• We continue to monitor and prioritise clinical need. This includes, weekly MDT meeting for the following week surgery plus outplacing at private hospital for lower risk outpatients. • The completed ICU build (main constraint to delivery) is estimated to be 18 months away (This has been extended from 12 months to 18 months due to air condition issues). Whilst there are no more ICU beds, there is likely to be more flexibility with increased staffing across the week.	Our current cardiac waiting list numbers (as at 31/1/21) are 26 Outpatients and 2 Inpatients. We aim to continue full production, contingent on ICU bed access and resume our 1 list per month in the private sector to assist compliance with our waiting list by the fourth quarter 20/21.

Expectation: All patients (both acute and elective) will receive their cardiac surgery within the urgency timeframe based on their clinical urgency.

Measure		Final Rating	Owner initials
	Planned Care Measure 6:		**GaT**

Planned Care Measure 6: Acute Readmissions

	Quarter result	Target	Status of action/milestone
Acute readmissions	11.7%	≤11.7%	No report required

8.4

<table>
<tr><th colspan="5">Measures of DHB Performance</th></tr>
<tr><th colspan="2">Measure</th><th>Final Rating</th><th>Owner initials</th><th>Ministry of Health Feedback and DHB Responses</th></tr>
<tr><td></td><td>Planned Care Measure 7:</td><td>(red)</td><td>PN</td><td>Planned care measure 7: Did Not Attend Rates (DNA) for First Specialist Assessment (FSA) by Ethnicity (Developmental)
<table>
<tr><th></th><th>Actions to achieve compliance</th><th>When will compliance be achieved</th></tr>
<tr><td>FSA DNA by ethnicity – data quality</td><td>Analysis of DNA rates by ethnicity presented to Telehealth group, Maori leadership group, Administration team, Faster Cancer Treatment Steering Group, Rural Hospitals.</td><td>• Develop education package for Admin staff regarding equity, DNAs and the equity plan
• Develop a process (and application) for identifying high DNA risk patients referred for Radiology and Outpatients – using the Cancer Nurse Coordinator application as a basis for engaging with patients differently.
• Develop options for improved engagement to attend clinics.
We aim to have these actions completed by the fourth quarter.</td></tr>
<tr><td>FSA DNA by ethnicity - Variance</td><td>We require a suite of measures to monitor equity for intervention, referral and waiting times rates. Our target is to have no difference in rates between Maori, Pacifica and Other.</td><td>• We are currently establishing a 2 weekly Equity in Outpatients and Radiology Group with a focus on Respiratory and Cardiology (adult).
• By end of Quarter 3 this will be established and have prioritised the high priority issues for entry services in Secondary Care.
• In Quarter 4 the Equity in Outpatients and Radiology will have developed the suite of monitoring tools for assessing equity and established a list of known effective strategies to address inequity.
• 2021/22 will continue this work.</td></tr>
</table></td></tr>
<tr><td rowspan="2">SS09: Improving the quality of identity data with the NHI and data submitted to</td><td>Focus Area 1:</td><td>A</td><td>MC</td><td>Focus Area 1: Improving the quality of data within the NHI</td></tr>
<tr><td>Focus Area 2:</td><td>P</td><td>MC</td><td>Focus Area 2: Improving the quality of data submitted to National Collections

MoH feedback:
• Thank you for focusing attention on improving NPF data quality and completeness for Indicator 1, NPF links to NBRS, NMDS and NNPAC. The Data Management Team will continue to support you and supply reports, advice and data to assist you in determining the source of the issue in your NPF extract. Well done on the continued great results for Indicator 3, Assessment of data reported to the NMDS.

Results Indicator 1 – NPF collection has accurate dates and links to NBRS, NMDS and NNPAC for FSA and planned inpatient procedures
Status: Not achieved</td></tr>
</table>

Measures of DHB Performance				
Measure		**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
National Collections				(see below)
	Focus Area 3:	A	MC	Focus Area 3: Improving the quality of the Programme for the Integration of Mental Health data (PRIMHD)
SS10: Shorter stays in emergency departments		N	PN	Result is 81.1, a decrease of 1% from last quarter. Rank: 16th out of 20 DHBs. National result is 85%. Target: 95% of patients will be admitted, discharged, or transferred from an Emergency Department (ED) within six hours. MoH feedback:

National Collections – Ministry of Health Feedback and DHB Responses:

	Num	Denom	%
NBRS	1191	3619	32.91%
NMDS	1001	3953	25.32%
NNPAC	7655	12147	63.02%

Achieved = greater than or equal to 90% and less than 95%

Results Indicator 2: National Collections Completeness
Status: Achieved

Results Indicator 3: Assessment of Data Reported to NMDS
Status: Achieved

Southern DHB report:

- Indicator 1 NPF collection has accurate dates and links to NBRS, NMDS and NNPAC
  Southern had planned for dedicated resource to work on the NPF extract last quarter to improve the matching issues, but with Christmas and holidays this wasn't possible. Focus is in this area now however, and effort will be put into checking interfaces, audits, errors and reconciliations. Results are expected to improve.
- RIS/Titanium/Mosaigq/Cardiobase data that was mentioned last quarter has now been submitted
  Within the DHB there has been a renewed focus by staff around controlling DHB Errors and correcting them in a more timely fashion, to improve the volume of data being submitted.
  SDHB will continue to meet fortnightly with the South Island Regional NPF group, hosted by Libby Antoun, Ministry of Health.
- Indicator 2: National Collections Completeness
  SDHB has an achieved rating this quarter but continue to look for improvements in our processes.
- Indicator 3: Assessment of data reported to the National Minimum Data Set (NMDS)
  SDHB has an achieved rating this quarter but continue to look for improvements in our processes

8.4

Measures of DHB Performance			
Measure	**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
			• Q2 performance is unchanged at well below expected levels since last year. There was no evidence of inequity with respect to the SSED target, with better performance for Māori and Pasifika, which may reflect more Māori and Pasifika presenting with minor problems to ED, which may in turn reflect reduced access to primary care for these people in your DHB. You should explore this further. • In Dunedin the 'generalism' plan for acute medical admissions may help, especially as the majority of the target 'breaches' are for admitted patients. It is good that you are also considering PAU and MAU for Southland. • Your ED short stay transfer rate to inpatient wards is appropriate, suggesting good use of ED Short Stay currently. Although just over 1% of patients leave ED within 15 minutes, a proportion of these are admitted to a ward, suggesting some of these may not be true ED patients. You should check that the appropriate group are being included target reporting. • Thank you for your comments on how the MoH can help. We are working hard to get the Senior Leadership Team at the MoH to recognise the importance of acute flow and that unplanned care and planned care are part of the same system and that a clear strategy for unplanned care with adequate resourcing is needed. The MoH is convening an Acute Care Sector Advisory group in 2021 with this in mind. It is good to hear that your IT provider will be compliant with SNOMED-CT coding soon.

Southern DHB report:

	% managed within 6 hours		
Facility	Total	Māori	Pacific
Dunedin ED	74.72%	80.11%	75.93%
Lakes District ED	94.87%	95.05%	95.45%
Southland ED	83.26%	86.41%	89.63%
Southern DHB Total	81.07%	84.79%	83.07%

Actions undertaken this quarter to maintain or improve the indicator

- Dunedin hospital escalation plan completed and planned for implementation early 2021
- Dunedin Fit 2 to sit ambulatory area 8 chairs operational
- Dunedin ED continues to exceed capacity
- Dunedin ED overflow into fracture clinic after 4pm and on weekends
- Southland ED COVID-19 phased response plan updated in response to COVID-19 resurgence.
- Southland ED continues to exceed capacity and overflows into other areas as required.

8.4

Measures of DHB Performance			
Measure	Final Rating	Owner initials	Ministry of Health Feedback and DHB Responses
			Planned work for next quarter • Older Person's Assessment Liaison process continuing • Board rounding by ED SMOs continues. • Dunedin Enhanced Generalism business plus MAU approved Barriers to achieving or maintaining the indicator • Poor ED flow • Lack of space • Access block getting people out of ED into inpatient beds What support can the Ministry provide • Support the MAU business cases for Dunedin and Invercargill to improve ED flow and improve performance against target. • Recognition that acute flow is as important as elective work

Data on acutely admitted patients

	Total Attendances	In ED over 6 hrs	% over 6 hrs
Not admitted	18,901	1,916	10.14%
Admitted	5,404	2,685	49.69%
Total	24,305	4,601	18.93%

For those Admitted to an inpatient ward, provide a separate report of target performance by service

	Total admitted from ED	In ED over 6 hrs	% over 6 hours
Medical (incl. all subspecialties	3,040	1,633	53.72%
Surgical (all subspecialties excl Ortho and O&G)	1,355	724	54.43%
Orthopaedics	603	219	36.32%
O&G	163	67	41.10%
Other	243	42	17.28%
Total	5404	2685	49.69%

Measures of DHB Performance			
Measure	**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**

Provide data on the number and proportion of patients admitted to an Emergency Department Short Stay Unit (SSU) that are subsequently admitted to an inpatient ward

	Admitted to SSU	Transferred to inpatients from SSU	% transferred
Total	2,451	416	16.97%

Provide data on what proportion of patients counted in your denominator that have an Emergency Department stay <15 minutes and where they go (discharged or admitted)

	Total ED attendances	# under 15 mins and discharged	# under 15 mins and admitted	Total stayed under 15 mins	% < 15 mins
Total	24,305	322	27	349	1.44%

Acute demand actions from Annual Plan

Acute Data Capturing: Please provide an update on your plan to implement SNOMED coding in Emergency Departments to submit to NNPAC by 2021

- DXC (Vendor) has been requested to modify EDIS to allow capture of SNOMED codes. DXC have estimated that this upgrade and functionality will be available to all EDIS clients by Q4 2020/21 (dependency on DXC). Note this is a delay from Q2 2020.
- Given the delay in delivery of required functionality in EDIS the review of code sets and process changes were delayed until Q2 2020 and now has been completed.
- A detailed implementation plan will be provided to the Ministry in Q3 2020/21. Including review of code sets, process changes, iPM collection for rural ED's, report and NNPAC extract reviews/changes, interfacing review, testing and training.
    - SDHB is targeting Q4 2020/21 for the implementation of SNOMED for ED (dependency on DXC delivery).

To improve Patient Flow, please report on actions from Annual Plan that:

Improves patient flow for admitted patients

- Enhanced generalism with co-located MAU approved for Dunedin will be fast tracked in 20/21 –transition plan underway. Work is occurring at Southland ED and initiatives include a fast track area, a PAU and scoping out opportunities for facility upgrade to provide a dedicated short stay units (MAU)

Improves management of patients to ED with long-term conditions

<table>
<tr><th colspan="4">Measures of DHB Performance</th></tr>
<tr><th>Measure</th><th>Final Rating</th><th>Owner initials</th><th>Ministry of Health Feedback and DHB Responses</th></tr>
<tr><td></td><td></td><td></td><td>
Supporting patients to remain at home or if an ED presentation or hospital admission is necessary to return home quickly and facilitated by allied health (HOME) Team established across Dunedin and Southland sites.
Improves wait times for patients requiring mental health and addiction services who have presented to the
ED
Dedicated SMO liaison holding mental health portfolio and recruitment of a dedicated Mental Health Educator in place.
Improves Māori patients experience in ED
Dedicated FTE Monday to Friday is in Dunedin and Invercargill EDs.
</td></tr>
<tr><td>SS11: Faster Cancer Treatment (62 days)</td><td>N</td><td>PN</td><td>
Results: 73.4% achievement (target 90%), ranked 18th out of 20 DHBs. National average: 88.8%.
(Data based on patients who received their first cancer treatment (or other management) between 1 Oct 2020 and 31 Dec 2020).

Ministry feedback: Measure not achieved

Southern DHB report:
Heat Map of 62-Day Capacity Breaches 1st January 2020 to 31st December 2020
<table>
<tr><th></th><th>Breast</th><th>Gynaecological</th><th>Haematological</th><th>Head and neck</th><th>Lower GI</th><th>Lung</th><th>Other</th><th>Sarcoma</th><th>Skin</th><th>Upper GI</th><th>Urological</th></tr>
<tr><td>Chemotherapy</td><td>4</td><td>2</td><td>4</td><td>2</td><td>4</td><td>5</td><td>0</td><td>0</td><td>0</td><td>2</td><td>1</td></tr>
<tr><td>Concurrent radiation therapy and chemotherapy</td><td>0</td><td>1</td><td>0</td><td>1</td><td>4</td><td>1</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td></tr>
<tr><td>Non-intervention management</td><td>0</td><td>1</td><td>4</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td><td>0</td><td>1</td><td>0</td></tr>
<tr><td>Other</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td>Palliative care</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>2</td><td>0</td></tr>
<tr><td>Patient died before treatment</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Radiation therapy</td><td>0</td><td>0</td><td>0</td><td>3</td><td>5</td><td>7</td><td>0</td><td>0</td><td>0</td><td>2</td><td>0</td></tr>
<tr><td>Surgery</td><td>9</td><td>12</td><td>0</td><td>2</td><td>18</td><td>1</td><td>1</td><td>0</td><td>2</td><td>0</td><td>8</td></tr>
<tr><td>Targeted therapy</td><td>2</td><td>1</td><td>0</td><td>0</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td></tr>
</table>
Southern DHB comments:
Analysis of post COVID pathway has been undertaken and is attached for information. The delay in diagnosis impacted on lower GI specifically. As identified in national data, Southern now has similar cancer rates to the previous year i.e. we have largely caught up.
Annual FCT refresher workshop was held on 19th November 2020. Urology & CRC CNS's were invited to speak.
</td></tr>
</table>

8.4

Measures of DHB Performance			
Measure	Final Rating	Owner initials	Ministry of Health Feedback and DHB Responses

- Resource folders have been developed and distributed to the FCT team, Oncology OP and MDU with a review date of November 2021.
- FCT data was audited by Audit NZ on 16/9/20 and we are awaiting the report.
- Patient pathways has started to be developed and/or updated to enable the FCT team to improve consistency in use of “delay code”.
- IT issues are continuing with IPM blocking the entry of patients with multiple cancer diagnosis into the FCT tracker – this is still under discussion with the IT team
- Comparison of CRC data with FCT data is planned with the CRC CNS.
- Comparison with Women’s Health data and FCT data is planned to ensure the correct capture of FCT data.

Summary – referrals

- In April 2020 cancer referrals dropped by over 50%
- This was mainly due to a drop in GP referrals.
- It took until June for us to see a rise (57%) of referrals from GPs and ED.
- Screening did not appear to have a significant impact from the previous year

FCT activity comparing 2020 to 2019 for the same month	Referrals onto the FCT database compared to 2019	Referrals from GP	Referrals from ED	Referrals from Screening	Decision to Treat events compared to 2019	First Definitive Treatment start dates compared to 2019
Mar-20	0%	-3%	9%	0%	14%	13%
Apr-20	-52%	-26%	-14%	-5%	-36%	-14%
May-20	-12%	-2%	3%	-6%	-23%	-28%
Jun-20	57%	36%	13%	2%	15%	-3%
Jul-20	22%	17%	5%	1%	7%	-4%
Aug-20	-2%	2%	-2%	-2%	-5%	4%
Sep-20	11%	0%	0%	0%	30%	13%
Oct-20	29%	0%	0%	0%	-3%	35%
Nov-20	-13%				-5%	-8%

Summary – treatment

- From March to September there was less surgery provided compared to previous year. This was despite prioritisation. The impact of less diagnosing and variation in flow is likely to have impacted.
- In March and April there was less chemotherapy given despite no deferment.
- October saw a 35% spike in surgery completed.

<table>
<tr><th colspan="5">Measures of DHB Performance</th></tr>
<tr><th colspan="2">Measure</th><th>Final Rating</th><th>Owner initials</th><th>Ministry of Health Feedback and DHB Responses</th></tr>
<tr><td colspan="2"></td><td></td><td></td><td>Summary – overall
• Reduced clinics and diagnostic services have had a major impact on the flow of cancer patients through services. This has deteriorated waiting lists and created backlogs over this period.
• Whilst there are now similar cancer registrations to the previous year, the flow for treatment is not yet back to 'usual'
• With Christmas taking out a further (although usual) 2 weeks of production, best guess is that the full catch up for treatment will be complete in February 2021.
• Further analysis required mid-February to assess flow data to confirm state of Faster Cancer Performance.</td></tr>
<tr><td colspan="2">SS12: Engagement and obligations as a Treaty partner</td><td>A</td><td></td><td></td></tr>
<tr><td rowspan="5">SS13: Improved management for Long Term Conditions (LTC)</td><td>Focus Area 1:</td><td>A</td><td></td><td>Focus Area 1: Long Term Conditions</td></tr>
<tr><td>Focus Area 2:</td><td>A</td><td></td><td>Focus Area 2: Diabetes services</td></tr>
<tr><td>Focus Area 3:</td><td>A</td><td></td><td>Focus Area 3: Cardiovascular Health</td></tr>
<tr><td>Focus area 4:</td><td>A</td><td></td><td>Focus area 4: Acute heart services</td></tr>
<tr><td>Focus Area 5: Stroke Service</td><td>P</td><td>LG</td><td>Focus Area 5: Stroke service

MoH feedback:
• Good to see the improvement in the acute service in Dunedin with 'code stroke' Good inpt rehab service being provided, and work still to do to confirm Ind 4 data. Is the DHB providing support locally for the FAST campaign? You are only reporting one lead stroke physician.

Southern DHB result:</td></tr>
</table>

8.4

Measures of DHB Performance				
Measure		Final Rating	Owner initials	Ministry of Health Feedback and DHB Responses

Indicator 1: 80% of stroke patients admitted to a stroke unit or organised stroke service, with a demonstrated stroke pathway			
Site	Numerator	Denominator	Percentage
Dunedin	97	114	85.1%
Invercargill	40	58	69.0%
Dunstan	0	17	0.0%
Oamaru	0	9	0.0%
Total	137	198	69.2%

Note: Indicator results and numbers are for the previous quarter (i.e. Q1 results in Q2) with narrative to include comments around indicator results also narrative for current reporting quarter activities

Indicator 1: Invercargill commentary

- In this indicator out of 58, 7 patients were from Lakes District (Lakes are keeping separate data now);
- Out of 11 patients from Invercargill 3 of them transferred to Christchurch for clot retrieval + emergency management from ED and received them back to Southland's ASU;
- So only 8 patients were not admitted in ASU- Southland during this period of time (2 patients deceased + 1 patient palliative management+ 1 patient refused admission+ 3 patients admitted in surgical ward+ 1 patient discharged home after assessment).

Indicator 1: Dunedin commentary

- This was a busy quarter (Q1) with a considerable increase in numbers through the ASU (Acute Stroke Unit) during this period. Numbers eased during Q2, and now January has been a busy month.
- Training in nurse led cough reflex testing and swallow screening continues, with an aim to run training every 3 months. The nurse educator is assisting with arranging orientation to the ASU for new nursing staff.

Indicator 2: 10% of potentially eligible stroke patients thrombolysed 24/7			
Site	Numerator	Denominator	Percentage
Dunedin	10	91	11.0%
Invercargill	3	50	6.0%
Dunstan	1	17	5.9%
Oamaru	3	7	42.9%
Total	17	165	10.3%

Measures of DHB Performance				
Measure		Final Rating	Owner initials	Ministry of Health Feedback and DHB Responses

Indicator 2: Invercargill site commentary

- As per the data 3 patients thrombolysed during this period and in that 2 patients were from Queenstown-Lakes district.
- The other patients in the denominator were outside the thrombolysis window due to time and other comorbidities.
- Indicator 2 improved compared to the Q4 19/20 data. During this time 3 NZ Maori patients presented with strokes, one patient thrombolysed and others were outside time window.

Indicator 2: Dunedin site commentary

- Numbers of 'CODE STROKE' calls from the ED have increased, and now we are beginning to see more patient's thrombolysed with 10 each in Q1 and Q2. There is still some work to do with the ED to have more of the CODE STROKE calls prior to patient arrival, and to decrease our door to needle time.
- We imminently have to return to using Alteplase for stroke thrombolysis, rather than the current Tenecteplase, due to a worldwide shortage. Alteplase is not as easy or quick to administer as Tenecteplase.

Indicator 3: 80% of patients admitted with acute stroke who are transferred to inpatient rehabilitation services are transferred within 7 days of acute admission			
Site	Numerator	Denominator	Percentage
Dunedin	28	39	71.8%
Invercargill	12	12	100.0%
Dunstan	0	0	0.0%
Oamaru	0	0	0.0%
Total	40	51	78.4%

Indicator 3: Invercargill site commentary

- No comments, target achieved with 100%

Indicator 3: Dunedin site commentary

- With the return of older peoples' rehabilitation services to the Dunedin Hospital site in Q2, the flow to rehabilitation beds has improved

Indicator 4: 60% of patients referred for community rehabilitation are seen face to face by a member of the community rehab team within 7 calendar days of hospital discharge			
Site	Numerator	Denominator	Percentage
Dunedin	3	17	17.6%

8.4

Measures of DHB Performance			
Measure	**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
			(table below)

Invercargill	2	2	100.0%
Dunstan	0	0	0.0%
Oamaru	0	0	0.0%
Total	5	19	26.3%

Note: Indicator results and numbers are for the previous quarter (i.e. Q1 results in Q2) with narrative to include comments around indicator results also narrative for current reporting quarter activities

Indicator 4: Southern DHB commentary

- The data above don't match the services experience and we are checking the data entry and coding.

Measure	Final Rating	Owner initials
SS15: Improving waiting times for colonoscopies	**P**	**PN**

Results:

- Positive FIT. End of November results: total 86.7%, Māori 87.5%, Pacific 100.0%
  Target: 95% of participants who returned a positive FIT have a first offered diagnostic date that is within 45 calendar days of their FIT result being recorded in the NBSP IT system.

Colonoscopy	Target	Results		
		Sep	Oct	Nov
Urgent colonoscopy (14 days or less)	90%	89.3%	81.0%	100.0%
Non-urgent colonoscopy (42 days or less)	70%	84.9%	86.5%	84.0%
Surveillance colonoscopy (12 weeks or less)	70%	39.3%	38.9%	38.0%

MoH feedback:

- We note your efforts to address non-urgent colonoscopy wait times and some improvement in the surveillance maximum target. However, we continue to be concerned with recommended urgent and surveillance targets being non-compliant. Due to the significant number of people continuing to wait longer than maximum (273 as at Dec 2020), colonoscopy performance is being escalated to your CE

Southern DHB report - Surveillance Colonoscopy

- Continuing to recover volumes post COVID.
- Lowest priority group as least likelihood of finding sinister pathology.
- One year surveillance prioritised.

Measures of DHB Performance			
Measure	Final Rating	Owner initials	Ministry of Health Feedback and DHB Responses
			• Recovery taking longer than originally anticipated. • Looking to utilise all available capacity across SDHB District and for patients to receive their colonoscopy where there is shortest waiting times. • Recovery funding, when available, to be utilised to employ additional nursing staff to increase capacity.
Improving wellbeing through prevention			**Achieving Government's priority goals/objectives and targets**
PV01: Improving breast screening coverage and rescreening	N	**LG**	Results: BSA coverage (65.1%) of women aged 50-69 years in the Southern district, for the two years ending 30 September 2020: Māori 64.6%; Pacific 58.9%; total 64.7%. Target: 70%. National total: 67.3%. MoH feedback: • Thank you for your feedback. As noted the 70% target has not been met for Maori, Pacific or the total population. We encourage the DHB to work together with the Lead Provider and prioritise equitable outcomes especially for Maori and Pacific. Southern DHB report: • The Breast screening data demonstrated that the SDHB has Not Achieved the targets for all groups. • The service is managed by Breast Screening Aotearoa. This is by way of a contract between the MoH and Pacific radiology. • The service provider works closely with local GP providers to improve these results. Please refer to the action plan submitted by the provider to the MoH.
Better population health outcomes supported by primary health care			**Achieving Government's priority goals/objectives and targets**
PH01: Improving system integration and SLMs	A		
PH02: Improving the quality of ethnicity data collection in PHO and NHI registers	A		

8.4

Measures of DHB Performance			
Measure	Final Rating	Owner initials	Ministry of Health Feedback and DHB Responses
PH03: Improving Maori enrolment in PHOs to meet the national average of 90%	P		Results: PHO enrolment for Māori reached 79% in the second quarter. Target: 90%. MoH feedback: • Final round feedback: Southern DHB has achieved a partially achieved rating. The Ministry acknowledges the work put in to increase Māori PHO enrolment rate and we look forward to the next report. Initial round feedback. Southern DHB report: WellSouth continues to contract with all Māori health providers with the objective of: • Increasing the number of Māori enrolled in primary care • Increasing the timely utilisation of primary health care service by Māori • Working with key health care providers to enhance the effectiveness of referral pathways and models of care for Māori communities. • Increasing the ownership and capacity (skills and knowledge) of Māori communities to help improve and protect their wellbeing. • These services target Māori either not enrolled in a Practice and/or not attending the Practice for regular health or screening programmes. The providers: • Identify Māori who are not enrolled with a primary care practice or not actively accessing appropriate health services. • Educate and inform Māori about health services, health issues and general health matters • Assist Māori to become familiar with, and become comfortable using, primary health services. • Work with primary care and other health services to remove barriers to access for Māori. • Assist Māori to attend appointments and to carry out advice from health professionals. • The WellSouth voucher programme continues to target Māori, Pacific and other priority populations. It is strictly for patients who are unable to pay, and without the voucher would not visit their GP/Practice Nurse or pharmacy. • WellSouth continues to actively support the VLCA practices within the region and encourages all practices to actively work with existing whānau to maintain their enrolments and identify and enrol other Māori in their community who may be unenrolled. Reports have been made available to Practices through “Thalamus” to identify patients with: • Ethnicity unknown • Funding expiring this month and next

Measures of DHB Performance			
Measure	**Final Rating**	**Owner initials**	**Ministry of Health Feedback and DHB Responses**
PH04: Primary health care: Better help for smokers to quit (primary care)	**P**	**LG**	Results: 75.5% (total population) were given brief advice and support to quit smoking. 75.5% of Māori and 74.3% of Pacific populations were given brief advice to quit smoking. Rank: 14th out of 20 DHBs (total population). National result: 78.0% (total population). Target: 90% of enrolled patients who smoke and are seen by a health practitioner in primary care will be offered advice and help to quit. MoH feedback: • Your final Quarter Two result is 75.5% percent. This is a 5.1 % increase from last quarter and you did not achieve the target. 75.5 percent of Māori and 74.3 percent of Pacific populations were given brief advice to quit smoking. • I look forward to updates on the Health Care Home programme and if practices joining the programme show an improved target result. What are the barriers to expanding this programme and the Integrated Primary Mental Health Programme to a wider group? Dr. John McMenamin (Target Champion – Primary Care) is available via teleconference to discuss ways of improving the DHBs Target results. • Please note that the result for Southern DHB's cessation support indicator is 24.9 percent. The national result for this indicator is 34.1 percent. This indicator shows the percentage of current smokers who have been given or referred to cessation support services in the last 15 months. The cessation support indicator result is for DHB use only and will not be publicly reported. You can use this indicator as a proxy measure of how well the clinicians are engaging with cessation services and how frequently they refer smokers to these services. Southern DHB response to MoH feedback: • The Primary Mental Health programme is a MoH funded initiative with capped FTE available. Once fully recruited to there is no further ability to scale up. • The HCH programme has a number of additional practices coming onto the programme during 2021 tranche 3. This will add an additional approximately 110,000 pts to the programme. Do you think you have met the overall target (as noted above) this quarter? If not, what issues are preventing the target from being met and sustained? What actions are being put in place to improve performance and how will these actions be monitored? • Final achievement against the target will be 73.1% for the total population. • Workloads at general practice in the post-lockdown period and prior to Christmas have affected practices ability to commit resource to smoking cessation. • In November WellSouth engaged its Call Centre to contact patients on practices' behalf and to help them achieve the target. We work with practices to ensure that they have a plan to achieve the target.

8.4

Measures of DHB Performance			
Measure	Final Rating	Owner initials	Ministry of Health Feedback and DHB Responses
			• All practices have access to Thalamus, a business analytics tool, for their own patients. WS will be able to provide daily updates of performance to stakeholders, using the tools that had previously been developed. • The WS Practice Relationship team was back to full strength from November, and a key message in their communications with general practices will be performance against the targets. We will work with each practice to agree a Practice Development Plan that sets out agreed activity towards a set of targets, with smoking cessation a priority. Do you think you have met the target for Māori and Pacific (as noted above) this quarter? If not, what issues are preventing the target from being met and sustained? What actions are being put in place to improve performance and how will these actions be monitored? • No. Final achievement against the target will be 72.7% for Maori and 71.7% for Pacific people. • As above, with the addition of the following. • Our Health Care Home programme is being expanded by 10 practices this year, with these practices chosen because they have a high number of high needs and/or Maori enrolled with them. A condition of being in the programme is that they achieve the target. Including the next intake of practices the Health Care Home programme serves 24 practices and approximately 172,000 patients, 16,800 of whom are Maori. • WellSouth has implemented the Integrated Primary Mental Health programme in its Network this financial year, placing 12 Health Coaches in practices. The practices chosen to be part of the Integrated Primary Mental Health programme all had high numbers of high needs and/or Maori patients. We are working with the Health Coach workforce to improve wellness of the population in those practices, starting with a focus on smoking cessation support. Is there any further support you require from the Ministry to achieve the target? If so, what support is required? • We would love to be able to expand the Integrated Primary Mental Health and Health Care Home programmes to a wider group of patients Is there anything else you would like to tell the Ministry? • Support from DHB public health team is incredibly valuable and appreciated.

Annual Plan Status Update Reports			Achieving Government's priority goals/objectives and targets
Measure	**Final Rating**	**Owner Initials**	**Ministry of Health Feedback and DHB Responses**
Annual Plan Status Update Reports - Improving wellbeing through prevention	**N**	**LG**	MoH feedback: • For Smokefree - please provide some commentary. • Sexual Health - There has been an increase in sexually transmitted and blood borne infections (STBBI). The Ministry will be seeking your support in understanding those populations and areas within your region at greatest risk and how the rates may be effectively reduced. Southern DHB commentary re Smokefree • Q2: Clinic processes established and weekly clinics held from Q2. • SDHB has not achieved it tobacco target for the quarter. The result is 76% for Q2. This is up from 63% in Q1. In response to these results a call centre has been established by WellSouth PHO to assist practices in the contacting and brief advice given to enrolled smokers.
Annual Plan Status Update Reports - Improving Child Wellbeing	**P**	**LG**	Southern DHB report: Refer to separate Q2 Annual Plan report
Annual Plan Status Update Reports - Improving Mental Wellbeing	**P**	**LG**	Southern DHB report: Refer to separate Q2 Annual Plan report
Annual Plan Status Update Reports - Better population health outcomes supported by primary health care	**P**	**LG**	MoH feedback: • Thank you for your report. Diabetes and long-term conditions. It is noted that the local Diabetes team is re-established. Focus on a catch up programme is required. Good work establishing virtual diabetes forums Southern DHB report: Refer to separate Q2 Annual Plan report
Annual Plan Status Update	**N**		MoH feedback: • Ola Manuia 2020-2025: Pacific Health and Well-being Action Plan – Look forward to following through to Q4 reporting.

Reports - Better population health outcomes supported by strong and equitable public health services			• CCDM – Thank you for your detailed report which gives a good account of where you are at with implementation. We look forward to SDHB resolving your FTE calculation discussions and agreeing phasing for implementation. • Acute demand – Thank you for your report, we are aware of your request for an extension due to your new PAS system. • Bowel Screening and colonoscopy wait times – The Ministry appreciates consistent performance for bowel screening KPI 306 and all participation rates. We note your efforts to address symptomatic colonoscopy wait times however, due to the significant number of people continuing to wait longer than maximum, colonoscopy performance is being escalated. Southern DHB report: Refer to separate Q2 Annual Plan report
Annual Plan Status Update Report – Improving Sustainability	**A**	**JR**	
Annual Plan Status Update Report – Give Practical Effect to He Korowai Oranga – the Māori Health Strategy	**A**	**GiT**	

Crown Funding Agreements (CFA) Variations

Crown Funding Agreements (CFA) Variations			
Measure	**Final Rating**	**Owner Initials**	**Ministry of Health Feedback and DHB Responses**
CFA Primary Health Care Services	**N**	**LG**	MoH feedback: • Southern DHB has received a Not Achieved rating as your report indicate that only 75 percent of children aged 14 years and under in your enrolled population has access to zero fees under 14 care within 60 minutes travel time after hours. • Please provide your plans for increasing access to zero fees under 14 care to your enrolled population with your next report. Results: GP Coverage • Dunedin ED Overnight Service • WellSouth continues to pass 100% of this funding directly onto Dunedin Hospital ED as the provider of overnight primary care services in Dunedin city. HML Telephone Triage • WellSouth continues to use this funding to procure telephone triage for mostly rural practices across the region with all available funding being paid to HML for this service. This service costs more than the funding that is provided and WS meets the deficit out of its flexible funding. Free After Hours Under 14s • Invercargill Urgent Doctor Service is the only after-hours provider that charges under-14s for services. All other parts of Southern District provide free care to under 14 patients after hours • After-hours services are free for under-14s across Southern district except in Invercargill, where the after-hours provider declines to offer zero-fees for under 14s. The under-14 population in Invercargill is aprox 13,477, which represents 23% of all children in this age group in Southern. • Only Invercargill urgent doctors refuses to provided zero-fees for U14s care after hours. • Pharmacy provides extended hours coverage in Dunedin and Invercargill. GPs providing after hours urgent care maintain the pharmaceuticals that they require in stock. U14 Population • Southern District 53,863 • Invercargill Urgent Doctors 12,995

			• % Without Access to Zero Fees U14 care after hours 24% • % With Access to Zero Fees U14 care after hours 76% • As part of our Alliance, WellSouth and Southern DHB is planning to established a Service Level Alliance Team (SLAT) to address the provision of urgent care in Invercargill, including access to after-hours care, zero-fees for under 14s, access to diagnostics, ED presentations and greater clinical contact between providers. Terms of Reference are being confirmed, including the composition of the SLAT and timeframes for reporting back to the Alliance Leadership Team. Pharmacy coverage. • There are no overnight pharmacies in SDHB. The provision of medicines is primarily required in our rural settings and this is supported by GPs holding the medicines that they require in stock.
CFA B4 School Check Services	**S**	**LG**	
CFA Well Child Tamariki Ora Services	**S**	**LG**	
DHB level service component of the National SUDI Prevention Programme	**S**	**LG**	
CFA National Immunisation Register (NIR) Ongoing Administration Services	**S**	**LG**	
CFA Immunisation Coordination Service	**S**	**LG**	
CFA: Health Services for Emergency Quota Refugees	**S**	**LG**	

CFA COVID-19 DHB Digital Enablement Funding Support 20/21	No rating this quarter	**LG**	MoH feedback: • Great update look forward to seeing further progress in your next report
CFA COVID-19 Primary Care Digital Enablement Funding Support 20/21	No rating this quarter	**LG**	MoH feedback: • Report noted

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Specialist Services monthly report for Feb 2021

Lead Executive: Patrick Ng

Southern District Health Board
Piki Te Ora

EXECUTIVE SUMMARY

- Nursing roster gaps leading to bed closures and reduced surgery continued into February but the situation is starting to improve (from mid March) as graduate recruits are now being counted on the roster.
- The additional CT scanner for Dunedin has had capital sign-off and the machine has been ordered. The facilities team have developed a de-cant plan and concept design and are working towards construction commencing in May to time with the machine arriving on site in August.

Performance area	Previous month	Current month	Commentary
Case weights surgery	→	→	CWD ahead o plan year to date but largely driven by medical CWD (cardiology) and General Surgery. Key specialties such as orthopedics are backlogging cases due to inability to move forward with surgery (bed blocked). .
Discharges	→	→	Following the same pattern as CWD. Slightly further behind plan YTD than CWD as we have an historic 'stretch' in the discharge target (from when the planned care rules changed).
ED six-hour target	↓	↓	Benchmarking for Southland ED facilities business case next key step. Have identified that 35% of presentations are out of district which will be key to the benchmarking.
Cancer target <31 days	↑	↑	31 day performance on target but challenges with 62 day performance. Specific recovery plan being worked on for Radiation Oncology wait list.
FSA (ESPI 2)	→	→	Volumes attended to improving in February month compared to January. Further work required to reduce acceptance levels in some services to match capacity.
Elective treatment< 4 months	↓	↓	Orthopaedics has been most impacted by inpatient bed issues over the last few months. Compounds backlog from COVID. A recovery plan has been developed by the service managers and future recovery funding will be targeted at this. Includes Mercy, Southern Cross and use of Timaru hospital + new Queenstown hospital capacity later this yr.
Medical imaging CT	→	→	CT shift in place and performance has improved in February and March compared to January. Working with IS to get reliable performance reporting from new Radiology software. Further CT machine outage in March.
Medical imaging MRI	↓	→	MRI capacity in Dunedin remains challenging. We are working on an overall Radiology strategy to be tabled at the May HAC which will propose how to address capacity issues.
Colonoscopy 14 days	↑	↑	Remains on target.
Colonoscopy 42 days	↑	↑	Remains on target.
Colonoscopy 84 days	↓	↓	Surveillance forecast to achieve compliance by September. New guidelines to be implemented in Southland will accelerate this.

Current Issues	Update/Achievements	Upcoming key deliverables
Elective surgical delivery	Broadly running on plan for the year to date elective surgery plan, but without the additional volumes from recovery being delivered.	Taskforce outcomes lead to improved bed availability. Nursing gaps need to be worked through.
Financial performance	Initiative to standardise orthopaedic product catalogue in Dunedin is now underway. Will extend to other specialties once working well.	Apply new month-end rigor on an ongoing basis – month-end checklist & dashboard, standardise results analysis.
ICU air handling issues (for stage 2) slow to be addressed	Update from mechanical engineers says remaining system designs will be completed early April. Peer review required, then pricing and we will have a timeline from there.	Target end of April for signed off designs & QS price leading to an overall project timeline for the completion of the remedial work.

Planned Care Recovery

- Further clarity gained about inpatient recovery. Our YTD recovery revenue has not been earned as our total elective surgery YTD is only sufficient to meet our YTD elective plan (and we must do recovery volumes on top of plan). Volumes in excess of elective plan then earn IAP revenue so we are seeking to maximise outsourcing in the remaining months of the year – the outsourcing will come with additional cost but allow us to accrue IAP recovery funding which will offset this. We hope to us Timaru hospital in the next couple of weeks to complete some of our orthopaedic volumes. Once we have the process locked down we will then slowly but systematically scale this up using recovery funding. This will keep the recovery funding in the public system and allow us to extend beyond the available capacity at Mercy hospital in Dunedin.
- For outpatient recovery at current run rates we have earned circa $1m of the available recovery funding of $1.6m for first specialist assessment and follow up appointments. We are working on scaling up initiatives that will achieve more volume – additional volume above baseline will be funded at unit prices from the available recovery funding so we can incur the cost and accrue the offsetting revenue.
- For both inpatient and outpatient we are developing a proposal for the Ministry's consideration that would see us asking for an additional circa 6 months beyond the end of the financial year to complete year 1 volumes, running in parallel to the year 2 plan once this is worked up and agreed with the Ministry. This would enable us to maximise the funded additional volumes we can get done.

Gastroenterology

- New internal digital referral has gone live and is being used consistently.
- Now focusing on improving tracking of colonoscopies for reporting so that we can understand our decline rates better (e.g. proportion directed to other treatment rather than declined). First opportunity to improve access is if our decline rate can be reduced. Looking at adding additional accept / decline reason codes in IPM to enable us to track and report this from source systems.
- Our capacity reporting demonstrates that there is physical scoping room capacity to do more. We are limited by current resourcing.

Patient Flow Improvement Programme

Date: 19th Mar 2021	**Report No.: 7**	**Establishment Phase:** Day 47

Activity this week:

- Second newsletter went out focusing on the 7 workstreams/themes. Supporting people to engage.
- Sharepoint development using SAFER and 7 workstreams as a template ,sharepoint available to staff next week -
- Further metrics development (work on including outliers)
- IT have been in the wards getting the specifications needed for more screens (big & small) so we can have live data up in more places, increasing visibility for our staff of what is going on in the hospital.
- Staff have started using the power app form to capture data on what is happening in the rapid rounds.
- Wellbeing workstream: Any initiatives will be under the work well banner, confirmed yoga sessions for staff (3 months) to commence in 2 weeks, negotiating with Barre Base re pilates/strength training
- Secured additional SMO support for PF (Rehab SMO & a Geriatrician).
- Radio interview re patient flow
- Scoping up of the virtual ward project
- Engagement with senior leaders – SPC and open forum on Friday and Quality team
- Orthopaedic wait list initiative – meeting with physiotherapy school who will facilitate one of the group programmes to be offered
- Continued support of rapid rounds, embedding new tools and ways of facilitating rapid rounds
- Further engagement with occupational therapy about ways of working to support patient flow

Priorities next week:

- Third newsletter to go out focussing on rapid rounds

Weekly update of key activities to be developed and distributed to SLT

- Sharepoint site promoted and functional
- Work on distilling the metrics into a weekly format that is digestible by the clinical teams (runchart style)
- Making the operational charts more visible: CAG screen etc. Further screens to be installed.
- Update of the project at Staff forum
- Confirm and promote wellbeing initiatives.
- Criteria led discharge promoted to the wards
- Continue to embed best -practise for rapid rounds

Distribute updated rapid round tools to Southland teams

Metrics: 1st Iteration/week 12

Consult request to consult seen average = 132.11 **Bed request to admission time average = 133.78**	**Number of bed days occupied by super-stranded patients (LOS > 21 days) = 10**	**% of inpatient discharged Sat & Sun (target 25%) = 14.81%**
Inpatient imaging requests: **Average request to complete time = 0.5 days** **New requests per week: 2**	**% of daily discharges before noon (target 33%) = 35.17%**	**Proportion of patients in hospital > 7 days = 25.55%**

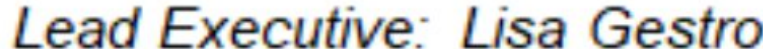
Issues, Delays, Risks, Dependencies to flag:

- Senior clinical buy-in is an ongoing issue
- The RMO cohort buy-in is also now a dependency
- Charge nurse mgt & need for ongoing support, mentoring

Decisions/Involvement required by ELT:

- Continued support around the messaging of SAFER
- Continued involvement in rapid rounds to show consistency

SP&C Services monthly report for Feb 2021



EXECUTIVE SUMMARY

Positioning Public Health services for the future	Previous month	Current month	Commentary
COVID-19 Response	↑	↑	▪ A significant amount of work continues in relation to COVID-19 Response ▪ Covid-10 Swabbing - 5047 swabs undertaken over the past month including 444 at the maritime ports. ▪ We are currently organising a table-top exercise with the scenario of having a positive COVID-19 case in an Aged Residential Care facility. A small Public Health workforce will undertake the role of case management and contact tracing. ▪ We are working with Public Health Nurse management on how we can include national contact tracing solution) training into their normal schedule going forward. ▪ Large event organisers are being provided with information on the government's guidelines for running safe events ▪ Planning is underway to roll out the COVID-19 vaccination programme, taking into account all the challenges, the sequencing and the logistics associated with the vaccination's cold chain.
Psychosocial Response planning	↑	↑	▪ The Central Lakes Mental Wellbeing Recovery group continues to meet to monitor and provide regular updates about referrals and activity within the district. ▪ The Mental Health Wellbeing Navigator role has been advertised with a large number of applications for this role. The communication strategy is being further refined with the aim to work with the Ministry of Health alongside current strategies.
Immunisation	→	→	▪ Further work is underway on overarching COVID/measles programme immunisation response plan. ▪ Demands on this service remain high
Maternity	↑	↑	▪ Four workshops have now been run by an independent facilitator, with midwives from Central Otago and Wanaka. These workshops aimed to agree a high level model of care for the proposed new primary maternity facilities and to give the DHB assurance that there is a workforce committed to staffing the units. The DHB project team is now considering the advice it will provide to the Board on how to progress. ▪ A business case for the associated capital spend and the next steps in the Request For Proposal provider process cannot be progressed until there is confirmation of a two-unit or single-unit plan.

Current Issues	Summary of risk	Mitigation strategies
COVID-19 vaccination programme	Public Health nurse work force is likely to be deployed for vaccination of priority groups in Southern. This will mean some Business as Usual (BAU) and programme work will need to stop.	Urgent development of an independent vaccinator workforce is required. Prioritisation of what work is stopped to ensure further inequities do not occur.
Well South PHO - Invercargill After Hours Primary Care	Clinical safety compromised if no overnight primary care is available to the population of the Invercargill	Engage with key stakeholders: WellSouth and Local General Practices (GPs). Hold contract holders to account.

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Strategy and Planning

- Annual Plan 21/22 - The Letter of Expectations was received on 10 February, outlining the Minister of Health's expectations. The first draft of the 2021/22 DHB Annual Plan was submitted to ELT for approval on 1 March. The Strategy & Planning team have compiled the document based off content provided by subject matter experts. The first draft of the Annual Plan, incorporating the SLM, was submitted on 5 March. A combined IGC/CPHAC workshop is scheduled for 7 April and the draft will be submitted to the Board on 8 April. MoH will commence feedback on 9 April.
- Financial tables (and narrative) are being prepared separate to the Annual Plan word document and the submission of the first draft will not include budget related content.
- The first draft remains incomplete, although the majority of the content has been created/updated.

Aged Residential Care

- The DHB continues to experience elevated levels of occupancy in Aged Related Residential Care (ARRC), primarily at Hospital and Psychogeriatric levels of care. After the increases in the first half of 2020, total bed utilisation has remained relatively stable for the past 6 months. Power BI is being utilised in the analysis of the complex datasets, which is providing useful insights, and then further questions. Some high level observations include:
    - Fewer people are entering ARC at Rest Home level care
    - More people are entering ARC directly to Hospital level care
    - More people at Rest Home level care are moving to Hospital level care
- COVID Resurgence Planning continues, with learnings from Exercise Rata, our Desktop Simulation, shared with the Sector via a Teams Meeting. Implementation of the learnings will be followed up on a Locality level and with our ARC IPC Nurses. Three Senior DHB leaders have been charged with developing a plan to release staff to support ARC in case of a COVID-positive facility. This continues to be our greatest risk. Another Desktop Simulation, to test changes made to the Response and focus on the Public Health interface, is planned for April.
- ARC Locality Groups continue to function, with a mini-group formed in Dunedin to link our five very small independent Rest Homes. Other connections have been made to connect like facilities, in some cases between localities, e.g. very small community-owned facilities.

SP&C Services monthly report for Feb 2021

Lead Executive: Lisa Gestro

EXECUTIVE SUMMARY

Mental health and addiction system transformation

- The review is well underway and engagement across the sector commenced this month. The increase in COVID Alert Level impacted on schedule changes and Zoom was used for some forums. Interest within the sector remains high with strong engagement.
- The review steering group and the DHB executive have agreed that the following three priority deliverables should be commenced during, rather than at the outcome of the review. It is hoped that the commitment to getting going with these 'quick wins' or early opportunities will demonstrate to the sector that there is clear commitment on the part of the DHB to implement the recommendations of the review in a timely way. Plans are currently being drawn up to implement these priority objectives,
    - Undertake a health and safety review of the current Wakari site, *which is planned to commence in the week commencing 1 March 2021 – this will be undertaken by an External Consultant.*
    - Provide some structured organisational development support for specialist services staff
    - Work collaboratively across the system, in community and NGOs to establish appropriate services to enable the transition of long-stay patients from inpatient wards at Wakari.

Primary Health Care

Pharmacy

- A review of the Client Led Integrated Care – Long Term Conditions (CLIC_LTC) pilot in Gore has been undertaken. Some small adjustments to the model are being explored around eligibility criteria. It appears that a volume of CLIC level 3 patients are not suitable for a Medicines Utilisation Review so we are looking to include a suitable segment of CLIC level 2 patients into the cohort for this service
- The Ministry of Health has made funding available to DHBs to support critical pharmacies if they are imminently going to have to close and/or cease services that are deemed critical, due to the impact of COVID. The Southern DHB pharmacy portfolio manager will work closely with any pharmacy that applies for access to this resource.
- Pharmaceutical Data and Analytics - Ongoing delays to obtaining data suitable for analysis are now causing slippage of milestones for key components of the pharms plan relating to dispensing and drug cost outlier work.

Tobacco control

- The GP Champion is to be resourced in a different way following WellSouth's review of their Medical Director position. Funding allocated for GP Champion will now be used to establish the WellSouth Call Centre, supporting the catch-up programme on the tobacco target.
- The Vape to Quit pilot will be funded through this revenue contract. The implementation of this pilot has been delayed due to COVID and the pilot is expected to go live in May 2021. The aim is to support smokers over 18 years to quit using a vape device, supplied through community pharmacies.

Public Health Service

Drinking water

- People with slightly elevated blood levels (lead) have been followed up by Health Protection Officers for a full environmental and site visit where necessary to take further samples
- An emergency response management group has been developed that includes DCC, Otago Regional Council, Public Health Service, local iwi and Wai Comply. This group will have oversight of the different roles that each organisation plays and how their roles work together as the situation progresses. DCC are undertaking a full review to determine a possible source of the lead; this is still ongoing. A community meeting to present the testing results is planned for 10 March.

Primary Maternity

- Initial negotiations about transition planning and a contract that reflects this have been undertaken with Charlotte Jean Maternity Hospital. They have agreed to a three month contract extension while negotiations continue.
- Two new graduate midwives had planned to join one of the Lead Maternity Carer (LMC) practices in Wanaka at the start of 2021. Neither of these two can now start which leaves only three LMCs to provide midwifery care to pregnant women in the Upper Clutha.
- The resultant pressure on these three existing LMCs is significant. Some Rural Relief support has been provided by Southern DHB, however, the LMCs are seeking additional support as the three days leave per month each is insufficient for them. As best practice requires two midwives to be present at each birth, it is very difficult for them to have time when they are not on call.

Child and youth wellbeing

- The breast-feeding survey has closed with a good response and analysis is now occurring. The breast-feeding hui will now occur early in May. This gives time for the analysis to be shared with the Well Child Tamariki Ora Steering Group who requested the survey prior to presenting findings at the hui.

Refugee Quota Programme

- The refugee resettlement programme has resumed with former refugees expected to arrive in Dunedin in April. There will be limited intakes this year with anticipated increases in the next financial year.

Rural health

- Surge capacity is impacting on services at Dunstan Hospital and Lakes District Hospital. Surge planning is being refined, in conjunction with Dunedin Hospital. The challenge for the system is when one facility is at capacity, their surge recipient support hospitals are also at capacity. Multiple helicopter transfers from Lakes District Hospital to base hospital in Dunedin and Invercargill helped manage the patient flow.
- Gore Health is also reaching capacity with increasing frequency. Where possible they have managed this surge by utilising available beds at Clutha Health First in Balclutha. Ambulance lack of availability to Gore has also resulted in an increase in the use of helicopters.
- The Project Manager for Rural Hospitals commenced in mid-February and has started a bench marking project that will provide transparency for service providers and help support decision making for future developments in service provision

Executive Summary

A Consumer Experience Manager has commenced at Southern DHB with the purpose of engaging with consumer/whānau to improve patient safety and experience of services. The role will build improvements in our consumer/whānau experience of the health system and its services, with our community based partners. All existing aspects of consumer experience such as feedback/complaints, community health council and Disability strategy will be in the team.

Quality Improvement Activities	
Safe Effective	A national Alaris pump infusion set recall 12 March has impacted the Rural Hospitals in Southern. A risk management plan is in place to ensure patient treatments, such as chemotherapy, are not interrupted. The plan is being monitored twice weekly until the Ministry release alternative pumps.
Patient Centred	In house interpreter services supply interpreting functions to the DHB, WellSouth PHO and several NGOs under contract with the DCC. Opportunities to enhance the service are being explored. The service works well with complaints being rare.
Equitable	The Disability strategy will be launched in the April DSAC meeting. Planning on track, both Dunedin and Invercargill sites will be involved.
Efficient Timely	Year 3 recruitment to the Improvement Movement is well underway. Over 250 applications have been received in 2 weeks; a positive signal from all staff to be involved in improvement. Each year the number of applicants has grown with this year places being offered to rural hospitals and WellSouth for the first time.

Service Updates	Previous month	Current month	Commentary
Emergency Management	↑	↑	COVID vaccination Emergency Operation Centre support commences 15 March.
Certification Nov 2021		→	Planning phase, tracer (mock) audits underway in-patient areas with feedback to teams. Preparations for Executive will commence soon.

Gail Thomson

Current Issues	Update/Achievements	Upcoming key deliverables
Competing demands	Competing demands on team resource to support key initiatives such as the Patient Taskforce and COVID vaccination require careful balancing.	Some items deferred in the short term will require re-evaluation if sustained support required.

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Health Pathways

The Manager of quality improvement and pathways teams is working with the Manager strategy and planning to closer align the service level accountability framework to service planning rounds. In time the intention is that risk and opportunities arising from monthly service level quality/clinical governance meetings will proactively inform annual service planning.

Clinical Governance

The Clinical Council have approved the revised terms of reference for a redesigned infection prevention and control committee (IPCC). Post COVID a review of the existing IPC committee revealed the membership was not broad enough to identify and provide expert advice on district wide risks. Membership and terms of reference have been revamped to be a much stronger committee with clear responsibilities in quality assurance and improvement. For example, Aged residential care and rural hospitals will be new additions to the group.

Community Health Council

The Community Health Council have formed a sub-group to develop and implement a HQSC* Quality & Safety Marker on consumer engagement. A national framework **S**upporting, **U**nderstanding, **R**esponding, **E**valuating (SURE) assists DHBs to establish where they sit in terms of consumer engagement. Online data submission commences 1 July 2020.

*Health Quality & Safety Commission.

People and data & digital monthly report for Feb 2021

Lead Executive: Mike Collins

EXECUTIVE SUMMARY

- Digital programme of work for the NDH progressing well, just need confirmation from the MOH refunding to progress. Currently reviewing structure and roles/responsibilities of the Digital team to ensure we are aligned for the uplift of work moving forward. Running scenario planning session with the Digital team re Covid 19 readiness

Digital & Tech Performance Indicators	Previous month	Current month	
My Lab (Physical space developed to assist with Change in technology and behaviours)	→ (amber)	↓ (red)	Site location now not confirmed was Feb now no date confirmed. Asbuilt RFP closed and are preferred supplier. Funding required for Asbuilt contract from NDH project costs for change.
Digital programme of work			
New Dunedin Hospital (Digital)	→ (amber)	↑ (green)	Programme Business case developed and ready for April board approval. Funding approved for T1.1. Paper going to board in April for T2.1 funding. Currently external gateway reviewing processes taking place.
Digital Strategy Update	↑ (green)	↑ (green)	SI PIC's project initiated. Currently reviewing Digital team structure to ensure its able to meet the demands of BAU, Projects and NDH development.
New Dunedin Hospital (Workforce)	→ (amber)	↓ (red)	On track Jo working on project plan and rollout re workforce planning and requirements for MOC's. Areas of concern are service level planning re workforce and lack of proactive models of care being developed.
South Island PICS	↑ (green)	↑ (green)	Team currently being recruited, steering group established and project milestones being confirmed.
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Current Issues	Update/Achievements	Upcoming key deliverables
Funding for Digital Work plan	Paper being presented to the board in April for T1.2	Board approval
HR Team Volumes of work Project/BAU	Concerns raised and additional resources have been provided. EOC work as well causing extreme stress for staff.	
Regional Collaboration Review	HR proposal for change developed for consultation	Rafted for CE/s re next steps

Digital Strategy

- Emergency Department Information System Update (due May 2021) on track
- Network and Desktop replacement pool progressing 2020.21
- HealthOne access across ARC and Māori Health Providers – Good progress
- Cyber security role appointment made as per Audit NZ request and activity underway
- E-pharmacy go live complete
- SI PIC's approval of SIPICS business case by National Capital Investment Committee
- Wireless improvements on track progressing well. On track to complete Q2 20.21
- EDIS upgrade delayed pending resource availability. Project expected to complete Q2 20.21
- Patient track draft business case complete going to Exec in Nov 2020
- FPIM dates changed go live Q4 FY20/21
- Tap to go, on track progressing well. On track to complete Q2. 20.21
- Scanning Solution to digitize records business case to Exec in Nov 2020
- MS office 365 – Complete PIC's Data sharing agreement with WellSouth finalised
- Recruitment Upgrade go Live Feb 2020
- RIS Replacement on track to complete Q2 FY20/21
- Exec review of Human Capital System Upgrade
- NDH early works team establishment progress report to SPG programme business case end of Oct and preapproval to Exec/Board ahead of SPG

People and data & digital monthly report for Feb 2021

Lead Executive: Mike Collins

8.5

EXECUTIVE SUMMARY

- Focus is on embedding the HR proposal for change, still challenges in terms of meeting BAU requests from an HR perspective due to excess demand for HR services. Workforce planning underway in some areas of the organisation.
- People forum established and will assist in strengthen our culture
- Staff Engagement survey closed and analysis being collated and presented to the Exec
- Focus on developing an HR dashboard underway, draft ready for FARC in March meeting
- Continual focus on AL liability continues to be monitored and reported

	Previous month	Current month	
Workforce & HS/W			
HR Dashboard Development	→	↑	Draft report now produced for FARC feedback
Workforce Strategy and Action Plan	→	→	Tanya to provide an update WIP
HS/W	→	→	Reporting to FARC and HS Governance group progress already.

Implementation of Workforce Strategy

Progressing Q2 & 3 actions within the strategy document (focus on the new recruitment system, workforce planning. Management of BAU tasks within HR remains constant. Draft proposal for change out for review during November.

Culture and change initiatives

People Forum established and work plan to be formalised by Exec in April

Current Issues	Update/Achievements	Upcoming key deliverables
Management of BAU within HR	Staff Engagement Survey presented to exec	Recommendation to Exec and Board April
New Electronic Tools	New recruitment system progressing well launch in Feb 2021	Now Live
Workforce Planning	Jo recruited to NDH team	Status report to come from Jo via NDH team reporting
HR Implementation of Proposal for change	Embedding new roles and responsibilities and processes	Recruitment and Implementation of recommendations (Jan/Feb/Mar)
Volume of BAU workloads and Resource to support	Benchmarking complete	Budget rounds only opportunity plus top slice from CAPEX resource appropriately to provide support

- **Green Healthcare Strategy** Q2 and Q3 actions within the strategy
  - Carbon footprint
  - Energy Supply and Efficiency
  - Waste
  - Travel
  - Procurement
  - Built Environment
  - Staff engagement and culture

- **Regional collaboration** Assisting with review of SIAPO
- New role "Chair South Island CIO/CDO monthly forum**) - complete Mike now Chair**
- **Next Steps another workshop re implementation and resourcing of the roadmap**
- **Mike attendance at CE and Chairs meeting re Data and Digital (April)**

Finance monthly report for 28 February 2021

EXECUTIVE SUMMARY

The net surplus for the month ending 28 February 2021 was $2.8m. During February 2021, Revenue was $1.5m favourable to budget, whereas Expenses were $3.1m unfavourable to budget.
The Revenue primarily from MoH funding to offset additional costs incurred relating to COVID-19 and Community services.
The overrun in Expenses primarily attributable to Workforce $2.0m and Provider payments $1.4m which reflects both hospital activity and ongoing COVID-19 activity.

Key Projects	Previous month	Current month	Commentary
Financial sustainability	↓	↓	The delivery of savings plans for the last months of the year are likely to be challenged with the frequent changes in Alert Levels and the impact of that on workforce and operational processes. The unbudgeted expenditure of Holidays Act, COVID-19, new Dunedin Hospital team and accelerated depreciation for Dunedin Hospital continue to impact on the results.
Holidays Act 2003	→	→	The Holidays Act project continues in the 'Rectification phase.' The unbudgeted impact on the 2021 year is $7.5m. We continue to work closely with the unions and other DHBs.
FPIM: Finance Procurement & Information Systems	↑	→	The FPIM project progresses to user acceptance testing in March. The involvement of the NZHPL team has limited face to face support because of the Alert Level 3 lockdowns for Auckland.
New Dunedin Hospital Business Case	→	→	The aligning current activity with the pathway to the New Dunedin Hospital and wider implications across the District are a key focus of discussions with Ministry of Health.

Current Issues	Update/Achievements	Upcoming key deliverables
Savings plans	The delivery continues to be "at risk".	The NZHPL & Pharmac procurement activities have been delayed. In addition, supply chain impacts from COVID-19 reduce opportunities.
FPIM go live date	Date set at 1 June 2021	The communications and training programme are being prepared.
Holidays Act 2003	The project is gaining momentum.	There is work underway to modify the payroll system to comply.

Systems for Success

- The Procurement and Purchasing Policy are being revised for disclosures of interests, robustness of documentation and alignment to best practice including consideration of equity.

Facilities

- The team are working to a 20 week timeline for the development and delivery of the construction required to enable the new CT treatment area to be ready for installation of the new CT machine funded by the Ministry of Health.

Reporting RAG (Red Amber Green) Guidelines		
OVERALL STATUS	GREEN	On track
	AMBER	Planned delivery at risk / concern with action underway to resolve
	RED	Significant concern with delivery / intervention required to prevent failure
FINANCE	GREEN	Tracking to budget 5% (or $100k).
	AMBER	Moderate variance to approved budget 10% (or $100-$500k)
	RED	Significant variance to approved budget 25% (or $50k+)
RESOURCES	GREEN	Adequately resourced
	AMBER	Constrained resources which will impact delivery
	RED	Resource shortfall, preventing tasks from being completed
FORECAST	↑	Status expected to improve
	→	No change expected in status
	↓	Status expected to decline

8.5

FOR APPROVAL

Item: Digital Indicative Business Case

Proposed by: Mike Collins, Executive Director People, Culture & Technology

Meeting of: 8 April 2021

9

Recommendation

That the Board endorses the Digital Indicative Business Case (DIBC) to the next phase of approvals.

That the Board notes that funding for the Digital Detailed Business Case will be included in the revised annual plan for 21/22.

Purpose

1. To seek Board approval to progress the DIBC to the Ministry of Health in order to initiate the next phase of approvals.

Specific Implications For Consideration

Background

2. The draft DIBC includes all costs for digital infrastructure and solutions beyond the core facility infrastructure of the NDH which is included in the NDH construction costs. It has previously been proposed that the additional infrastructure and commissioning costs will be funded by the Ministry and solutions costs will be funded through SDHB internal cashflows.

3. The draft DIBC defines a programme delivery structure based on two key delivery streams being digital solutions and digital infrastructure along with other supporting streams including a Programme Management Office (PMO), a change and engagement stream and a design, data, and integration stream. Delivery will be through a series of Tranches aligned with the NDH construction programme.

Discussion

Next Steps & Actions

After Board approval the DIBC can progress to next phase of approvals, which are:

- Director General
- Capital Investment Committee
- Joint Ministers

Appendices

Appendix 1	Digital Indicative Business Case
Appendix 2	IBC Overview

Saved in Diligent Resource Centre

Digital Indicative Business Case Appendices – Part A

Digital Indicative Business Case Appendices – Part B

CONFIDENTIAL

9

Indicative Business Case for digital investment

For New Dunedin Hospital and the Southern health system

26 March 2021

Digital Indicative Business Case

Document Control

Document Information

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Document owner	
Issue date	26/04/2021
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Document History

Version	Issue date	Changes
1.0	15/10/2020	First integrated draft. Prepared for the SDHB Board and submitted to a Treasury business case clinic.
2.0	24/02/2021	Second draft with changes in response to feedback. Prepared for a second Treasury business case clinic, an Independent Quality Assurance, and a Gateway Review.
3.0	26/03/2021	Third draft with changes in response to feedback. Prepared for the SDHB Board.

Document Review

Role	Name	Review Status
Programme Manager		

Document Sign-off

Role	Name	Sign-off Date
Senior Responsible Owner/Project Executive		

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Glossary

Acronym	Stands for
BBC	Better Business Case
DBC	Detailed Business Case
HIMSS	Healthcare Information and Management Systems Society
IT	Information technology
MoH	Ministry of Health
NDH	New Dunedin Hospital
DHB	District Health Board
SDHB	Southern District Health Board

9

Executive summary

This Indicative Business Case outlines the case for investment in a programme of digital infrastructure and solutions for New Dunedin Hospital and the wider Southern health system. It assesses a set of options that comprise digital infrastructure and digital solutions (i.e. equipment, and system software components) and identifies an indicative preferred option. The capital investment to deliver that option **is estimated at $215.4 million**. The purpose of this Indicative Business Case is to seek approval to move to the digital programme establishment phase and the preparation of Detailed Business Cases, to be aligned with the New Dunedin Hospital programme of construction.

The Strategic Case – the case for change

Investment in digital infrastructure and solutions for New Dunedin Hospital is part of a wider transformation programme for the Southern health system. This programme is designed to realise the Southern DHB vision of "a health-enabling society, within which we deliver more accessible, extensive primary and community care with the right secondary and tertiary care when its needed". The transformation programme comprises several interdependent streams that combine to enable the Southern health system to deliver on its vision and strategic outcomes.

- **Facilities for the future** – ensuring that the physical environment supports new models of care and workflow. The full replacement of Dunedin Hospital through the New Dunedin Hospital project is subject to a Detailed Business Case (outlined below) .
- **Systems for success** – digital enablement, workflow and process changes driven by investment in new digital solutions, in line with the Southern Digital Health Strategy. The Digital Programme is the subject of this Indicative Business Case).
- Other streams involve macro changes to models of care and pathways (i.e. service change) and relate to the workforce skills and support (**Enabling our people)**, access to care in primary and community settings (**Primary & Community care**), and service integration and efficiency (**Clinical service re-design**).

The streams of the transformation programme are interdependent in that each relies on the others to full contribute to the strategic vision being realised. Investment in digital infrastructure and solutions, in particular, is an enabler of the transformation programme. The delivery of the Digital Strategy was identified in the facility Detailed Business Case (DBC) as a key enabler of the planned benefits from the development of New Dunedin Hospital, as a next-generation digital hospital. In particular, the expected productivity gains will not be achieved without the success of this strategy.

Drivers of this investment proposal

This proposal is driven by the need for some essential digital infrastructure to be specified and installed during the construction of New Dunedin Hospital. Some of these components are present in the existing Dunedin Hospital, but will not support the capacity and performance requirements of the new facility. Furthermore, these components are in constant use and so are not easily removed and transferred. For example, a new upgraded network and Wi-Fi will be required to support the quantity of mobile devices proposed for use by staff working in New Dunedin Hospital.

Some of the components necessary for the new facility to function as designed are entirely absent from current digital infrastructure. For example, there is no current system for automated check-in, wayfinding and queuing necessary to support the clinical areas. Similarly, there is no real time location system to track the location of staff, patients and equipment, which is necessary to enable modern and efficient clinical workflow.

The absence of a specification and funding source for this digital infrastructure has the potential to delay the construction programme for New Dunedin Hospital, or to lead to sequencing problems and rework being required later. Further, digital systems are not fit for purpose, from the perspectives of health system staff and consumers. A series of engagements were held with clinical staff, service managers and consumers to hear their perspectives. There were clear themes of inefficiencies, fragmentation, wasted time and frustrations, avoidable errors and inequitable access to care.

The problem definition comprises three main components

Figure 3 presents the distillation of the presenting issues into a problem definition in three parts. It emerged as an output from a facilitated Investment Logic Mapping workshop with the Project Team. The aim was to produce an accessible summary statement.

- Firstly, the absence of a specification and funding arrangements for digital infrastructure components has the potential to delay the construction programme for New Dunedin Hospital, or lead to sequencing problems and costly rework required later.
- Secondly, disparate systems (clinical and administrative) and fragmented information requires suboptimal use of staff time, resulting in manual workarounds and duplicated effort that can lead to error and increased risk of avoidable harm being done to patients.
- Thirdly, current systems do not support wider innovation, including the planned transition to new models of care (e.g. under the workforce strategy and primary and community care strategy) and the empowerment of patients through access to their data.

The Economic Case – exploring the way forward

The Economic Case explores the way forward by identifying a preferred option which represents the best value for money by identifying and assessing short-listed options that have the potential to deliver the proposal's investment objectives and meet the identified critical success factors.

The options for investment in a programme of digital solutions comprise infrastructure and systems.

- **Digital infrastructure** – a digital hospital is highly dependent on robust infrastructure and equipment that provides sufficient capacity to connect and share data across all devices and enables the future deployment of emerging technologies.
- **Digital solutions** – the software systems (clinical, patient support and corporate) that digitise activities, store, and integrate data, and enable the automation and streamlining of processes to support modern hospital design and models of care.

The table shows how the high-level categories of infrastructure and solutions can be disaggregated into several domains, each comprising components with common characteristics or functions.

Domain	Components
Digital infrastructure components	
1. Network	The communications network (wired, wireless) that connects equipment and enables access to digital systems.
2. Servers and storage	Infrastructure that hosts software systems, databases and data.
3. Telephony (unified communications)	Infrastructure, systems and devices to enable calls (voice, video) on handsets (wired, wireless), and messages and clinical alerts.
4. End user equipment	Devices (desktops, laptops) that allow access to digital systems, as well as output devices such as scanners and printers.
5. Directory services	Database that authenticates, hosts, provisions and tracks equipment, users and systems across the digital environment.
6. Audio visual	Equipment and systems that manage and present information throughout the facility, in support of meetings, training.
7. Facility systems	Systems that underpin workflow by enabling staff and patients to interact with each other and the facility, i.e. (a) Realtime location services, (b) Digital wayfinding, (c) Inpatient engagement system, (d) Outpatient flow system, (e) Inpatient flow system.
8. Biomedical systems	Systems which capture and transmit data to and from biomedical devices (including patient monitors, pumps, imaging modalities; medication dispensers). Includes integration and commissioning.
Digital solutions components	
1. Corporate systems	Systems supporting corporate functions (finance, human capital).
2. Patient support systems	Systems that support patients, scheduling and related operations. • Patient administration system (PAS) • Consumer engagement portal • Patient support systems (manage tasks, meals)
3. Clinical systems	Systems that store patient and clinical data, used to support care • A clinical data repository or electronic medical record (EMR) that stores clinical data used to support patient treatment/care. • Clinical sub-systems: service-specific modules/systems.
4. Biomedical solution	A solution to integrate biomedical device data with the EMR.
5. Integration	Interconnection of systems to automate data exchange.
6. Data analytics / business intelligence	Data collection from original sources, preparation for analysis, queries and reporting.

Different levels of functionality are possible for a given digital component. The approach to building up the options is to identify three points of functionality along a spectrum, defined as follows.

- **Maintain current state** – the scope of investment required for New Dunedin Hospital to function at existing levels of digital maturity.
- **Enhanced** – an additional level of functionality, beyond the current state identified.
- **Advanced** – an additional level of functionality, beyond the enhanced level.

These have informed the development of a set of options – packages of components at different levels of functionality, as defined above against external standards of digital maturity. The options were then assessed against five investment objectives developed for the NDH Detailed Business Case.

1. Ability to adapt – to create responsive infrastructure and capability that supports disruptive health system change.
2. Optimise use of total health system resources.
3. To reduce non-value-added time by 80 per cent to create a seamless patient journey.
4. To improve the patient and staff experience.
5. To reduce the risk of harm to 'acceptable standards.

The options were also assessed five critical success factors are the attributes that are essential to achieving the investment objectives.

1. Business needs – allows the NDH to operate as designed
2. Strategic fit – aligns with national and regional strategies (i.e. obligations can be fulfilled).
3. Affordability – is within available resources to purchase, operate and maintain.
4. Coherence – the option is internally coherent and works as a system
5. Achievability – can be delivered and used (i.e. aligns with organisation maturity).

The assessment results can be summarised as follows.

Option 0: Do nothing – this option represents no investment being made into digital infrastructure or solutions. This means that New Dunedin Hospital would be constructed without the necessary digital infrastructure and equipment and so would be unable to function as designed.

Option 1: Maintain current state – this option involves investment into digital infrastructure and solutions to maintain the current level of functionality. This option does not meet investment objectives or critical success factors.

Option 2: Enhanced functionality – this option involves investment into digital infrastructure and solutions to an enhanced level. Some building blocks would be missing (e.g. enterprise scheduling). On the infrastructure side, further development is limited as system cannot easily be scaled to advanced functionality over time, as needed, creating costs and disruptions risks later.

Option 3: Advanced functionality – this option involves investment into digital infrastructure and solutions to an advanced level. It would dependent on affordability but also question over achievability already so leaning to "do not carry forward",

Option 4: Hybrid – this option is a hybrid in that it involves investment into digital infrastructure to an advanced level and into digital solutions to an enhanced level. The logic is that the digital infrastructure is built into place during the facility construction period, thereby ensuring that adequate capacity is available for the progressive uptake of new digital solutions over the next decade (and for technological advances). The option is intended to minimise digital infrastructure upgrades, which may be more costly and more disruptive to install later in a working hospital. It also reflects some caution about the ability to leap from the current state to the advanced digital solutions.

The conclusion is that **the hybrid option** is the **indicative preferred option** to be carried forward for more analysis in the Detailed Business Case. This option provides the best value in that the advanced infrastructure provides a future proofed platform, allowing more advanced digital solutions to be

taken up in future. The solutions side can still be scaled up to advanced functionality later, as and when the organisation is ready and those solution become more affordable. A further option, to be defined as the "**minimum viable option**" will also be taken forward to the Detailed Business Case for formal assessment. That work will also explore variations on these options, in terms of delivery.

The Financial Case – costs and affordability

Total capital expenditure for the indicative preferred option over ten years is estimated at $220.8 million. This estimate comprises new capital expenditure, which is estimated at $214.9 million over the ten years between 2020/21 and 2029/30. Replacement capital expenditure is also likely to be required within the ten years of the programme, for example, replacing end-user computing equipment. This is estimated at estimated at $9.5 million, and can be offset against $3.5 million of BAU spending on asset replacement.

The working assumption is that annual costs of around $15 million will be incurred for maintaining the infrastructure. This number has been calculated based on advice, drawn from experiences in similar programmes elsewhere, that 20% per annum of the initial equipment cost should be set aside for maintenance and support. It is expected that around $5 million of this expenditure can be offset through existing maintenance spending, which will no longer be required for existing systems.

Financial benefits

The benefits of the digital programme have not yet been disaggregated from the benefits of commissioning a new hospital. A disaggregation is challenging because both changes are necessary for unlocking substantial system benefits, but neither initiative is sufficient on its own. In the financial modelling for NDH, the assumption has been for an immediate productivity gain a 2.5% per cent in the two years after the commissioning of NDH. This efficiency assumption results in gains of $24.4 million in personnel cost savings and a further $10.2 million in operational cost savings in 2031/32.

In present value terms, the gains over the 10 year period between 2030/31 and 2039/40 amount to $183.6 million. The holding assumption, while further work is being undertaken on workforce modelling, is that these productivity savings include the effect of additional maintenance costs as per the previous section, i.e. if additional maintenance costs were not required then the productivity savings would be even greater.

Funding sources

There is an expectation that some of the capital investment will be funded internally by Southern DHB and some will be directly funded from the Ministry of Health. While there will be a capital charge levied on the equity associated with the Crown-funded asset, it is assumed that offsetting revenue will be made available in the form of capital charge relief, in line with the current financial policy settings.

This estimate of new capital expenditure, of $214.9 million assumes a contribution of $174.6m from the Crown, based on the detailed business case for the facility. The remaining $40.2m would be funded by Southern DHB.

The Commercial Case – the procurement approach

The Commercial Case sets out the approach to procurement across the full investment scope at a high-level. Consultation during development of this approach has included the Office of the Chief Digital Officer and Ministry of Health procurement staff. The approach considers the significant and inter-locking nature of digital infrastructure and solutions and that the installation of digital equipment is underpinned by a considerable service delivery element. In summary, the proposed approach consolidates delivery risk under the MOH project (passed through to the builder) while allowing the SDHB to have maximum input into the design and selection of technologies ensuring they integrate into the broader SDHB digital environment.

Co-ordination of procurement responsibilities

Procurement responsibilities will be shared as follows:

- The MOH NDH Project Team will procure and commission the digital facility infrastructure (communications rooms, structured cabling, etc) for the inpatient and outpatient facilities that make up the NDH. The commissioning approach and procurement details are specified by the Ministry of Health led project team in the current Detailed Business Case for NDH. The SDHB will have input into the requirements specification and design.
- The MOH NDH Project Team will also lead the procurement of the remaining infrastructure and equipment (active network equipment, audio visual equipment, computers, phones, etc) for the inpatient and the outpatient facilities however the SDHB will have greater input into the selection, detailed design and configuration of the solutions. Effectively the SDHB will act as the client and provide input and approvals while the MOH will manage the process of design, procurement, and delivery (under the builder). The SDHB will also be responsible for securing funds and ensuring the solutions stay within the allocated budget.
- SDHB will be wholly responsible for digital solutions (EMR, clinical specialty systems, etc) and will engage an external consultants to assist in the development of solution requirements based on market experience and industry trends. Requirements gathering will include national and regional consultation to ensure broader alignment.

The first two categories clearly require close co-ordination and involve co-ordination on a single yet-to-be-constructed site. The third category requires close integration with the SDHB change programmes and business-as-usual service delivery.

Market sounding suggests strong interest

The digital programme is significant and will require support from a broad range of suppliers, both domestic and internationally. The programme will actively seek participation from the market in the early stages of the planning process and throughout the procurement and selection processes. The early engagement will provide the opportunity for New Zealand businesses to understand the programme and be able to respond to opportunities as they arise.

The initial assessment of attractiveness of the proposed procurement to the market indicates a high level of interest (both across the infrastructure and systems streams) supported by a strong New Zealand presence of tier 1 and 2 systems integrators, infrastructure, and software systems vendors.

The Management case – the implementation approach

The Management Case describes the structure and approach by which the digital programme will be managed and delivered and support the overall digital programme scope including: the construction and commissioning of a new digital-ready facility, and the uplift of existing SDHB facility's digital infrastructure and solutions to align the digital platform across the whole ecosystem

A high-level sketch of the intended approach, is as follows:

- Wherever possible, SDHB will use off-the-shelf, tried-and-true products, preferably delivered as software-as-a-service.
- Digital infrastructure will be implemented separately, with a high expectation of a level of service commensurate with that required of an essential service.
- Where there is tailoring, SDHB will ensure that such tailoring is in line as much as possible with the Ministry of Health's proposed nHIP environment.
- In adopting digital solutions, SDHB will align regionally as much as possible, such as in the selection and implementation of the Patient Administration System, and will extend opportunities regionally in both directions (out to others and in to Southern) where those reveal themselves.
- Strong project governance, including integration of clinical leadership and close involvement of local health organisations such as WellSouth.
- In implementation, SDHB will ensure that SDHB leverages its own staff experience of implementation, including previous implementation of a Patient Administration System and design and implementation of Electronic Pharmaceutical Administration.

The project planning has paid attention to integration of clinician champions and development of expert users and has identified, documented and resourced considerable training effort. This change management effort is interlocking with the PMO for the NDH and with the wider SDHB health system change platform.

Overview of responsibilities

Responsibilities are shared between the construction of the NDH lead by the MOH project and wider commissioning of solutions led by the SDHB. Here is the layout of these responsibilities in more detail:

1. Responsibilities for the design and commissioning of digital infrastructure in the NDH are shared between the MOH project and the Southern DHB. The builder (under contract with the MOH) will procure and commission the facility infrastructure (comms rooms, structured cabling, etc).
2. The MOH NDH Project Team will also lead the procurement of the remaining infrastructure and equipment (active network equipment, audio visual equipment, computers, phones, etc) for the inpatient and the outpatient facilities however the SDHB will have greater input into the selection, detailed design and configuration of the solutions. Effectively the SDHB will act as the client and provide input and approvals while the MOH will manage the process of design, procurement, and delivery (under the builder). The SDHB will also be responsible for securing funds through the digital business case and ensuring the selected solutions stay

within the allocated budget. This process ensures there are limited delivery dependencies on the SDHB and minimal opportunities to delay the builder and construction programme while allowing the SDHB to select technologies consistent with the environment and where appropriate extend existing infrastructure platforms.

3. SDHB will be responsible for the enhancement and implementation of new solutions (corporate, patient support and care delivery) necessary to support the facility design (including paper lite) and new enhanced models of care. Where possible, these new solutions will be commissioned and deployed throughout the DHB prior to commissioning the new facility. As part of this, SDHB will oversee the change management element of solutions implementation prior to new facilities arriving, and finally, align new solutions with the Southern DHB health system's wider connectivity to ensure the system functions as a whole.

Introduction

This section outlines the purpose of this Digital Indicative Business Case and the approach taken.

Purpose of this business case

This Indicative Business Case outlines the case for investment in a programme of digital infrastructure and solutions for New Dunedin Hospital and the wider Southern health system. It assesses a set of options that comprise digital infrastructure and digital solutions (i.e. equipment, and system software components) and identifies an indicative preferred option. The capital investment to deliver that option is estimated at $215.4 million.

The purpose of this Indicative Business Case is to seek approval to move to the digital programme establishment phase and the preparation of Detailed Business Cases, to be aligned with the New Dunedin Hospital programme of construction.

Structure of this business case

This Indicative Business Case follows the Better Business Case five-case model:

- Strategic case – outlines the context and makes the case for change
- Economic case – identifies and assesses options to reach an indicative preferred option
- Financial case – assesses detailed costings, funding sources and overall affordability
- Commercial case – an overview of the supplier market and the procurement
- Management case – outlines how the programme would be delivered, including the arrangements for the "Tranche 0" – establishment phase.

Preparation of this business case

The analytical work has been led by a project team comprising: a project manager, a lead digital consultant, a digital solutions architect, a business case writer, and a financial analyst. The work has been informed by a programme of engagement with stakeholders, including clinical staff, managers, and consumers, to hear their perspectives with respect to frustrations with the current state and the potential benefits from investment in digital solutions. The investment logic has been tested with the Executive Leadership Team and the Clinical Leadership Group and their feedback has been incorporated.

1. The Strategic Case – the case for change

The Strategic Case makes the case for investment in a programme of digital infrastructure and digital solutions for New Dunedin Hospital and the wider Southern health system. It outlines the strategic context and the drivers of the investment proposal and identifies the investment objectives that will guide the options assessment.

1.1 Strategic context

Southern DHB is responsible for planning and funding, and for providing or contracting health care services to improve, promote and protect the health of its population across Otago and Southland. As the DHB with the largest geographical area, Southern DHB's population of 345,000 people is widely dispersed, with 45% living in rural areas and towns outside of the centres of Dunedin and Invercargill.[1]

Specialist services are delivered from the DHB's facilities of Dunedin Hospital and Wakari Hospital (Dunedin), Southland Hospital (Invercargill) and Lakes District Hospital (Queenstown). Southern DHB also contracts with primary and community health providers for primary care, aged residential care, mental health, Māori and Pasifika health, pharmacy, and laboratory services, and with community-owned hospitals (at Oamaru, Balclutha, Gore, Clyde and Ranfurly).

Priorities – areas of focus and strategic outcomes

Southern DHB is committed to a quality and patient-focused health system while achieving clinical and financial sustainability. It's annual plan identifies five inter-related areas of focus.

4. Positioning public health services for the future
5. Primary and community services, investing in change
6. Valuing Patients' Time
7. Enabling people and systems
8. Facilities and the Dunedin Rebuild Transition Programme

In terms of outcomes, the South Island DHBs have, collectively, identified three strategic outcomes to demonstrate whether they are making a positive change in the health of their populations. The intent is to show measurable improvement in population health over time (i.e. 5-10 years).

1. People are healthier and enabled to take greater responsibility for their own health
2. People stay well, in their own homes and communities
3. People with complex illness have improved health outcomes

Figure 1 shows these strategic outcomes alongside a core set of associated indicators.

[1] Southern DHB (2019) *Annual Plan 2019/2020*, p.9

Figure 1 South Island strategic outcomes and associated indicators

	Outcome 1 People are healthier and take greater responsibility for their own health	Outcome 2 People stay well in their own homes and communities	Outcome 3 People with complex illness have improved health outcomes
Outcome Measures	• A reduction in smoking rates • A reduction in obesity rates	• A reduction in acute medical admissions to hospital • An increase in the proportion of people living in their own homes	• A reduction in the rate of acute readmissions to hospital • A reduction in the rate of avoidable mortality
Impact Measures	• More babies are breastfed • Fewer young people take up tobacco smoking • More children are caries free	• People wait no more than 6 weeks for scans (CT or MRI) • A reduction in avoidable hospital admissions • A reduction in number of people admitted to hospital due to a fall	• People presenting to ED are admitted, discharged or transferred within 6 hours • People receiving their specialist assessment or agreed treatment in under 4 months • Fewer people experience adverse events in hospital

Source: Southern DHB, *Annual Report 2018/19*

A shared digital strategy for the Southern health system

The proposed investment in digital solutions is intended to give effect to, the Southern Health Digital Strategy. This digital strategy has been jointly prepared by Southern DHB and WellSouth Primary Health Network, to describe the transformation of digital capabilities of the Southern health system. The Digital Strategy committed to three goals.

1. **Digital Environment** – laying the foundations, providing secure, sustainable, and scalable digital environments.
2. **Digital Solutions** – enabling the people of Southern Health to achieve better health, better lives, Whānau Ora via digital solutions
3. **Digital Insights** – bringing our people and information together by capturing, storing, securing and analysing data to provide digital insights.

Implementation of the Southern Health Digital Strategy was identified in the Detailed Business Case for New Dunedin Hospital as a key enabler of planned benefits from the development of the facility as a next-generation digital hospital. In particular, the expected productivity gains will not be achieved without the success of this strategy. Similarly, investment in digital solutions is a necessary enabler for the new models of care envisaged in the Southern Workforce Strategy and the Primary and Community Care Strategy (discussed below).

The New Dunedin Hospital Digital Blueprint defines the target state (including data, systems, and infrastructure) which will be in place for "day 1" operations of the New Dunedin Hospital.[2] The Blueprint has been guided by the Southern Health Digital Strategy and identifies the following key design principles for digital infrastructure and systems for New Dunedin Hospital.

[2] Southern DHB (2020) *The New Dunedin Hospital Digital Blueprint*, V1.2 – July 2020

Design principles for digital infrastructure and systems for New Dunedin Hospital

Digitally capable – capable of supporting current and emerging technologies and trends.
Highly integrated – minimises manual data entry by being highly integrated on all levels.
Data hungry – stores all data generated throughout the facility for analysis and reporting.
Highly mobile – staff and devices are not tethered to locations.
Deeply interactive – all ICT is accessible, intuitive and encourages interaction.
Always available – all ICT infrastructure and systems are architected to be highly available.
Device agnostic – information is accessible from a broad range of device types.
Paper lite – an emphasis on a full digital health record and fully digital corporate records.

Source: Southern DHB, *New Dunedin Hospital Digital Blueprint*

Digital investment is part of a transformation programme

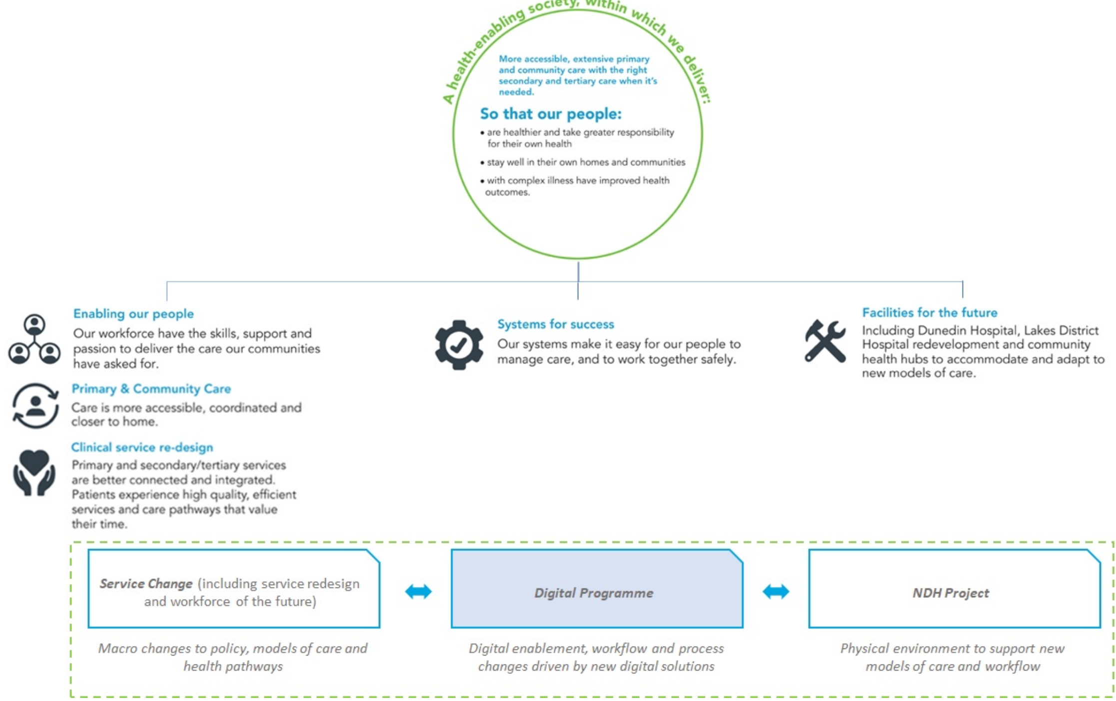
Investment in digital infrastructure and solutions for New Dunedin Hospital is part of a wider **transformation programme** for the Southern health system. This programme is designed to realise the Southern DHB vision of "a health-enabling society, within which we deliver more accessible, extensive primary and community care with the right secondary and tertiary care when its needed". Alongside this vision are the three strategic outcomes, identified by the South Island DHBs to demonstrate measurable improvement in the health of their populations (as outlined above).

The transformation programme is necessary to address a number of issues that are preventing the vision from being realised. Those issues include: an outdated and deteriorating facility that is creating safety risks; an overly hospital-centric system that is not enabled to support complexity of care in primary and community settings; operating and clinical systems that are fragmented, inefficient, and error-prone; inconsistent workforce planning; and inequity of access and outcomes.

Figure 2 shows how the transformation programme comprises several interdependent streams that combine to enable the Southern health system to deliver on its vision and strategic outcomes.

- **Facilities for the future** – ensuring that the physical environment supports new models of care and workflow. The full replacement of Dunedin Hospital through the New Dunedin Hospital project is subject to a Detailed Business Case (outlined below) .
- **Systems for success** – digital enablement, workflow and process changes driven by investment in new digital solutions, in line with the Southern Digital Health Strategy. The Digital Programme is the subject of this Indicative Business Case).
- Other streams involve macro changes to models of care and pathways (i.e. service change) and relate to the workforce skills and support (**Enabling our people)**, access to care in primary and community settings (**Primary & Community care**), and service integration and efficiency (**Clinical service re-design**).

Figure 2 Overview of Southern DHB transformation programme



Source: adapted from Southern DHB (2020) "Change – A Work In Progress"

A full replacement of Dunedin Hospital

The Government has committed to the full replacement of Dunedin Hospital. The Executive Steering Group provides governance, working closely with Southern DHB and the Ministry of Health. The approved Indicative Business Case (August 2017) made a compelling case for the rebuild of Dunedin Hospital city campus. The condition of the clinical facilities, along with the projected unsustainable service demand associated with an ageing population, are impeding Southern DHB's ability to deliver on the Government's strategic objectives. In particular:

- a deteriorating environment is eroding quality of care, creating safety risks and potential harm, causing distress to patients and staff
- inflexible and inappropriate care facilities restrict service capacity, cause delays and increase outsourcing costs, and
- care facilities cannot absorb innovations, preventing efficiency gains and care improvements.

A Detailed Business Case (July 2020) was approved by Cabinet in August 2020, with the preferred option for the New Dunedin Hospital (Option 5) being an Inpatient Building on the former Cadbury factory site and an Outpatient Building on the adjacent former Wilsons Parking Building site. This comprises building on a new central city site, with the Outpatient Centre scheduled to be completed in 2024 followed by the Inpatient Services building in 2028. The Detailed Business Case identified key dependencies as being the implementation of three linked strategies: the Digital Strategy, the Primary and Community Healthcare Strategy and the Workforce Strategy.

A Final Detailed Business Case has been prepared (February 2021)

The service change streams and are underpinned by the following key strategies. It is intended that these strategies will be delivered within Southern DHB's existing resource base,

- Southern Health Workforce Strategy and Action Plan (2019) – describes Southern DHB's goal to create a sustainable and contemporary workforce by developing capacity and capabilities, as well as improving workplace culture.
- Southern Primary and Community Care Strategy and Action Plan (2018) – the blueprint for improving healthcare services in these settings and reducing the current level of medical admissions to hospital. It focuses on providing care closer to people's homes and promoting more equal access to services for better health outcomes.
- Clinical service re-design – workstreams developing new models of care to ensure that patient flows through the hospital and wider system are more efficient and effective. This is critical to ensure treatment occurs in the right place and that more care of patients occurs in community settings, thereby allowing New Dunedin Hospital to operate as designed.

Table 1 provides an overview of the key actions within these streams in the short and medium term.

Table 1 Overview of service change streams and actions

Stream	Short term, 2020-23	Medium to long term, 2023-29
Enabling our people	• Workforce modelling and business needs • Capability / workforce gaps and analysis (Outpatients Building) • Implementation of: – SDHB Workforce Action Plan – Whakamaua – Māori Health Action Plan – Care Capacity Demand Management Programme	• Detailed workforce modelling for Inpatients Building and across the Southern health system • Consultation action and metrics
Primary & Community care	• Community Health Hubs • Health Care Homes • Locality Network Planning • Urgent primary care (Southland) • Tier 1 Model of Care Changes • Mental Health review • End of Life Care • Cancer care changes • Frail elderly pathway and rehabilitation • Disability Strategy Implementation	• Continued rollout of Primary and Community Care strategy • Rural hospital network
Clinical service re-design	• Valuing Patients' Time • 7 Day Hospital • Generalism/ Medical Assessment Unit (Dunedin) • Transit care • Criteria-led discharging • Collaborative workspace • Centralised booking systems	• Commissioning outpatient building with new Models of Care • 23 hour ward • Rehoming outsourced surgery • Central equipment and

Source: adapted from Southern DHB (2020) "Change – A Work In Progress"

Multiple interdependencies exist

The streams of the transformation programme are interdependent in that each relies on the others to full contribute to the strategic vision being realised. Investment in digital infrastructure and solutions, in particular, is an enabler of the transformation programme. The delivery of the Digital Strategy was identified in the facility Detailed Business Case (DBC) as a key enabler of the planned benefits from the development of New Dunedin Hospital, as a next-generation digital hospital. In particular, the expected productivity gains will not be achieved without the success of this strategy.[3]

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Similarly, investment in digital solutions also enables the changes to models of care and pathways envisaged in the streams related to workforce, primary and community settings and clinical service re-design. The direct benefits includes the digitisation of manual processes, the ability to store, retrieve and analyse information, ease of sharing of information across care settings, and improved decision making. In this way, the digital solutions have been designed to respond to business needs. All future models of care will be enabled (and benefit from) better flows of patient and service data.

In turn, realising the full benefits of investment in digital infrastructure and solutions is dependent on the successful delivery of the other streams of the transformation programme, for example, with respect to workforce skills, the design of patient flows and integration of services across settings. Those streams build on the improvements to processes and information flows, as enabled by the digital stream, and use that data-driven potential to drive the macro-level or structural change to models of care such as enabling more care in the community and empowering patients.

A strategic refresh is underway

The construction of New Dunedin Hospital is setting the timeframe for the digital programme (and the other streams). The facility and digital streams have some similarity in that they involve the design and build of complex infrastructure that has a defined delivery point. The streams focused on workforce skills and support, the accessibility and coordination of primary and community care, and clinical service re-design to improve integration and efficiency, are essentially about people and so change tends to be more gradual and continuous in nature.

To ensure coordination across this transformation programme, Southern DHB has commissioned a **Strategic Refresh** to provide an overarching framework, to identify any gaps, and to confirm how these interdependent streams are best governed and delivered as a cohesive whole. The Strategic Refresh is scheduled for delivery Apr-Sep 2021. The refresh is being delivered by a specialist external consultancy, working closely with the Southern DHB Executive Leadership Team.

It is expected that the outcome will largely confirm and refine the existing transformation programme, and its component strategies. However, the outputs will include specific recommendations for Southern DHB with respect to: a coordinating framework, governance structures and accountabilities, senior responsible owners, resourcing in the form of the project management and analytical teams and how they fit with existing structures set up for the delivery of the facility project. The outcomes from the refresh will be incorporated in the Detailed Business Case for the digital programme.

[3] Sapere (2020) *Detailed Business Case for the New Dunedin Hospital project*, 9 July 2020, p.36

Consistency with existing regional and national strategies

At a regional level, the South Island Data and Digital Strategy provides a foundation for the South Island over the next 10 years.[4] The Strategy makes the following relevant points.

- The South Island 'best for people, best for system' framework is focused on ensuring that people receive the right treatment, at the right time, from the right provider and in the most appropriate setting.
- Service delivery is centred on the person, requiring improvements in flow and the sharing of information, better use of available technology, support for more flexible workforce models and the connection of disparate services across service levels and DHBs.
- Data and digital technologies enable access to health information where, and when, it is needed to support decision making at the point of care.

This regional strategy acknowledges that local requirements and innovation opportunities will be prioritised and progressed at a local level. There is an obligation for Chief Digital/Information Officers to ensure other South Island stakeholders have awareness of those plans and an opportunity incorporate these into their local plans where appropriate.

Nationally, the Ministry of Health has developed a Digital Health Strategic Framework to guide the use of digital technologies and data to support a strong and equitable public health and disability system.[5] The Framework sets out five digital objectives are long-term aspirational goals that describe the impact this strategic framework will have on the sector (see text box below). The digital objectives support and are aligned to the strategic objectives, and government priorities, for the health system.

The Framework expects that each agency will make its own specific plans, that are consistent with the objectives and with their own strategic and operational plans. Decisions should also be made with awareness of the broader digital environment and the actions of others.

National digital objectives

- People are in control of their own health information
- Digital services and health information improve health outcomes and equity
- Digital services enable health providers to deliver better services
- Digital services increase the performance of the public health system
- Data insights provide evidence to make and support informed decisions

Source: Ministry of Health, *New Zealand Digital Health Strategic Framework*

[4] South Island Alliance (2020) *South Island Alliance Data and Digital Health Strategy 2020-2030*, v. Jan 2020
[5] see https://www.health.govt.nz/our-work/digital-health/digital-health-strategic-framework#prin

1.2 Drivers of this investment proposal

This proposal is driven by the need for digital infrastructure to be installed during the construction of New Dunedin Hospital. That infrastructure is necessary to enable investment in digital systems to address the current state of fragmented information and labour intensive or paper-based processes that do not support innovation, including the planned transition to new models of care.

Digital infrastructure is needed for the timely completion of NDH

Some of the ICT Infrastructure and equipment necessary for the operation of New Dunedin Hospital, as a next generation digital hospital, is part of the building fabric and so has been allowed for in the construction cost estimates prepared for the Detailed Business Case. This "behind the wall" digital infrastructure is installed by the builder during the construction phase and includes: communications rooms, structured cabling, antenna systems, a modern nurse call system (capable of integration), and security systems (e.g. CCTV, electronic access control, fixed duress communications rooms).

However, some essential digital infrastructure components, which need to be specified and installed during the construction programme, are not included in the building cost estimates.

- Some of these components are present in the existing Dunedin Hospital, but will not support the capacity and performance requirements of the new facility. Furthermore, these components are in constant use and so are not easily removed and transferred. For example, a new upgraded network and Wi-Fi will be required to support the quantity of mobile devices proposed for use by staff working in New Dunedin Hospital.
- Some of the components necessary for the new facility to function as designed are entirely absent from current digital infrastructure. For example, there is no current system for automated check-in, wayfinding and queuing necessary to support the clinical areas. Similarly, there is no real time location system to track the location of staff, patients and equipment, which is necessary to enable modern and efficient clinical workflow.

The absence of a specification and funding source for this digital infrastructure has the potential to delay the construction programme for New Dunedin Hospital, or to lead to sequencing problems and rework being required later.

Digital systems are not fit for purpose, from the perspectives of health system staff and consumers

The Project Team identified a working problem statement with respect to current clinical systems being inadequate to enable the planned programme of system change for the Southern health system, including the operation of New Dunedin Hospital.

- Current clinical systems predominantly store information in static files (pdf) rather than structured data fields. This format limits the usefulness of the data with regards to validation, analysis, triggering of events/ workflow and reporting.
- Some services rely on labour-intensive, paper-driven processes, e.g. ICU and anaesthetics.

- Current systems lack sophisticated integration and this results in data duplication and manual transcription that gives rise to errors.
- Current clinical systems and data have limited access outside the hospital facility, thereby restricting innovation in models of care.

A series of engagements were held with clinical staff, service managers and consumers to hear their perspectives and to test the above problem statements. The clinical staff comprised SMOs, RMOs, nurse managers, pharmacists, allied health professionals and general practitioners. In total, 30 stakeholders were interviewed. There were clear themes of inefficiencies, fragmentation, wasted time and frustrations, avoidable errors and inequitable access to care, as summarised in the box below.

Themes from stakeholder interviews

- *Workflow planning and monitoring is fragmented*. Clinicians in hospital settings cannot create a single digital workflow from when a patient presents with a clinical condition, with the options for ordering diagnostic tests, receiving prompts and making referrals.
- *Disparate systems and insufficient digitisation.* Related to the above point, a mix of digital and paper-based systems leads to inefficient use of staff time, including searching for information in multiple locations (digital and paper-based), duplication of effort, and repetition of manual tasks.
- *Avoidable errors occur*, due an over reliance on paper-based systems and on people remembering to complete manual tasks. Some errors can have harmful consequences for patients.
- *Insufficient information flows inhibit integration* between services in hospital and community settings. For example, discharge summaries may not be clear to general practitioners, in terms of medication changes or care plans for long-term conditions. Conversely, hospital clinicians may schedule more follow-up attendances at outpatient clinics in the absence of visibility over the management of patients in the community.
- *Barriers to care led to inequitable access*. From a consumer perspective, some patients face barriers in accessing care that are not being mitigated by digital solutions (e.g. telehealth, smarter scheduling). Distance from hospital services, involves travel time, cost and inconvenience. Examples cited include cancelled appointments not being advised in time, morning appointments being harder to make, or related appointments being scheduled on different days.
- *Patient time is taken unnecessarily in hospital settings*. The same data (e.g. personal information) is gathered multiple times from a patient. Patients may spend more time in hospital than necessary, e.g. waiting to go home following a ward round, while the necessary paperwork is completed (subject to multiple paper sources, interruptions).
- *Inaccessibility of data for querying or for feedback loops.* This is because the data is in static form (e.g. scanned documents) or paper based or in systems that are not designed for analysis. This means the resource of data is not being well used for service planning, and performance improvement.

Staff engagement survey responses reveal frustrations with inadequate equipment

Responses to the Southern DHB staff engagement survey, undertaken in 2018 & repeated in 2020, also highlight that many staff are frustrated with current state of the digital environment. Among the questions, staff were asked to respond to statement "I have the equipment and supplies I need to do my job properly" on a five-point scale (i.e. strongly or somewhat positive, neutral, somewhat or strongly negative).

- In reply, 24% of responses (482 of 2,016) selected the option of either "somewhat negative or "strongly negative" – indicating a disagreement with the statement.
- Among the comments provided with those negative responses, 32% referred to some part of the digital environment (or its absence), such as insufficient access to computers, poor connectivity, paper-based systems and digital systems that are slow or not integrated.

The main themes in these comments are summarised in the text box below and are consistent with the findings from the interviews with staff. Essentially, there is a great deal of frustration with the digital set up (or lack of it) and, in particular, what is seen as a lack of devices (computers and mobile), outdated technology and manual processes that cause delays and duplication. The resulting impacts cited include: wasted time and energy, multiple frustrations through the day and poor staff morale.

Themes from staff engagement survey comments [draft]

Strong themes

- Insufficient access to computers in the workplace.
- A lack of mobile devices to get work done when moving around, including in the hospital and in community settings.
- Slow and outdated systems waste time, with respect to logging on and waiting for connections, can lead to workarounds, such as written notes, that duplicate effort.
- A lack of computerised notes and the continued reliance on paper hampers access to clinical information.
- Interfaces between software systems are slow or absent.

Moderate themes

- Poor or absent Wi-Fi connectivity hinders productivity.
- IT system outages create frustrations and impact productivity.
- Problematic to undertake video clinical interviews.
- Poor access to data for analytical purposes.

The problem definition comprises three main components

Figure 3 presents the distillation of the presenting issues into a problem definition in three parts. It emerged as an output from a facilitated Investment Logic Mapping workshop with the Project Team. The aim was to produce an accessible summary statement.

- Firstly, the absence of a specification and funding arrangements for digital infrastructure components has the potential to delay the construction programme for New Dunedin Hospital, or lead to sequencing problems and costly rework required later.
- Secondly, disparate systems (clinical and administrative) and fragmented information requires suboptimal use of staff time, resulting in manual workarounds and duplicated effort that can lead to error and increased risk of avoidable harm being done to patients.
- Thirdly, current systems do not support wider innovation, including the planned transition to new models of care (e.g. under the workforce strategy and primary and community care strategy) and the empowerment of patients through access to their data.

Weightings were placed on these components to illustrate their interlinked nature of these issues. The weighting of 50% for the digital infrastructure component of the problem statement recognises that it is critical to New Dunedin Hospital being completed and operating as intended. It also acknowledges that digital infrastructure underpins any solutions to the presenting issues with the digital systems.

Figure 3 Drivers of the investment proposal – presenting problems with the digital environment

The design, quantity and quality of existing digital infrastructure solutions will not allow New Dunedin Hospital to operate as designed.

[50%]

Clinical and care delivery solutions are fragmented, information is siloed, requiring manual workarounds that create errors and risk harm to patients.

[20%]

Clinical and care delivery solutions do not support new models of care and other innovations that will enable performance improvements and patient empowerment.

[30%]

Source: Sapere; Project Team workshop

1.3 Investment objectives, existing arrangements & business needs

The investment objectives specify the outcomes sought and are used to assess the options in the Economic Case. The investment objectives are based on the gap between the problems and challenges of the current arrangements and the business needs of the desired future state.

Investment objectives

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The approach here is to use the same investment objectives that were developed and refined in the NDH business case process. The rationale is that the investment in digital solutions and in the NDH facility, as inputs into the delivery of the same services, should be treated as a programme of system change and contributing to the same outcomes. This rationale was reinforced by initial attempts to articulate investment objectives, which resulted in the same concepts emerging.

The Southern DHB Executive Leadership Team and the Clinical Leadership Group have supported the use of this common set of investment objectives.

The **five investment objectives** are as follows.

1. Ability to adapt – to create responsive infrastructure and capability that supports disruptive health system change.
2. Optimise use of total health system resources.
3. To reduce non-value-added time by 80 per cent to create a seamless patient journey.
4. To improve the patient and staff experience.
5. To reduce the risk of harm to 'acceptable standards.

The core concepts of these investment objectives are: adaptability to enable change (i.e. new models of care), optimising the use of resources, reducing wasted patient time, improving the experience for patients and staff, and reducing patient harm.

Existing arrangements and business needs

The Investment Objectives are underpinned by statements of the existing arrangements (i.e. presenting issues with the current state) and future business needs. The details are focused on the digital environment and are derived from the engagement undertaken with stakeholders (clinical and administrative staff and consumers) as well as analysis from the Project Team.

Table 2 Investment Objectives, Summary of the existing arrangements and business needs

Investment objective 1	**Ability to adapt – to create responsive infrastructure and capability that supports disruptive health system change**
Existing arrangements	The digital infrastructure and systems are not sufficient to support the shift to more modern models of care required to improve the efficiency and effectiveness of hospital services and the wider Southern health system. Insufficient digitisation, disparate systems, inflexible data formats and an inability to share data are all limiting the use of data for performance improvement, changes in practice and service planning.
Business needs	Need a digital environment that will enable New Dunedin Hospital to operate as designed and to connect and integrate with the wider Southern health system. Digital infrastructure and systems enabling the changes in models of care being pursued via the Workforce Strategy and the Primary and Community Healthcare Strategy.

Investment objective 2	**Optimise use of total health system resources**
Existing arrangements	Patient flows through the hospital are largely inefficient. Inconsistent high variability (manual) processes and pathways, and repetitive and duplicated effort, result in sub-optimal use of workforce and assets. Clinical staff time is unnecessarily wasted on transcription and administrative tasks, the need to interact with multiple systems and processes to execute clinical actions, and to travel to the bedside to review clinical notes.
Business needs	Need digital systems that support standardised clinical workflow and reduce variation and waste. Clinician time is freed up for value-add activities allowing the health service to do more with the same resource. Health pathways with embedded referral criteria, as well as access to information and advice ensure patients are treated in appropriate, lower cost settings.

Investment objective 3	**To reduce non-value-added time by 80 per cent to create a seamless patient journey**
Existing arrangements	Lack of digitally supported clinical workflow, prompts and referrals leads to delays in investigations and review, and days where there is no progression in inpatient care. Inefficient paper-based processes delay patient discharge and contribute to bed block within wards and longer waiting times in ED. Patient time is wasted on unnecessary travel to hospital settings and the need to relay the same information multiple times.
Business needs	Electronic workflow and modern scheduling systems facilitate smooth patient flow through the system and clinical actions occurring in a timely way. Access to data and clinical information/plans means that patient journeys are not interrupted by unnecessary transfers of care between clinicians/providers.

Investment objective 4	To improve the patient and staff experience
Existing arrangements	Patients are required to relay the same information multiple times and face cancellations, unnecessary testing, and delays in care and discharge. Patients do not have access to their own data, thereby inhibiting their engagement in their treatment/care. Distance and travel creates barriers to accessing care. Staff face a frustrating digital work environment, including a lack of standardised systems, unclear care plans at discharge, an inability to easily communicate between community and hospital settings, an inability to analyse clinical data, and large amounts of time spent on repetitive non-complex manual tasks, and on unnecessary movements around the facility.
Business needs	Patient experience – need greater use of telehealth and integrated scheduling as a way to avoid unnecessary delay for patients. Need for patients to be able to view their own health data, and to capture and add information digitally at a time that suits them. These changes need to reduce barriers to accessing care and to empower patients and to enable more equitable care, i.e. care that does not vary in quality because of patient characteristics (e.g. ethnicity, age, gender, location). Staff experience – need digital systems that support standardised clinical workflow, removing unnecessary manual tasks and reducing frustrations and the confusion from information uncertainty, thereby enabling a high-trust environment.

Investment objective 5	To reduce the risk of harm to 'acceptable standards'
Existing arrangements	Low grade errors are common and arise from reliance on paper-based systems, the absence of automated prompts, and inadequate information flow between hospital and community settings. Delays in timely care result from appointments going unscheduled or being missed, procedures being missed (e.g. patient turns, drug doses). The lack of medicines reconciliation between hospital and community settings is material source of risk. Some of these errors result in harmful consequences for patients.
Business needs	Need digital systems that support standardised clinical workflow across settings, with automated prompts, data flows and medicines reconciliation, to reduce errors and materially reduce preventable serious harm events.

A focus on equity considerations

Inequity of access and outcomes are among the issues that are preventing the vision for the Southern health system from being realised. These are also among issues that the wider SDHB transformation programme is seeking to address.

The digital programme in the design and implementation of digital solutions, will be focused on reducing, and not exacerbating, existing inequities in access and outcomes. In particular, care will be taken to avoid creating a 'digital divide', with respect to how patients access health services and engage with information about their health and the treatments and care they receive.

Equity will be considered at all stages of solutioning (design, procurement, configuration) to ensure people are not disadvantaged. For example, making greater use of telehealth can help alleviate location-based inequities and barriers, but technology use can create new issues for some people. Alongside digital advancements, SDHB will maintain other non-digital engagement channels (e.g. telephone, in person) for people who have limited access to (or are not comfortable with) digital technology.

Examples where digital solution can assist with the patient experience of care, and their health outcomes were identified in stakeholder engagement phase, and these will be addressed in the detailed design phase of the digital programme.

- Better identification of people who face barriers in accessing care (e.g. travelling to an outpatient appointment), so that community-based support can be provided to determine those who cannot attend (e.g. linking back to Māori providers in the community who can engage and follow up).
- Real-time information flows about Māori patients arriving in hospital settings (emergency department or on the ward) being provided to the Māori liaison team.
- Better measurement – using service and outcome data to monitor equity in access and also being able to look into causes of inequity in outcomes.

1.4 Scope of the proposed investment

The scope of the investment defines what is needed to enable the development of New Dunedin Hospital, as a next-generation digital hospital that is capable of supporting current and emerging technologies and trends. A definition of a digital hospital is offered below.

Essential elements of a digital hospital

- The healthcare team is able to readily document and access patient medical information (such as identity, reason for admission, medical history and any allergies) on devices connected to a system, instead of using paper files.
- Digital bedside monitoring devices automatically upload patient vital signs and observations, such as blood pressure, temperature and heart rate, directly to a secure electronic medical record.
- Access to real time patient information enables better care and improved workflow.

Source: adapted from Princess Alexandra Hospital, Queensland Health

The scope of investment in New Dunedin Hospital has been categorised into the following groups.

- Digital infrastructure and equipment procured and delivered by the builder
- Digital infrastructure and equipment procured and delivered by Southern DHB
- Digital systems – new or enhanced software systems

Two further groups are necessary – for the commissioning and transition to the new facility and the uplift of infrastructure across other facilities to provide a standardised digital platform.

- NDH digital commissioning and transition – programme and change management
- Non NDH infrastructure – uplift and standardisation of digital infrastructure and equipment across all DHB facilities

A list of digital components in scope, and potential functionality, is included in the Economic Case.

Table 3 Scope of proposed invesment (in-scope)

Group	Component	Description
Group 1	Digital infrastructure and equipment	Part of the building fabric, procured and delivered by the builder.
Groups 2 and 3	Digital infrastructure Digital equipment	To be specified for the construction programme. To be designed and procured and delivered by Southern DHB.
Group 4	Digital software	New or enhanced software systems
Group 5	Commissioning and transition	Programme and change management for design installation, commissioning and transition into NDH.
Group 6	Southern health system infrastructure	Additional works required (beyond usual maintenance) to uplift digital infrastructure and equipment across other facilities to provide a standardised digital platform.

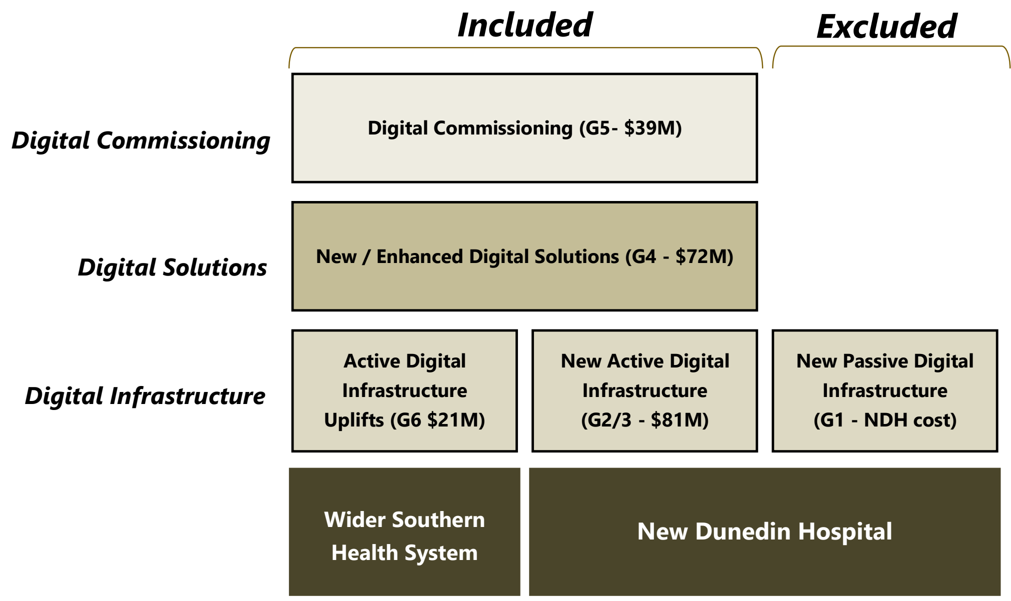
Figure 4 shows the how the groups fit together.

- Group 1 is the new digital 'passive' Infrastructure that is installed as part of the building fabric, procured and delivered by the builder. This is out of scope for this business case.

The other groups are in scope for this business case.

- Group 2 is the new digital 'active' infrastructure that is being designed and procured and delivered by the digital programme (to inform the construction programme). This is for New Dunedin Hospital.
- Group 3 comprises the new digital 'active' solutions, that are designed and procured and delivered by the digital programme. This group is for New Dunedin Hospital and the Southern health system as a whole
- Group 4 comprises the programme and change management for design installation, commissioning and transition into New Dunedin Hospital and the Southern health system as a whole. This business case covers digital infrastructure and systems improvements and change management to introduce the new digital solutions. It does not cover the physical relocation of operations to the new buildings.
- Group 5 comprises the infrastructure necessary for the wider Southern health system. This is to ensure the digital infrastructure and equipment across other facilities, such as Southland Hospital in Invercargill, are on standardised and compatible digital platform.

Figure 4 Scope of the proposed investment in digital groups



1.5 Main Benefits

The benefits framework agreed in the New Dunedin Hospital Detailed Business Case emerged out of two workshops with stakeholders from Southern DHB and the Ministry of Health. The framework comprises five categories of benefit, which largely map the investment objectives. The same concepts are also applicable to investment in digital infrastructure and systems.

- *Improved efficiency* – more can be done with a given amount of resources than would otherwise be the case, enabling more services (and new models of care) to be delivered in a given period, thereby contributing to better health outcomes.
- *Improved patient safety and experience* – reductions in errors and avoidable harm improves patient safety and, together with an improved experience of care for patients and whānau, improves patient recovery and contributes to better health outcomes.
- *Improved experience for staff* – an improved work environment contributes to staff engagement that results in fewer absences, higher retention rates and better recruitment, thereby supporting the delivery of care.
- *Better health outcomes* – is the overarching benefit, resulting from the collective improvements in the other categories of benefit – i.e. more care being delivered (including new models of care), improvements in the quality and safety of care, an improved experience of care for patients and whānau, and an improved work experience for staff.
- *A more resilient system* – a new hospital with improved connectivity improves the resilience of the local health system, allowing the above benefits to be realised. Resilience means the risk of service failure inherent in inadequate facilities would be avoided and that the system is better able to respond to growth in demand for care and to any shocks.

Figure 5 Expected benefits framework

Source: Detailed Business Case for the New Dunedin Hospital project, 9 July 2020

The table below summaries the rationale for these expected benefits.

Table 4 Detail of expected main benefits

Benefit category	Expected benefits from digital investment
Improved efficiency	Enabling efficiencies such as a reduction in time-intensive manual task, a reduction in duplication, and faster decision making. Contributes to a lower length of stay (e.g. unplanned admissions among older people with long stay rehabilitation) Means more can be done with a given amount of, thereby enabling more services to be delivered in a given period.
Improved patient safety and experience	Reductions in errors and avoidable harm improves patient safety. An improved experience of care for patients and whānau.
Improved experience for staff	An improved work environment that reduces wasted time and energy, reduces frustrations and duplication of effort. The result would be improved staff morale and engagement, which may contribute to fewer absences, higher retention rates and improved recruitment.
Better health outcomes	Better health outcomes is the overarching benefit, resulting from the collective improvements in the other categories of benefit.
A more resilient system	System more is connected Risk of service failure is reduced Better able to respond to demand growth Better able to respond to shocks (e.g. a pandemic)

1.6 Main risks

The main risks to achieving the investment objectives can be grouped into the following categories. Each of these risks may prevent, hinder or delay the achievement of the intended benefits.

1. Scope of investment
2. Capacity and capability
3. Change readiness of the organisation
4. External environment

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The table below outlines the strategy to mitigate this risks. More information on the approach to risk management is included in the Management Case. A detailed assessment of risks, including likelihood, impact and mitigating actions, is outlined in the initial risk register (refer to Appendix 1.8.6). All risks will be monitored, managed and updated as the project progresses.

Table 5 Main risks and approach to mitigation

Main risks	Mitigation strategy
1. If the scope is not aligned with user needs, then the proposed investment will not enable transformational system change.	• Identified best practice in other health systems. • Commission external expertise to inform/review the proposed plan for investment to test information about scope and price. • Work with the SDHB models of care stream, adapting designs at a detailed level, as the specific needs of that stream are confirmed.
2. If there is insufficient capacity and capability in the digital programme team, then the detailed design choices, and their implications and trade-offs, will not be fully factored into investment decisions.	• Build good partnerships, to bring in relevant technical skills and external experience sets. In particular, bridging knowledge for contract management, i.e. – people with skills to understand and translate what SDHB is trying to achieve to external technical experts, and then translate back to SDHB about the implications and trade-offs. • Package up the work, so that inputs can be prepared remotely, thereby accessing a wider external base of knowledge.
3. If the organisation is not change ready, then there may be resistance rather than willingness to embrace new ways of doing things – as will be required by new digital systems.	• Deep engagement within the organisation, to ensure requirements are met at macro and detailed levels; all layers of staff to be engaged with. • Ensure that the digital programme is clinically-led and not technically-led by investing in clinicians to work within the programme team, and to become champions within SDHB (and the Southern health system). • Include subject matter experts from non-clinical areas, e.g. from within corporate services and support services.
4. If external changes are not taken into account, then the proposed investment may not fully align with a future digital strategy of the health system.	• Commitment to designs being as customisable and flexible as possible, to accommodate potential institutional changes in the health system. • Engage externally, to building understanding of, and get buy-in to, the SDHB digital programme, and to clear about system changes.

1.7 Constraints and dependencies

Constraints are the limitations imposed on the investment proposal from the outset. The following key constraints have been identified for this investment proposal, along with the management strategy.

Table 6 Key constraints identified

Constraint	Management strategy
Resources available • Southern DHB has budgeted an amount for capital and operating expenditure impacts, as part of the financial plan prepared for the New Dunedin Hospital Detailed Business Case. • The Programme will be reliant on contribution funding from the Health Capital Budget for digital infrastructure and equipment, where the need is triggered by the development of the new facility.	Create a package that is aligned with the resources available, while providing options and associated trade-offs. Ensure the costings are robust and assured. Clearly articulate the rationale for components being triggered by the development of the new facility versus part of DHB systems improvement.
Timeframes • The Programme timeframe for delivery is ten years, but this involves new technology being introduced, and will require material changes in practices and behaviours across the organisation. • Facility construction programme timeframes are fixed and will drive upfront systems changes being done in time (i.e. outpatient building).	The Programme will be managed using the Managing Successful Programmes (MSP) framework, where large complex change is broken down into manageable, inter-related projects. The Project Management Office will be responsible for implementation of the MSP framework through the processes, tools and templates they will develop and deploy. Due to the scale and complexity, the Programme will adopt a blend of approaches and methodologies to suit different streams of work. This includes traditional waterfall delivery for digital infrastructure closely aligned with the construction programme, agile delivery for software and interface components and a service management framework (ITIL) for management of capacity and configuration of infrastructure platforms once commissioned. In all cases projects will align with PRINCE2 methodology to utilise a standards-based framework widely known throughout the industry or easily learned by staff joining the programme.
Organisation digital maturity • The current ability of the organisation to absorb (i.e. transition to and use) modern digital infrastructure and systems.	The preferred option for investment will comprise technologies that can be realistically deployed and used (noting that training and upskilling of the workforce to use new technologies will be part of any option).
Need to maintain service delivery • The hospital must continue to deliver full clinical services while the New Dunedin Hospital and new models of care are built and introduced.	Current digital infrastructure and equipment and systems will be left in place to enable service continuity. This means that the emphasis will be on new infrastructure and equipment will need to be specified and installed into New Dunedin Hospital.

Dependencies are external influences on the success of the programme, where success is contingent on the future actions of others. The following key dependencies have been identified for this investment proposal.

The Digital Blueprint has been developed using best practice (i.e. using the functional design briefs for NDH, checking that everything has a digital enabler). The approach has been to create an adaptable model that will cater for changes as a result of the strategic refresh. At the more detailed design stage, then more input will be needed from services with respect to the planned model of care changes.

Table 7 Key dependencies identified

Dependency
Facility development • The phased construction programme for New Dunedin Hospital is fixed. The design, build and implementation of digital solutions needs to fit with this fixed construction programme.
Workforce strategy • Southern DHB has undertaken a workforce strategy indicating the types of changes that it might need to make with its workforces. The workforce needs to be ready to use new digital solutions being proposed.
Primary and Community Healthcare strategy • Southern DHB is embarking on a primary care strategy that will see primary care and secondary care working proactively to manage patients in their homes rather than in the hospital. The wider Southern health system needs to be ready to use new digital solutions being proposed.

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2. The Economic Case – exploring the way forward

The Economic Case explores the way forward by identifying a preferred option which represents the best value for money by identifying and assessing short-listed options that have the potential to deliver the proposal's investment objectives and meet the identified critical success factors.

2.1 Critical success factors

Critical success factors are the attributes that are essential to achieving the investment objectives. They are set at a level which does not bias or exclude preclude legitimate options at this indicative stage of analysis.

1. **Business needs** – allows the NDH to operate as designed
2. **Strategic fit** – aligns with national and regional strategies (i.e. obligations can be fulfilled).
3. **Affordability** – is within available resources to purchase, operate and maintain.
4. **Coherence** – the option is internally coherent and works as a system
5. **Achievability** – can be delivered and used (i.e. aligns with organisation maturity).

Table 8 Critical success factors

Dimension	Critical Success Factor	Rationale
Business needs	The option allows the NDH to operate as designed	It is essential that investment in digital solutions enables the expected benefits from NDH, as critical system infrastructure, to be realised.
Strategic fit	The option aligns with national and regional strategies	The investment should not preclude commitments to national or regional directions being followed.
Potential affordability	The option is within available resources to purchase, operate and maintain	The investment must be affordable for Southern DHB, both upfront and over the long term (i.e. within available resources).
Coherence	The option is internally coherent and works as a system	The package of digital solutions must take account of internal dependencies (i.e. sufficient network capacity, the backbone of an electronic medical record, and sufficient integration) .
Potential achievability	The option can be delivered and used.	The package of digital solutions must fit with organisational maturity to use absorb and those solutions.

2.2 Programme options identification

The options for investment in a programme of digital solutions comprise infrastructure and systems.

- **Digital infrastructure** – a digital hospital is highly dependent on robust infrastructure and equipment that provides sufficient capacity to connect and share data across all devices and enables the future deployment of emerging technologies.
- **Digital solutions** – the software systems (clinical, patient support and corporate) that digitise activities, store, and integrate data, and enable the automation and streamlining of processes to support modern hospital design and models of care.

The high-level categories of infrastructure and solutions can be disaggregated into several domains, each comprising components with common characteristics or functions. Table 9 outlines these domains and summarises the scope of components involved.

Table 9 Scope of investment: domains and digital components

Domain	Components
Digital infrastructure components	
9. Network	The communications network (wired, wireless) that connects equipment and enables access to digital systems.
10. Servers and storage	Infrastructure that hosts software systems, databases and data.
11. Telephony (unified communications)	Infrastructure, systems and devices to enable calls (voice, video) on handsets (wired, wireless), and messages and clinical alerts.
12. End user equipment	Devices (desktops, laptops) that allow access to digital systems, as well as output devices such as scanners and printers.
13. Directory services	Database that authenticates, hosts, provisions and tracks equipment, users and systems across the digital environment.
14. Audio visual	Equipment and systems that manage and present information throughout the facility, in support of meetings, training.
15. Facility systems	Systems that underpin workflow by enabling staff and patients to interact with each other and the facility. • Realtime location services • Digital wayfinding • Inpatient engagement system • Outpatient flow system • Inpatient flow system
16. Biomedical systems	Systems which capture and transmit data to and from biomedical devices (including patient monitors, pumps, imaging modalities; medication dispensers). Includes integration and commissioning.
Digital solutions components	
7. Corporate systems	Systems supporting corporate functions (finance, human capital).
8. Patient support systems	Systems that support patients, scheduling and related operations. • Patient administration system (PAS) • Consumer engagement portal

	• Patient support systems (manage tasks, meals)
9. Clinical systems	Systems that store patient and clinical data, used to support care • A clinical data repository or electronic medical record (EMR) that stores clinical data used to support patient treatment/care. • Clinical sub-systems: service-specific modules/systems.
10. Biomedical solution	A solution to integrate biomedical device data with the EMR.
11. Integration	Interconnection of systems to automate data exchange.
12. Data analytics / business intelligence	Data collection from original sources, preparation for analysis, queries and reporting.

Three levels of functionality

Different levels of functionality are possible for a given digital component. The approach to building up the options is to identify three points of functionality along a spectrum, defined as follows.

- **Maintain current state** – the scope of investment required for New Dunedin Hospital to function at existing levels of digital maturity.
- **Enhanced** – an additional level of functionality, beyond the current state identified.
- **Advanced** – an additional level of functionality, beyond the enhanced level.

These levels of functionality have been benchmarked against the well-known digital maturity models produced by HIMSS Analytics.[6] As context, the Southern DHB undertook a baseline assessment in 2019, conducted with HIMMS Analytics at the invitation of the Ministry of Health. As an industry recognised method of assessment, this baseline assessment, and future target levels of maturity have been used in the development of the digital business case and options outlined in the economic case.

Digital infrastructure functionality has been benchmarked against the Infrastructure Adoption Model (INFRAM), an eight-stage (scores 0-7) model for technology infrastructure adoption and maturity. Southern DHB currently meets the criteria associated with level 4. Maintaining this level of maturity for the infrastructure investment included in the business case (particularly that associated with the NDH) is considered the "minimum option". Other infrastructure options considered in the digital business case include "enhanced" (level 5 - 6) and "advanced" (level 7).

Following analysis, the recommended option for the ICT infrastructure investment is "advanced" (level 7). Key reasoning is that the upgrade of core infrastructure in an existing facility is both expensive and disruptive and to be avoided if possible. Therefore, in order to provide a solid base, enable future growth in devices and support new future solutions an "advanced" ICT infrastructure platform should be installed and commissioned during the construction of the NDH. Regarding software solutions, as indicated in the baseline assessment undertaken in 2019, the SDHB currently meets the criteria associated with level 1 – 2 primarily in the domains of Electronic Medical Record adoption and Outpatient Electronic Medical Record adoption. Maintaining this level of maturity for the solutions

[6] Healthcare Information and Management Systems Society (HIMSS) is an American not-for-profit organization dedicated to improving health care in quality, safety, cost-effectiveness and access through the best use of information technology and management systems.

investment included in the business case is considered as the "minimum option". Other solution options considered include "enhanced" (level 3 - 5) and "advanced" (level 6 - 7).

Digital solutions functionality is based on adoption models for electronic medical record, continuity of care, digital imaging, and analytics. Following analysis, the recommended option for the digital solutions investment is "enhanced" (level 3 - 5). This target level of maturity would provide the DHB with a core EMR accessible throughout the facility but would exclude some advanced capabilities such as closed loop medications. The recommendation is based on three key considerations being:

- **Cost** – the cost associated with "advanced" (level 7) is considerably higher and likely beyond the affordability (both capital and operating) of the SDHB and MOH
- **Organisational Change** – the organisational change associated with any increase in maturity is considerable and there is a concern that the "advanced" change may be too aggressive considering all other changes, including the NDH, underway across the DHB
- **Future Advancements** – unlike ICT infrastructure it is possible to increase additional solutions / modules at a later date and progressively increase the level of maturity over time without incurring considerable cost and disruption.

Figure 6 shows that the current state for digital infrastructure is level 4, with enhanced being levels 5-6 and advanced level 7. The current state for digital solutions (systems) is at levels 1-2, with levels 3-5 being enhanced and levels 6-7 being advanced.

Figure 6 Functionality levels benchmarked against HIMSS digital maturity models

Source: Sapere

HIMMS maturity models

HIMSS Analytics (Healthcare Information and Management Systems Society) is a global healthcare IT market intelligence, research and standards organization assisting clientele in both healthcare delivery and healthcare technology solutions. HIMSS Analytics uses their maturity models as a means to measure and track the digital maturity of health organisations in key areas including infrastructure, analytics, coordination of care, clinical documentation, and supply chain infrastructure. The domains currently covered by HIMMS maturity models include: analytics; continuity of care; clinically integrated supply; digital imaging; infrastructure adoption; Electronic Medical Record adoption; Outpatient Electronic Medical Record adoption. Maturity is generally assessed based on a level of 0 - 7 (7 being the highest) with achievement criteria associated with each level.

Table 10 lays out the key capabilities for the digital infrastructure and systems components, at each level of functionality as defined against the HIMSS digital maturity models.

Table 10 Key capabilities at each level of functionality

	Maintain current state	Enhanced	Advanced
Digital infrastructure Based on HIMMS INFRAM	Level 4 where applicable • Multiparty video capabilities. • Wireless coverage throughout facility • Active/active high availability infrastructure. • Remote access VPN. • Macro virtual, segmented network infrastructure with automated configuration of access ports. • Fully redundant campus and wide area network designed to recover very quickly with no or limited downtime including dual on-premise wireless controllers.	Levels 5-6 where applicable. • Video on mobile devices. • Location-based messaging. • Firewall with advanced malware protection and real-time scanning of hyperlinks in email messages. • Software defined network automated validation of experience • On-premise enterprise/hybrid cloud application and infrastructure automation. • Micro virtual, segmented network infrastructure with advanced quality of service performance monitoring. • End-to-end visibility of service delivery in real-time and a self-service portal for IT use-cases.	Level 7 where applicable. • Adaptive and flexible network control with software defined networking. • Home-based tele-monitoring. • Internet/TV on demand. • Network data, voice, and location grade throughout all internal and external on-campus areas. • Identity and access management, mobile management and bring-your-own-device policies and solutions • Identity, access, and mobile device management solutions integration use the software defined networking controller to provide advanced security and automated access policy enforcement.
Digital solutions Based on HIMMS EMRAM / O-EMRAM / CCMM / DIAM / AMAM	Level 1-2 where applicable. • The beginning of a Clinical Data Repository (CDR) where diagnostic test results reside no matter where they are generated. • Other items in the repository including patient demographics, basic clinical documentation from nursing personnel, etc. • Major ancillary clinical solutions are enabled with internal interoperability feeding	Level 3-5 where applicable. • A consumer engagement portal exists with capabilities to see testing results, obtain patient educational material, interact with caregivers, update demographic and allergy information, and schedule or request an appointment. • Full physician documentation (e.g., progress notes, consult notes, discharge summaries,	Level 6-7 where applicable. • Complete EMR with advanced clinical decision support implemented throughout the health service. • Health status and preventive care reminder flags are in use • The hospital no longer uses paper charts to deliver and manage patient care and has a mixture of discrete data,

	data to a single clinical data repository that provides seamless clinician access from a single user interface for reviewing all orders, results, and radiology and cardiology images. • Core data warehouse with a centralized database and analytics competency centre.	problem/diagnosis list, etc.) with structured templates and discrete data is implemented for at least 50 percent of the hospital. Capability must be in use in the ED, but ED is excluded from 50% rule. • Patient data entry, personal targets, alerts are available. • Analytical data assets, skills, and infrastructure squarely towards improving clinical, financial, and operational program areas.	document and medical images within an EMR. • Clinical information can be readily shared via standardized electronic transactions with all entities that are authorized to treat the patient, or a health information exchange • Completely coordinated care across all care settings with Integrated personalized medicine. • Clinical risk intervention & predictive analytics. • Personalized medicine & prescriptive analytics

Description of the options

The following long list of options has been considered. These options are essentially packages of components at different levels of functionality, as defined above against the digital maturity models.

0. **Do nothing** – this option represents no investment being made into digital infrastructure or solutions. This means that New Dunedin Hospital would be constructed without the necessary digital infrastructure and equipment and so would be unable to function as designed.
1. **Maintain current state** – this option involves investment into digital infrastructure and solutions to maintain the current level of functionality. The digital solutions are outlined in the table below.
2. **Enhanced functionality** – this option involves investment into digital infrastructure and solutions to an enhanced level. The digital solutions are outlined in the table below.
3. **Advanced functionality** – this option involves investment into digital infrastructure and solutions to an advanced level.
4. **Hybrid** – this option is a hybrid in that it involves investment into digital infrastructure to an advanced level and into digital solutions to an enhanced level. The logic is that the digital infrastructure is built into place during the facility construction period, thereby ensuring that adequate capacity is available for the progressive uptake of new digital solutions over the next decade (and for technological advances). The option is intended to minimise digital infrastructure upgrades, which may be more costly and more disruptive to install later in a working hospital. It also reflects some caution about the ability to leap from the current state to the advanced digital solutions.

The digital components for Options 1, 2 and 3 are outlined in Table 11 below.

Table 11 Summary of digital components within each option

Category	Maintain current state	Enhanced	Advanced
Infrastructure • Network • Servers and storage • Telephony • End user equipment • Directory and identity • Audio visual • Facility systems (location services, wayfinding, inpatient engagement, outpatient flow) • Biomedical	• Transfer existing infrastructure and equipment (where possible) and implement similar equipment for additional capacity. • Networks remain separate (corporate, engineering, and biomedical). • Basic end user devices and telephony. • No new facility systems • Excludes biomedical connectivity and integration.	• New converged infrastructure and devices for increased capacity and functionality. • New end user devices (including point of care terminals) with tap on/off functionality. • New facility systems with base level capability. • Implement new biomedical systems with network connectivity.	• New infrastructure and devices with advanced automation and policy-based provisioning. • Fully integrated environment with voice recognition and video for unified comms and supports BYOD. • New facility systems with advanced capability and fully integrate with messaging and SDHB systems. • New biomedical systems with network connectivity and integration to the EMR.
Systems • Corporate Systems • Patient Support Systems • Clinical Systems • Design data & integration • Biomedical integration	• Extend and reconfigure existing systems, including the current PAS and provide additional licensing to support the capacity of the new facility. • Add some additional functionality to the existing Clinical Data Repository (CDR) including forms-builder, workflow, and health pathway functionality • Continue with existing point to point interfaces • Excludes new enterprise scheduling and consumer engagement portal.	• New corporate systems including finance, payroll, human capital and learning systems with integration to enable data feeds into downstream systems. • Implement new PAS aligned with regional solution. • Implement new consumer engagement portal and integration with primary care. • Enhance the existing CDR to a core Electronic Medical Record (EMR) to include electronic clinical chart, electronic orders and results, clinical decision support capabilities, clinical forms and workflow and interface with a scanning solution to support "paper lite". • Implement new solutions for clinical areas which needs are not achieved by the core	• Replace all existing corporate systems with an ERP solution across all corporate services. • Fully integrated EMR throughout all services across the DHB and include a new PAS and enterprise scheduling solution as modules of the EMR. • Closed loop medications and advanced, automated clinical decision support. • Advanced consumer engagement portal providing health advice using AI and clinical decision support recording personal health data from wearables, personal biomedical devices. • Fully paperless solution and eliminate all paper throughout the DHB • Clinical risk intervention & predictive analytics including personalized

		(shared) EMR functionality. • Integrate selected biomedical devices with the EMR • Implement new Integrated task management system • Integrate aggregated data into the EMR and present as clinical documentation • Implement a central repository of identity and reference data • Excludes enterprise scheduling	medicine & prescriptive analytics • An agnostic biomedical data hub enabling integration of all devices with the EMR • New ESB and API platforms to manage software integration and data exchange • Robotic automation solution to present an API layer on legacy applications • Advanced data management and analytics including Extract, Transfer, Load (ETL) layer feeding into a new data warehouse and 'Big Data' capability, data science, machine learning, and AI capability, and toolsets. • Manage all data as a component of a fully integrated EMR throughout all services

The key outcomes from investment in the above digital systems can be summarised as follows.

Maintain current state option

- Continue supporting clinical services at the current level, noting limited patient health data sharing within Southern health system and the South Island region.

Enhanced option

- Standardisation of data entry and processes across the DHB. One instance of PAS for DHB.
- Patient has increased access to information
- Enable patient health data sharing within Southern health system and regional alignment
- Basic visibility of biomedical data in the EMR
- Improve clinical quality, productivity, and outcomes
- Better informed hospital operations, quality performance, and compliance performance

Advanced option

- Enterprise wide planning and reporting
- Improved integration of patient demographics and scheduling information and a single coordinated schedule throughout the health pathway
- Proactive scheduling of all future appointments
- Reduction in medication incidents

- Improved opportunities to help people to develop their health literacy and therefore increase their ability to make appropriate and informed decisions.
- Patient has standardised personal health journey and shared care plans that tells their health and wellness story.
- Health providers have standardised tools to select the right health pathway and coordinate care for the patient.
- Real-time clinical decision making, patient support workflow

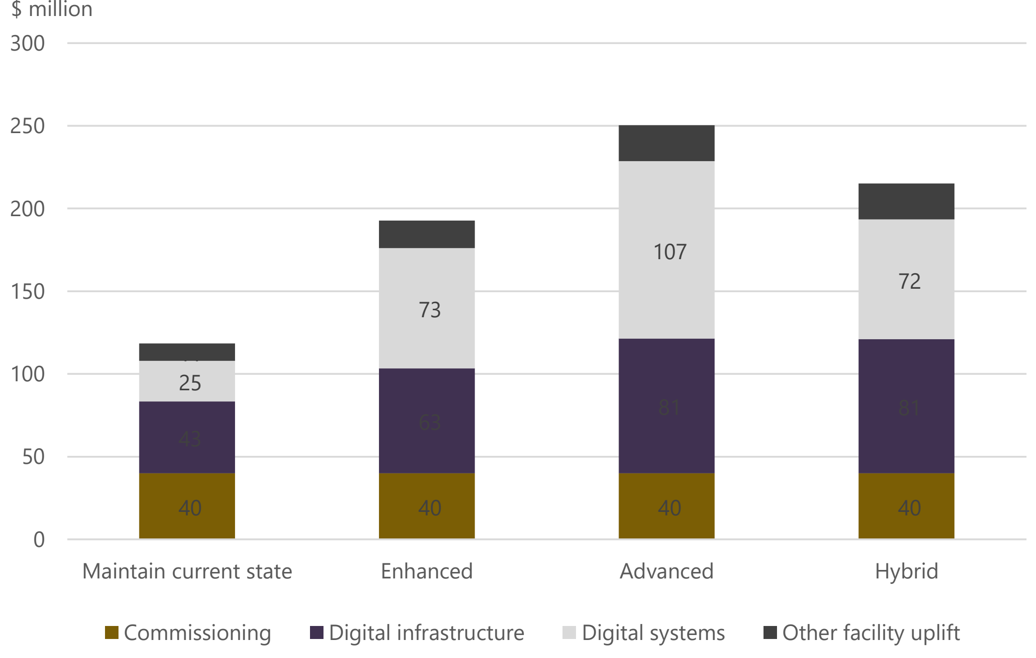
Capital cost of options

Figure 7 shows the estimated capital cost over ten years for each option and the composition of those options, at the high-level categories of digital infrastructure, digital solutions, commissioning, and infrastructure uplift at other hospital facilities in the Southern health system.

- The Maintain current state option has an estimated capital cost of $106.8 million.
- The Enhanced option has an estimated capital cost of $194.9 million, or $88.1 million more than the Maintain current state option.
- The Advanced option has an estimated capital cost of $240.2 million, or $45.3 million more than the Enhanced option.
- The Hybrid option has an estimated capital cost of $215.4 million, or $22.3 million more than the Enhanced option and $35.2 million less than the Advanced option.

The associated operating expense impacts are explored in the Financial Case.

Figure 7 Estimated programme capital cost over ten years



Source: Project team; Sapere analysis

2.3 Programme options assessment

The options have been assessed, in Project Team workshop, against the investment objectives and the critical success factors. The table below summarises the analysis and the conclusions.

Table 12 Options assessment

Assessment domain	Option 1 Maintain current	Option 2 Enhanced	Option 3 Advanced	Option 4 Hybrid
Investment objectives				
1. Ability to adapt – to create responsive infrastructure and capability that supports disruptive health system change.	**No**; maintains current state with no ability to adapt.	**Partial**; may lose opportunity to invest in more advanced systems later; some limited adaptation.	**Yes**; the infrastructure provides the foundation to enable adaptation.	**Yes**; advanced infrastructure and the systems side incudes enterprise scheduling.
2. Optimise use of total health system resources.	**No**; maintains current state with no enabled optimisation of resource use.	Infra: **Yes** Location services to track people/equip Systems: **partial** Data sharing: more accurate decision making	**Yes** reduce manual tasks: EMR and ERP is two platforms. AI frees up clinical time.	**Partial+** Enterprise Scheduling also provides optimisation so better than enhanced. Plus advanced infra.
3. To reduce non-value-added time by 80 per cent to create a seamless patient journey.	**No**; maintains current state with no enabled reduction in non-value-added time.	**Partial**; enabling MOC changes will improve	**Yes**	**Yes;** Ent sch – enables improved flow: in and outpatients: booking process and scheduling and pre-booking appointments/ procedures / tests; can be modified with flow-on as a package
4. To improve the patient and staff experience.	**No**; maintains the current state and does not contribute to improved experience.	**Yes**; anything beyond current state is some improvement.	**Yes+** Patient – full AI portal Staff: mobility and own devices (EMR and ERP platforms)	**Yes**
5. To reduce the risk of harm to 'acceptable standards.	**No**; if the current is not acceptable then this will not improve	**Yes;** Risk reduced (e.g. clinical notes more available in facility and comm); but e.g. scanning in transition	**Yes+** b/c introduce AI for diagnostics and closed loop medications	**Yes**; Same as enhanced
Critical Success factors				
1. Business need – the option allows the NDH to operate as designed	**No**; does enable improved patient flow through the facility or enable more to be done in	Partial; Infra is **yes**: patient portal and Check-in kiosks but Systems is **partial** w/o Enterprise	**Yes**	**Yes** With the addition of Enterprise Scheduling.

	community settings.	Scheduling does not support new outpatient model.		
2. Strategic fit – the option aligns with national and regional strategies	National: **No** Regional: **No** (stay on current PAS)	National: **Partial** in terms of MoH strategic objectives Regional: **Partial** PAS implemented; HCS is retained. Systems open to others.	National: **Yes** Regional: **Yes**	National: **Yes** Regional: **Yes** warehousing analytics and integration
3. Affordability – the option is within available resources to purchase, operate and maintain	**Possibly;** $106.8m over 10 years relative to indicative signal of $197m.	**Possibly;** $194.9m over 10 years relative to indicative signal of $197m.	**Unlikely**; $240.2m over 10 years relative to indicative signal of $197m.	**Possibly**; $218.5m over 10 years relative to indicative signal of $197m.
4. Achievability The option can be delivered and used.	**Yes**; is a similar version of what is currently in place and used.	**Yes**	**Partial**; questions over organisation ability to absorb the leap into AI, closed loop medicines.	**Yes**; as similar to enhanced but has integrated Enterprise Scheduling added.
Costs				
Capital cost over ten years ($ million nominal)	$106.8	$194.9	$240.2	$215.4
Conclusion				
Identify the preferred option for exploration in the detailed business cases.	**Do not carry forward** Does not meet investment objectives or critical success factors.	**Do not carry forward** Some building blocks missing (enterprise scheduling). On the Infrastructure side, further development is limited as system cannot easily be scaled to advanced over time, as needed. Risks of disruption to a working facility later and of higher upgrade costs.	**Do not carry forward** Dependent on affordability but also question over achievability already so leaning to "do not carry forward"	**Carry forward as preferred option** and variations on hybrid would be explored. A key advantage is that the systems side can still be scaled up to advanced later, as the advanced infrastructure provides a future proofed platform.

The conclusion is that **the hybrid option** is the **indicative preferred option** to be carried forward for more analysis in the Detailed Business Case. This option provides the best value in that the advanced infrastructure provides a future proofed platform, allowing more advanced digital solutions to be taken up in future. The solutions side can still be scaled up to advanced functionality later, as and when the organisation is ready and those solution become more affordable.

A further option, to be defined as the "**minimum viable option**" will also be taken forward to the Detailed Business Case for formal assessment. That work will also explore variations on these options, in terms of delivery.

2.4 Benefits demonstration

This section examines some of the plausible benefits of investment into the preferred option for a programme of digital solutions. The approach is a qualitative assessment of benefits in selective service areas, presented as case studies that are representative. A fuller benefits analysis that is wider is scope and employs quantification methods, will be included in the Detailed Business Case, as part of a systematic cost benefit analysis. The approach is to look at the particular impacts on two patient pathways: (1) a planned day procedure; and (2) and unplanned admission for an older person with rehabilitation. The wider opportunity to realise these specific benefits is also being considered.

Patient pathway 1: Planned day procedure

Southern DHB has closely examined the pathway and associated workflows (including detailed booking processes) for a planned day surgery pathway for a tonsillectomy. The table below summarises how the investment in digital solutions changes the patient pathway, reducing unnecessary interactions and the time spent on administration.

Table 13 Summary of impacts of investment in digital solutions: planned day procedure

Investment in digital solutions	
• Electronic Medical Record with fully integrated Clinical Workflow • Patient Administration System • Digital referral, appointment, theatre scheduling and bed management systems	
Before investment	**After investment**
• Appointment booking is manual and the patient is not able to adjust to suit their circumstances • Multiple appointments are required for assessment by surgeon and anaesthetist prolonging overall waiting time • Time is spent collecting information at multiple appointments, that could be collected in advance • Providers have a siloed and incomplete view of patient medical records, including recent test results and risk information. • Booking processes are highly manual, involving many different people and considerable time • Post-surgery community care is not well integrated as information sharing is not timely	• Booking administrators review appointments/schedules that are automatically built, intervening only occasionally • Patient waiting time reduced and more likely to attend appointments (they can book themselves) • Clinicians can send digital questionnaires ahead of appointments, reducing face-to-face time spent collecting information • Anaesthetic information is automatically monitored during surgery and available in EMR • Detailed data is available to optimise hospital operations and planning • Discharge summaries are automatically generated and available, reducing time spent completing forms
Outcomes	
• Reduced waiting time and patient more likely to attend single appointment. • Better patient engagement and increased, timely clinical information sharing improves patient outcomes. • Drastically reduced time spent on booking and scheduling, freeing up administrative and clinical staff for other activities (e.g. additional day procedure cases).	

Source: adapted from Southern DHB staff analysis

The potential impacts, in terms of reduced patient waiting time and avoided staff administration time, are still being examined. The results will be tested by an internal working group with clinical input.

Patient pathway 2: Unplanned admission for an older person

A Southern DHB clinical group has examined the patient pathway for an unplanned admission of an older person, using a patient archetype, to identify the changes that could be enabled by investment in an 'enhanced' digital environment. The key details of the patient archetype is outlined in the text box below. The potential impact on length of stay was also considered.

Patient archetype

- The patient is an 85-year-old woman who lives alone in Dunedin and has had a fall at home and lain on the floor all night.
- Taken by ambulance to the emergency department with a suspected broken hip and with some reddening to the heel.
- Surgery is likely to be required followed by transfer to a rehabilitation ward.

The table below summarises how the investment in digital solutions could change the patient pathway. The potential impact on length of stay is being analysed.

Table 14 Summary of impacts of investment in digital solutions: unplanned admission with rehabilitation

Investment in digital solutions • Electronic Medical Record with fully integrated Clinical Workflow • Supported by Clinical Decision Support rule sets • Patient Administration System	
Before investment	**After investment**
• Providers have a siloed and incomplete view of patient medical records, including recent test results and risk information. • Patient transferred to ED by ambulance. Tests, including bloods and x-rays are ordered, taken and reviewed after arrival in ED (patient spends time waiting for each step). • Patient may wait to be seen by orthopaedic specialist. • Patient may wait for surgery to be booked. • After theatre, the patient may be taken back to orthopaedic ward (instead of the older persons ward). • Patient at risk of complications such as a pressure (e.g. stage 4 pressure injury of the heel). • Discharge is delayed due to the EPoA (enduring power of attorney) completion process needing to be completed.	• All providers have role-based access to an EMR, Shared Advanced Care Plan, including prior assessment and risk information. • Ambulance staff have access to an EMR and are provided clinical pathway advice to collect bloods and other tests, take measurements in transit to hospital. Able to notify hospital. • Digital solutions enable orthopaedic doctor to be called to see patient in ED upon arrival. Surgery slot is booked automatically upon approval orthopaedic doctor (i.e. earlier on in the process) • Patient flow is better managed, from arrival until discharge, and automated where possible. • Clinical workflows, pathways and role-based 'to do' lists enable people with the right skills to better meet patient needs. • The patient is less likely to be unnecessarily moved around the hospital, with doctors, nurses

	and other professionals arriving bedside at the right time, with the right information on hand. • Complications are able to be avoided (e.g. a stage 4 pressure injury of the heel) due to completion of digitised risk assessments, clinical protocols being surfaced into clinical pathways, and ongoing screening questionnaires.

Outcomes

- Reduced waiting time and avoided complications for the patient). The combined impact is that the patient spends less time in hospital than would otherwise be the case.
- [The potential impact on length of stay is being analysed]

Source: adapted from Southern DHB staff analysis

3. The Financial Case – costs and affordability

The Financial Case presents the detailed costings of the preferred option and considers the implications for affordability by examining the impact on Southern DHB's financial statements.

3.1 Outline of the capital costings

Total capital expenditure for the indicative preferred option over ten years is **estimated at $220.8 million.** Table 15 shows the estimated year-by-year profile of this capital expenditure and shows the following components.

- New capital expenditure, which is estimated at $214.9 million over the ten years between 2020/21 and 2029/30.
- Replacement capital expenditure is likely to be required within the ten years of the programme, for example, replacing end-user computing equipment. This is estimated at estimated at $9.5 million, and can be offset against $3.5 million of BAU spending on asset replacement.

Table 15 Estimate of capital expenditure cash flows ($ million)

Financial year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	Total
New capex (DHB)	3.0	5.1	45.7	33.0	11.5	9.4	11.2	24.8	24.9	6.0	174.6
New capex (MoH)	0.2	4.1	5.9	15.7	9.7	0.8	0.6	1.3	1.4	0.4	40.2
Total new capex	3.2	9.3	51.6	48.8	21.2	10.1	11.8	26.1	26.3	6.4	214.9
Replacement capex	-	-	-	-	-	-	-	-	*1.5*	*8.0*	*9.5*
Less BAU replacement									*-1.5*	*-2.0*	*-3.5*
Total capex	**3.2**	**9.3**	**51.6**	**48.8**	**21.2**	**10.1**	**11.8**	**26.1**	**26.3**	**12.4**	**220.8**

Source: Sapere analysis

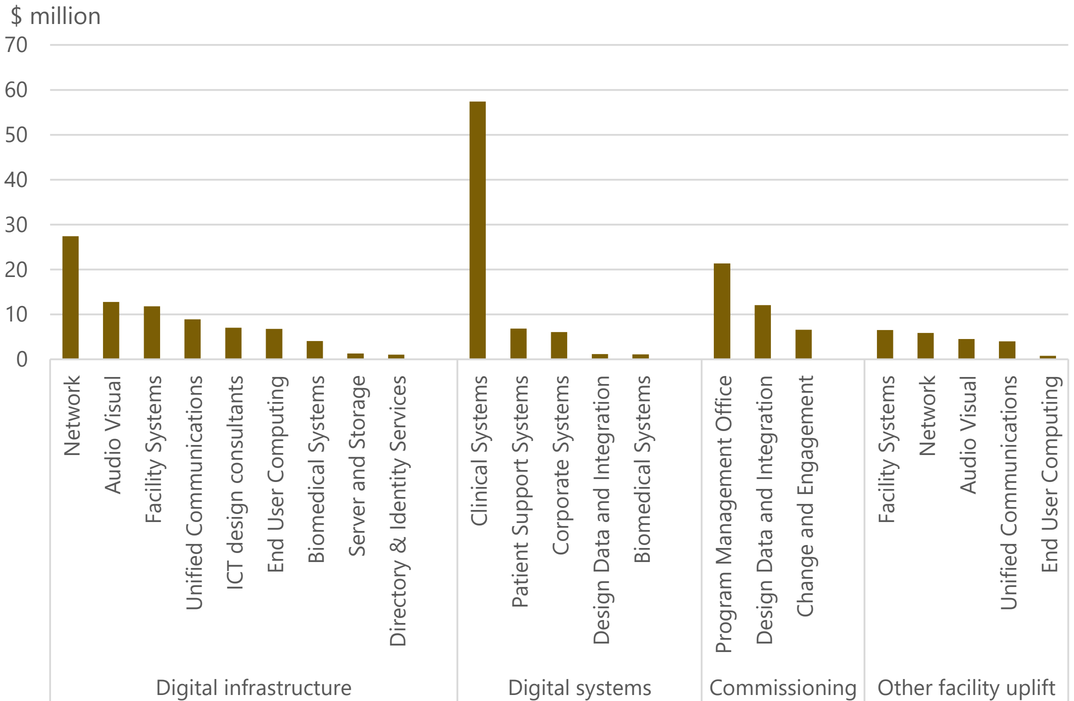
Figure 8 presents the new capital expenditure by category (group): digital infrastructure, digital systems, the commissioning of new digital infrastructure and systems, and the uplift and integration of the digital infrastructure and equipment at other facilities.

Within those groups, the key domains (i.e. clusters of components) are also shown. The two domains with the largest capital investment, each comprising more than $25 million over the ten years of the Programme are as follows.

- The communications network (wired, wireless) that connects equipment and enables access to digital systems – $27.4 million.

- Clinical systems that store patient and clinical data, used to support care. These include a clinical data repository or electronic medical record (EMR) that stores clinical data used to support patient treatment/care, and a series of clinical sub-systems with service-specific modules/systems – $57.4 million.

Figure 8 Estimate of capital expenditure over ten years by category and domain



Source: Sapere analysis

Table 16 outlines the assumptions that have been made in determining these estimates.

Table 16 Table of assumptions

Assumption	Description	Source
Digital estimates	Cost estimates by year Useful life Funding split	NDH Digital Program Cost Model V05
Contingency	40% on labour costs	Cost model
Escalation	0% on equipment 3% on labour costs per annum	Modelling assumptions based on Statistics New Zealand
Useful life of assets	10 years (minimum) for systems End-user computing – 4 years Communications – 5 years	Cost model
Holding costs	No holding costs applied	Modelling assumption

3.2 Maintenance costs

The working assumption is that annual costs of around $15 million will be incurred for maintaining the infrastructure. This number has been calculated based on advice, drawn from experiences in similar programmes elsewhere, that 20% per annum of the initial equipment cost should be set aside for maintenance and support. It is expected that around $5 million of this expenditure can be offset through existing maintenance spending, which will no longer be required for existing systems.

3.3 Quantifying benefits

The benefits of the digital programme have not yet been disaggregated from the benefits of commissioning a new hospital. A disaggregation is challenging because both changes are necessary for unlocking substantial system benefits, but neither initiative is sufficient on its own.

In the financial modelling for NDH, the assumption has been for an immediate productivity gain a 2.5% per cent in the two years after the commissioning of NDH. This efficiency assumption results in gains of $24.4 million in personnel cost savings and a further $10.2 million in operational cost savings in 2031/32.

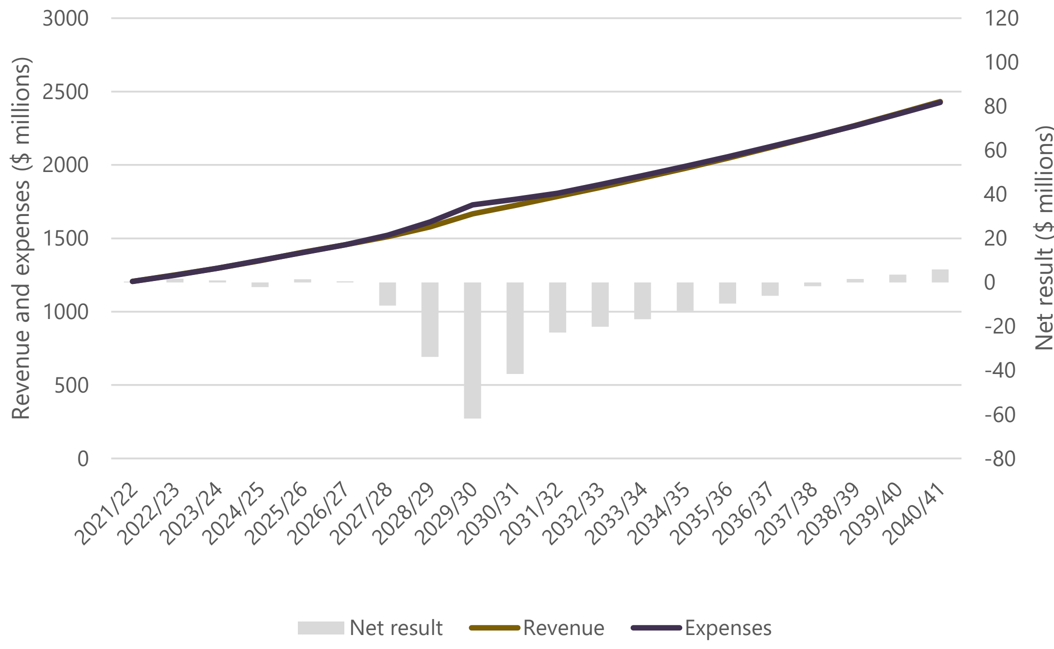
In present value terms, the gains over the 10 year period between 2030/31 and 2039/40 amount to $183.6 million. The holding assumption, while further work is being undertaken on workforce modelling, is that these productivity savings include the effect of additional maintenance costs as per the previous section, i.e. if additional maintenance costs were not required then the productivity savings would be even greater.

3.4 Comprehensive financial model

The financial modelling for the New Dunedin Hospital Detailed Business Case forecasts the financial results for Southern DHB out to 2040/41. This modelling takes account of the cost of NDH and of the digital programme.

Figure 9 shows the combined impacts on revenue and operating expenses, namely, higher funding to cover the capital charge on the MOH-funded capital expenditure, as well as the depreciation expenses on the new capital assets. There is further work underway to improve the workforce modelling, which will also be explored further in the detailed business case for the digital programme.

Figure 9 Financial results of Southern DHB 2020/21 to 2039/40



Source: NDH Detailed Business Case

3.5 Funding sources

There is an expectation that some of the capital investment will be funded internally by Southern DHB and some will be directly funded from the Ministry of Health.

While there will be a capital charge levied on the equity associated with the Crown-funded asset, it is assumed that offsetting revenue will be made available in the form of capital charge relief, in line with the current financial policy settings.

This estimate of new capital expenditure, of $214.9 million assumes a contribution of $174.6m from the Crown, based on the detailed business case for the facility. The remaining $40.2m would be funded by Southern DHB.

4. The Commercial Case – the procurement approach

The Commercial Case sets out the approach to procurement across the full investment scope at a high-level given this is an Indicative Business Case. Consultation during development of this approach has included the Office of the Chief Digital Officer and Ministry of Health procurement staff.

The approach considers the significant and inter-locking nature of digital infrastructure and solutions and that the installation of digital equipment is underpinned by a considerable service delivery element.

The approach also considers lessons learnt from other capital infrastructure projects and new innovative models used in other projects throughout the world. In summary, the proposed approach consolidates delivery risk under the MOH project (passed through to the builder) while allowing the SDHB to have maximum input into the design and selection of technologies ensuring they integrate into the broader SDHB digital environment.

4.1 Co-ordination of procurement responsibilities

Procurement responsibilities will be shared as follows:

1. The MOH NDH Project Team will procure and commission the digital facility infrastructure (communications rooms, structured cabling, etc) for the inpartient and outpatient facilities that make up the NDH. The commissioning approach and procurement details are specified by the Ministry of Health led project team in the current Detailed Business Case for NDH. The SDHB will have input into the requirements specification and design.
2. The MOH NDH Project Team will also lead the procurement of the remaining infrastructure and equipment (active network equipment, audio visual equipment, computers, phones, etc) for the inpatient and the outpatient facilities however the SDHB will have greater input into the selection, detailed design and configuration of the solutions. Effectively the SDHB will act as the client and provide input and approvals while the MOH will manage the process of design, procurement, and delivery (under the builder). The SDHB will also be responsible for securing funds through the digital business case and ensuring the selected solutions stay within the allocated budget. This process ensures there are limited delivery dependencies on the SDHB and minimal opportunities to delay the builder and construction programme while allowing the SDHB to select technologies consistent with the environment and where appropriate extend existing infrastructure platforms.
3. SDHB will be wholly responsible for digital solutions (EMR, clinical specialty systems, etc) and will engage a external consultants to assist in the development of solution requirements based on market experience and industry trends. Requirements gathering will include national and regional consultation to ensure broader alignment.

The first two categories clearly require close co-ordination and involve co-ordination on a single yet-to-be-constructed site. This supports the strategy of allocating active infrastructure items on which the

builder is highly dependent (e.g. network, digital operating theatres) to the Ministry of Health led project teams.

The third category requires close integration with the SDHB change programmes and business-as-usual service delivery.

4.1.1 Addressing co-ordination and integration risks

SDHB will act as the master systems integrator responsible for overall coordination and allocation of scope and management of the "master plan" thus ensuring a coordinated approach to the design, specification, and procurement of the end to end digital environment. In the first instance this plan will be the NDH Digital Blueprint, which will be further developed during the initial tranche along with the programme and procurement plans.

The SDHB is the only entity with full oversight of the end to end digital scope and therefore best placed to perform the master systems integrator role. This role will be responsible for overall high level design and ensuring all scope is defined and allocated to a specific stakeholder for detailed design and delivery. The role of master systems integrator has no direct delivery responsibility as this is passed to each stakeholder group responsible for their scope.

Several options were assessed regarding the commercial approach including roles and responsibilities between the MOH and SDHB (refer Appendix 1.7 - Digital Commercial Options Analysis V01). This primarily involved analysis of which stakeholder holder was best placed to deliver each group of the digital scope. In the case of active equipment the MOH (and builder) are best placed to manage these works to ensure alignment and interdependencies with the construction programme and remove any opportunity for SDHB managed works to delay the process.

MOH and SDHB will make two critical appoints to ensure co-ordination and integration through the procurement and contracting process.

- To ensure a fully integrated facility, MOH and SDHB will engage a digital infrastructure design consultant to specify all digital infrastructure and equipment during the facility design process. This digital infrastructure design consultant will specify the content of tender documents and RFPs for all facility-oriented digital infrastructure and may be appointed directly or via an RFP for services.
- MOH and SDHB will also appoint a Systems Integrator (SI) to manage the delivery of the infrastructure obligations and to interface with the builder. The SI is likely to be a subcontractor to the builder thereby reducing the risk of programme interdependencies and the potential for the SDHB to delay the construction programme.

4.2 Procurement of software solutions

SDHB will be responsible for the procurement of new software solutions assumed by facility designers and required for enhanced models of care. The new facility is designed to be paper-lite initially and then paper free dictating the need for several new solutions.

4.2.1 Procuring a Patient Administration System and an Electronic Medical Record

The primary solutions to be procured within the programme include a new Patient Administration System (PAS) aligned with the regional solution, a new Electronic Medical Record (EMR) and a new customer engagement portal. These solutions will provide the core functionality to digitize and manage patient care schedules and health records along with enabling access from anywhere within the facility, across the DHB and externally from primary, community and home settings.

Due to the complexity and risk of the proposed procurement the digital programme, guided by the SDHB and New Zealand Government procurement principles, will follow a structured, open market approach supported by the New Zealand Government Electronic Tenders Service (GETS).

4.2.2 Other procurement groupings

The digital programme scope can be categorised into the following groups consistent with the traditional procurement groupings of capital infrastructure projects throughout New Zealand.

Table 17 Procurement groups

Group	Definition	Digital Scope (examples)
Group 1	Digital infrastructure and equipment procured and delivered by the builder as a component of the construction project.	• Comms rooms • Structured cabling • Nurse call system • Engineering systems
Group 2 / 3	Digital infrastructure and equipment procured and delivered by MOH (via the builder and systems integrator) with greater input into the specification, selection, detailed design and configuration by the SDHB. The digital infrastructure and equipment selected will set the direction to be followed for the broader uplift and alignment of other facilities throughout the DHB.	• Network equipment • Telephony equipment • Audio visual equipment • PCs, laptops, printers • Patient engagement system • Outpatient check in system
DHB Systems (Group 4)	New or enhanced software solutions (Care delivery, corporate and patient support) required to support the facility design and enhanced models of care.	• Patient Admin System • Electronic Medical Record • Patient engagement portal • Clinical sub systems • HR and Payroll systems

We make the following points about scope and responsibility for procurement:

- The builder's scope (Group 1) is included in the commercial case to ensure a coordinated approach to procurement.

- The PMO will also be responsible for development of the detailed procurement plan and engaging the management and assurance consultants as required.
- The NDH project team (run by the MOH) will be responsible for procurement of the Group 1 infrastructure and equipment (facility infrastructure) and will have oversight and connection to the digital programme via the infrastructure stream. This responsibility includes the appointment of a digital design consultant, Systems Integrator (via the builder) and vendors associated with their scope.

Table 18 Facility infrastructure

Sub Streams / Projects	Key Procurements
Facility Infrastructure	• Comms – communications rooms, structured cabling, antenna systems • Nurse call – a modern system capable of integration • Security – CCTV, electronic access control, fixed duress

- The MOH NDH Project Team will also lead the procurement of the remaining infrastructure and equipment (active network equipment, audio visual equipment, computers, phones, etc) for the inpatient and the outpatient facilities however the SDHB will have greater input into the selection, detailed design and configuration of the solutions.
- The infrastructure stream also includes the biomedical project. This project will not directly procure any products or services but rather manage any clinical equipment procured through the FF&E program which may be network connected, integrated and / or come with accompanying software systems. e.g. major medical and biomedical devices.

Table 19 Infrastructure

Sub Streams / Projects	Key Procurements
Core Infrastructure	• Network equipment • Servers and storage • Unified communications • Directory and identity

End User Infrastructure	• End user computing - PCs, laptops, printers
	• Audio visual equipment
	• Facility systems including
	    o Patient engagement system
	    o In patient flow system
	    o Outpatient check in system

Biomedical	• Biomedical solutions • Imaging modalities • Digital theatres

- The solutions stream (sometimes referred to as Group 4) will manage the procurement of new or enhanced software solutions (clinical, corporate and patient support) required to support the modern facility design and enhanced models of care.
- For example, the facility has been designed based on the principle of "paper lite" and does not include temporary or permanent storage for clinical charts. This will require, at a minimum, an enhanced Electronic Medical Record with digital forms and workflow including a temporary scanning solution to support the transition. Furthermore, objectives defined throughout the IBC and Strategic Brief clearly identify the requirements for

enhanced telehealth solutions, patient portals and other technologies to support the future models of care.

- In addition to the above there are currently clinical specialities without fit for purpose digital solutions which must be resolved to progress to an integrated digital platform. Details will be confirmed following the selection of a core EMR product.
- Finally, several key solutions are currently end of life and/or no longer supported, the prime example being the patient administration system which will be replaced (by the regional solution) prior to commissioning of the new facility.

Table 20 Solutions

Sub Streams / Projects	Key Procurements
Corporate solutions	• Finance system • Payroll system • Human resource system • Learning management system • Workflow, policy and risk system
Patient support solutions	• Patient administration system • Patient portal • Enterprise scheduling • Support task management system
Clinical solutions	• Electronic medical record system • Clinical speciality systems
Data and integration	• Integration platform • Business intelligence platform

4.2.3 Alignment with the Ministry of Health nHIP implementation

The Ministry of Health is procuring proof of concept for interoperability rather than a national EMR. SDHB's EMR will be procured such that it is fit for purpose for the intended interoperability requirements.

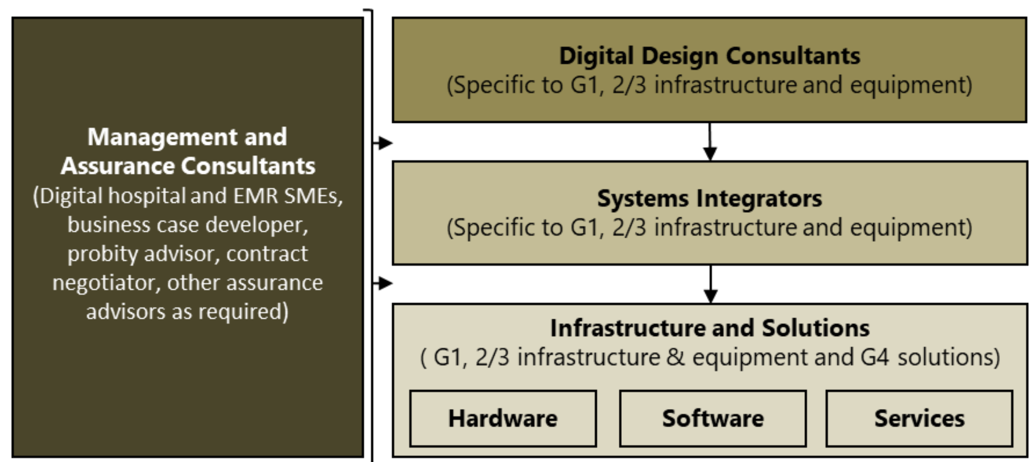
> **The nHIP is founded on the notion of interoperability and replaces the idea of developing a single Electronic Health Record.[7]**

4.3 Required products and services

Most costs associated with the digital programme relate to the various infrastructure and solutions consisting of hardware, software, and vendor services. That said there are other critical procurements required to ensure design and delivery of the solutions is managed and coordinated with the NDH and the SDHB change programmes.

[7] https://www.hinz.org.nz/news/469586/nHIP-approved-by-Cabinet.htm

Figure 10 Products and services



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- **Digital design consultants** will be engaged to develop the high-level designs and specifications of the infrastructure and equipment. The MOH will be responsible for engagement of the consultant with regards to the Group 1 and Group 2/3 scope with significant input from the SDHB. Due to the significant integration (and interdependencies) within a modern health facility it is proposed that the same design consultant works across both streams and the MOH may seek direct engagement based on the initial MOH appointment.
- **Systems Integrators (SI)** are digital specialists who are agnostic to any specific product or vendor and will be engaged to manage the delivery of the digital infrastructure and equipment. An SI will likely be engaged by the contractor (builder) to manage their digital delivery obligations which will include Group 1 and Group 2/3. To the extent that digital infrastructure and equipment may delay the builder any penalties or damages would flow to the SI rather than being retained by the SDHB. In the case of the SDHB solutions where the NDH interdependencies and risks are not as high, the SDHB will act as the SI and manage all works across the various vendors.
- **Solutions** will be procured from vendors across the various groups and consist of hardware, software, and services. Consistent with the MOH policy and SDHB digital standards a “cloud first” model will be preferred when procuring and selecting solutions which means term “services” may range from professional services associated with the installation and configuration or hardware and software through to infrastructure or software as a service where by the DHB does not own an asset and rather pays for the solution through a recurrent payment model. The SDHB has already adopted this principle with regards to server and storage infrastructure utilising an Infrastructure as a Service (IaaS) model. During the digital programme however, this will be expended to consider Software as a Service (SaaS) with regards to the new SDHB systems.
- A range of **Management and Assurance Consultants** will be required to ensure effective going management and governance of the programme. These consultants include but are not limited to digital hospital and EMR Subject Mater Experts (SMEs), business case developer, probity advisor, contract negotiator, and other assurance advisors as required.

4.4 Market sounding suggests strong interest

The digital programme is significant and will require support from a broad range of suppliers, both domestic and internationally. The programme will actively seek participation from the market in the early stages of the planning process and throughout the procurement and selection processes. The early engagement will provide the opportunity for New Zealand businesses to understand the programme and be able to respond to opportunities as they arise.

The initial assessment of attractiveness of the proposed procurement to the market indicates a high level of interest (both across the infrastructure and systems streams) supported by a strong New Zealand presence of tier 1 and 2 systems integrators, infrastructure, and software systems vendors. Although digital technology specialists have not traditionally been involved in the design and specification of new hospitals in New Zealand, the requirement has been acknowledged and local engineering companies have started to partner with digital specialists as is common practice in Australia and other countries around the world.

Each tranche of the programme will consider the capabilities and services required and will evaluate the market to identify whether capability exists in New Zealand or whether the specific service/capability would need to be sourced internationally. All the procurement activities will be conducted following established processes, i.e. openly advertising the opportunity, clearly stating the breadth of the procurement, and the likely participation by sector organisations. This will ensure that, whilst there is a focus on New Zealand suppliers, the best supplier is selected for each procurement undertaken.

Detailed RFI / EOI processes will be planned and executed throughout Tranche 1 however initial market scans have identified the following findings.

Table 21 Market scan

Product / Service	Scan Method	Findings
Digital design consultants	• Consideration of other capital infrastructure health projects both domestic and international • Discussions with traditional engineering services consultants both domestic and international.	• In New Zealand digital design has generally been completed by traditional engineering consultants rather than digital specialist. • In Australia it is common to use specialist digital design consultants and a number of organisations have been established in response. e.g. Lend Lease Technology
Systems integrators	• Review of existing panels and standing offer arrangements • Desktop review of available marketing material.	• Several Tier 1 and Tier 2 integrators have a strong presence within NZ however there is no evidence of a local supplier managing the end-to-end integration of a new digital facility.
EMR vendors	• Findings provided by Price Waterhouse Cooper (PwC)	• Over a dozen Tier 1 and Tier 2 EMR vendors were identified of which

	through a consulting engagement.	over half had a presence and experience within New Zealand.
Other equipment, infrastructure, and solutions vendors	• Review of existing panels and standing offer arrangements • Desktop review of available marketing material.	• Numerous equipment, infrastructure and solutions vendors were identified many with a local capability and inclusion on a current panel or standing offer arrangement.

SDHB digital programme is not the only significant digital works programme underway and scheduled across the country and as such may be operating in a tight market. Capacity and capability constraints can be anticipated, particularly for suppliers and resources experienced in digital solution design, delivery, and integration.

The programme will communicate with the market early and regularly so that potential suppliers can plan for the skills and capacity required. The DHB will also be flexible in how and where suppliers are located by maximising online collaboration and engagement. This flexibility is expected to increase the attractiveness of the project and therefore maximise the pool of suppliers and resources available to participate.

4.5 Procurement Strategy

A detailed procurement plan will be developed during the initial tranche of the digital programme to describe the specific approach for each programme stream. In addition, procurement plans will be developed for each significant project within the programme. We intend to align with, and where possible leverage the approach followed by the NDH construction programme.

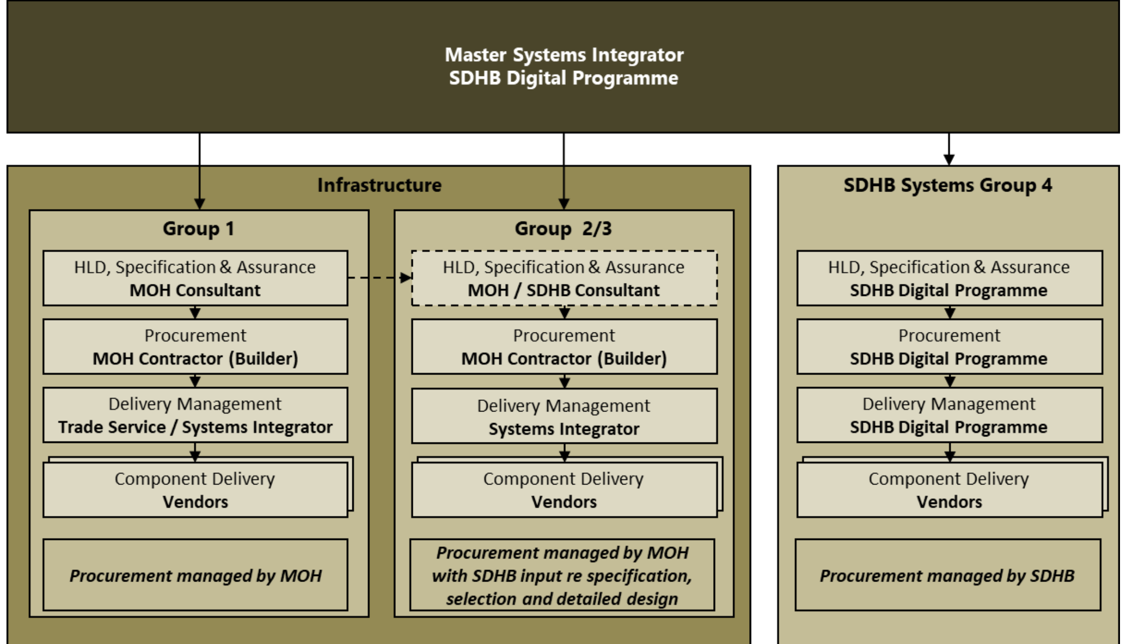
All procurement activities will adhere to the national and SDHB procurement and purchasing policy and SDHB tendering policy which details the framework and obligations when procuring or purchasing goods or services for the organisation. In summary the policies direct that:

- All activity is conducted in accordance with Government Procurement Rules of Sourcing.
- The approval of all procurement will be endorsed in accordance with SDHB Delegation of Authority Policy.
- Conflicts of interest will be managed in accordance with SDHB Conflict of Interest Policy.
- All staff associated with procurement are to perform their duties in a way that is ethical, fair, unbiased and not affected by any self-interest or personal gain
- All purchasing will be controlled and evaluated in an effective and efficient manner.
- Processes will identify situations where tendering should occur.
- Peer review and advice will be sought from MBIE for the business cases and procurement plans valued at over $5 million.

The proposed programme governance structure aligns with the SDHB Delegation of Authority Policy and appropriate practice for a programme of this nature. The governance structure also ensures appropriate oversight across the digital programme, including procurement activities, with specified roles and interactions.

An external probity consultant will be appointed to assure all procurement processes and confirm compliance with SDHB and New Zealand Government procurement principles.

Figure 11 Logical procurement structure



The key factors and principles considered in the development of the procurement plan include:

- The relationship with the NDH construction programme and the need to ensure a coordinated approach to design, specification and procurement while managing programme interdependencies and risks associated with delays.
- The capability and capacity of the existing SDHB digital department. This influences what services and functions may be managed and delivered in house versus what needs to be procured from the market. This also includes the further development of SDHB to increase the capabilities associated with delivery and contract management.
- The availability and suitability of local vendors and service providers versus the need to seek international arrangements.
- The requirement to ensure the upskilling of New Zealanders and knowledge transfer to benefit the ICT sector and New Zealand overall.
- Regional collaboration and the opportunity to partner with other DHBs across the region to gain efficiencies across common procurement activities.
- Leveraging the investment and relationships the SDHB has made in its existing digital platforms and across the industry sector.
- The digital standards defined by the SDHB particularly that of "cloud first" preferring software and infrastructure be procured as a service.
- A southern wide approach noting systems will be deployed across the DHB not just the NDH.

- Flexibility in contract arrangements noting digital infrastructure, equipment and systems selected in the first tranche will largely set the direction to be followed for the second tranche yet the DHB requires flexibility to opt for alternate solutions (based on additional requirements and learnings) if required.
- Delivery to a future state master plan that all vendors and service providers are informed of and aligned to noting this will evolve over time.
- Early engagement and partnering with vendors and service providers to ensure trustful, resilient and sustainable relationships.

For each significant purchase, the DHB will follow a competitive process guided by the SDHB and New Zealand Government procurement principles, and will follow a structured, open market approach supported by the New Zealand Government Electronic Tenders Service (GETS).

4.5.1 Whole of life costs will be used

Value for money throughout the process is essential, and SDHB recognises this does not necessarily equate to achieving the lowest price but rather attaining the optimum combination of whole life costs and quality while staying within what is affordable.

VFM considerations will include seeking:

- **Upfront value** - savings that can be negotiated during the initial purchase and costs that can be avoided including opportunity costs the DHB will face if they don't proceed or transition in costs for setup and establishment of the solution.
- **Total Cost of Ownership (TCO) value** – the committed duration of the contract, a reduction in any transactional costs and savings in any transition out costs at the completion of the contract be it as scheduled or early.
- **Fit for Purpose (FFP) value** – confirming the solution meets the requirements and is compliant with the DHBs standards and vision while ensuring the supplier is capable of delivery within any constraints.

4.5.2 Timing of procurement

Most procurement activities are planned to occur in Tranche 1 of the programme and be finalised in Tranche 2 following formal approval of a detailed business case. Tranche 2 is focused on the outpatient's facility however the digital infrastructure, equipment and systems selected at this stage will largely set the direction for the inpatient facility, and for the broader uplift and alignment of other facilities throughout the DHB.

The contracts will be multi-staged and the SDHB will specify flexibility to extend solutions into the inpatient facility at a known and agreed cost or opt to procure alternate solutions at no disadvantage or cost penalties to the DHB. The opt out will be available if there are different requirements than those originally specified or if there is supplier non-performance.

4.6 Collaborating with other DHBs on procurement

SDHB will look to involve its regional counterparts and encourage the inclusion of additional requirements specific to those DHBs. This will establish the foundation for a broader, regionally attuned design which can be considered when procuring solutions, a process which may also include the participation of other DHBs.

A further way to derive value is to collaborate regionally. The NDH is not the only new hospital currently being designed in the southern region as Nelson Marlborough Health are also in the process of developing a business case for the redevelopment of Nelson Hospital. There is a significant opportunity for the SDHB digital programme to collaborate with Nelson Marlborough District Health Board in the specification and procurement of digital infrastructure and equipment required for a new health facility.

In both cases, with Nelson Marlborough Health on digital infrastructure and more broadly across the region for solutions, it is expected that collaboration will result in:

- More inclusive and comprehensive requirements.
- Better quality and more regionally attuned designs.
- Better bargaining power when it comes to procurement of equipment and solutions.
- Potential for cost sharing throughout both the procurement and implementation processes.

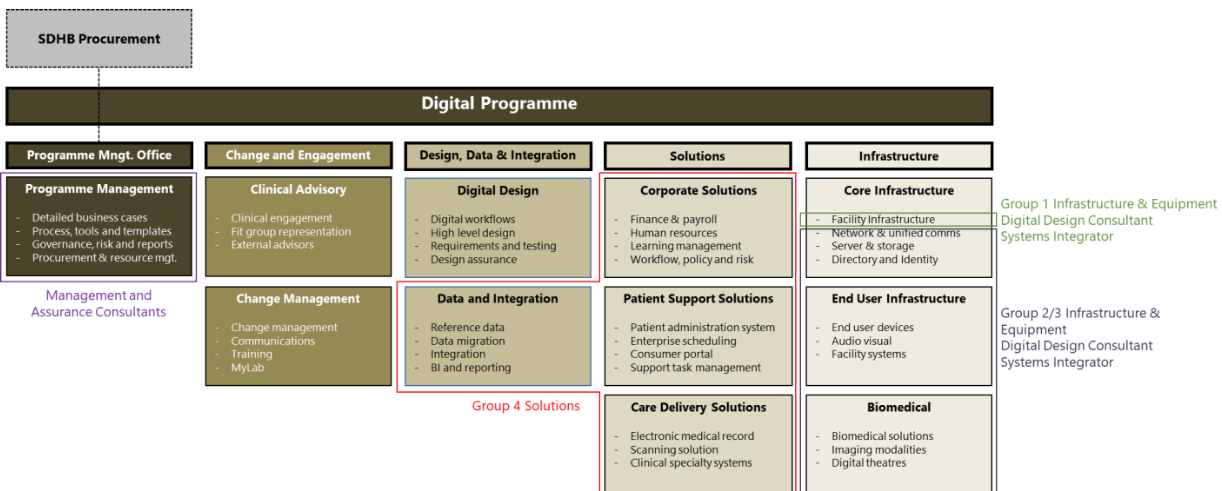
The final step to ensure value for money will be the appointment of a professional contract negotiator to assist in the final stages of the key procurements throughout the programme. This appointment is expected to secure fair and equitable prices and contracts that benefit all parties and provide firm foundations for long-lasting partnerships with key vendors.

4.7 Programme streams and timelines

As detailed in the management case the programme structure will comprise of several streams each consisting multiple sub streams and projects:

- The various procurement groups (1, 2/3 and 4) will be managed and delivered from within the corresponding stream.
- The Programme Management Office will include a procurement function to centrally coordinate all procurement activities across the programme.
- While individual streams and projects will prepare documentation, requirements and ultimately recommend any supplier selection, the PMO will be responsible for all processes, governance and enforcing delegations associated with procurement.
- For this reason, the programme procurement function will also have an indirect reporting line to SDHB's procurement department.

Figure 12 Programme streams



An overview of the key procurement activities by tranche and stream are detailed below.

Table 22 Key procurement activities

Tranche	Key Procurement Activities by Delivery Stream	Timing
Tranche 1	**Programme Management Office**	
Implementation	Appointment of key management & assurance consultants	Q1 2021
	Development of a detailed procurement plan	Q2 2021
	Communications to the market including public presentations	Q3 2021
	Solutions	
	Formal engagement of PAS supplier	Q2 2021
	Detailed requirements developed for the EMR	Q3 2021
	RFI / EOI released for SDHB systems	Q4 2021
	Infrastructure	
	Appointment of group 1 design consultant – MOH	Q1 2021
	Appoint group 2/3 design consultant – SDHB	Q1 2021
	Detailed requirements developed for G1, 2/3 infrastructure & equipment	Q4 2021
Tranche 2	**Programme Management Office**	
Outpatients	Ongoing management of procurement functions	2022 - 2024
	Solutions	
	Selection and engagement of EMR supplier	2022
	Selection and engagement of other SDHB systems	2023
	Infrastructure	
	Proof of concepts / early trials of infrastructure solutions	2022

Tranche	Key Procurement Activities by Delivery Stream	Timing
	Selection of G1 infrastructure & equipment - MOH	2023
	Selection of G2/3 infrastructure & equipment - SDHB	2023
Tranche 3	**Programme Management Office**	
Inpatients	Ongoing management of procurement functions	2024 - 2028
	Solutions	
	Requirements developed for additional solutions	2025
	Selection and engagement of additional solutions	2025
	Infrastructure	
	Extension of G1 infrastructure & equipment - MOH	2027
	Extension of G2/3 infrastructure & equipment - SDHB	2027

4.8 Contract provisions to address critical risks

Contracts will be multi-staged and provide the DHB the flexibility to extend infrastructure and solutions from the outpatient facility into the inpatient facility at a known and agreed cost or opt to procure alternate solutions (based on additional requirements and learnings) at no disadvantage or cost penalties to the DHB. Similarly, the hardware and solutions selected in Tranche 2 will initially be deployed throughout the existing Dunedin hospital and will include provisions for transition into the new facility and deployment throughout the rest of the DHB.

There are significant risks associated with Group 2 / 3 ICT infrastructure and equipment with the potential to delay the construction program. For example, the nurse call system cannot not be fully commissioned by the builder until the active network equipment has been procured and installed. To mitigate these risks the programme will allocate active infrastructure items on which the builder is highly dependent (e.g. network, digital operating theatres) to the Ministry of Health led project team with significant input from the SDHB. This has not currently been considered in the NDH Detailed Business Case but is the agreed strategy with the MOH, who will ensure the builder's contract includes the necessary subcontractor arrangements and commercial clauses.

5. The Management case – the implementation approach

The Management Case describes the structure and approach by which the digital programme will be managed and delivered and support the overall digital programme scope including:

- the construction and commissioning of a new digital-ready facility, and
- the uplift of existing SDHB facility's digital infrastructure and solutions to align the digital platform across the whole ecosystem.

This uplift and alignment contributes directly to enhancing the ability of the SDHB health system to adopt new ways of working and integrating, with anticipated productivity gains and improvements in patient care.

The management case is based on previous experience of systems integration and implementation, as well as carefully considering the known pitfalls of health IT implementation and broader lesson learnt from other new hospital projects and digital solutions programmes.

5.1 Health systems implementation context

SDHB has reviewed the health systems implementation literature, and the lessons are straightforward and practical. For instance[8], Creswell et al. note these implementation projects are reliant not just on successful technical implementation, but also:

- successful social buy-in to ensure there is use of systems rather than work-arounds and resistance to implementation, including successful integration with work patterns and positive uptake
- successful organisational implementation, including getting the organisation ready for change as well as appropriate planning and resourcing
- wider support, for instance, from the Ministry of Health, other South Island DHBs and local organisations such as PHOs.

Specifically, for in hospital implementations, SDHB has adopted the learnings from other new hospital projects and large-scale digital health investments internationally. These initiatives confirm the importance and dependency of the digital programme as a key enabler to successful hospital commissioning and identify the potential risks of an unstructured, ill-formed approach. These learnings have been used to inform the programme design and coordinated implementation plan.

System-wide adoption is particularly difficult, and uptake can be patchy, particularly with primary and community care. There has been research on implementation of EMRs, and there is a clear interplay

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[8] Cresswell, K. M., Bates, D. W., & Sheikh, A. (2013). Ten key considerations for the successful implementation and adoption of large-scale health information technology. Journal of the American Medical Informatics Association : JAMIA, 20(e1), e9–e13. https://doi.org/10.1136/amiajnl-2013-001684

between positive and negative influences, particularly in the agile environment of primary and community care. For example, from one meta-analysis of the relevant research[9]:

- "concerns about the accessibility, reliability and overall utility of the EMR appear to exert a sizeable adverse influence on PCP [Primary Care Practitioner] s' attitudes to adoption"
- "lack of EMR interoperability, limiting physicians' ability to exchange electronic information between other general practices or with secondary care IT systems was also highlighted as a barrier"
- "many PCPs were positive about EMRs' potential to improve clinical productivity and valued the automation of key clinical functions, like prescription renewals."

Failure to learn from these experiences can mean extensive, well-resourced and longitudinal investment may still not fully achieve its outcomes. For instance, in Norway, there has been considerable effort and investment in developing an EMR. Recent feedback[10] is that manually updated information into an electronic system is not trusted:

> Therefore, we can assume that the popularity of the pharmaceutical summary among doctors is based on their preference to place their trust in – and therefore more often utilise – automatically updated information. In addition, the doctors' lack of trust in manually updated information might have severe implications for the future success of the SCR and for similar digital tools for sharing patient information.

SDHB is careful to navigate this wider sector acceptance and intends to closely focus on issues of implementation and issues of data governance and privacy. Fortunately, these issues have been traversed in other DHBs, and lessons will be taken directly from that experience, as was done in the HealthOne implementation.

5.2 A high-level sketch of our approach

Considering this background, SDHB's strategy is as follows:

- Wherever possible, SDHB will use off-the-shelf, tried-and-true products, preferably delivered as software-as-a-service.
- Digital infrastructure will be implemented separately, with a high expectation of a level of service commensurate with that required of an essential service.
- Where there is tailoring, SDHB will ensure that such tailoring is in line as much as possible with the Ministry of Health's proposed nHIP environment.
- In adopting digital solutions, SDHB will align regionally as much as possible, such as in the selection and implementation of the Patient Administration System, and will extend

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[9] O'Donnell, A., Kaner, E., Shaw, C., & Haighton, C. (2018). Primary care physicians' attitudes to the adoption of electronic medical records: a systematic review and evidence synthesis using the clinical adoption framework. BMC medical informatics and decision making, 18(1), 101. https://doi.org/10.1186/s12911-018-0703-x

[10] Dyb, K., & Warth, L. L. (2018). The Norwegian National Summary Care Record: a qualitative analysis of doctors' use of and trust in shared patient information. *BMC health services research*, *18*(1), 252. https://doi.org/10.1186/s12913-018-3069-y

opportunities regionally in both directions (out to others and in to Southern) where those reveal themselves.

- Strong project governance, including integration of clinical leadership and close involvement of local health organisations such as WellSouth.
- In implementation, SDHB will ensure that SDHB leverages its own staff experience of implementation, including previous implementation of a Patient Administration System and design and implementation of Electronic Pharmaceutical Administration.

The project planning has paid attention to integration of clinician champions and development of expert users and has identified, documented and resourced considerable training effort. This change management effort is interlocking with the PMO for the NDH and with the wider SDHB health system change platform.

5.3 Overview of responsibilities

Responsibilities are shared between the construction of the NDH lead by the MOH project and wider commissioning of solutions led by the SDHB. Here is the layout of these responsibilities in more detail:

6. Responsibilities for the design and commissioning of digital infrastructure in the NDH are shared between the MOH project and the Southern DHB. The builder (under contract with the MOH) will procure and commission the facility infrastructure (comms rooms, structured cabling, etc).

7. The MOH NDH Project Team will also lead the procurement of the remaining infrastructure and equipment (active network equipment, audio visual equipment, computers, phones, etc) for the inpatient and the outpatient facilities however the SDHB will have greater input into the selection, detailed design and configuration of the solutions. Effectively the SDHB will act as the client and provide input and approvals while the MOH will manage the process of design, procurement, and delivery (under the builder). The SDHB will also be responsible for securing funds through the digital business case and ensuring the selected solutions stay within the allocated budget. This process ensures there are limited delivery dependencies on the SDHB and minimal opportunities to delay the builder and construction programme while allowing the SDHB to select technologies consistent with the environment and where appropriate extend existing infrastructure platforms.

8. SDHB will be responsible for the enhancement and implementation of new solutions (corporate, patient support and care delivery) necessary to support the facility design (including paper lite) and new enhanced models of care. Where possible, these new solutions will be commissioned and deployed throughout the DHB prior to commissioning the new facility. As part of this, SDHB will oversee the change management element of solutions implementation prior to new facilities arriving, and finally, align new solutions with the Southern DHB health system's wider connectivity to ensure the system functions as a whole.

5.4 Governance reflects complex stakeholder groups

Programme governance has been defined to create clear lines of accountability from the digital programme through the SDHB, noting the strong relationship and dependencies with the NDH

programme. Due to the complexity and multiple stakeholder groups, programme governance and management have been designed to centrally coordinate delivery and outcomes while ensuring dependencies with other programmes are coordinated and managed.

Figure 13 Programme governance structure

Southern Information Technology Governance Group
Southern DHB Change Programme
Informed
External Advisors and Assurance
Clinical Advisory Group
Digital Design Authority
Advice and Assurance
SDHB Board
SDHB Executive
Digital Programme Steering Committee
Governance
Executive Steering Group
Ministry Project Steering Group
NDH Programme Governance
NDH Programme
Digital Programme Control Group
Programme Mngt. Office
Change and Engagement
Design, Data & Integration
SDHB Systems
Infrastructure
Project Control Groups
Project Control Groups
Project Control Groups
Programme Management and Control

There are several tiers of governance, starting with the Digital Programme Steering Committee, which is an evolution of the current NDH working group.

The **Digital Programme Steering Committee** will be chaired by the Senior Responsible Officer (SRO), who has overall accountability for the digital programme and for ensuring it remains within the approved scope, timescales, budgets and remains on track to realise the projected benefits.

- The Executive Director People, Culture and Technology from the SDHB will be the programme SRO in recognition of the scale of the programme and integration within the existing information solutions department.
- The committee will also be responsible for ensuring the programme is aligned with the broader SDHB change and NDH programmes and that all dependencies are coordinated and resolved.
- Committee membership will include senior executives from across the DHB and MOH along with internal clinical representatives and external advisors.
- The committee will report directly to the SDHB executive, with indirect reporting lines to the NDH programme and information updates to the Southern Information Technology Governance Group to ensure regional alignment.

The **Digital Design Authority** will be chaired by the stream lead of design, data and integration and be responsible for oversighting the implementation and execution of a coordinated design approach.

This includes coordinating the development of high-level designs and standards across infrastructure, SDHB systems, integration and data and assuring all detailed designs developed within the various projects. Membership of the group will include solution analysts from across the programme and external advisors from other DHBs, MOH and sector partners.

The **Clinical Advisory Group** will be chaired by the clinical lead dedicated to the digital programme and will be responsible for assisting in the development of requirements and providing a clinical interface to the organisation. The group will review and assure all works to ensure successful alignment of technology with new models of care and future clinical workflow. Membership of the group will include clinical SMEs from across the programme and additional clinical staff to represent a cross section of the DHB. The group will provide updates and recommendations to the digital programme steering committee and SDHB executive regarding clinical alignment of the programme. The group will also have an indirect reporting line to the SDHB clinical leadership group to ensure alignment with the broader SDHB change and NDH programmes.

The **Digital Programme Control Group** will be chaired by the Programme Manager, with each stream lead reporting status updates to the group. The group will provide operational oversight and control against an integrated programme and schedule while managing and addressing programme issues, monitoring risk and quality.

At the lowest level, a series of **Project Control Groups** will be established across the various delivery streams for each key project (e.g. Patient Administration System) to monitor and control progress and status of the project. Each project control group will be chaired by the corresponding stream lead, with the project manager reporting status updates to the group. A Senior Responsible Officer (SRO) from the relevant business area will be appointed to each project, they will be responsible for ensuring project objectives are met. Along with the SRO, other attendees will include suppliers (internal and external vendors) and representatives from the PMO, change and engagement stream, and advice and assurance function. Project control groups will escalate issues through their stream to the overarching programme wide control group.

5.5 Programme characteristics

We set out in this section the approach that SDHB will take to programme implementation.

5.5.1 Programme design means implementing systems before moving to a new facility

Programme implementation will be based on several sequential tranches aligned with the design, construction, and commissioning of the new facility. The enhancement and implementation of new DHB solutions will also be managed within these tranches. However, new solutions will go live first, allowing service ***transformation*** to occur and settle prior to the ***transition*** into the new facility. This will greatly reduce the risk associated with the significant amount of organisational change related to the broader NDH programme.

5.5.2 A single Programme Management Office

The structure consists of a single **Programme Management Office (PMO)** responsible for implementing a structured, gated project process along with programme wide functions, including: procurement and resource management; processes, tools and templates; governance, risk and reporting. In addition, the PMO will lead the development of the detailed business cases related to each tranche of the programme. The PMO will have an indirect reporting line to the NDH PMO to ensure coordination and consistency in processes, governance, and reporting.

5.5.3 Programme structured around several streams

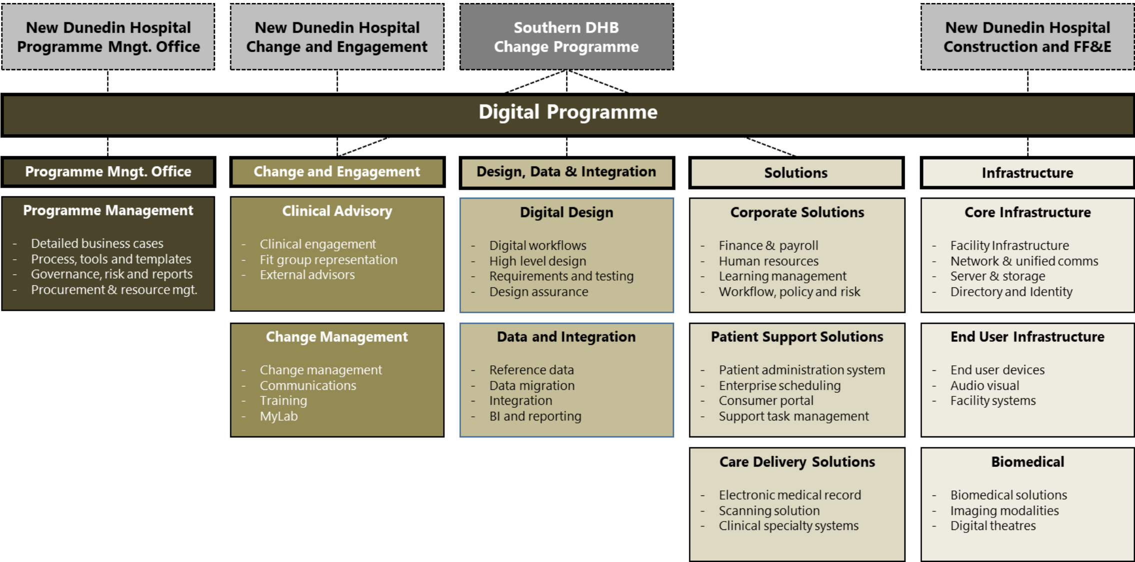
The programme will be structured around several streams and sub-streams, some with the responsibility for delivery of specific technology components (e.g. care delivery systems), while others will provide cross-programme services to all other streams and projects (e.g. data and integration), ensuring consistency in design and approach. The streams that we identify are as follows:

- The **Change and Engagement** stream will lead clinical engagement and validate all requirements collected and considered during digital design. The stream will also ensure representation and coordination with other related programmes and inclusion of external advisors and subject matter experts as required. Finally, the stream will include a centralised change and communications capability, along with a centrally coordinated training discipline and the delivery of a Proof of Concept "PoC" facility, MyLab. The change and engagement stream will have an indirect reporting line to the NDH and SDHB change programmes to ensure alignment in engagement, change, communications and training activities.
- The **Design, Data and Integration** stream is responsible for the design and architecture throughout the implementation. This workstream will work with the SDHB change programme to understand new models of care and clinical workflow. The stream will record and track digital requirements through to fulfilment, while leading the digital strategy, including end-to-end digital design proficiency and architecture (noting design will occur within the SDHB systems and infrastructure streams). In addition, the stream will manage all aspects of data and integration, providing the development of interfaces and data migration as a service to the SDHB systems stream. To do this, there will be a group of four to five solution analysts providing technical leadership (testing, configuration, data migration, etc) in project implementation. There will also be four to five business analysts leading definition of requirements and specific leadership of testing and data migration.
- The **Solutions** stream will be responsible for the enhancement and implementation of new software solutions (corporate, patient support and care delivery) across the DHB necessary to support the facility design (including paper lite) and new enhanced models of care. During hospital commissioning, the stream will also update and test all existing solutions ready for use in the new facility (outpatients and inpatients building). This group will be temporary implementors (fixed term or vendor supplied).
- The **Infrastructure** stream will focus on delivery of digital infrastructure to support the NDH, along with the uplift and standardisation of infrastructure across all existing SDHB facilities. The stream will have an indirect reporting line to the NDH construction and FF&E programmes based on the shared responsibilities. The FF&E programme will be

responsible for the procurement and delivery of biomedical equipment; however, the infrastructure stream will support the digital integration.

In several cases, the programme streams will have indirect reporting lines to other NDH and SDHB programmes to ensure alignment and coordination of dependencies.

Figure 14 Programme structure



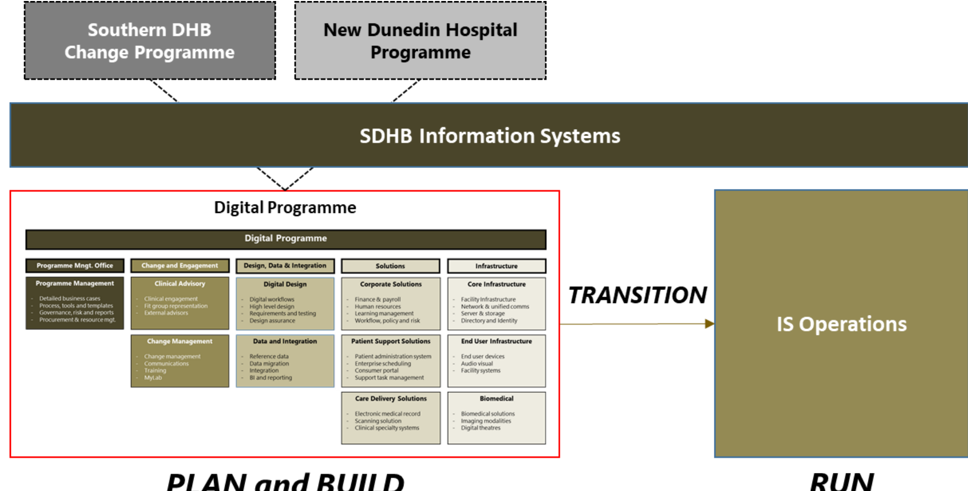
5.5.4 Business as usual will run separately

The digital programme will operate from within the SDHB information systems (IS) department (with indirect reporting lines to the SDHB change and NDH programmes), fulfilling the ***plan*** and ***build*** stages of the digital lifecycle. The programme will oversee the design and implementation of all new digital infrastructure and solutions, including significant upgrades, small projects and tactical solutions.

Existing teams will fulfil the ***run*** stage and continue to operate and maintain the business as usual (BAU) environment.

As the digital programme commissions new infrastructure and solutions, they will be transitioned to the operations team for day-to-day administration, support and maintenance. The programme will work with IS operations at the commencement of the programme to confirm the transition approach and ensure seamless handover as scheduled.

Figure 15 Programme context



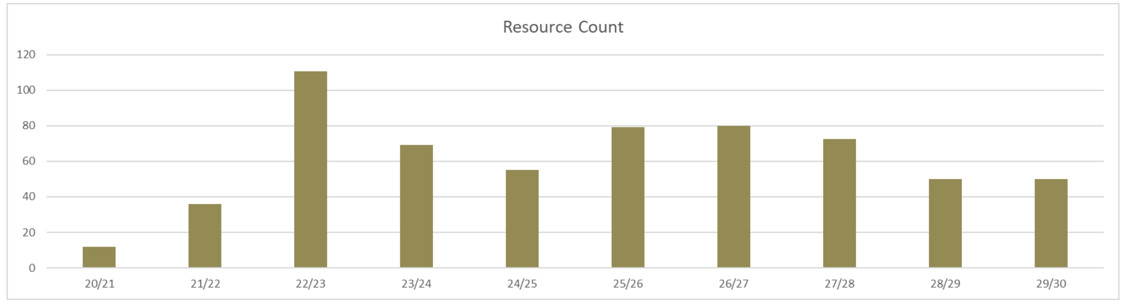
5.5.5 Resourcing from employees through to sector partners

Programme resources are expected to comprise a combination of SDHB employees (some full-time, some part-time), fixed-term contractors, consultants and sector partners. A recruitment strategy will be developed to ensure that a capable and experienced digital workforce will support the programme. All roles will be new to the SDHB, and existing SDHB staff will be encouraged to apply. Any successful candidates' existing roles will be backfilled, ensuring a level of current systems knowledge is included within the team.

This approach would ensure the best combination of subject matter expertise and institutional knowledge and would provide the most cost-effective structure, as resources would only be engaged for the period required.

Initial estimates indicate as many as 110 dedicated programme resources are required at peak periods (excluding consultants and sector partners) with an average of ~80 dedicated resources required throughout the life of the programme.

Figure 16 Programme resource estimates



5.5.6 A dedicated pool of clinicians

The programme will be clinically led, utilising a dedicated pool of clinicians to develop requirements and manage change throughout the organisation. Nurses are particularly critical to implementation of Patient Administration Systems and are very much included, as are other professions, including allied health. A clinical advisory group will also review and assure all works to ensure successful alignment of technology with new models of care and proposed workflow in the new facility.

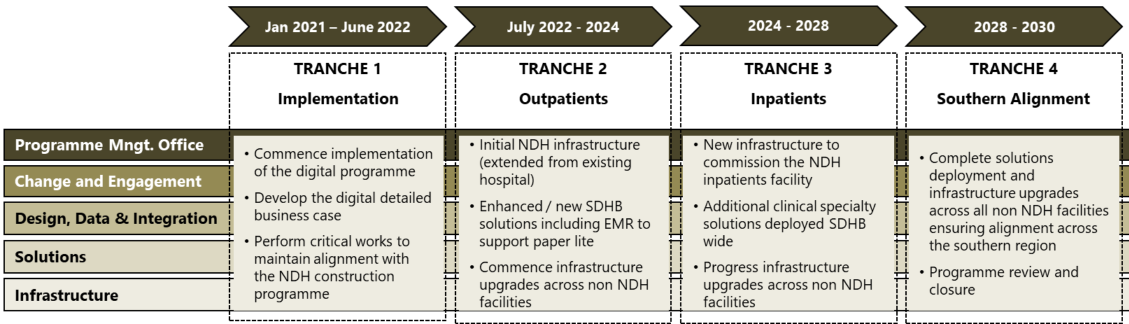
5.6 Four programme tranches

The programme will be structured around commissioning of the two facilities: the NDH outpatient facility in 2024, followed by an inpatient facility in 2028. This activity will be bookended by two further tranches being:

- Tranche 1 – Implementation (during which the Detailed Business Case will be developed) and
- Tranche 4 – Southern Alignment (during which all works will be finalised across the DHB).

The work within each tranche will learn from the previous and formal internal and external reviews undertaken before proceeding from tranche to the next.

Figure 17 Programme tranches



5.7 Expectations and deliverables from each tranche

5.7.1 Tranche 1: Implementation (January 2021 – June 2022)

The key objective of Tranche 1 is to commence implementation of the digital programme. This includes realigning the Digital Department to ensure successful delivery of the wider Southern digital programme, developing a detailed digital business case and commencing the critical works required to maintain alignment with the NDH construction programme.

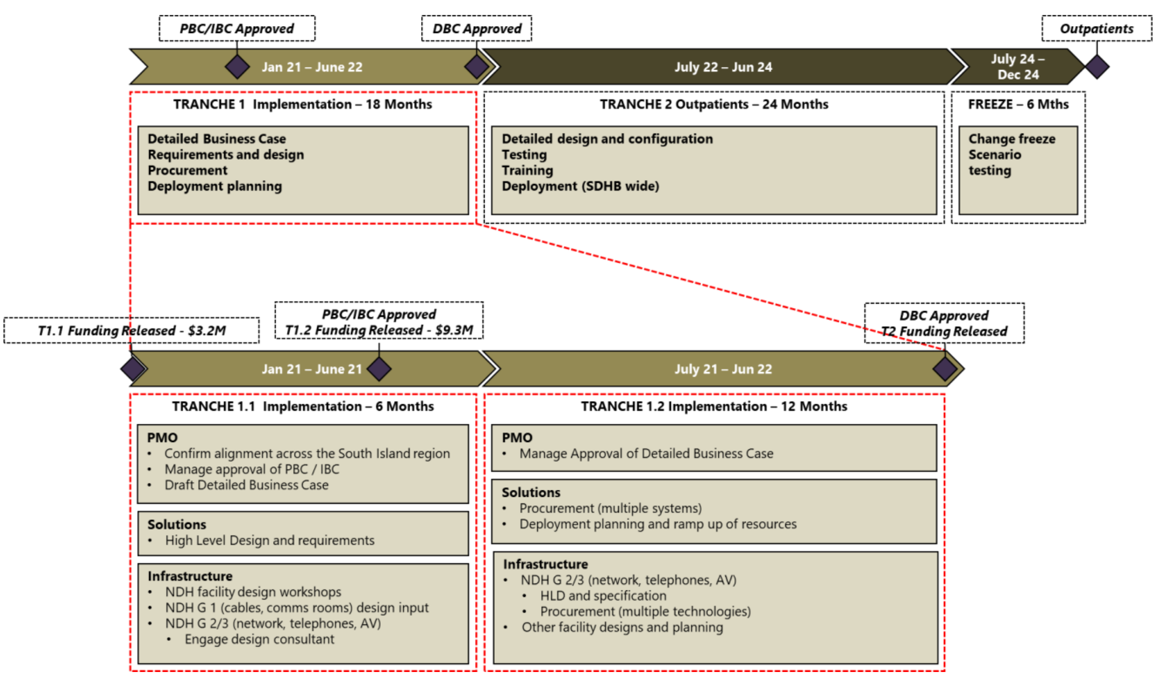
Solutions projects already underway within the SDHB will be progressed including the Patient Administration System (PAS) and scanning solution necessary to support the "paper lite" design principle. Other key solutions projects including enterprise scheduling, consumer portals and Electronic Medical Record (EMR) will gather detailed requirements and to go to market for products and solutions.

In parallel, the infrastructure stream will work with the MOH appointed consultant to specify and design facility infrastructure while the SDHB will also appoint a design consultant (potentially the same consultant) to specify and design the remaining digital infrastructure.

Tranche 1 works must commence in January 2021 to maintain alignment with the NDH construction programme and allow time for solutions deployment prior to the opening of Outpatients. In order to progressively plan and fund Tranche 1 it has been further divided into two sub tranches being:

- Tranche 1.1 (January 2021 to June 2021, 6 months) – focused on developing the detailed business case and progressing the solutions and infrastructure designs.
- Tranche 1.2 (July 2021 – June 2022, 12 months) – focused of approval of the detailed business case, procurement and selection of solutions and ramp up of resources ready for Tranche 2.

Figure 18 Tranche 1.1 and 1.2



Tranche 1.1: Implementation (January 2021 – June 2021)	
Programme Mngt. Office	• Manage approval of indicative business case / indicative business case. • Develop the detailed business case.
Change and Engagement	• Regional engagement and alignment.
Design, Data & Integration	• Implement a digital design approach including assurance. • Work with SDHB change programme on new models of care and health pathways. • Develop high level data, solutions and integration designs.
Solutions	• Gather requirements for new solutions.
Infrastructure	• Participate in facility design workshops. • Work with the MOH consultant to specify and design facility infrastructure (Group 1). • Appoint a design consultant to specify and design the remaining digital infrastructure (Group 2 / 3).

Tranche 1.2: Implementation (July 2021 – June 2022)	
Programme Mngt. Office	• Realign the Information Solutions Department and establish the PMO including processes, tools, and templates. • Implement governance and reporting. • Recruit key resources across all streams. • Manage approval of the detailed business case. • Address the market and prepare procurement approach for key projects.
Change and Engagement	• Develop a detailed change and engagement plan. • Establish the necessary clinical governance forums. • Identify and engage external advisors. • Commence programme communications.
Design, Data & Integration	• Implement a digital design approach including assurance. • Further develop high level data, solutions and integration designs. • Develop and implement a requirements traceability and testing framework.
Solutions	• Progress current projects including PAS and scanning solution. • Procure, and commence implementation of new solutions.
Infrastructure	• Design consultant specifies and designs the remaining digital infrastructure (Group 2 / 3). • Progress design and planning for infrastructure upgrades across other non NDH facilities

5.7.2 Tranche 2: Outpatients (July 2022 – 2024)

The key objectives of Tranche 2 are:

- deliver initial IT infrastructure to commission the outpatients facility (noting this will be extended from and remain dependant on the existing hospital)

- enhance/implement new solutions to support key aspects of the outpatients building including "paper lite"
- commence infrastructure upgrades across non-NDH facilities.

Enhanced/new solutions will include a new Patient Administration System (PAS) aligned with the regional solution and supported by enterprise scheduling and a patient engagement portal. Solutions will also include a new core Electronic Medical Record (EMR), including electronic forms and clinical workflow, eliminating the current paper-based chart.

Tranche 2: Outpatients (July 2022 – 2024)	
Programme Mngt. Office	• Manage and maintain programme governance and reporting including processes, tools, and templates • Manage programme wide resources across all streams • Manage procurement and contract performance for each project
Change and Engagement	• Manage clinical engagement and associated forums • Implement change management strategies, including regular communications and operation of "MyLab" • Manage training across all new digital infrastructure and systems
Design, Data & Integration	• Manage the digital design approach and assurance • Manage the requirements traceability and testing framework • Implement integration and BI and reporting platforms • Develop interfaces and perform data migration to solutions
Solutions	• Implement enhanced / new systems across the DHB including: ◦ Corporate: HR, learning management and workflow ◦ Patient support: PAS, enterprise scheduling, consumer portal ◦ Care delivery: EMR, scanning
Infrastructure	• Implement new infrastructure to support commissioning of the outpatient facility noting that some components (e.g. network) will be extended from and remain dependant on the existing facility • Commence infrastructure upgrades across non NDH facilities

5.7.3 Tranches 3: Inpatients (2024 – 2028)

The key objective of Tranche 3 is to deliver new infrastructure to commission the inpatient facility, which will include rerouting and disconnection from the existing hospital.

Solutions will also continue to be delivered including additional clinical specialty systems (details to be determined once the EMR solution is known) to further support the EMR delivered in the previous tranche.

Finally, this tranche will also include the continuation of infrastructure upgrades across non NDH facilities.

Tranche 3: Inpatients (July 2024 – 2028)	
Programme Mngt. Office	• Manage and maintain programme governance and reporting including processes, tools, and templates • Manage programme-wide resources across all streams • Manage procurement and contract performance for each project
Change and Engagement	• Manage clinical engagement and associated forums • Implement change management strategies including regular communications and operation of "MyLab" • Manage training across all new digital infrastructure and systems
Design, Data & Integration	• Manage the digital design approach and assurance • Manage the requirements traceability and testing framework • Implement integration and BI and reporting platforms • Develop interfaces and perform data migration to SDHB systems

Solutions	• Implement enhanced/new systems across the DHB including:
	  ◦ Corporate: finance and payroll
	  ◦ Patient support: support task management
	  ◦ Care delivery: selected specialty systems

Infrastructure	• Implement new infrastructure to support commissioning of the inpatient facility, which will include rerouting and disconnection of outpatients from the existing facility • Continue infrastructure upgrades across non NDH facilities.

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5.7.4 Tranche 4: Southern Alignment (2028 – 2030)

The key objectives of Tranche 4 are to complete solution deployment and infrastructure upgrades across all non NDH facilities and ensure alignment across the southern region.

In addition, the PMO will manage review and closure activities across the programme.

Tranche 4: Southern Alignment (July 2028 – 2030)	
Programme Mngt. Office	• Manage and maintain programme governance and reporting, including processes, tools, and templates • Manage programme wide resources across all streams • Manage procurement and contract performance for each project • Manage programme review and closure
Change and Engagement	• Manage clinical engagement and associated forums • Implement change management strategies including regular communications and closure of "MyLab" • Manage training across all new digital infrastructure and systems
Design, Data & Integration	• Manage the digital design approach and assurance • Manage the requirements traceability and testing framework • Implement integration and BI and reporting platforms • Develop interfaces and perform data migration to SDHB systems
Solutions	• Complete the implementation of all enhanced and new solutions across all facilities throughout the southern region.
Infrastructure	• Complete the upgrade and standardisation of all infrastructure across all facilities throughout the southern region.

5.8 The adopted programme methodology is Managing Successful Programmes

The overarching digital programme will be managed using the Managing Successful Programmes (MSP) framework whereby large, complex change can be broken down into manageable, interrelated projects. MSP comprises a set of principles and processes for managing a programme, which are founded on best practice and focus on achieving outcomes and realising benefits. The PMO will be responsible for implementation of the MSP framework through the processes, tools and templates they will develop and deploy across the programme.

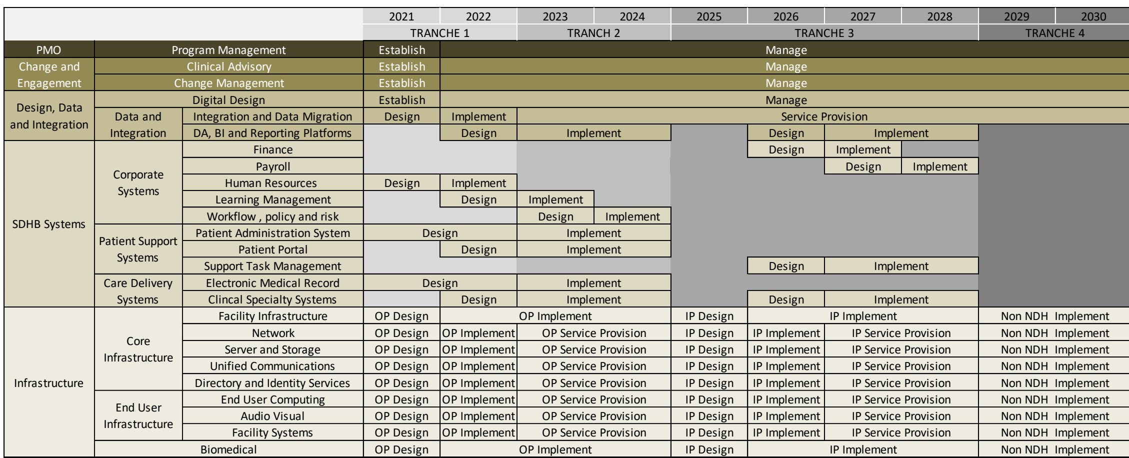
5.8.1 A range of project methodologies as suited to the circumstance

The programme will adopt a blend of approaches and methodologies to best suit different streams of work and technology components. This includes traditional waterfall delivery for digital infrastructure closely aligned with the construction programme, agile delivery for software and interface components, and a service management framework (ITIL) for management of capacity and configuration of infrastructure platforms once commissioned.

Whether a project uses a traditional waterfall delivery or agile delivery approach, in all cases projects will align with PRINCE2 methodology to utilise a standards-based framework widely known throughout the industry or easily learned by staff joining the programme.

A summary of key project stages are as follows.

Figure 19 Key project stages



			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
			TRANCHE 1		TRANCH 2		TRANCHE 3				TRANCHE 4	
PMO	Program Management		Establish	Manage								
Change and Engagement	Clinical Advisory		Establish	Manage								
	Change Management		Establish	Manage								
Design, Data and Integration	Digital Design		Establish	Manage								
	Data and Integration	Integration and Data Migration	Design	Implement	Service Provision							
		DA, BI and Reporting Platforms		Design	Implement			Design	Implement			
SDHB Systems	Corporate Systems	Finance						Design	Implement			
		Payroll							Design	Implement		
		Human Resources	Design	Implement								
		Learning Management		Design	Implement							
		Workflow , policy and risk			Design	Implement						
	Patient Support Systems	Patient Administration System	Design		Implement							
		Patient Portal		Design	Implement							
		Support Task Management						Design	Implement			
	Care Delivery Systems	Electronic Medical Record	Design		Implement							
		Clincal Specialty Systems		Design	Implement			Design	Implement			
Infrastructure	Core Infrastructure	Facility Infrastructure	OP Design	OP Implement			IP Design	IP Implement			Non NDH Implement	
		Network	OP Design	OP Implement	OP Service Provision		IP Design	IP Implement	IP Service Provision		Non NDH Implement	
		Server and Storage	OP Design	OP Implement	OP Service Provision		IP Design	IP Implement	IP Service Provision		Non NDH Implement	
		Unified Communications	OP Design	OP Implement	OP Service Provision		IP Design	IP Implement	IP Service Provision		Non NDH Implement	
		Directory and Identity Services	OP Design	OP Implement	OP Service Provision		IP Design	IP Implement	IP Service Provision		Non NDH Implement	
	End User Infrastructure	End User Computing	OP Design	OP Implement	OP Service Provision		IP Design	IP Implement	IP Service Provision		Non NDH Implement	
		Audio Visual	OP Design	OP Implement	OP Service Provision		IP Design	IP Implement	IP Service Provision		Non NDH Implement	
		Facility Systems	OP Design	OP Implement	OP Service Provision		IP Design	IP Implement	IP Service Provision		Non NDH Implement	
	Biomedical		OP Design	OP Implement			IP Design	IP Implement			Non NDH Implement	

Refer to the detailed schedule in the appendix.

5.9 Change management using Prosci ADKAR

Some organisational changes (including processes and workflow) will be introduced directly as a result of new digital infrastructure and solutions. These changes will be managed within a well-known digital

change programme using the Prosci ADKAR model based on Awareness, Desire, Knowledge, Ability and Reinforcement.[11]

As with all aspect of the digital programme, changes will be clinically led by Senior Medical Officers and other senior clinical staff embedded within each project. Clinical oversight will be through the programme's clinical lead and with the Clinical Advisory Group.

The primary barrier to the adoption of new technology is a need for greater digital literacy throughout an older workforce. Dedicated communications and training capabilities are included in the digital programme, and a general digital literacy training programme commences at the beginning of Tranche 2. There will be considerable effort to raise the capability of the organisation prior to the introduction of significant new solutions.

9

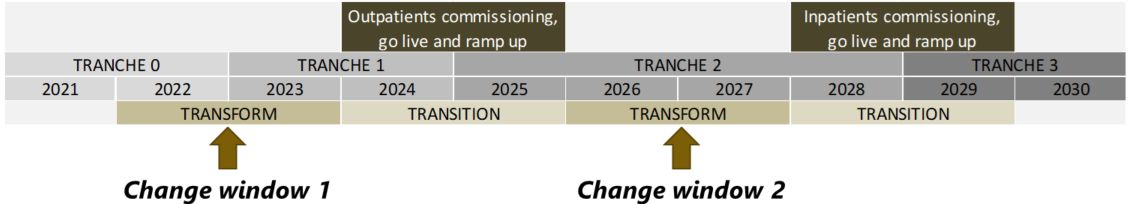
5.9.1 Transition only during facility commissioning

NDH is planned to go live in two stages over several years: outpatients in late 2024, followed by inpatients in late 2028. As each building nears completion, SDHB staff will be extremely busy. They will be required to dedicate significant time and effort to commissioning the new facility (including familiarisation, induction, equipment transfer, certification and scenario testing). This commissioning will be followed by go live and ramp up of services.

The period of commissioning is unsuited to the introduction of new solutions and technologies. That time must be allocated to transition into the new facility with a known and familiar set of digital solutions, rather than simultaneous transformation of solutions.

There are two change windows where there is opportunity to transform services and introduce new solutions, processes and workflows. These windows have been considered in developing the digital programme, and project schedule has been aligned with these change windows.

Figure 20 Change windows



The change and engagement stream will have an indirect reporting line to the NDH and SDHB change programmes to ensure alignment in engagement, change, communications and training activities.

[11] https://www.prosci.com/resources/articles/change-management-methodology#:~:text=Prosci's%20model%20of%20individual%20change,of%20the%20need%20for%20change

5.9.2 A demonstration laboratory will be a key enabler

In addition, the programme will establish and operate a physical and virtual space known as MyLab to showcase new digitally-enabled models of care; demonstrate enhanced healthcare experiences for both staff and patience; co-create with staff, patients and wider communities on new ways to deliver healthcare experiences; and research and seek feedback on emerging technologies and what can create the most value to our people and communities.

5.10 Risk management

The digital programme will adopt and work within the NDH risk management framework, which defines and establishes the required activities and responsibilities for the management of risk for the NDH project. This approach also utilises the Ministry of Health's approved Risk Management framework and tools, to which the Southern District Health Board's risk management approach aligns. The framework is closely aligned to the AS/NZS ISO 31000 Risk Management – Principles and guidelines (2018) and the Ministry's Risk Management Policy (February 2018).

Refer to Appendix 1.8.6 for an initial digital programme risk register.

6. Appendices

1.1 Southern Health's Digital Future
1.2 Digital Capability Model
1.3 Digital Architecture Standards
1.4 Proposed High Level Solutions
  1.4.1 Solution Context Map
  1.4.2 Solution Overview
  1.4.3 Solutions by Process
  1.4.4 Solutions by Module
  1.4.5 Solutions by Service
  1.4.6 Solutions by Transformation Approach
1.5 Digital Implementation Roadmap 2021 – 2024
1.6 New Dunedin Hospital Digital Blueprint
1.7 Digital Programme – Commercial Options Analysis
1.8 Digital Programme Overview
  1.8.1 Tranche 1 Plan
  1.8.2 Roles and Responsibilities
  1.8.3 Scope Options
  1.8.4 Lessons Learnt Register
  1.8.5 Communications and Assurance
  1.8.6 Risk Register
1.9 Change - A Work in Progress

Digital IBC Overview

Kind Manaakitanga	Open Pono	Positive Whaiwhakaaro	Community Whanaungatanga

Approach

1. Business case context

- Indicative Business Case
- Detailed Business Case (draft June 2021)
- Implementation Business Cases (1 per tranche)

2. Indicative Business Case approach

1. Full review of NDH functional design brief – identified digital requirements / scope
2. Process mapping with sample services – highlighted changes and potential benefits
3. Reviewed staff surveys – identified problems with current state
4. Workshops with other digital hospital projects – confirmed scope and identified risks
5. Workshops with business stakeholders - confirmed priorities
6. Scope workshops – identified options
7. Roles and responsibilities workshops – confirmed responsibilities with MOH

3. External input, review and assurance

- Digital hospital Subject Matter Expert - scope, delivery approach
- Sapere Research - author and alignment with NDH
- Price Waterhouse Coopers - validate clinical solutions costs
- MOH - alignment with national digital strategies
- Southern region – alignment with requirements and digital blueprint
- Treasury review clinics (including key departments) x 2
- Investment Quality Assessment - KPMG
- Technical Quality Assessment – Akceli Consulting
- Gateway review (Gate 0)

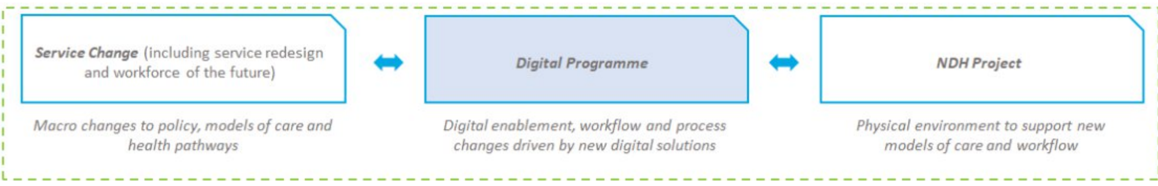
9

Strategic Case

1. Inputs and considerations:

- SDHB strategic plan
- NDH Business Case
- South Island Data and Digital Strategy
- MOH Digital Health Strategic Framework
- Staff surveys
- Stakeholder interviews

2. Context and interdependencies:



3. Problem definition:

The design, quantity and quality of existing digital infrastructure solutions will not allow New Dunedin Hospital to operate as designed. [50%]
Clinical and care delivery solutions are fragmented, information is siloed, requiring manual workarounds that create errors and risk harm to patients. [20%]
Clinical and care delivery solutions do not support new models of care and other innovations that will enable performance improvements and patient empowerment. [30%]

4. Investment objectives (consistent with NDH business case):

1. Ability to adapt – to create responsive infrastructure and capability that supports disruptive health system change.
2. Optimise use of total health system resources.
3. To reduce non-value-added time by 80 per cent to create a seamless patient journey.
4. To improve the patient and staff experience.
5. To reduce the risk of harm to ‘acceptable standards.

5. Equity:

- The IBC identifies the need to minimize the “digital divide”
- Further work required in the DBC

Economic Case

1. Critical success factors:

- **Business needs** – allows the NDH to operate as designed
- **Strategic fit** – aligns with national and regional strategies (i.e. obligations can be fulfilled).
- **Affordability** – is within available resources to purchase, operate and maintain.
- **Coherence** – the option is internally coherent and works as a system
- **Achievability** – can be delivered and used (i.e. aligns with organisation maturity).

2. Scope (SDHB wide including NDH):

- **Digital infrastructure** – a digital hospital is highly dependent on robust infrastructure and equipment that provides sufficient capacity to connect and share data across all devices and enables the future deployment of emerging technologies
- **Digital solutions** – the software systems (clinical, patient support and corporate) that digitise activities, store, and integrate data, and enable the automation and streamlining of processes to support modern hospital design and models of care.

3. Options Assessed (used HIMMS to define):

1. Do nothing
2. Maintain current state
3. Enhanced functionality (HIMMS level 3-5)
4. Advanced functionality (HIMMS level 6-7)
5. Hybrid

4. Preferred option - 5. Hybrid

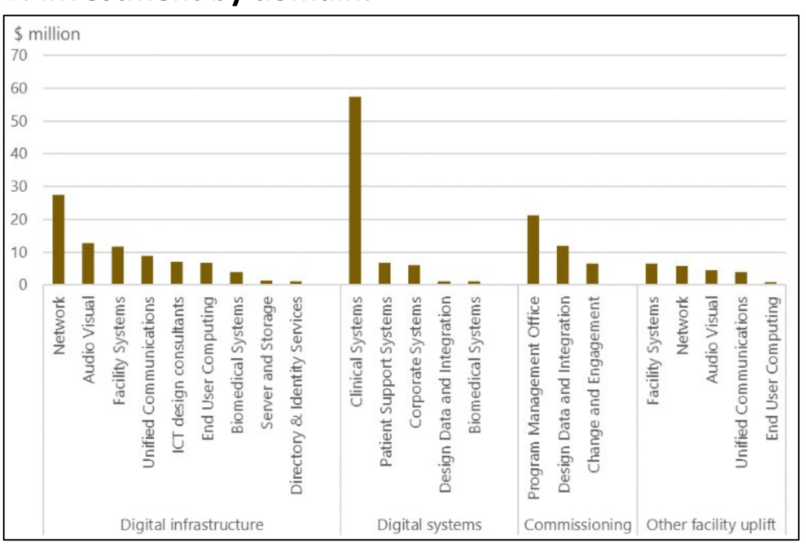
*Digital **infrastructure** to an **advanced** level and digital **solutions** to an **enhanced** level. The logic is that the digital infrastructure is built into place during the facility construction period, thereby ensuring that **adequate capacity** is available for the progressive uptake of new digital solutions over the next decade. The option is intended to **minimise digital infrastructure upgrades**, which may be more costly and more disruptive to install later in a working hospital. It also reflects some caution about the ability to leap from the current state to the advanced digital solutions.*

Financial Case

1. Total investment required:

- total capital expenditure over ten years of **$215.4M**
- **$174.6M from MOH**
- **$40.8M from SDHB** internal cashflows
- **Consistent with the NDH detailed business case** which states "*We also note that $175m Crown-funded capital expenditure relating to IT projects for NDH has been included in the financials. This expenditure, although integral to the successful completion of the NDH, has been the subject of a separate business case*".

2. Investment by domain:

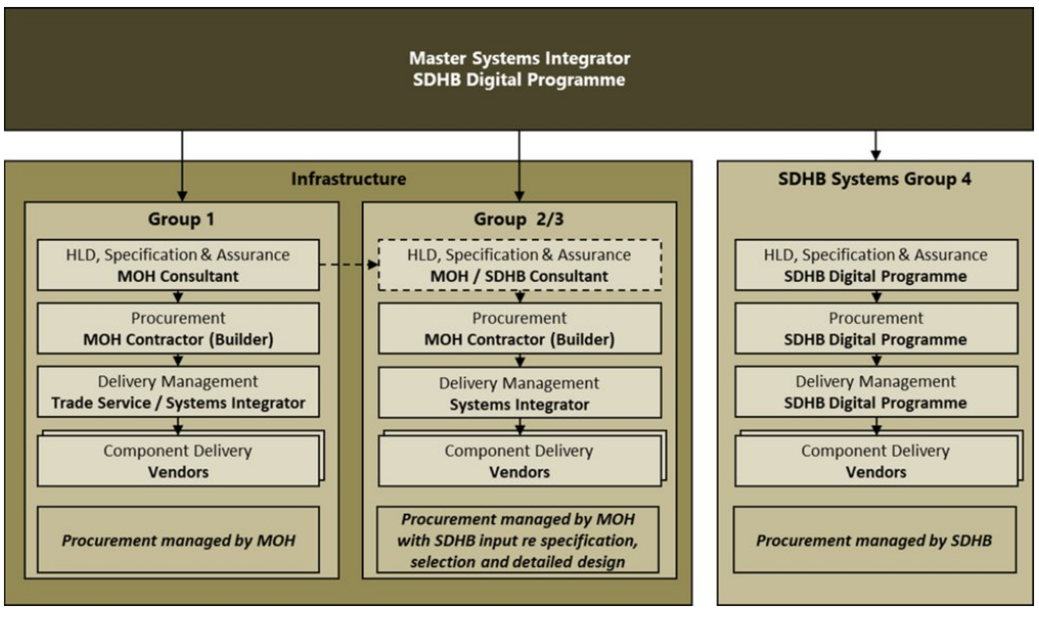


3. Projected cashflow and funding requirements over 10 years:

Capex Cashflows Scenario1	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	Total
MoH	$ 3.0	$ 5.1	$ 45.7	$ 33.0	$ 11.5	$ 9.4	$ 11.2	$ 24.8	$ 24.9	$ 6.0	**$ 174.6**
SDHB	$ 0.2	$ 4.2	$ 5.9	$ 15.7	$ 9.7	$ 0.8	$ 0.6	$ 1.3	$ 1.4	$ 0.4	**$ 40.3**
Total new Capex	**$ 3.2**	**$ 9.3**	**$ 51.6**	**$ 48.8**	**$ 21.2**	**$ 10.1**	**$ 11.8**	**$ 26.1**	**$ 26.3**	**$ 6.4**	**$ 214.9**
Replacement capex (SDHB)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.3	$ 0.2	**$ 0.5**
Total ICT capex for DHR	**$ 3.2**	**$ 9.3**	**$ 51.6**	**$ 48.8**	**$ 21.2**	**$ 10.1**	**$ 11.8**	**$ 26.1**	**$ 26.6**	**$ 6.6**	**$ 215.4**

Commercial Case

1. Logical commercial structure:



2. Scope of procurement groups:

Group	Definition	Digital Scope (examples)
Group 1	Digital infrastructure and equipment procured and delivered by the builder as a component of the construction project.	• Comms rooms • Structured cabling • Nurse call system • Engineering systems
Group 2 / 3	Digital infrastructure and equipment procured and delivered by MOH (via the builder and systems integrator) with greater input into the specification, selection, detailed design and configuration by the SDHB. The digital infrastructure and equipment selected will set the direction to be followed for the broader uplift and alignment of other facilities throughout the DHB.	• Network equipment • Telephony equipment • Audio visual equipment • PCs, laptops, printers • Patient engagement system • Outpatient check in system
DHB Solutions (Group 4)	New or enhanced software solutions (Care delivery, corporate and patient support) required to support the facility design and enhanced models of care.	• Patient Admin System • Electronic Medical Record • Patient engagement portal • Clinical sub systems • HR and Payroll systems

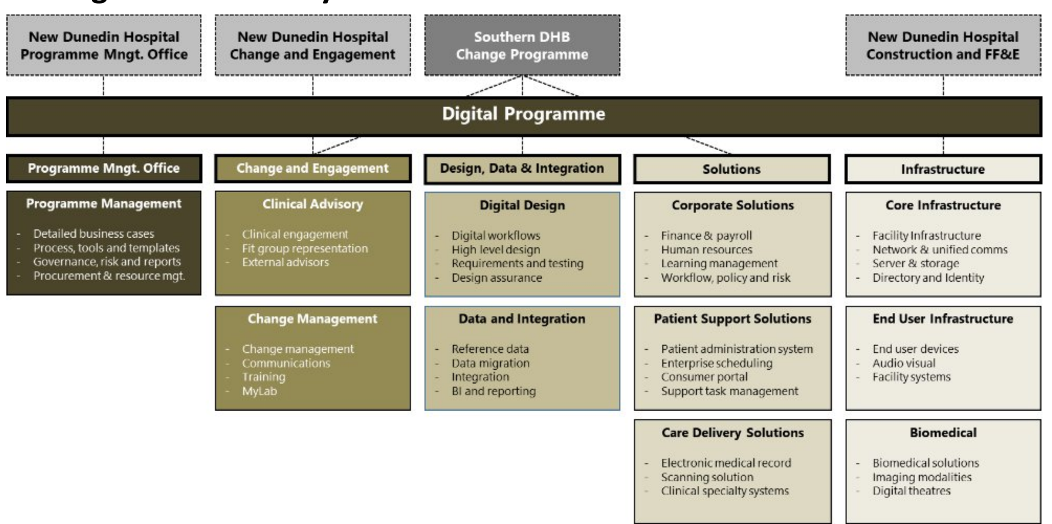
9

3. Other key points:

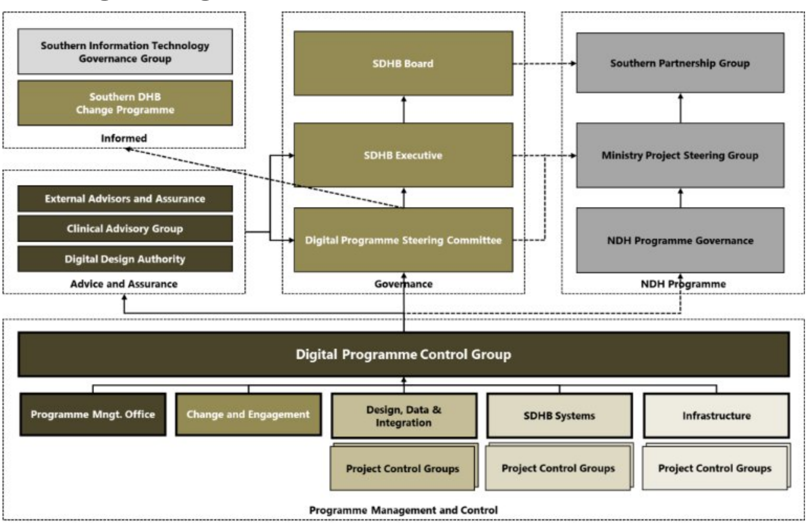
- Initial **assessment of the market indicates a high level of interest** (both across the infrastructure and solutions streams) supported by a strong New Zealand presence of tier 1 and 2 systems integrators, infrastructure, and software solutions vendors.
- **Regional collaboration** is expected to result in more inclusive and comprehensive requirements; better quality and more regionally attuned designs; better bargaining power when it comes to procurement of equipment and solutions; potential for cost sharing throughout both the procurement and implementation processes.

Management Case

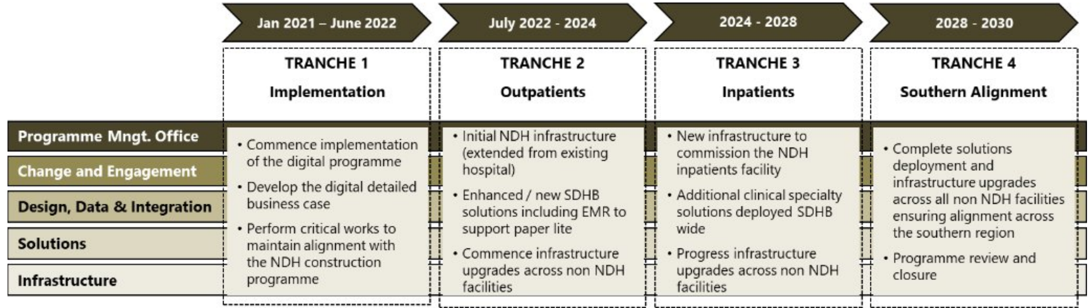
1. Programme delivery structure:



2. Integrated governance structure:



3. Programme tranches:



4. Other key points:

- SDHB **Digital structure will realign** to support the programme including BAU functions
- Strategies required to **attract key resources**
- New / enhanced solutions (including **process and workflow changes**) will be implemented prior to NDH outpatients and inpatients facilities

9

Our pathway towards enabling

Better health, better lives, Whānau Ora

What have our people asked for?*

Southern Future It's up to us

- better coordinated care across providers, with less wasted time
- care closer to home
- communication that makes sense and is respectful
- a calm, compassionate and dignified experience
- high quality, equitable health services.

*Southern Future listening sessions, 2016

THE SOUTHERN STRATEGIC HEALTH PLAN

How will we get there?

Improving experience and outcomes:

Creating an environment for health

The environment and society we live in supports health and wellbeing.

Primary & Community Care

Care is more accessible, coordinated and closer to home.

Clinical service re-design

Primary and secondary/tertiary services are better connected and integrated. Patients experience high quality, efficient services and care pathways that value their time.

Enabling success:

Enabling our people

Our workforce have the skills, support and passion to deliver the care our communities have asked for.

Systems for success

Our systems make it easy for our people to manage care, and to work together safely.

Facilities for the future

Including Dunedin Hospital, Lakes District Hospital redevelopment and community health hubs to accommodate and adapt to new models of care.

By 2026: We work in partnership to create a truly integrated, patient-centred health care system

A health-enabling society, within which we deliver:

More accessible, extensive primary and community care with the right secondary and tertiary care when it's needed.

So that our people:

- are healthier and take greater responsibility for their own health
- stay well in their own homes and communities
- with complex illness have improved health outcomes.

Kind - Manaakitanga | Open - Pono | Positive - Whaiwhakaaro | Community - Whanaungatanga

FOR INFORMATION

Item: Clinical Council Update

Proposed by: Tim McKay, Deputy CMO & Gail Thomson, ED Quality & Clinical Governance

Meeting of: 8 April 2021

Recommendation

That the Board notes this report

Purpose

1. To update the Board on the role and function of the Clinical Council and some of its sub-committees.

Specific Implications For Consideration

2. Financial

   - Patient harm costs money, anxiety and occasionally leads to an early death. Healthcare providers must continually find ways to reduce harms and improve the patient's experience and health outcomes.

3. Workforce

   - The vast majority of staff in Healthcare come to work to make a difference every day to patients' health and wellbeing. Staff therefore also suffer when things don't go well for a patient in their care. Continuously improving the individual contributions to the health system is key to motivating staff and can impact staff retention, sickness and absence and the ward/unit/DHB reputation. Staff want to work in a safe, supported and continuously improving environment. This is basic clinical governance.

4. Equity

   - Health provision in terms of ability to access and unconscious bias can dramatically disadvantage groups of people, whether by ethnicity, disability, age or gender. The clinical council needs a clear view of risks and issues in regards equity, and have zero tolerance for all inequity identified within the DHB.

5. Clinical Governance

6. Setting of clinical standards of care, monitoring improvements and empowering staff to be their best everyday are basic tenets of clinical governance, the key role of the Clinical Council. The following definitions sum up the purpose of the Clinical Council.

   a. 'a system through which healthcare organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care, creating an environment in which excellence in clinical care will flourish' Scally & Donaldson, NHS 1998

   Or as more recently defined by the Health Quality & Safety Commission (HQSC) in 2017:

   b. 'Clinical governance provides a means for clinicians, managers and other staff to work together to improve and be held accountable for the quality and safety of the health and disability services they provide' HQSC, 2017

10.1

Background

7. At the commencement of 2015 the Clinical Council had its first meeting. The Council was initially established to give balanced, clinically informed advice to the Southern DHB Board and across the entire Southern Health system, Alliance South, WellSouth and other health service providers contracted by the DHB. Clinical Council was to advise on substantial issues around the current performance of existing services or proposed changes in service configurations or functions.

8. The Council was initially established as a representative group including primary care, Dunedin and Southland Hospitals, rural healthcare sector and the University.

Discussion

With this very wide remit, of having a view across the whole system, the council struggled to get a grip of the clinical risks within the system. Southern had experienced significant issues in the past with services such as Ophthalmology and Urology and the Council needed to have an ability to detect early the next "-ology". With the new CEO's appointment, Chris recognised that the Council needed significant support in this space and as such the new structure of 2018 included the Quality & Clinical Governance Solutions Directorate. With the appointment of the new Executive Director, this new support has enabled the Council to refocus on its role within the organisation.

To undertake the refocus of the council the membership was rejiged from being a representative group from across the whole system, to one based on operational clinical leadership from the provider arms in Dunedin, Invercargill, rural hospitals, also having the Chair of Community Health Council has been invaluable. The Chief Nursing Officer, Chief Medical Officer, Chief Allied and Technical Officer and Chief Maori Health Strategy & Improvement Officer have added weight to the Council to have a focus on operational clinical risks across the system.

The ED of Quality & Clinical Governance Solutions Directorate worked on establishing the organisations quality framework, with one of the core pillars of this being Service Level Accountability, which is fully supported by the Clinical Council to ensure clinical governance at a service level, with the hope that this will enable early detection of possible risks within clinical service delivery and allow these to be resolved before harm occurs to our patients.

After the reconfiguration of the Council in mid 2020, the terms of reference were reviewed and the following key change was made to reflect the change of focus to hospital level services:

- It is the principal interprofessional clinical governance and leadership advisory group for the SDHB. It puts patient safety and quality of care at the centre of all decision making on every level of Southern DHB Hospital Services.

The Councils key responsibilities are:

- The Council provides key clinical oversight for the Board and ELT with regard to patient harm and patient flow within the Southern DHB Hospitals.
- The Council will have links with CLG and ALT to ensure strategic alignment of vision for the Southern Health System.
- The Council will produce a set of Clinical Accounts to describe and measure clinical quality and performance across Hospital Services.
- The Council will oversee an annual workplan.

The workplan is evolving and being refined to reflect its new focus on provider arm services and also being cognisant of the whole system. A recent example of this is the work that is being undertaken in the identification of harms to older people, traditionally this was separated into individual pieces of works i.e pressure injury, falls, delirium. However with having operational clinical representation around the table, and also reviewing Health Roundtable data – it was clear that this needs to be a project across all of these domains, and the work needs to include primary to secondary providers to ensure best outcomes to patients and to reduce harm.

Structurally, various subcommittees within the provider arms are being realigned to ensure they have a home to report to and to support the Chairs, such as Mortality Review Committee, Clinical Practice Committee and the Medicines committee.

The Chair of Clinical Council is also working towards meeting with chairs of CLG and ALT to ensure the strategic direction of Council fits with the objectives of the wider system in its decision making processes.

The Clinical Council continues to raise its profile within the organisation, importantly if clinicians on the ground are assured that patient safety and quality of care are at the centre of all decision making within the provider arms, we will get better buy in and participation, as Service Level Accountability is rolled out across services. Ultimately allowing early identification of clinical risk and therefore their mitigation, ensuring the best outcomes for our patients.

Achievements & Next Steps

9. Establishment of subcommittees and regular formal attendance at CC by the chairs on a rotating basis:

   a. Clinical Practice Committee established 2019

      - The CPC's main function is to support SDHB staff by providing a pathway to consider new procedures, techniques and technologies. We ensure the implications of a 'new way of doing things' have been evaluated. The committee also reviews some high cost items or queries posed by the procurement team to support cost control. A second potential function of the committee is to develop a tool to prioritise 'new ways of doing things.' Membership is multidisciplinary and district wide. See recent news in Appendix 1

   b. Mortality Committee established 2019

      - Mortality and Morbidity committees (M&M) are run within departments to review the care of their patients, and in particular review issues when there has been a death or a specific problem. Our committee was formed to provide advice to, and oversight of, the individual department groups to ensure information is shared between departments. A comprehensive guide on how to establish and run an effective M&M, including standard terms of reference and how to review a death have been developed and launched across the DHB. Membership is multidisciplinary, across district which includes public health, mental health and Māori health representation. See recent news in Appendix 2

   c. Infection Prevention & Control Committee (IPCC) established pre 2019

      - The IPCC is realigning in 2021 to include District wide membership to ensure DHB funded facilities have strong infection prevention & control practices. This will include Aged Residential Care, laboratory representation alongside 'Primary care/GP'. The

move to broaden the membership and committees objectives has been a targeted move in response to the global pandemic. The purpose is to assure the Executive leadership team and the Board that SDHB and its funded services can adequately respond to infectious disease management.

- The reshaped committee will govern all issues in regards prevention & containment of infections that includes; clear oversight of anti-microbial management, facilities, regular testing of air and water, surgical site infection rates and monitor antibiotic resistant bugs that can wreak havoc in a hospital setting such as MRSA and Clostridium Difficule.

d. The Medicines Management Committee will be reviewed in the latter part of 2021. Medicines are broadly known to be responsible for many deaths per annum and can contribute to many harms such as falls in the frail older population. ACC are currently working with SDHB on understanding some of our medicine related patient events, and designing a new review tool in collaboration with DHB multidisciplinary teams. There is much work to be done internationally in safer medicines management, most of today's initiatives have been in response to the following report:

- To Err Is Human: Building a Safer Health System is a landmark report issued in November 1999 by the U.S. Institute of Medicine has resulted in increased awareness of medical errors. The push for patient safety that followed its release continues. The report was based upon analysis of multiple studies by a variety of organizations and concluded that between 44,000 to 98,000 people died each year in the U.S as a result of preventable medical errors (2-4% of all deaths at that time). For comparison, fewer than 50,000 people died of Alzheimer's disease and 17,000 died of illicit drug use in the same year.

- The report called for a comprehensive effort by health care providers, government, consumers, and others. Claiming knowledge of how to prevent these errors already existed, it set a minimum goal of 50 percent reduction in errors over the next five years. This ambitious goal has yet to be met. Many medicines management interventions have been introduced a result of this report over the subsequent years. For example, medicines reconciliation which aims to ensure that new drugs prescribed are done so with a view of all medicines a person is on to avoid risk of interaction or compounded effects.

e. Continue to expand and implement the service level accountability framework across the organisation in 2021 supported by the availability of good clinical risk data accessible by services.

f. Communications and engagement strategy to increase visibility of and engagement in good clinical governance at Southern DHB.

g. Ongoing review of Current Clinical Governance Committees, alignment of functions and identification if they are a working group or information sharing group. Appendix 3

Appendices

Appendix 1	Clinical Practice Committee News
Appendix 2	Mortality Review Committee News
Appendix 3	Terms of Reference with current Clinical Governance Committees

Clinical Council

Terms of Reference

Purpose

1. The *Clinical Council* is the Clinical Governance Committee for Southern District Health Board (SDHB). It is the principal interprofessional clinical governance and leadership advisory group for the DHB. It puts patient safety and quality of care at the centre of all decision making on every level of Southern DHB Hospital Services.

2. The *Board & the CEO* established the *Council in 2016* to give balanced, clinically informed advice to the Board and the Executive Leadership Team (ELT) around clinical and patient risk.

3. The *Clinical Council* will be active for three years, effective from 1 July 2020. The CEO may extend the council's duration by amending these Terms of Reference and recording the extension with the Executive Director Quality & Clinical Governance Solutions.

Responsibilities

4. The Council provides key clinical oversight for the Board and Executive Leadership Team with regard to patient harm and patient flow within the Southern DHB.

5. The Clinical Council will receive and consider reports on clinical quality and safety matters relating to care delivered to any patients in the Southern District or to SDHB patients treated elsewhere, including:
   - Patient Safety and Clinical Risk
   - Patient Outcome and experience measures.
     - Health Roundtable Data
     - Patient Surveys
   - External Audits
     - HDSS Certification corrective actions.
     - Accreditation, HDC, Credentials, Coroner

6. The Council will have links with Clinical Leadership Group and Alliance Leadership Team to ensure strategic alignment of vision for the Southern Health System.

7. The Council will produce a set of Clinical Accounts to describe and measure clinical quality and performance across the DHB.

8. The Council will oversee an annual workplan.

9. The Council's role is one of clinical governance, not operational or line management.

Governance

10. The Clinical Council will base all of its recommendations and advice on the fundamental principles embodied in the Quality Framework and make best endeavours to balance these in all of its decision-making in a way that minimises harm and improves patient flow through the health care system.
11. Clinical leadership and advice provided by the Clinical Council should be guided by the following key principles as outlined in our Service Level Accountability.
    - Consumer engagement & participation
    - Engaged, effective workforce
    - Clinical effectiveness
    - Quality improvement/Patient & staff safety
12. The Clinical Council will provide timely, independent and constructive advice that translates into practical recommendations.

Level of Authority/ Delegations

13. The Council has the authority to make recommendations to Southern DHB, through the CEO.

14. To assist it in this function the Council will:
    - Oversea the work of the sub committees – see ~~APPENDIX 1~~ – committee structure, ~~APPENDIX 2~~ – 6 Dimensions
    - Establish sub-groups to investigate and report back on particular matters
    - Commission audits or investigations on particular issues
    - Request reports and presentations from groups
    - Co-opt people from time to time as required for a specific purpose

15. Where considered necessary Council shall resolve to request a report or presentation or to commission a specific piece of work. The Chair of Council shall convene an appropriate group to oversee the request or the drafting of terms of reference for any commission. The required resources to undertake commissioned work shall be agreed by discussion with the Chief Executive Officer of the Southern DHB, who shall be responsible for their provision.
16. Any decision undertaken should be supported by informed debate drawing on the best available evidence – noting that where possible, a consensus approach will be adopted in decision-making. Where this is not possible, the item will be referred to the CEO by the Chair of the Council.

Referral to the Council

17. Any service or team operating within the Southern DHB may propose items or matters for consideration by the Clinical Council where these matters properly fall within the remit of the Council.

18. The Chair has discretion to accept or reject such items – but will communicate the reasons why to the service, team and Council if rejected.

19. The Chair will consult with the bodies to which the Council relates and produce a draft annual workplan aligned with health sector planning timetables for ratification by the Council.

20. The council will have standing agenda items that relate to clinical safety and quality across the health system.

Membership

21. The *Clinical Council* appoints the Chair for a term of two years.

22. The Chair will initially be appointed through an open Expressions of Interest process, with final recommendations being endorsed by the DHB CEO.

23. There shall be two Deputy Chair positions. The purpose of these positions is to assist the Chair of the Council in managing the business of Council and to deputise should the need arise. The Chair will appoint the Deputies.

24. The *Clinical Council* will be set up to ensure that it, as a whole, has skills, knowledge and ability to fulfil its purpose and properly discharge its roles and responsibilities.

25. When making appointments, consideration must be given to maintaining a wide range of perspectives and interests within the total membership, ensuring in particular that Māori health and rural health interests and expertise are reflected.

26. The *Clinical Council's* Chair will appoint members from the following areas ,with a maximum of appointed and ex-officio 16 members:

Members of Clinical Council

Appointed
Clinical Council Chair
Directors of Nursing x2
Clinical Directors x1
Medical Directors x3
Directors of Allied Health – Scientific and Technical
Rural Hospital clinician
General Manager Human Resources
~~Consumer Representative~~
Rising Star- Intern (Yearly appointment)
Ex Officio
Chief Nursing & Midwifery Officer
Chief Medical Officer
Chief of Allied Health, Scientific and Technical
Chief Māori, Health & Improvement
Chair Community Health Council
In attendance • Executive Director Quality & Clinical Governance

• Chief Executive Officer

27. Half of the elected/nominated members of the Council will be appointed for a two year term and the remaining half for three years. Thereafter terms will be of two years duration. Members may be reappointed but for no more than three terms.

28. **A quorum** will be half of all members plus one member.

29. Members of *all DHB sub-committee's* may attend meetings by invitation.

Chair's responsibilities

30. The *Clinical Council's* Chair will:

    (a) work with members to ensure that conflicts of interest are managed meeting

    (b) work with the *Clinical Council's* Secretariat to coordinate the Committee or Group's 's business and administration, including scheduling meetings, writing agendas and distributing papers and meeting minutes

    (c) work with the Executive Director Quality & Clinical Governance to ensure the council achieves its purpose & properly discharges its roles and responsibilities

    (d) Ensure the Clinical Council produces a report to *the Southern DHB Board on a quarterly basis.*

Members' responsibilities

31. Members will attend all meetings. If a member is unable to attend for any reason, they must notify the Chair. A delegate cannot be sent in their place.

32. Non-attendance at 2 or more meetings will result in revocation of membership.

    If a decision requires a key member who is missing and the area would be greatly impacted, it will be deferred

33. Members may also be required to perform tasks or accept responsibilities as required by the *Clinical Council's* purpose and/or the Chair.

34. Take an active role, along with the Chair, in producing quarterly reports to the board.

Meetings

35. The *Clinical Council* will meet monthly ten-times per year. Council will make use of IT platforms to enable virtual meetings and reduce unnecessary travel.

36. The meetings will be scheduled to enable the provision of timely advice to the Board.

37. The Council may meet more frequently or to consider urgent business if called upon to do so or at the discretion of the Chair.

38. Meetings will be monthly for 4 hours.

39. Meetings will be public-excluded and shall be conducted in accordance with Southern DHB Board Standing Orders as if the Council was a Board Committee.

40. Matters may be dealt with between meetings through discussion with the Chair/Co-chairs and other relevant members of the Council and noted at the next Council.

Administration

41. Secretariat support will be provided by the Directorate of Quality and Clinical Governance Solutions

42. The Secretariat will:

   (e) with the Chair, coordinate all the *Clinical Council* business and administration, including scheduling meetings and forming and distributing agendas

   (f) record and distribute meeting minutes and an actions list to members for comment within seven days of the meeting taking place.

   (g) circulate a meeting pack containing the agenda and any discussion papers at least five business days before the next meeting

   (h) keep the members register up to date.

Appendix 1: Membership

Name	Business Area, SDHB Role	[Advisory Group] Role
Tim Mackay	*Deputy Medical Director*	*Chair*
Gail Thomson	*Executive Director Quality & Clinical Governance Solutions*	*Member*
Jane Wilson	*Chief Nursing & Midwifery Officer*	*Member*
Kaye Cheetham	*Chief Allied Health, Scientific & Technical Officer*	*Member*
Nigel Millar	*Chief Medical Officer*	*Member*
Gilbert Taurua	*Chief Maori Health Improvement Officer*	*Member*
Caroline Collins	*Medicines, Women's & Children's Medical Director*	*Member*
Hywel Lloyd	*Strategy Primary & Community Medical Director*	*Member*
Evan mason	*Mental Health, Addictions & Intellectual Disability Medical Director*	*Member*
Nicholas Johnstone	*Ophthalmology Southland Clinical Director*	*Member*
Joanne McLeod	*Director of Nursing Southland*	*Member*
Sally O'Connor	*Director of Nursing, Strategy, Primary & Community*	*Member*
Tracy Hogarty	*Director of Allied Health*	*Member*
Tanya Basel	*General Manager Human Resources*	*Member*
Karen Browne	*Community Health Council Chair, Consumer Representative*	*Member*
Susan Weggary	*Rural Representation*	*Member*
Jess Dixon	*Lakes – Shining Star*	*Member*
Samantha Graham	*Shining Star*	*Member*

10.1

Clinical Council

CLG

Engaged Effective Workforce
- Credentialing
- Orientation
- Training
- Performance

Clinical Effectiveness
- Performance
- Clinical Audit
- Mortality
- Outcomes

Quality Improvement & Patient Safety
- Medicines
- Infection
- Maternity
- Resuscitation
- Clinical Practice
- Pressure Injury
- Falls
- Violence Intervention
- Transfusion

Consumer Engagement
- Consumer Participation
- Feedback
- Co-design

Kind Manaakitanga	Open Pono	Positive Whaiwhakaaro	Community Whanaungatanga

FOR INFORMATION

Item: Patient Flow Update Report March 2021

Proposed by: Patient Flow Taskforce

Meeting of: 8 April 2021

Recommendation

That the Board notes the content of this update, supports the course of action to date, and moving forward.

Purpose

To summarise progress of actions of the Patient Flow Taskforce and seek approval for next steps.

10.2

Specific Implications For Consideration

1. **Financial**

   - Low level opex requirements associated with increased IT related tools (additional screens etc.)

2. **Operational Efficiency**

   - The Patient Flow activities identified are believed to have a significant long-term impact on increasing patient flow and in turn providing operational efficiencies.

3. **Workforce**

4. **Equity**

Background

The Patient Flow Taskforce was established in response to urgent focus needed addressing our hospital's bed block issues and staff stress and burnout. The 'SAFER' Bundle framework was introduced as an evolution of the 'Valuing Patient Time', and is being used as a vehicle to embed the necessary system changes to alleviate pressure, increase patient and staff wellbeing.

Discussion

Progress to date has involved further planning, targeted engagement, developing resources/education, gathering feedback, communications and surfacing of metrics and facilitating enhanced processes where possible.

Next Steps & Actions

Further comms to support the efforts and further focus and embedding of best practise for rapid rounds.

Appendices

1. **Patient Flow Taskforce Progress Update**
2. **SAFER Framework programme**

Patient Flow Improvement Programme

Month #2 Progress Update

Summary of Patient Flow Taskforce activity to date:

- Identification of 7 key workstreams: Senior Review, Rapid Rounds, Discharge Summaries, Clinical criteria for discharge, staff wellbeing, and stranded patients. These workstreams are aligned with the 'SAFER' bundle which is the international framework that we are working too & an evolution of the Valuing Patient Time work. See appendix #2 to this report.

Rapid Rounds have been a key focus over the past 3 weeks, as during the discovery phase it was observed there is a high degree of variability happening which has significant flow on effects for the hospital. Some of the issues, include not all clinical groups being represented, house officers & nursing not empowered to make enough decisions, structure of the rapid round not being ideal, input of information being hamstrung by lack of technology/process. Therefore, work has been done to reinvigorate the rapid round resource kit – enhanced resources/education developed and the executive being present to help problem-solve in the moment.

10.2

Additionally 9 key themes have emerged via the feedback to the patient flow email:

1. Transitions (between internal services)
2. Transitions (to external providers or care settings, or home)
3. Tools to do the job
4. Culture – a lack of empowerment, needing to seek permission
5. Transport
6. Access to Imaging
7. Staffing/Resourcing
8. Process Improvement/Change or variability in process
9. Model of care change/adapt

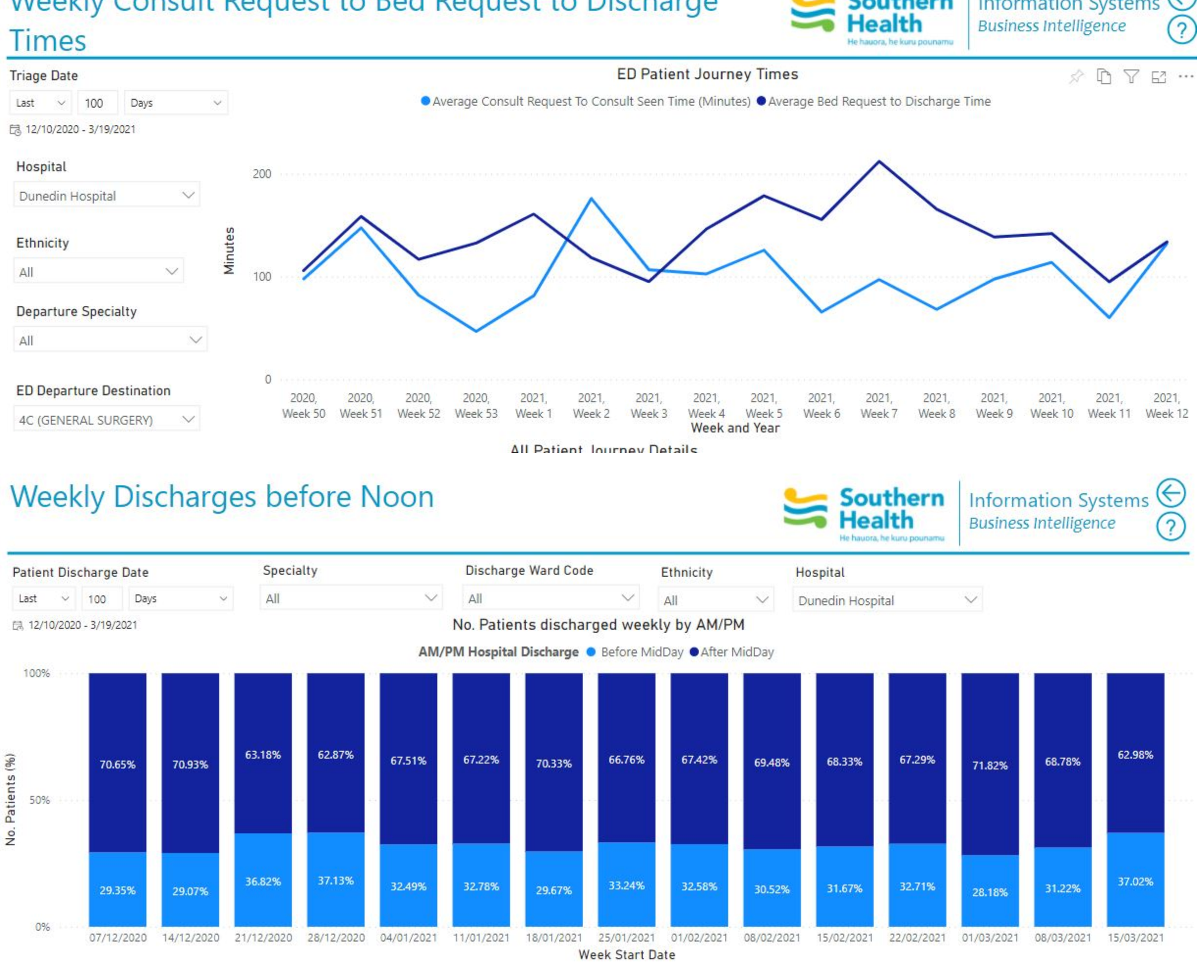
- Emergency Department - Do Not Waits: The CEO of WellSouth Primary Health Network has committed to supporting capacity to follow up patients that 'do not wait' once they have presented at our emergency departments. The PowerBI ED data highlights an equity issue with higher numbers of Maori patients that don't wait for their appointment generally. Discussions are underway with WellSouth on how we will look to resource this issue. There are pockets of best practice where patients that present to emergency departments are followed up by their general practice, however this does not extend to patients that 'do not wait' and there is a clear equity issue associated with these presentations.

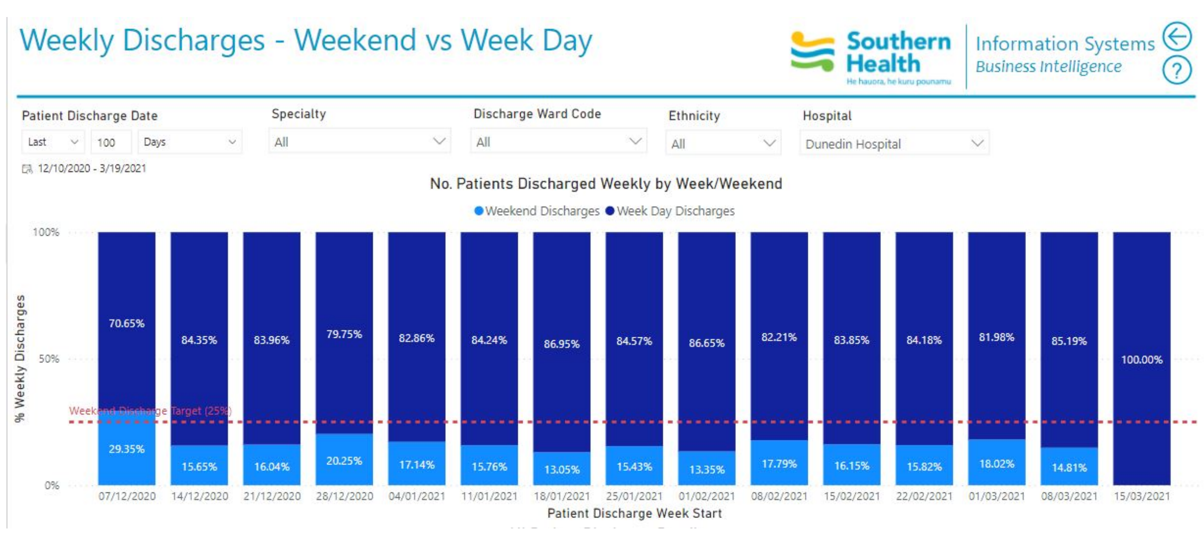
- Maori Contracted Providers: We are embarking on a comprehensive review of our contracts with Maori health providers and aim to better align our community-based contracts to our secondary and tertiary health services. Janice Donaldson from Canterbury has agreed to undertake this review

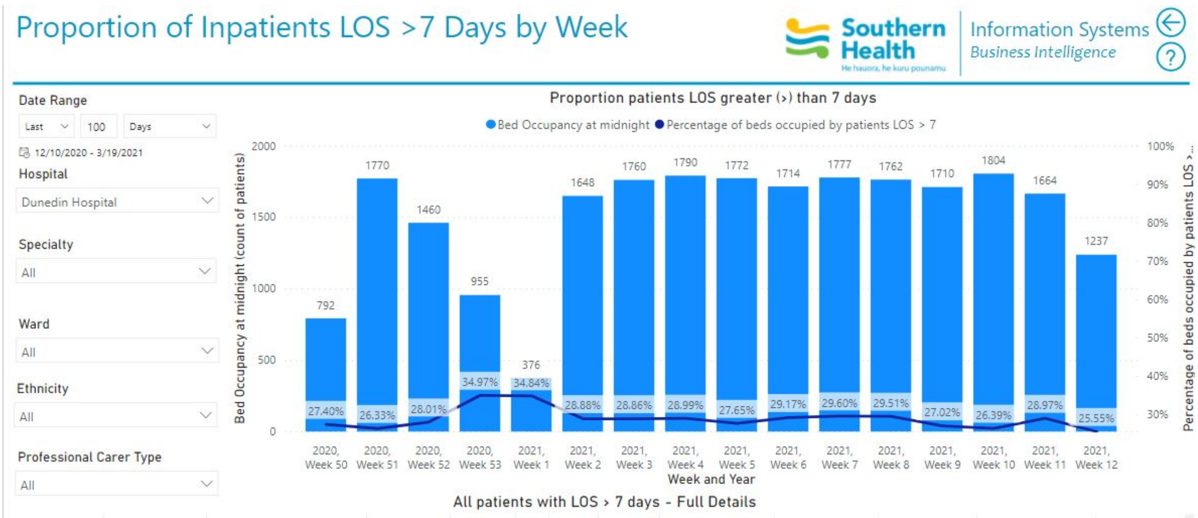
and although this will not be a short-term solution to our patient flow issues it will better align our services into the future within the context of the primary and community strategy.

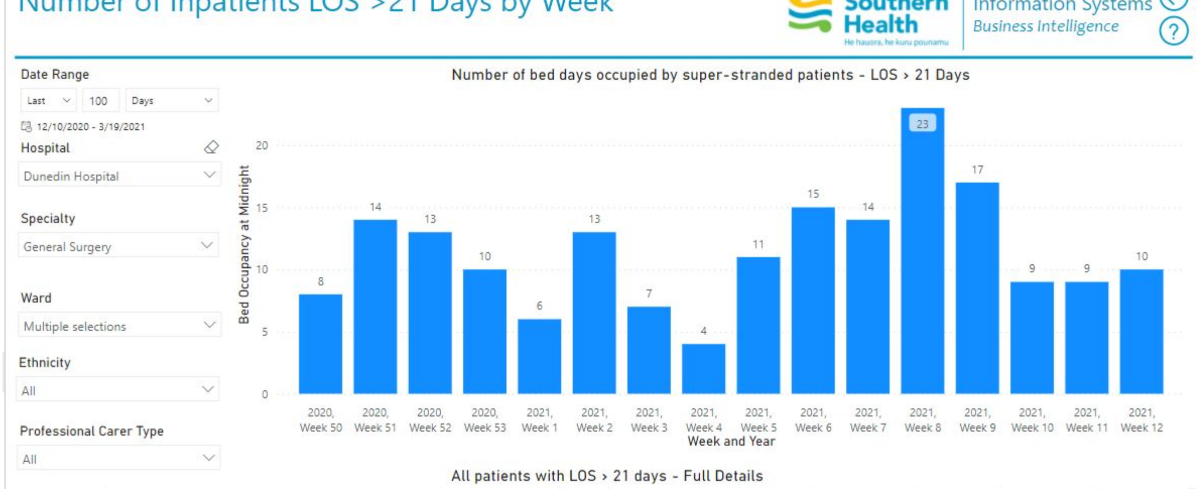
- Comms/Engagement: working with the comms team to get a regular weekly newsletter out, focussing on grabbing hearts and minds but also the various workstreams. Melissa (comms) has spent some time with the team on the wards getting a feel for the rapid rounds etc. A concerted effort has been made around SLT engagement this past few weeks, as the feedback was that they felt the communication had been lacking. This has been addressed – we now have a weekly Patient flow stand-up that is open to anyone who would like to join and attendance at the ops meetings by the patient flow taskforce has been taking place. Two senior consultants have indicated their commitment to assisting the taskforce, a rehab and geriatrician SMO's, which will assist, but it's only a start.

- Metrics have been surfaced via two PowerBi dashboards. All of the Executive have access to these and they are refreshed daily. A weekly progress report tracking the trend over time is provided to the CE. The metrics are in the process of being distilled down into the 3 identified measures that will be of value to clinical teams to see. We are working with the Quality Improvement team and IT on what the best method for delivering this is. We are considering small static screens in multiple clinical areas and/or development of a weekly infographic report with the help of the comms team. Both options have merits and complexities and are being worked through with priority. Information that has been developed for us can be seen in the following graphical images taken from the PowerBi dashboards:

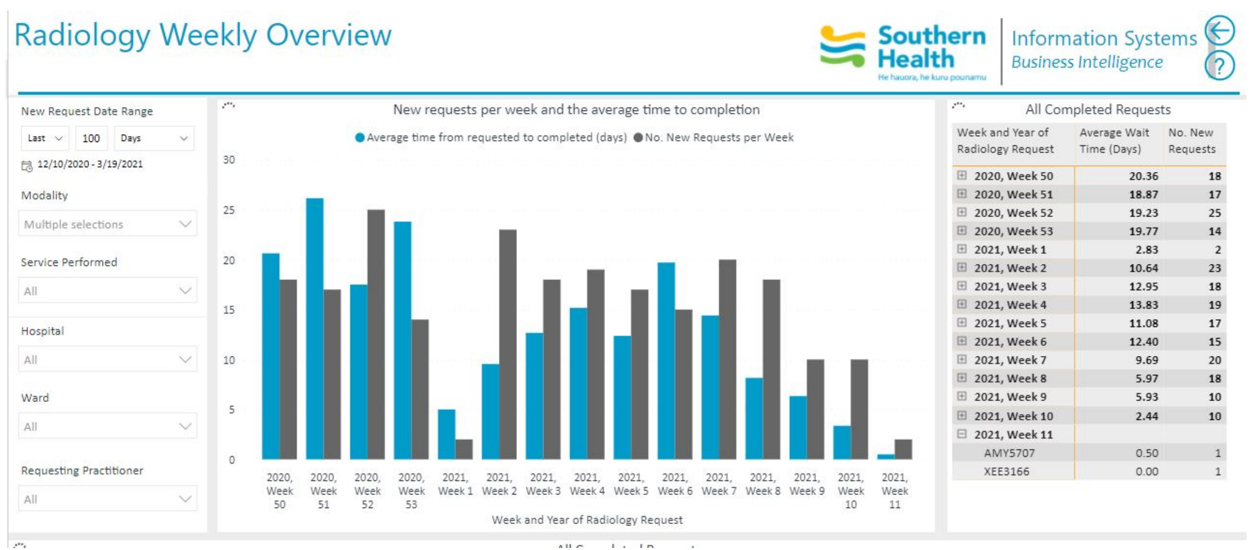








10.2



Week and Year of Radiology Request	Average Wait Time (Days)	No. New Requests
2020, Week 50	20.36	18
2020, Week 51	18.87	17
2020, Week 52	19.23	25
2020, Week 53	19.77	14
2021, Week 1	2.83	2
2021, Week 2	10.64	23
2021, Week 3	12.95	18
2021, Week 4	13.83	19
2021, Week 5	11.08	17
2021, Week 6	12.40	15
2021, Week 7	9.69	20
2021, Week 8	5.97	18
2021, Week 9	5.93	10
2021, Week 10	2.44	10
2021, Week 11		
AMY5707	0.50	1
XEE3166	0.00	1

- Next Steps:

Comms continues with particular focus on building up the SharePoint site that has been created as a hub for resources, tools etc. More screens are to be installed in operational areas for two reasons. The first being to share more widely the CAG screen so that more clinical areas can visually see the status of the beds and hospital which in turn will hopefully lead to more informed decision-making. The second to look at installing small screens to share the static metrics. Some further work has been started with IT and the taskforce to make some tweaks to insert a flag on these dashboards so that the rural's can visibly see what patients they might be able to 'pull' back to rural which is optimal rather than waiting for us to push. The wellbeing initiatives in conjunction with the workwell team are being launched. Criteria-led discharge and the discharge summaries project streams are planned for further focus in the coming weeks.

- Risks/dependencies/constraints:

a) This work will continue beyond 100 days and that expectation should be set now. This is a cycle of continuous improvement, process change and behaviour change that will be ongoing.

b) The next 5 weeks will be especially challenging from a bed block perspective with 3 short weeks because of ANZAC day & Easter. This is followed up by two weeks of school holidays so potentially higher leave being taken by our clinical workforce's.

c) Engagement from clinical teams (access to the messaging and willingness to do some things differently) still an ongoing risk, especially senior clinical availability/active participation.

d) The RMO cohort buy-in is also a dependency now.

e) Also have identified we need strengthened support and mentoring wrapped around our charge nurse cohort so they feel empowered to lead and make decisions associated with rapid rounds.

f) There is a significant amount of feedback received via the patient flow email that represents quite a large amount of operational change & process improvement that could be done in multiple areas. Whilst this is positive in many regards, executing these changes will take resource beyond the current team – largely it also depends on changing the cultural narrative and ensuring staff see patient flow as everyone's responsibility, therefore they are empowered to take ownership of these issues and try different things, but that attitude takes time to embed.

PATIENT FLOW TASKFORCE PRIORITIES

Shape & Reduce Demand | Manage Capacity & Demand | Redesign the System

S Senior Review	A All Patients	F Flow	E Early Discharge	R Review
Rapid Rounds	Expected Date of Discharge (EDD)	Early ED transfers & 'pull' model	Home Before Lunch	Stranded Patient Rapid Round
Ward Rounds	Criteria-led Discharge	Transitions	Discharge Summaries	Stranded Patient Review Team

A range of other patient flow improvement initiatives are being led or supported by teams

STAFF EXPERIENCE & WELLBEING

PATIENT EXPERIENCE & CHOICE

CAPABILITY DEVELOPMENT

DATA FOR IMPROVEMENT

Process Metrics | Outcome Metrics | Quality Metrics | Balancing Metrics

FOR APPROVAL/INFORMATION

Item: Covid19 Vaccination Implementation Planning

Proposed by: Hamish Brown

Meeting of: 8 April 2021

Recommendation

That the Board notes:

- The general update on the implementation of COVID Vaccine Programme.

Purpose

1. To provide a general update on the implementation of COVID Vaccine Programme.

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Specific Implication For Consideration

2. Progress towards Government vaccination targets
   - A suitable booking system is a key enabler to achieve the current vaccination delivery targets until a National solution is in place.
   - A second enabler is to secure sites for large scale clinics for up to the next 12 months. The lower floor of the old H & J Smith site has been secured for 12 months in Dunedin and clinics commenced on 29th March. The Municipal Chambers (Victoria Room) has been identified as a preferred site in Invercargill -terms have been negotiated and a lease drawn up (as at 24/3/21)
   - Staffing of the clinics in terms of administration and vaccination continues be to fragile
3. Quality and Patient Safety
   - Adequate staffing of clinics is key to ensuring patient safety. All Vaccinators must have completed appropriate vaccinator training and sign off as well as completing the IMAC COVID-19 vaccination training. Ministry of Health have provided an operational plan for clinics.
4. Operational Efficiency
   - Having a combination of large and small distributed clinics will ensure that we achieve throughput of numbers for vaccination with greater penetration into the community. Key is that engagement with the PHO, Primary Care and other community providers is occurring as success overseas has been when vaccinations are being provided by trusted providers.
5. Workforce
   - Significant work is still needed to build the workforce capability and capacity to support the vaccination rollout. This is ongoing. This will significantly impact on all levels of the DHB, eg, recruitment, payroll, digital, and workspace. **This remains one of the most critical constraints impacting on our ability to upscale the volume of vaccination delivery.**
   - It is important to ensure there is still sufficient workforce to deal with non-deferrable BAU, other emergent work and also any Covid19 cases for example contact tracing, testing CBACs and Trans-Tasman border re-opening.
   - It is essential that the DHB and PHO remain joined up and effort is put into building an independent workforce and not reducing the capacity in Primary Care, Aged Residential Care and other parts of the sector.

6. Equity
   - Engagement is underway will Māori and Pacific Providers about how they can vaccinate priority populations. Separate funding is being provided to Māori and Pacific Providers to support capacity and capability within to do this work. This is being administered via Te Pūtahitanga o te Waipounamu in the South Island.
7. Other
   - Current workforce has been utilised in the interim. This will impact on deliverables for the Public Health nursing and immunisation programmes such as; HPV and MMR catch up. This is also materially impacting on the workloads of all staff who have been brought into the EOC in various roles for the short or medium term.

Background

8. Covid19 Vaccination planning has been underway. Vaccination of the Tier 1 cohort started from 1 March with 447 people being vaccinated. The second round of vaccinations is scheduled between 24 March - 1 April.
9. Over 400 household contacts (Tier 1b) have been identified to date. While most are in Dunedin and Invercargill, approximately 80 are in Central Otago and Queenstown. This is less than expected and at the time of second vaccinations workers will be reminded about the opportunity to vaccinate their household contacts. Nationally numbers have been lower than expected.
10. A small number of Tier 1a workers who were not vaccinated in the first round are being booked into subsequent clinics.
11. Queenstown based Airport/Airline border workers and their families will need to be prioritised if international flights proceed in and out of Queenstown (Announcement April 6)
12. On 10 March the government announced further sequencing timeframes for tier 2, 3 and 4. This is attached in *Appendix 1*.
13. Communications on 11 March from the Ministry outlined all DHBs need to significantly increase delivery of vaccinations for Tier 1, 2, and 3. For Southern this means we need to have achieved over 30,000 vaccinations delivered by the beginning of May.
14. The Pfizer vaccination will be the vaccine that will be used for this programme. This currently has some challenges with supply chain/logistics and shelf life once thawed. To date we have received vaccine with about a 3-day shelf life.
15. Either 5 or 6 vaccines can be obtained from each vial. Contingency planning is required to ensure that all vaccines drawn up are used at each site and all vaccine vials are used within the shelf life. To date contingency has focused on having an equity approach (Māori Health Providers in Tier 2a) and approaching people from Tier 2a workforce.
16. There is currently no national booking system in place and unlikely to be in place until somewhere between May to July.
17. SDHB's high number of remote rural population leans itself to a distributed model of delivery in these settings. This provides added challenges under the current logistics limitations.
18. A key difficulty to date has been the rapidly changing nature of the requirements and assumptions around which we are undertaking this planning. This changes frequently and significantly.
19. On 6 April, there is likely to be an announcement about a commencement date for the trans-Tasman bubble.

Discussion

Te Tiriti o Waitangi.

- All Māori and Pacific health Providers have met with the Ministry of Health and Maori Health directorate.
- Information about the geographic distribution of Māori and Pacific populations is being prepared to assist planning.
- The framework used for the clinics set up has been shared with providers.
- Ongoing meetings and consultation are planned with providers and community

Planning for service delivery.

- Planning is underway to vaccinate the Tier 1, 2, and 3 cohorts within the expected time frames. To achieve the volumes of vaccination delivery required planning is underway to use a hub and 'spoke' model of delivery.
- Vaccination of the port workforce has been operationally led by WellSouth, working in conjunction with Queens Park Medical Centre and Mornington Health Centre. Southern DHB has provided key workforce to clinically lead the vaccination clinics at South Port and Port Otago, manage cold chain, and drawing up of vaccines on site. This will be completed on 1 April.
- Consistent with the MoH guidelines -current proposed delivery model will use fixed delivery sites in key urban locations – Dunedin and Invercargill (large clinics, at least 360 vaccinations a day) and potentially Gore, Dunstan and Oamaru (smaller clinics 180 vaccinations a day).
- These clinics will be supported by Māori Health Providers to support vaccinating priority populations. Outreach 'spokes' will also be used. These will be bespoke localised models working collaboratively with General Practice and other health providers in remote and/or rural areas. Various models are being looked at, including clinics run through General Practice but with DHB support.
- Bespoke solutions in small communities are likely to require a pragmatic approach to sequencing to ensure there are enough numbers to utilise vaccines. This approach may involve vaccinating health workforces from Tier 2 as well as vulnerable people from Tier 3 in a clinic or series of clinics.
- While Southern is unlikely to achieve the initial vaccination delivery volumes requested by the Ministry for 31 March 2021, using large and small clinics in the district starting from 22 March will enable us to achieve the overall goal by early May. (*Appendix 2*).
- Large clinics are planned to run for extended hours (e.g. from 0700 – 2100hrs) to enable a range of times when people can be booked in for vaccination. Weekend sessions will be included. This is dependent on workforce.
- Several key factors are still required to be addressed definitively for success of the programme: **booking system, venues, workforce, stakeholder engagement.**

Booking System.

- There is currently no robust booking system in place. The existing hospital booking system does not meet the requirements for the programme.
- An interim booking system using an outlook calendar has been put in place to manage the immediate need to book in household contacts for the next few weeks.
- The National solution for a vaccination booking system is not expected until somewhere between May -July.
- We have been working with the other DHBs on solutions. ServiceNow has been identified as meeting the majority of what is required for a medium-term solution. Health Alliance are already using ServiceNow to manage their bookings and working with Homecare Medical to provide a call centre solution. The Homecare Medical team provide support for both inbound and outbound calls.
- Next steps include localising ServiceNow for Southern and getting an agreement in place with DXC – the implementation partner for ServiceNow.

- Discussions are underway with Homecare Medical to support the ServiceNow solution but also to talk about how they can support the interim call centre process currently in place.

Workforce.

- Workforce continues to be a critical constraint to our planning.
- Current workforce is being utilised for clinics over the next 3 – 4 weeks using vaccinators predominantly from Public Health nursing and Immunisation workforces in the Population Health Service. Administration currently is being drawn initially from the Public Health and Population Health workforce.
- Until ServiceNow is in place, significant administration support is needed to book people into clinics.
- A consequence of this has been the need to place on hold Public Health nursing and immunisation outreach work. The use of administration from these areas is also impacting on this work. This will have consequences in our ability to deliver Ministry requirements for MMR catch up campaign, B4 schools check, HPV vaccinations and school-based programmes. This is also using staff who would also support contact tracing work for Covid19 cases.
- Recruitment is underway for four Immunisation/Clinical Coordinators to support the ongoing work programme. Two will be Dunedin based and one each in Invercargill and Central Otago. Recruitment is underway for vaccination/nursing and administration roles. Two recruitment staff have commenced to support the recruitment that will be required for the programme.
- A portal is now in place for anyone to register their interest in supporting this programme – what roles, availability and location. This has been sent to all the people who have registered with the Ministry of Health surge workforce page and authorised vaccinators. A number of expressions of interest have been received, this is resource intensive undertake the screening, screening and onboarding work.
- EOC Resourcing. From the 22 March, two senior executives will alternate as controllers. The Covid19 Programme Manager is taking a key role in operational planning and will support the Controller. Adequate sustainable resourcing needs to be in place to lead communications, planning and intelligence, logistics and operational leads for key clinics moving forward, and ensuring reporting to the Ministry of Health is completed. Resourcing needs to be provided under these roles for the next 4 - 8 weeks during this vital planning period.
- Rural Health Project Manager (joint appointment SDHB/COHSL) has been pulled into EOC as Rural Hospital Liaison officer.

Facilities.

- A key enabler for proceeding is to establish permanent clinic locations for Dunedin and Invercargill. Sites need to be accessible to people including those with disabilities and meeting Infection Prevention Control and risk needs.
- In Dunedin, the Meridian Mall has been assessed as the preferred option. A 12-month lease has been secured and clinics will be run from 29 March at this site.
- Municipal chambers in Invercargill has been identified as a preferred option.

Trans-Tasman Bubble/Queenstown airport

- An announcement about the commencement date for Trans-Tasman travel is expected on 6 April. Should flights international flights recommence in and out of Queenstown, this will require staffing to ensure that exit and entry screening occurs to meet health requirements.
- This will need to be staffed – 7 days a week and two shifts to cover anticipated flights. A workforce needs to be in place to ensure that this does not impact on either Covid19 vaccination staffing or Covid19 contact tracing work.
- When flights resume a regular Covid19 testing programme will need to be established to meet the requirement of the border testing order.
- Workers and their household contacts will need to be prioritised to be vaccinated as part of the Government priority Tier 1 sequencing.

Other.

- Engagement work is required with key employers and stakeholders Tier 2a and b (*Appendix 1*) around clinics times and locations.
- A significant piece of work needs to be in place for aged residential Care (ARC) workforce and residents. Nationally some large providers an identifying how they will vaccinate their own sites and residents. However, plans will still need to be in place to vaccinate the bulk of this group.
- Messaging regarding Flu vaccination campaign needs resolved urgently (advice awaited from MoH) SDHB clinical advice is to prioritise COVID-19 vaccine

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Next Steps & Actions

Ongoing work continues to plan and implement this programme.

Appendices

Appendix 1 – Updated Sequencing 10 March 2021

SUB-TIER	POPULATION COHORT	DEFINITION
TIER ONE: THE BORDER AND MIQ		
Tier 1(a)	Border workforce, all workers recorded on the official Border Register as per the Required Testing Order. (~7,700 people)	"Affected persons" at a New Zealand border (airport or marine port) as defined by the COVID-19 Public Health Response (Required Testing) Order 2020. Includes only the workforce that qualify for routine COVID testing as recorded on the official Border Register within the following categories: - Aircrew members who qualify based on the border order - Flight or ship workers who spend more than 15 minutes in an enclosed space (plane or ship) and qualify based on the border order - Airside government officials - Airside DHB workers - Airside retail, food, beverage workers - Airside cleaners - Airline/airport workers interacting with international passengers and baggage - Other landside workers interacting with international passengers - Pilots, stevedores working on/around, and people who board affected ship - Workers who transport to/from affected ship - Other port workers who interact with people required to be in isolation - Health workers providing COVID-19 testing services to these sites.
	MIQ workforce (~35,000 people)	"Affected persons" at a New Zealand border (airport or marine port) as defined by the COVID-19 Public Health Response (Required Testing) Order 2020. Includes only the workforce that qualify for routine COVID testing as recorded on the official Border Register within the following categories: This includes: - All MIQ workers (including all New Zealand Defence Force (NZDF) and New Zealand Police eligible for rotation to MIQF) - MIQ healthcare workers including medical, nursing and support staff who provide services to these facilities - Workers who transport to/from MIQ.
Tier 1(b)	Household contacts of the eligible border and MIQ workforce (~40,000 people)	Any person who usually resides in a household or household-like setting with (a border or MIQ worker as set out above), regardless of whether they are related or unrelated people; this will include people who may reside part-time in the household including children and partners not permanently resident in the household.

TIER TWO: FRONTLINE WORKFORCES AND AT-RISK PEOPLE LIVING IN HIGH-RISK SETTINGS		
Tier 2 (a)	Frontline (non-border) healthcare workers potentially exposed to COVID-19 whilst providing care. (~57,000 people)	The frontline healthcare workforce in service delivery settings where possible cases will seek healthcare and there is no ability to screen for COVID-19 before the interaction occurs. It includes only staff who are at the front line interacting directly with patients in: - COVID-19 testing (taking samples and laboratory analysis) - Administering COVID-19 testing - Administering COVID-19 vaccinations - Ambulance services - Accident and emergency department frontline staff - Urgent care clinic front line workforces - Emergency response diagnostics (e.g. radiology) and support staff (e.g. orderlies, security, receptionists) who are interacting with patients - Community midwives and WCTO workers in people's homes - General practice front line workforce including GPs, nurses and receptionists - Pharmacy front line workforce - NGOs (including Whānau Ora) providing first response personal health services directly to patients (excludes mental health and addictions, social support services) - Healthcare providers providing treatment services to people in managed isolation. This only includes the four centres with MIQ facilities and only extends to services which receive MIQ patient referrals. AND: - Contact tracing personnel required to respond to prevent community transmission
Tier 2 (b)	Frontline healthcare workers who may expose more vulnerable people to COVID-19 (~183,000 people)	The frontline healthcare workforce working in healthcare service delivery settings interacting with patients/clients. Frontline healthcare workers interacting with patients: - Inpatient, ambulatory and outpatient publicly funded hospital services including community staff and diagnostics - All long-term residential care frontline workers, including aged residential care, Corrections (staff at custodial and community-based residences), disability, Oranga Tamariki (including Youth Justice), mental health and addictions, group-based transitional residences for homeless people, and hospice care workers. - Home care support workers including aged care and disability support - Community diagnostics – radiology, laboratories - All other primary care not included in Tier 2 (a) - Community and home-based services - All NGO and community-based services including iwi-based services, mental health - Community public health teams, including outreach immunisation staff - COVID Incident Management Teams at each DHB AND: - NZDF staff who may be involved in overseas deployments for the purpose of vaccination programmes

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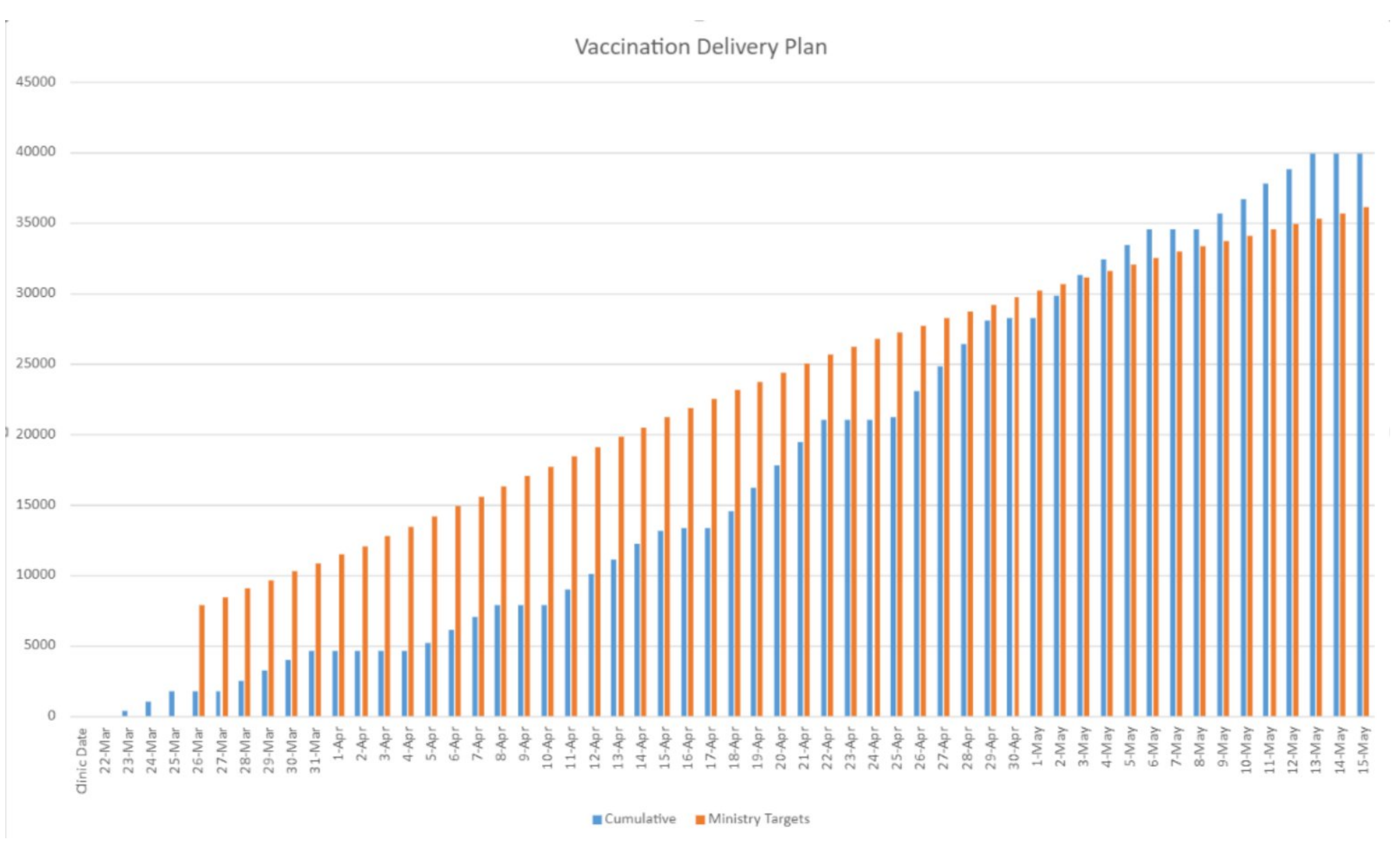
	At-risk people living in settings with a high risk of transmission or exposure to COVID-19 (~235,000 people)	Any person who usually resides in a long-term residential care setting, including (approximately ~57,000 people): - Aged Residential Care (~35,000 people) - Disability Residential Support Services (~7,700 people) - Oranga Tamariki, including Youth Justice (up to 100 people) - Mental health and addictions (~9,800 people) - Group-based transitional residences for homeless people (~4,000 people based on the number of transitional housing places, though actual number is likely to be lower) Approximately 40,000 courses allocated to Māori and Pacific providers to reach older people (and their households and carers) living within a whānau environment in hard to reach places (this is approximately equivalent to the number of Māori and Pacific people over 70 years of age, and the allocation for aged residential care). Any person in the Counties Manukau DHB district who: - is over the age of 65 years (~70,000 people), or - is under 65 years old but has a relevant underlying health condition that puts them at risk of severe disease from COVID-19 infection* (indicative estimate is ~67,000 people).[1] - is in custodial settings (~1,300 people) -
TIER THREE: NEW ZEALAND PUBLIC WHO ARE AT AN ELEVATED RISK OF SEVERE ILLNESS FROM COVID-19		
Tier 3 (a)	Older people nationwide (not already covered in Tier 2(b))	People who are 75 years or older (~317,000 people)[2]
Tier 3 (b)		People who are 65 years – 74 years (~432,000 people)
Tier 3 (c)	People with comorbidities nationwide aged under 65 years and people in custodial settings	People with relevant underlying health conditions* and disabled people under 65 years of age (very approximate estimate due to potential double counting is 730,000 – 1.3 million people). Individuals in custodial settings (~7,500) *This includes coronary heart disease, hypertension, stroke, diabetes, chronic obstructive pulmonary disease/chronic respiratory conditions, kidney disease and cancer. While it is not a health condition, pregnant people will also be included in this Tier.
REST OF THE POPULATION AGED 16 AND OVER		

[1] 9 Chan WC, Winnard D, Papa D (2017) People identified with selected Long-Term Conditions in CM Health in 2015. Counties Manukau Health. Unpublished.

[2] Based on 2021 DHB Population Projections (estimated 2020).

Appendix 2- Southern Vaccination Delivery Plan



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26 MAR 2021

18 March 2021

Hon Pete Hodgson
Chair
Southern District Health Board
Private Bag 1921
Dunedin 9054

By email: pete.hodgson.nz@gmail.com

12.1

Dear Pete

Notice applying a code of conduct for the Board Members of Southern District Health Board under section 17(3) of the Public Service Act 2020

As you will be aware I have been consulting with boards and others on the development of a code of conduct for the board members of Crown entities. I am pleased with the support boards have given and the work of an across boards team in preparing a draft code.

I recently conducted consultation on the draft code. Feedback has been very positive with good support for its introduction. As a result I have decided to apply the code.

Application of the code of conduct

Pursuant to section 17(3) of the Public Service Act 2020 I hereby apply the Code of Conduct for Crown Entity Board Members, a copy of which is attached, to the board members of your entity. Your board members are required to comply with the minimum standards set out in the code of conduct (section 18(1)).

The date of commencement for application of the code will be 19 April 2021. The commencement date has been deferred to allow time for your board to make any arrangements necessary for implementation of the code.

Changes from the consultation draft

For your information, based on feedback received, I have made one change from the draft code issued in consultation. I have deleted the sentence "We avoid wherever possible any conflicts of interest with our board roles or the appearance of a conflict, current or future" from the conflicts of interest standard as it could have been seen to be expanding on board members obligations in the Crown Entities Act 2004. This doesn't detract from the importance of thorough and regular management of interests.

Implementation of the code of conduct

The code is written at an overall level. I have specified in the code that a board should put in place a board charter or governance manual to guide its activities which includes ethics provisions for board members as appropriate to support these standards and suit the entity's particular circumstances. Boards usually already have such provisions or their own code of conduct in place and this step may just involve ensuring there is no inconsistency with the Code of Conduct for Crown Entity Board Members.

Your role

Thank you for your leadership in these matters. Your high standards of integrity are a vital part of the government's and the public's trust and confidence in the public sector. I also encourage you to continue to support your management in emphasising the importance of integrity throughout your entity.

Yours sincerely

Peter Hughes (he/him)
Te Tumu Whakarae mō Te Kawa Mataaho
Public Service Commissioner | Head of Service

Code of Conduct
For Crown Entity Board Members

Crown entities deliver public services, exercise significant powers and directly impact the lives of New Zealanders. To be effective, Crown entities must have the trust and confidence of New Zealanders and the Government.

ACTING IN THE SPIRIT OF SERVICE

Boards oversee the operations and performance of Crown entities. As board members we bring to our roles a spirit of service to the community and a desire to improve the wellbeing of New Zealand and New Zealanders, including of Māori consistent with Te Tiriti o Waitangi. A key requirement of our roles is to act with the highest levels of integrity and professional and personal standards.

RESPONSIBILITIES UNDER THIS CODE

PERSONAL INTEGRITY

We are honest and open

We act with honesty and with high standards of professional and personal integrity.

We are truthful and open. We speak up in board meetings on decisions or advice that may be detrimental to the public interest.

12.1

We are fair

We deal with people fairly, impartially, promptly, sensitively and to the best of our ability.

We do not act in a way that unjustifiably favours or discriminates against particular individuals or interests. We help create an environment where diverse perspectives and backgrounds are encouraged and valued. We treat other members and staff employed by the entity with courtesy and respect.

We speak up

We report unethical behaviour when we see it. We treat all concerns raised by others seriously.

We support the entity to have clear policies and procedures in place that help expose serious threats to the public interest, and encourage open organisation cultures where all staff feel safe speaking up.

PROFESSIONAL CONDUCT

We use our positions properly

When acting as a member, we do not pursue our own interests at the expense of the entity's interests.

We do not misuse official resources for personal gain or for political purposes. We behave in a way that reflects well on the reputation of the entity and do not do anything to harm that reputation.

We never seek gifts, hospitality or favours for ourselves, members of our families or other close associates. We inform the Chair or other proper authority, or otherwise follow our entity's procedures, in relation to any offers of gifts or hospitality. We ensure that, where a gift or hospitality is accepted, it is recorded in a register as required under the entity's procedures.

Issued by the Public Service Commissioner under section 17(3) of the Public Service Act 2020 to apply to board members of statutory entities (excluding corporations sole) and Crown entity companies (excluding Crown Research Institutes and their subsidiaries)

IMPLEMENTATION

This Code sets out minimum standards of integrity and conduct. The board should put in place a board charter or governance manual to guide its governance activities, which includes ethics provisions for board members as appropriate, to support these standards and suit the entity's particular circumstances.

This Code should be read in conjunction with the collective and individual duties of members as set out in the Crown Entities Act 2004. This Code does not override any statutory provisions including those in an entity's empowering legislation, the Crown Entities Act 2004, the Public Service Act 2020, the Public Finance Act 1989 and the Companies Act 1993. This code is not intended to limit the ability of an entity or statutory officer to act independently in regard to any statutorily independent function.

We use information properly

We use information we gain in the course of our duties only for its intended purpose and never to obtain an advantage for ourselves or others or to cause detriment to the entity.

We are well informed about privacy, official information and protected disclosures legislation. We fully comply with entity procedures and only disclose official information or documents when required to do so by law, in the legitimate course of duty or when proper authority has been given.

We are politically impartial

We act in a politically impartial manner. Irrespective of our political interests, we conduct ourselves in a way that enables us to act effectively under current and future governments. We do not make political statements or engage in political activity in relation to the functions of the Crown entity.

When acting in our private capacity, we avoid any political activity that could jeopardise our ability to perform our role or which could erode the public's trust in the entity. We discuss with the Chair any proposal to make political comment or to undertake any significant political activity.[1]

We use care, diligence and skill

We carry out our work with care, diligence and skill.

We give proper consideration to matters and seek and consider all relevant information.

ACTING LAWFULLY

We meet our statutory and administrative requirements

We understand and act in accordance with all statutory and administrative requirements relevant to our roles.

We play a full and active role in the work of the board and fulfil all our duties responsibly. We respect the principle of collective decision-making and corporate responsibility. This means once the board has made a decision, we support it. We follow board protocols for public comment.

We identify and manage conflicts of interest

We identify, disclose, manage and regularly review all interests.

We become familiar with, and follow, all conflicts of interest requirements, including those of the board, the entity, and all statutory and professional requirements including the Crown Entities Act 2004, sections 62-72.

[1] *These provisions apply to elected board members in the same way as to appointed members. However elected board members have a relationship with their constituency in addition to their accountability to the responsible Minister. Elected Board Members must consider how to maintain that relationship while, as for all members, ensuring their actions do not jeopardise the effective governance of the entity.*

Closed Session:

RESOLUTION:

That the Board move into committee to consider the agenda items listed below.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 32, Schedule 3 of the NZ Public Health and Disability Act (NZPHDA) 2000* for the passing of this resolution are as follows.

General subject:	*Reason for passing this resolution:*	*Grounds for passing the resolution:*
Minutes of Previous Public Excluded Meeting	As set out in previous agenda.	As set out in previous agenda.
Public Excluded Advisory Committee Meetings: a) Finance, Audit & Risk Committee ▪ 25 February 2021 Minutes ▪ 25 March 2021 Verbal Report b) Community & Public Health Advisory Committee ▪ 7 April 2021 Verbal Report c) Iwi Governance Committee ▪ 7 April 2021 Verbal Report	Commercial sensitivity and to allow activities and negotiations to be carried on without prejudice or disadvantage	Sections 9(2)(i) and 9(2)(j) of the Official Information Act.
CEO's Report - Public Excluded Business	To allow activities and negotiations to be carried on without prejudice or disadvantage	Sections 9(2)(i) and 9(2)(j) of the Official Information Act.
Presentation – Staff Survey Results	Feedback is provided in confidence.	Section 9(2)(ba) protect information which is subject to an obligation of confidence and making available of the information would be likely to prejudice the supply of similar information.
Contract Approvals ▪ Strategy, Primary and Community ▪ Regional Intellectual Disability Secure Services ▪ MoH Variation for the Provision of Funding for Post Grad Clinical Training (Med)	Commercial sensitivity and to allow activities and negotiations to be carried on without prejudice or disadvantage	Sections 9(2)(i) and 9(2)(j) of the Official Information Act.
New Dunedin Hospital	Commercial sensitivity and to allow activities and negotiations to be carried on without prejudice or disadvantage	Sections 9(2)(i) and 9(2)(j) of the Official Information Act.
Southern Health Alliance	To allow activities to be carried on without prejudice or disadvantage	Section 9(2)(j) of the Official Information Act.

*S 32(a), Schedule 3, of the NZ Public Health and Disability Act 2000, allows the Board to exclude the public if the public conduct of this part of the meeting would be likely to result in the disclosure of information for which good reason for withholding exists under sections 9(2)(a), 9(2)(f), 9(2)(i), 9(2)(j) of the Official Information Act 1982, that is withholding the information is necessary to: protect the privacy of natural persons; maintain the constitutional conventions which protect the confidentiality of advice tendered by Ministers of the Crown and officials; to enable a Minister of the Crown or any Department or organisation holding the information to carry on, without prejudice or disadvantage, commercial activities and negotiations.

The Board may also exclude the public if disclosure of information is contrary to a specified enactment or constitute contempt of court or the House of Representatives, is to consider a recommendation from an Ombudsman, communication from the Privacy Commissioner, or to enable the Board to deliberate in private on whether any of the above grounds are established.