

Hospital Advisory Committee

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



03/05/2021 09:00 AM - 11:30 AM

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APOLOGIES

As at the time of publication, no apologies had been received.

FOR INFORMATION/NOTING

Item:	Interests Registers
Proposed by:	Joanne Fannin, Personal Assistant
Meeting of:	Hospital Advisory Committee, 3 May 2021

Recommendation

That the Hospital Advisory Committee (HAC) 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:

- Peter Crampton, Deputy Board Chair, added
 - Lisa Gestro, former Executive Director Strategy, Primary and Community, removed
-

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).

Appendices

- HAC, Board and Executive Leadership Team Interests Registers

Hospital Advisory Committee - Interests Declarations

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.	
Peter Crampton (Deputy Board Chair)	16.04.2021	Employment: Professor, Kōhatu Centre for Hauora Māori, University of Otago (appointed July 2018)		
	16.04.2021	Member, Health Quality and Safety Commission Board (appointed April 2020)		
	16.04.2021	Chair, Executive of Medical Deans Australia and New Zealand Social Accountability Committee		
	16.04.2021	Member, Expert Advisory Group for WAI claimants related to historical underfunding of Māori PHOs (appointed September 2020)		
	16.04.2021	Member, Board of the National Science Challenge - A Better Start (appointed 2015)		
	16.04.2021	Honorary Fellow, Royal New Zealand College of General Practitioners		
	16.04.2021	Fellow, New Zealand College of Public Health Medicine		
	16.04.2021	Wife, Alison Douglass, is a member of the Health Practitioners Disciplinary Tribunal		
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.	

Hospital Advisory Committee - Interests Declarations

SOUTHERN DISTRICT HEALTH BOARD
INTERESTS REGISTER

Member	Date of Entry	Interest Disclosed	Nature of Potential Interest with Southern DHB	Management Approach
	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		
	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 Mātauranga 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 Mātauranga 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 Ōtākou 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.

Hospital Advisory Committee - Interests Declarations

SOUTHERN DISTRICT HEALTH BOARD
INTERESTS REGISTER

Member	Date of Entry	Interest Disclosed	Nature of Potential Interest with Southern DHB	Management Approach
	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		
	21.01.2020	Deputy Commissioner, Waikato DHB		
	21.01.2020	Southern Partnership Group	(Role ended December 2020)	
	21.01.2020	Health Quality and Safety Commission		
	21.01.2020	Health Workforce Advisory Board		
	21.01.2020	Fellow Royal Australasian College of Surgeons		
	21.01.2020	Member, NZ Association of General Surgeons		
	21.01.2020	Member, ASMS		
	05.05.2020	Member, Ministry of Health's Planned Care Advisory Group	Will be monitoring planned care recovery programmes.	
	06.05.2020	Nephew is married to a Paediatric Medicine Registrar employed by Southern DHB		
Roger Jarrold (Crown Monitor)	16.01.2020 (Updated 28.01.2021)	EO, 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	
	05.04.2021	Financial Advisor, DHB Performance, Ministry of Health		

Hospital Advisory Committee - Interests Declarations

SOUTHERN DISTRICT HEALTH BOARD
INTERESTS REGISTER
HOSPITAL ADVISORY COMMITTEE EXTERNAL APPOINTEES

Committee Member	Date of Entry	Interest Disclosed	Nature of Potential Interest with Southern DHB	Management Approach
Justine CAMP	31.01.2017	Research Fellow - Dunedin School of Medicine - Better Start National Science Challenge	Nil	
IGC - Moeraki Rūnaka		Member - University of Otago (UoO) Treaty of Waitangi Committee and UoO Ngai Tahu Research Consultation Committee	Nil	
		Member - Dunedin City Council - Creative Partnership Dunedin	Nil	Removed 22.12.2020
		Moana Moko - Maori Art Gallery/Ta Moko Studio - looking at Whanau Ora funding and other funding in health setting	Nil	Removed 22.12.2020
	22.12.2020	Board Member - Healthier Lives National Science Challenge	Nil	
	22.12.2020	Member - Aukaha Design panel for the new Dunedin Hospital	Nil	

**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 Health Services Ltd	
	12.02.2018	Deputy Kaiwhakahaere, Te Rūnanga o Ngai Tahu	Nil
	12.02.2018	Chairperson, Kāti 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)
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
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

**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
	18.12.2017	Daughter, medical student at Auckland University.	
	27.01.2021	Daughter, is a junior doctor in Auckland and is involved in orthopaedic 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.
		<i>Specified contractor for JER Limited in respect of:</i>	
	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.
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.

**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
	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.	

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 Ms Justine Camp Dr John Chambers Dr Lyndell Kelly Miss Lesley Soper Dr Moana Theodore	Chair Committee Member <i>by zoom</i> Committee Member Committee Member Committee Member Committee Member
In Attendance:	Mr Roger Jarrold Ms Ilka Beekhuis Tuari Potiki Mrs Kaye Crowther Mr Terry King Mr Chris Fleming Mr Patrick Ng Dr Nigel Millar Ms Kaye Cheetham Dr Nicola Mutch Mrs Jane Wilson Mrs Joanne Fannin	Crown Monitor <i>by zoom</i> Board Member Board Member Board Member Board Member Chief Executive Officer Executive Director Specialist Services Chief Medical Officer Chief Allied Health Scientific and Technical Officer <i>by zoom</i> Executive Director Communications <i>by zoom</i> Chief Nursing and Midwifery Officer <i>by zoom</i> 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."

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

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 questions 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.

- 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:

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

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.

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: _____

FOR INFORMATION

Item:	SDHB Letters Process Update
Proposed by:	Gail Thompson, Executive Director Clinical Governance and Quality Patrick O'Connor, Quality and Performance Improvement Manager
Meeting of:	03 May 2021

Recommendation

That the Hospital Advisory Committee notes the update to the SDHB letters process.

Purpose

1. To provide the Committee with an update on the SDHB letters review and proposed actions.
-

Specific Implications For Consideration

2. Quality and Patient Safety
 - Patient letters from our major systems to be standardised with the number of templates significantly reduced.
 3. Equity
 - Patient letters need to be reviewed from an equity perspective.
-

Background

4. A review of the letters process was commissioned by Gail Thomson, Executive Director for Quality & Governance, and Patrick Ng, Executive Director, Specialist Services. This review was completed by the Quality & Performance Improvement Team and presented to the Executive Leadership Team in November 2020.
5. Given the scale of the letters process (350,000 letters sent last year or circa 1800 items per day) the review was deliberately broad in scope and aimed to uncover the major areas of concern within the letters process.
6. The major areas of concern are:
 - Variation of process across specialities and directorates, we lack common standards and approaches across the letters processes.
 - Timeliness of letters, concerns remain that letters are not delivered in a timely fashion.
 - Multiple systems producing letters, at last count we have 12 systems that produce letters. The majority of letters come out of our two In Patient Management systems. IT estimate that we have approximately 1,000 templates sitting in our systems at the moment. It is thought that these templates are often subtle variations of the same letters with slightly different logos or wording.
 - No clear channel strategy for communication to consumers.

- It is difficult to measure and understand the letters process, most of what is measured is financial rather than related to performance.
 - Letter wording and tone is sometimes in-appropriate. This is no surprise given the disparate and fragmented nature of the process.
 - Equity, while the equitable aspect of letters has not been a focus of this investigation it does underlie all aspects of communication to patients. This requires further investigation.
7. These issues add up to a disparate, fractured and siloed letters process. This results in an inconsistent experience for patients and whanau which can express itself as inappropriate wording, late delivery of letters and communication channels which cater for the majority but are not suitable all groups.
 8. A number of recommendations were made to address the areas of concern. The paper was presented to ELT who asked for further details on the scale and scope of implementing the recommendations. An initial assessment shows the piece of work will require dedicated resource to implement change (1 to 2 FTE) and it will most likely take a year to 18 months to complete. It will also require input from a significant number of stakeholders. Improvements to the oncology letters would be included as part of this programme.

Discussion

9. Recent discussion between Patrick O'Connor and Colin Browne, the Project Manager for the PICs project, has shown there may be a way forward with the PICs programme. PICs will require letter templates to be transferred from our Inpatient Patient Management system and rationalise. We propose that this work, which is a major part of the letter program, be taken on as part of the PICs programme. Also, we need to put in a gating process, as part of this initiative, to stop the number of templates growing again.
10. We have also recently talked to the Canterbury DHB Project Manager of PICs. They spent a considerable amount of time consulting and trying to accommodate all requirements and found that this was impossible. Their solution was to create a base set of letters to be used by all. They went from hundreds of templates to around 20. We should consider this approach as it is highly likely that we could spend months if not years doing the same thing. The Canterbury team found that there were actually a limited number of types of letters and we suspect it will be the same for the SDHB. We will need to review our current template suite to confirm this.
11. We should also engage the recently appointed Consumer Experience Manager to be part of this process. The Consumer Experience Manager will prove invaluable and provide a consumer lens with regard to letter wording and tone as well as having input on a channel strategy.

Next Steps & Actions

- The quality team are to partner with PICS to resource this initiative but retains ownership.
- Review, rationalise, and implement a new suite of templates into the PICs system. Introduce a gating system to stop the number of templates growing again.
- Involve the Consumer Experience Manager in these changes and review any equity issues.

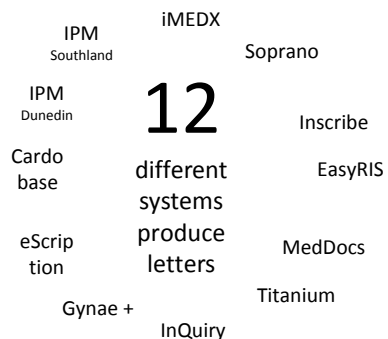
Some facts about our letters process

350,000

letters in the last year

or the equivalent of 1,800 per day

Equivalent of 3 FTE putting letters into envelopes



IT estimate we have over 1,000



templates in our systems

100s of Clinicians in 20+ specialties

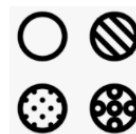


producing patient letters independently

28% of complaints are about communication



Areas of concern



Variation – we operate in silos with little evidence of common standards thus impacting consumer experience



Timeliness – lots of anecdotal evidence and a number of complaints of the late delivery of letters



Multiple, independent systems producing letters leads to inconsistency of communication



Reporting with little if any performance reporting. Virtual all reporting is based on financial performance



Wording, tone and style can be inconsistent and inappropriate. We also are inconsistent in our approach to additional information as well

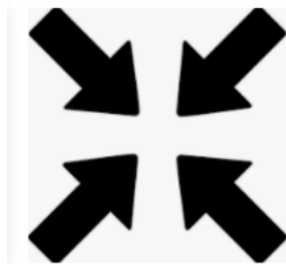


Channel strategy for communication is not clear. For example some Services use text extensively whereas others do not

Letters are a critical communication channel with Consumers but the problems cannot be solved overnight. We plan to take the following steps to improve the letters process



Partner Quality and the PICS project will partner on this resource with PICS to resource and Quality to retain ownership



Rationalise the number of templates sitting in our systems, particularly IPM, as part of the PICS project. We plan to review and implement a new suite of templates in the PICS system and introduce a gating system for new templates



Equity was not a focus of the review but it became apparent it underlies all forms of communication. We need to look at patient letters through an equity lens to uncover any possible inequities and mitigate them. This will involve a look at health literacy, language, disability and gender sensitive approaches being tested.



Involve the newly appointed Consumer Experience Manager in this process and get his and the team's expertise in consumer satisfaction communication. In addition engage consumers via the Community Health Council in the language and content of letters to reflect 'What Matters to Me'

FOR INFORMATION

Item:	Standardised Intervention Rates (September 2020)
Proposed by:	Patrick Ng, Executive Director of Specialist Services
Meeting of:	03 May 2021

Recommendation

That the Hospital Advisory Committee notes the latest intervention rate information and the brief commentary from the surgery team in response to these rates. Input has also been sought from the planning and funding team.

Purpose

1. The purpose of this report is to review the latest intervention rates published by the Ministry.

This report provides further clarification for specialities and procedures which are either under or over the standardised intervention rate and clarifies what actions are either being considered or undertaken in response to these rates.

Specific Implications For Consideration

2. Financial

Access to orthopaedic surgery has declined since the period covered by this report (which is the quarter ending September 2020) for the reasons outlined in earlier hospital advisory reports. Recovery work is being planned and is underway, partly funded by COVID recovery funding. Work is also underway to deliver volumes at Timaru hospital. This is planned as an ongoing initiative (to best utilise the capacity across the district) and this will be programmed in as inter district flow (IDF) activity as next years' elective delivery plan is developed.

3. Quality and Patient Safety

Orthopaedic surgery has been particularly badly impacted by the inpatient bed access challenges experienced in the third quarter of this financial year (January to March) and action is underway to recover from this deterioration in elective delivery.

The specialties (and subcategories) for which we benchmark relatively low continue to be:

- Ophthalmology.
- Total knee replacement.
- All plastics.
- Plastic reconstruction.
- Plastics excluding skin lesions.

However, it should be noted that our cataract intervention rates have improved and were not significantly different to standardised intervention rates in the last quarter.

For total knee replacement the service will review the rate at which it accepts hips for surgery (which is above standardised intervention rates) with the rate at which knees are accepted and will also look at how knees are prioritised for outsourced and out of district surgery.

Plastic surgery is constrained by the amount of theatre list time that is currently made available to them.

Cardiology and Cardiothoracic surgery tend to perform well with the cardiac surgery intervention rate continuing to remain higher than the national average despite a relatively high rate of cardiac surgery cancellation due to the availability of intensive care unit (ICU) beds.

Background

4. This report compares our intervention rate (defined as the number of interventions performed per 10,000 population) with the national intervention rate and national standardised intervention rate. The standardised intervention rate takes into account the differences between populations such as the age profile and is the key benchmark that we focus on.
5. It should be noted that the standardised national intervention rate is not necessarily the optimal intervention rate for either the national or local population.
6. The comparison does, however, enable us to better understand how our intervention rates per the identified specialities and sub-specialities compare nationally.
7. Please refer to appendix one for the reports.

Discussion

Further clarification about key variances is as follows.

8. Ophthalmology and Cataracts.

There are a number of initiatives underway which are targeted at improving SDHB's intervention rates for ophthalmology. Intervention rates are lower in Invercargill than in Dunedin so access to patients from Invercargill is being focused on for outsourced surgery. Ophthalmologist surgeon availability for Invercargill has also been a key focus and the borders between Southland and Otago have been adjusted to allow more patients to be seen in Dunedin to balance the overall load across the two hospitals.

These initiatives are improving intervention rates, which have also previously been impacted by relatively low rates of surgery per surgical list (this has also been worked on) and the inability to recruit to fill long-term vacancies. It is expected that ophthalmology intervention rates will improve over the next year.

9. Total Knee Replacement.

The surgical team is planning to prioritise total knee replacements on the orthopaedic lists in the coming financial year. Since December 2020 there has been a reduction in the overall orthopaedic surgery able to be completed due to inpatient bed access block (this impacted from December 2020 until March 2021) and more recently with acute surgery having to be prioritised ahead of elective surgery (March-April 21). The surgical teams are working hard to recover the rate of orthopaedic elective surgery.

10. Plastics Reconstruction.

The number of total procedures are low for plastic reconstructions. There is an initiative in Southland to undertake reconstruction at the time of the primary cancer surgery. This should address a number of discrepancies and the plastics team are exploring further opportunities to improve intervention rates. Access to theatre time is one of the constraints.

11. Tubal Ligation.

The numbers are small for this surgery and the decline in performance may be a statistical aberration. The team will undertake a review to better understand the cause of this deterioration and to determine if work is required to address this.

12. Therapeutic Electrical Physiology (EP)' and 'Other Electrical Physiology'.

Generally, patients are sent to Canterbury District Health Board (CDHB) for these procedures. Cardiac and Cardiothoracic generally perform well for intervention and diagnostic (as noted in the other intervention rates achieved) and the team believes these rates are a function of the low volumes and the need for these to be sent out of the district. This will be investigated further.

It should be noted that our cardiac intervention rates are generally above the national standardised intervention rate, including those for cardiothoracic surgery. Whilst this does indicate a consistent and high level of service provision for these services, a discussion should be had about whether investment in these services should be maintained at a constant rate to allow specialities which are achieving lower rates of intervention to improve.

Next Steps & Actions

Action is underway to reduce the rate of elective surgery cancellation, including a review of the acute theatre capacity that is required so that we can balance elective and acute surgical demand. A proposal will come from the working group for consideration.

Immediate actions noted earlier in this report are to:

- a. Continue to progress the actions underway to lift ophthalmology intervention rates.
 - b. Prioritise knee replacement over other large orthopaedic procedures (such as hips) in elective planning for 2021/22.
 - c. Review opportunities to lift plastic surgery intervention rates, including whether there is an opportunity to re-distribute theatre capacity to this speciality.
 - d. Review tubal ligation to better understand why intervention rates have changed compared to historical rates.
 - e. Review electrical physiology to either confirm that the rates are driven by the need to send patients out of the district and are appropriate or whether a review of the intervention rates currently being achieved is required.
-

Hospital Advisory Committee - Matters Arising/Review of Action Sheet

5.1

Trend over Time - Cardiology and Cardiothoracic Procedures											
DHB or Region	Southern					WIES 14 Filter Applied					
Specialty	Year End	Raw Intervention Rate per 10,000	National Intervention Rate per 10,000	Standardised Intervention Rate per 10,000	Change in SIR	Ranking	Lower CI limit (95% CI)	Upper CI Limit (95% CI)	Actual Discharges	Expected Discharges	Variance from National Average
Angiography	30 Sep 2016	43.51	34.53	42.39		2	40.21	44.68	1,395	1,136	Significantly Above National Average
Angiography	30 Sep 2017	37.67	34.79	36.59	-5.80	6	34.59	38.71	1,231	1,170	Not Significantly Different
Angiography	30 Sep 2018	33.53	34.25	32.66	-3.94	11	30.78	34.64	1,116	1,171	Not Significantly Different
Angiography	30 Sep 2019	33.05	33.18	32.37	-0.28	8	30.52	34.34	1,117	1,145	Not Significantly Different
Angiography	30 Sep 2020	31.75	30.75	31.04	-1.33	5	29.24	32.96	1,087	1,077	Not Significantly Different
Angioplasty	30 Sep 2016	17.15	12.65	16.33		1	15.01	17.77	550	426	Significantly Above National Average
Angioplasty	30 Sep 2017	14.11	12.98	13.45	-2.89	6	12.26	14.74	461	445	Not Significantly Different
Angioplasty	30 Sep 2018	12.68	12.89	12.12	-1.32	12	11.01	13.35	422	448	Not Significantly Different
Angioplasty	30 Sep 2019	13.37	13.20	12.84	0.72	7	11.70	14.10	452	464	Not Significantly Different
Angioplasty	30 Sep 2020	11.77	12.25	11.29	-1.55	13	10.23	12.46	403	437	Not Significantly Different
Cardiac Surgery	30 Sep 2016	7.17	6.21	7.17		3	6.28	8.17	230	199	Significantly Above National Average
Cardiac Surgery	30 Sep 2017	8.08	5.95	7.97	0.81	1	7.05	9.01	264	197	Significantly Above National Average
Cardiac Surgery	30 Sep 2018	7.48	5.78	7.44	-0.53	2	6.56	8.44	249	194	Significantly Above National Average
Cardiac Surgery	30 Sep 2019	7.31	5.74	7.26	-0.18	1	6.40	8.24	247	195	Significantly Above National Average
Cardiac Surgery	30 Sep 2020	7.62	5.53	7.61	0.35	2	6.73	8.61	261	190	Significantly Above National Average
Revascularisation	30 Sep 2016	21.77	16.34	20.90		1	19.39	22.53	698	546	Significantly Above National Average
Revascularisation	30 Sep 2017	19.22	16.51	18.42	-2.48	3	17.02	19.93	628	563	Significantly Above National Average
Revascularisation	30 Sep 2018	17.34	16.35	16.65	-1.77	7	15.33	18.08	577	567	Not Significantly Different
Revascularisation	30 Sep 2019	17.87	16.32	17.25	0.60	4	15.92	18.70	604	571	Not Significantly Different
Revascularisation	30 Sep 2020	16.95	15.16	15.40	-1.85	6	14.15	16.76	546	537	Not Significantly Different
Cardiac Surgery + PCI	30 Sep 2016	24.17	18.80	23.38		1	21.77	25.09	775	623	Significantly Above National Average
Cardiac Surgery + PCI	30 Sep 2017	22.03	18.85	21.23	-2.15	3	19.72	22.85	720	639	Significantly Above National Average
Cardiac Surgery + PCI	30 Sep 2018	20.16	18.58	19.51	-1.72	5	18.08	21.06	671	639	Not Significantly Different
Cardiac Surgery + PCI	30 Sep 2019	20.62	18.83	20.00	0.49	4	18.55	21.55	697	656	Not Significantly Different
Cardiac Surgery + PCI	30 Sep 2020	19.37	17.70	18.81	-1.19	4	17.42	20.31	663	624	Not Significantly Different
CABG	30 Sep 2016	4.77	3.74	4.72		2	4.01	5.55	153	121	Significantly Above National Average
CABG	30 Sep 2017	5.23	3.59	5.12	0.40	1	4.39	5.96	171	120	Significantly Above National Average
CABG	30 Sep 2018	4.66	3.53	4.55	-0.57	1	3.87	5.34	155	120	Significantly Above National Average
CABG	30 Sep 2019	4.56	3.19	4.51	-0.04	1	3.84	5.30	154	109	Significantly Above National Average
CABG	30 Sep 2020	4.21	2.92	4.18	-0.33	2	3.54	4.94	144	101	Significantly Above National Average
Valve replacement/repair	30 Sep 2016	3.96	3.48	3.94		5	3.30	4.71	127	112	Not Significantly Different
Valve replacement/repair	30 Sep 2017	4.19	3.33	4.13	0.18	3	3.48	4.89	137	111	Significantly Above National Average
Valve replacement/repair	30 Sep 2018	4.09	3.13	4.13	0.01	1	3.48	4.90	136	103	Significantly Above National Average
Valve replacement/repair	30 Sep 2019	4.20	3.37	4.14	0.01	3	3.50	4.90	142	115	Significantly Above National Average
Valve replacement/repair	30 Sep 2020	4.85	3.32	4.84	0.69	1	4.14	5.65	166	114	Significantly Above National Average
Cardiology	30 Sep 2016	8.11	5.60	7.58		1	6.70	8.58	260	192	Significantly Above National Average
Cardiology	30 Sep 2017	7.87	5.76	7.45	-0.13	2	6.58	8.43	257	199	Significantly Above National Average
Cardiology	30 Sep 2018	7.30	5.86	6.89	-0.56	4	6.07	7.83	243	206	Significantly Above National Average
Cardiology	30 Sep 2019	7.25	5.63	6.82	-0.07	3	6.00	7.74	245	202	Significantly Above National Average
Cardiology	30 Sep 2020	7.16	5.81	6.76	-0.06	3	5.95	7.67	245	211	Significantly Above National Average
Cardiothoracic	30 Sep 2016	4.49	4.64	4.46		11	3.77	5.26	144	150	Not Significantly Different
Cardiothoracic	30 Sep 2017	5.88	4.37	5.83	1.37	2	5.05	6.73	192	144	Significantly Above National Average
Cardiothoracic	30 Sep 2018	6.74	4.53	6.74	0.91	1	5.90	7.70	224	150	Significantly Above National Average
Cardiothoracic	30 Sep 2019	5.59	4.28	5.57	-1.17	1	4.82	6.44	189	145	Significantly Above National Average
Cardiothoracic	30 Sep 2020	4.91	3.94	4.85	-0.72	1	4.16	5.66	168	136	Significantly Above National Average
Interventional Cardiology	30 Sep 2016	55.05	44.57	53.40		2	50.96	55.96	1,765	1,473	Significantly Above National Average
Interventional Cardiology	30 Sep 2017	50.53	45.33	48.96	-4.44	3	46.65	51.39	1,651	1,529	Significantly Above National Average
Interventional Cardiology	30 Sep 2018	45.34	44.77	44.08	-4.89	8	41.90	46.37	1,509	1,533	Not Significantly Different
Interventional Cardiology	30 Sep 2019	43.02	43.95	42.05	-2.03	10	39.93	44.27	1,454	1,520	Not Significantly Different
Interventional Cardiology	30 Sep 2020	42.39	42.19	41.23	-0.82	8	39.15	43.41	1,451	1,485	Not Significantly Different
All EP	30 Sep 2016	11.79	10.33	11.28		5	10.18	12.49	378	346	Not Significantly Different
All EP	30 Sep 2017	13.37	10.87	12.85	1.57	3	11.69	14.13	437	370	Significantly Above National Average
All EP	30 Sep 2018	12.50	10.93	12.08	-0.77	7	10.96	13.31	416	377	Significantly Above National Average
All EP	30 Sep 2019	10.41	10.86	10.13	-1.95	12	9.11	11.26	352	377	Not Significantly Different
All EP	30 Sep 2020	11.04	11.24	10.60	0.47	12	9.57	11.74	378	401	Not Significantly Different
Permanent Pacemaker	30 Sep 2016	6.49	5.48	6.04		5	5.26	6.94	208	189	Not Significantly Different
Permanent Pacemaker	30 Sep 2017	7.41	5.63	6.91	0.86	4	6.07	7.85	242	197	Significantly Above National Average
Permanent Pacemaker	30 Sep 2018	8.05	5.78	7.53	0.62	2	6.67	8.50	268	206	Significantly Above National Average
Permanent Pacemaker	30 Sep 2019	7.13	5.68	6.69	-0.83	2	5.89	7.61	241	205	Significantly Above National Average
Permanent Pacemaker	30 Sep 2020	7.65	6.04	7.07	0.37	3	6.25	7.99	262	224	Significantly Above National Average
Defibrillator	30 Sep 2016	1.28	1.47	1.34		11	0.97	1.83	41	45	Not Significantly Different
Defibrillator	30 Sep 2017	1.47	1.59	1.56	0.23	9	1.16	2.09	48	49	Not Significantly Different
Defibrillator	30 Sep 2018	0.99	1.56	1.04	-0.52	19	0.73	1.48	33	50	Significantly Below National Average
Defibrillator	30 Sep 2019	0.89	1.61	0.93	-0.11	20	0.64	1.35	30	52	Significantly Below National Average
Defibrillator	30 Sep 2020	1.14	1.59	1.19	0.26	16	0.86	1.65	39	52	Not Significantly Different
Diag and Therapeutic EP	30 Sep 2016	2.25	2.65	2.22		11	1.75	2.82	72	86	Not Significantly Different
Diag and Therapeutic EP	30 Sep 2017	2.57	2.86	2.53	0.30	11	2.03	3.14	84	95	Not Significantly Different
Diag and Therapeutic EP	30 Sep 2018	2.34	2.76	2.33	-0.20	10	1.85	2.93	78	92	Not Significantly Different
Diag and Therapeutic EP	30 Sep 2019	1.75	2.76	1.75	-0.58	18	1.35	2.28	59	93	Significantly Below National Average
Diag and Therapeutic EP	30 Sep 2020	2.13	2.80	2.15	0.40	15	1.70	2.72	73	95	Significantly Below National Average
Other EP	30 Sep 2016	6.71	7.16	6.39		16	5.58	7.32	215	241	Not Significantly Different
Other EP	30 Sep 2017	7.25	7.28	6.94	0.56	14	6.10	7.90	237	248	Not Significantly Different
Other EP	30 Sep 2018	6.97	7.08	6.74	-0.20	13	5.92	7.68	232	244	Not Significantly Different
Other EP	30 Sep 2019	5.27	7.45	5.23	-1.51	19	4.50	6.07	178	253	Significantly Below National Average
Other EP	30 Sep 2020	4.41	7.18	4.33	-0.90	18	3.68	5.10	151	250	Significantly Below National Average

FOR INFORMATION

Item:	Radiology Strategy
Proposed by:	Patrick Ng, Executive Director of Specialist Services
Meeting of:	03 May 2021

Recommendation

That the Board notes the first draft of the requested Radiology Strategy which is attached for information. Board feedback will be incorporated into future versions of this strategy.

Purpose

1. To provide the Board with the future direction and associated priorities for the Radiology Service noting that in line with previous reporting this draft strategy has identified that access to Computerized Tomography (CT) scanning and Magnetic Resonance Imaging (MRI) scanning at Dunedin hospital are the highest priorities for immediate resolution.

Specific Implications For Consideration

2. Financial

- The strategy identifies the likely investment required in order to staff the additional CT machine in Dunedin and the proposed future MRI machine. However, each of these initiatives will be the subject of a separate proposal.
- The strategy also identifies the need to progress with the replacement of key assets, the digital subtraction angiography (DSA) suite in Dunedin and the replacement of the existing CT machine at Southland hospital.

3. Quality and Patient Safety

- There are many positive implications associated with improving access to our complex medical imaging diagnostics. These range from faster diagnosis to improved patient flow.

4. Operational Efficiency

- Improved access to key diagnostics will also improve the flow of patients through our hospitals, for example, timelier access to medical imaging will in some cases translate into timelier discharging.

5. Workforce

- The strategy identifies separate proposals that will need to be developed to resource the additional CT scanner in Dunedin and the proposed additional MRI scanner in Dunedin.
- The strategy also identifies the need to develop a multi-year training plan to cover long term vacancies in the ultrasonography service for both Dunedin and Southland. The training plan needs to be developed in recognition of the fact that ultrasonography vacancies have been unable to be recruited into, which is a national problem, whilst the service has identified that we have good candidates who would like to undergo training in ultrasonography.

6. Equity

- Equity is an important consideration for the Radiology Service. Access to medical imaging is an important requirement to enable adequate care to be provided for the more serious illnesses that we treat such as oncology.
- Our current data suggests that our Maori population presents to our services later than the non-Māori population when disease progression is more advanced. Timely and equitable access to Radiology is likely to be an important component of initiatives that will lead to more equitable access to secondary care services. We have therefore outlined a number of equity related initiatives in the current draft of the Radiology Strategy.

7. Other

- We are conscious that the draft strategy is very secondary care focused. Further engagement with primary care and our rural hospital partners is planned and future versions of the strategy will be updated to reflect this broader focus.
- Unfortunately, the Radiology Service Manager has been on extended leave whilst this strategy was developed. The General Manager has engaged broadly within the Radiology Service but future versions of this strategy will also include key input from the Service Manager.

Background

8. Access to high technology imaging, particularly CT and MRI at Dunedin has been of concern for the Board and our clinicians. This led to more resourcing being approved for the CT machine in Dunedin last year allowing planned sessions to be extended into the evening.
9. When COVID recovery funding was announced we applied for capital funding to pay for a second CT machine for Dunedin. This was approved, the machine has been ordered and preparation work is well underway so that once the machine arrives it can be implemented as quickly as possible. However, to improve access to CT, additional resourcing is required. The strategy outlines the resourcing that is required and recommends that a separate proposal is completed which seeks the required resourcing.
10. Access to MRI in Dunedin remains constrained and the strategy outlines the likely capacity and staffing considerations of implementing a second machine in Dunedin.

Discussion

11. We are conscious that the strategy quickly narrows down to access to CT (Dunedin), MRI (Dunedin) and ultrasonography (district wide) as the key challenges that need to be overcome to improve access to radiology services.
12. Future versions of the strategy will be expanded to take into account what is required to optimise the provision of radiology services across the entire district, taking into account the radiology services which are currently provided in primary care and at the rural hospitals.
13. Other concepts identified in the strategy for an immediate focus are the replacement of machines in a manner that ensures we gain maximum utilisation from them before moving into the new Dunedin hospital, systematically improving our understanding of equity in radiology referrals and then taking appropriate action, working towards pathways that will enable General Practitioners to have direct access to high technology imaging and working with the improvement action planning funding for the next two years to focus on improving

access to high technology imaging in parallel to the initiatives that will create sustainable access to these modalities.

14. The strategy also discusses our current intervention rates and compares them to other DHBs using available data (available data has been collected from peer DHBs and has not been standardised to account for age and other population differences).

Next Steps & Actions

- Proposed training plan for ultrasonography. This plan will not need Board approval as it will utilise existing vacancies to fund training positions. We are planning to complete this proposal by the end of June.
- Proposal for Dunedin CT resourcing. June.
- Proposal for Dunedin MRI (capital and resourcing). We are proposing to complete a business case for both the capital and resourcing with the intention of returning to the Board with the business case in December. As part of the development of the proposal we propose running an expression of interest process to test whether a private provider would be prepared to partner with us to share the cost of introducing additional MRI capacity into the district. This could take a number of forms. This is on the basis that our modelling suggests that additional MRI machine capacity is required in the near future (particularly if we are to improve our access and intervention rates) but that we would not fully utilise the capacity of a second machine for a number of years.

Appendices

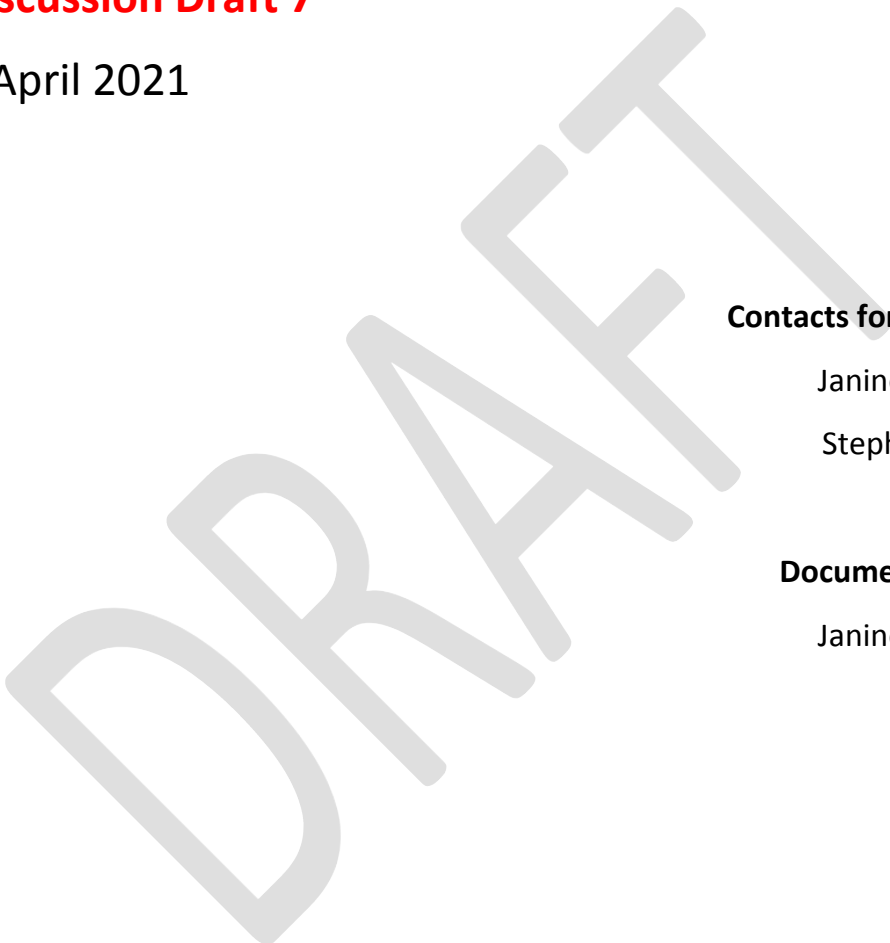
Appendix 1 Radiology Strategy

A Strategy for Southern Radiology

2021 to 2031

Discussion Draft 7

9 April 2021



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Version	Version Date	Sent to
Discussion draft 1	16 March 2021	Group 1
Discussion draft 2	29 March 2021	Feedback from Group 1
Discussion draft 3	4 April 2021	Feedback from departments
Discussion draft 4	5 April 2021	Feedback from Janine's work
Discussion draft 5	6 April 2021	Feedback from Janine's work
Discussion draft 7	9 April 2021	Feedback from Patrick Ng and 3x SMOs
		Iwi
		Patrick Ng

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Executive Summary

This document outlines an initial strategy for radiology services and includes short, medium and long term initiatives which must be completed to support the direction outlined by this strategy. The strategy is initially focused on the radiology services provided by Dunedin and Southland hospitals. However, we are conscious that radiology services across our district are broader than those provided at the two main hospitals and we have proposed initiatives in the medium and longer term which will systematically improve access to hospital based complex imaging.

The aspirations of this strategy are that acute patients do not wait for a medical image, inpatients receive their medical imaging quickly and efficiently, patients receiving planned care do so within the Ministry indicated waiting times and the intervention rates for rural and non-rural populations and our Maori and non-Maori populations are equivalent and in line with overall national intervention rates.

Noting that *access to* and *waiting times for* non-complex imaging are within acceptable timeframes, and that our longest waits and potential for adverse outcomes are the most pronounced in our CT (Dunedin), MRI (Dunedin) and Ultrasonography (across the district) services, we have narrowed the focus of this initial draft of the strategy to focus on these modalities. In this strategy we have sought to compare our intervention rates for the CT and MRI modalities in Dunedin with available data from elsewhere and we have sought to articulate the risks, challenges, interruption to flow and frustrations experienced by referrers and patients whose access to these modalities is constrained by our existing capacity.

We have undertaken initial modelling to test how the new CT machine in Dunedin can be used to improve timeliness and access to CT, and we have completed similar modelling for the MRI machine. We have also tested whether the capacity supplied by the new CT and proposed MRI machines would allow us to manage demand in the lead up to the opening of the ambulatory and acute hospital buildings in Dunedin.

Our analysis suggests that the additional CT machine would enable us to systematically increase access to the point where our intervention rate for CT in Dunedin is on par with Southland and the rest of the South Island. We have quantified the additional staffing investment that would be required to staff this machine at \$734k per annum. This is based on expanding on the additional resourcing that has been applied to the existing machine so that a full 8am till 5pm service from Monday to Friday can be provided on the second machine to provide meaningful additional capacity to the CT service. Similarly, our analysis suggests that an additional MRI machine for Dunedin would allow us to systematically improve the intervention rate for this modality to the point where it is on par with Southland and the rest of the South Island. The additional staffing required for this machine has been quantified at \$704k.

The short-term initiatives proposed by this strategy focus on developing separate proposals for staffing the new CT machine in Dunedin, developing a capital and staffing proposal for a second MRI machine for Dunedin (which will also explore options for partnering with the private sector to provide additional capacity on a 'sessional' cost sharing basis) and developing and progressing with a training strategy for ultra-sonographers for both Dunedin and Southland (as this service is constrained by its inability to recruit ultra-sonographers, not by machine capacity).

The medium-term initiatives proposed by this strategy focus on engaging with our Quality and Clinical Governance colleagues to develop health pathways that would support systematically improving access to complex medical imaging for our General Practitioners (in line with other hospitals) as CT and MRI access is improved as a consequence of the short-term measures being completed.

And the longer-term initiatives proposed by this strategy focus on planning associated with the additional capacity that will be made available with the opening of the ambulatory and acute buildings in Dunedin respectively.

Running along the short, medium and longer term initiatives are a series of initiatives which must be taken to improve equity outcomes in access to radiology, ensuring that staffing and rosters are optimised and that our capital planning takes into account the limited life now left in the current clinical services building.

The GM Surgery and Radiology has engaged carefully with the Radiology service in the construction of this strategy, but we are conscious that further engagement and ongoing dialogue are required with our primary and community and rural hospital partners in order to develop this strategy so that it meets the overall radiology needs for the district. This strategy should be considered an initial draft and it will continue to evolve as we engage further and as we consider further opportunities to locate radiology capacity outside of the two hospitals.

Southern Radiology Vision

A summary of our vision for Southern Radiology is that acute patients do not wait for a medical image, inpatients receive their medical imaging quickly and efficiently, patients receiving planned care do so within the Ministry indicated waiting times and the intervention rates for rural and non-rural populations and our Maori and non-Maori populations are equivalent and in line with overall national intervention rates.

Our team believe that appropriate measures which will give us confidence that these outcomes are occurring should target:

- Acceptable waiting times for acute in-patients.
- Inpatients receiving their scan within 12 hours of request.
- Achieving the Ministry's elective CT measure (95% scanned within 42 days of request).
- Achieving the Ministry's elective MRI measure (85% scanned within 42 days of request).
- Achieving 70% of Ultrasonography scans within 42 days of request.
- Measuring intervention and waiting times by ethnicity and achieving equitable results.

There is work to be done to achieve these outcomes, which includes capital investment (CT and MRI machines), resourcing, and then translating enhanced capacity into improved patient flow. A key focus for this strategy is the initial identification and quantification of the most significant investments that will create the most significant changes to these outcome measures.

An Explanation of our Current Situation

The Southern District Health Board (SDHB) operated Radiology Services are based at Dunedin and Southland Hospitals and are included in the Surgical and Radiology Directorate in the Executive Director Specialist Services portfolio. They have one District Service Manager and two Clinical Directors. The Southland Clinical Director has resigned and this provides us with the opportunity to consider whether a single clinical director across both sites would be a better way to provide clinical leadership for the service.

SDHB also provides services at Lakes Hospital (Queenstown) and the Rural Trust radiology services (which operate plain film x-ray and two CT machines). These services are managed locally and their contract is maintained by the Executive Director Strategy, Primary and Community portfolio. These services have both formal and informal professional links back to the Surgical and Radiology Directorate.

Overall, there is reasonable alignment between capacity and demand at the Lakes and rural hospitals.

In addition to the publicly provided radiology services, Pacific Radiology Group (PRG) also provide radiology services at Invercargill, Queenstown and Dunedin.

The Radiology Services based at Dunedin and Southland Hospitals which have a good match between capacity and demand (and acceptable waiting times) are:

- Plain film (both sites)
- CT (Southland)
- MRI (Southland)

Areas that have significant risk and are compromised are:

- CT (Dunedin)
- MRI (Dunedin)
- Ultrasonography (both sites)

CT and MRI are the modalities that deliver the most complex imaging and are needed in the treatment of the most severe conditions (such as oncology). For this reason, constraints that limit the supply of these services need to be a priority for our radiology strategy and a key focus for this strategy will be the identification of short, medium and long term initiatives that will increase the available capacity for these modalities in Dunedin (for CT and MRI), where capacity is currently the most constrained and on both sites for Ultrasonography.

As well as the need to increase capacity on these modalities, over the 10 year timeframe of this strategy there will be significant changes to Dunedin hospital. In 2025 the ambulatory centre will open, and, if implemented as planned in the Detailed Business Case for the New Dunedin Hospital, this will provide an immediate increase in machine capacity for both CT and MRI. In 2029, the acute building will open, and the radiology service will move from its current location. This strategy aims to chart a roadmap from our current situation where demand exceeds available capacity on these key modalities, to one where immediate actions and proposed investment will improve access, to the interim relief offered by the enhanced capacity that will be made available with the opening of the ambulatory building to an eventual end state where the opening of the acute building and the transfer of radiology services to that building results in sufficient capacity to meet the longer term demands on the radiology service.

In charting the roadmap for these key modalities, this strategy needs to consider improvements to processes that will enhance access to these key services by primary care (e.g. by allowing direct access using well-developed pathways) and how to improve scheduling so that care can be delivered closer to home and is targeted at ensuring equitable access for vulnerable populations.

Further clarification about our most compromised services

Computerised Tomography (CT) Scanning in Dunedin

The Dunedin radiology service has been constrained by the number of available CT machines. There is one CT machine in the radiology department (noting that a separate machine exists for dedicated oncology work in the oncology department and is sometimes used to provide urgent assistance when the radiology department's CT machine breaks down). The single photon emission computed tomography machine (SPECT) which is used in the department for the nuclear imaging service has been upgraded to allow normal CT scans to be completed on it and is also available to back up the main CT machine when there is a breakdown. As a consequence of this constraint, access, waiting lists and response times are compromised in Dunedin. There is no direct access pathway for General Practitioners (GP's). Long term performance against the Ministry of Health's planned care target (95% of planned care patients receiving their CT scan within 42 days) is in the region of 40-50%. This compares with 85-93% for Southland where there is one CT machine serving approximately half of the population served by the Dunedin machine.

The Dunedin CT machine is heavily utilised with 12.5 hour shifts on the machine during weekdays and 'call backs' over the weekend averaging close to a full 8 hour shift on Saturday and another on Sunday. The shifts were extended on this machine last year to enable more scanning to occur. And as a consequence the machine is more prone to breaking down (Siemens, the provider of the machine has advised our radiology team that the machine is the most highly utilised in the Southern Hemisphere).

Because of constrained capacity Otago residents are booked at rural hospitals for their CT scans as much as possible. Limited access to the CT has artificially suppressed demand resulting in the Dunedin city population having 67% of the intervention rate of Invercargill city. And the waiting times for Dunedin residents are currently 100-200% longer than those of Invercargill residents. This can create significant delays for patients who require planned procedures. The increasing demand for CT access over the last 5 years has primarily been for acute diagnostics (ED and inpatients) and surveillance referrals (following cancer or a post treatment check). CT is a key diagnostic in the diagnosis and staging of cancer. Delays in gaining access to a CT are impacting on performance in other key measures such as the 62 day 'faster cancer treatment' target.

Magnetic Resonance Imaging (MRI) Scanning in Dunedin

The Dunedin radiology service has also been constrained by the number of MRI machines. There is one machine in Dunedin hospital compared to a machine at Southland hospital which serves approximately half the population of Dunedin. In a similar manner to the situation with CT in Dunedin, there is no direct access for GP's, and waiting lists are long. The intervention rate is 67% of the Southland intervention rate and planned care performance against the Ministry target (85% of planned patients receiving an MRI scan within 42 days) is currently between 35% and 45% despite 8 hour sessions running on both Saturday and Sunday. This compares to 70-80% performance for Southland.

In a similar manner to the CT machine, limited access to an MRI at Dunedin hospital causes delays in gaining access to time specific procedures and the waiting times in Dunedin are currently double those of Southland. The cardiac service, neurology service and oncology service have new treatments (e.g., Pharmac approved regimes for oncology) that are increasing the demand for an MRI and this is a pattern that is expected to continue.

Ultrasonography (US) Scanning Dunedin and Southland

Ultrasonography is used for the diagnosis of a number of conditions. One of the main uses of ultrasonography is for pregnancies. These are completed in a timely manner. Ultrasonography is also a preferred diagnostic for the paediatric service and is used for numerous other conditions such as abdominal scanning, liver and renal system scanning, prostates, thyroids, vascular images and for checking the liver and lower and upper abdomen. Ultrasonography is used for gynaecology, including for cancer queries and the timeliness of these scans is not as good as it is for pregnancy. Limited interventional radiology also occurs for biopsies and drainages using ultrasonography.

Whereas the CT and MRI machines are constrained by the number of available machines and the resourcing of sessions, ultrasonography machines are portable and affordable, and do not pose a major constraint. There are multiple machines in use in both Dunedin and Southland. The major constraint for Ultrasonography is staffing, as there is a national shortage of trained ultrasonographers.

The service runs sessions from 8 until 5 Monday to Friday and uses 'call back' to manage after hours and weekend demand. In order to fully staff existing sessions an additional 2 ultra-sonographers would be required in Dunedin and a further ultra-sonographer would be required in Invercargill. Although recruitment to fill vacancies has been unsuccessful, the service has advised that trainees are available and a key component of our strategy must therefore focus on inducting and training ultrasonographers (i.e., 'growing our own').

The Scope of this Strategy

This document is focused on the key changes that are required in order to achieve the goals associated with the vision that was outlined earlier. The immediate focus for this strategy is on what is required to improve access to CT and MRI medical imaging at Dunedin hospital, for the reasons outlined earlier and on what is required to improve access to Ultrasonography. There are important services in radiology that are not yet included in this version of the strategy. These require significant engagement with key stakeholders, horizon scanning and needs analysis and include Digital Subtraction Angiography (DSA), Interventional Radiology, Nuclear Medicine and Fluoroscopy). Collection of feedback from stakeholders concerning their future needs for these services has now commenced. This process is expected to be completed in August of this year and this strategy will be updated to ensure it covers the broader services that are provided by our radiology services. The service is also aware that the radiology service provided across the district is broader than the radiology services delivered at Dunedin and Southland hospitals and this strategy should be considered as a draft document that will need to be extended upon in the future to include primary and rural referrers and providers. Broader questions which will need to be addressed in future versions of this strategy include how the primary, community, rural and secondary services should best work together, and the testing of the ongoing demands on the other modalities and services provided by the radiology service (including plain film x-ray and position emission tomography (PET) scanning, which is currently undertaken in Christchurch as an 'inter district flow' service) to ensure that these continue to be delivered in a timely manner.

This strategy looks across a 10 year horizon and therefore needs to test that the additional capacity that is proposed, and the future capacity that will become available upon the opening of the ambulatory building and then the acute hospital building in Dunedin will meet the forecast demands on the Dunedin radiology service. It also needs to test that Southland hospital's key modalities will

manage forecast demand over the same time period, noting that Southland will not see the same step up in capacity that Dunedin will, particularly when the ambulatory building is opened.

The strategy has an initial focus on the key capacity deficits identified earlier in CT, MRI and Ultrasonography and identifies proposed short, medium and longer term initiatives that will systematically improve access to these key modalities.

The Breast Radiology service (including screening and diagnostics) is contracted to a private provider and is not currently included within the scope of this strategy. This provision of these services needs to be reviewed and will be incorporated into the strategy once it has been reviewed later in the year.

We are currently undertaking a study to better understand our radiology intervention rates for Maori and Pasifika patients. We believe that we will find that these patients will be less likely to have a radiology referral because of the late presentation of heart disease and cancers in these populations and our study intends to quantify the extent to which this is a problem.

We are initiating a broader equity work program which will develop a dashboard of equity measures. Key measures which have been identified include waiting times, intervention rates and unable to attend rates and future work to improve equity outcomes will be informed by what we find in these measures.

Breaking this down further we are seeking to better understand:

- Referral rates for radiology by ethnicity and where these patients live.
- Scanning rates and the impact that unable to attend, cancellations and patient not wishing to proceed have on these rates.
- Waiting times.

We anticipate that the information that is collected will provide us with focal areas that will allow us to improve equity outcomes. These are likely to include:

- How we invite patients and whanau to appointments.
- The experience for patients and whanau when they attend.
- The optimisation of referrals, particularly when we review referrals that are arriving too late, e.g. for optimal cancer diagnosis and treatment.

Our current understanding of the equity issues for Maori and Pasifika patients who are referred to the radiology service is limited. Collecting good data to understand our equity challenges better is the first step towards making the necessary improvements that will lead to more equitable outcomes.

A capital replacement programme has been drafted for the next 10 years and this will need to be carefully cadenced so that maximum use of new assets occurs in Dunedin and the stranding of assets which have a residual useful life is minimised.

Improving Intervention Rates and Planning for Future Growth

As indicated earlier, our current intervention rates and ability to manage projected growth are inadequate for both CT and MRI scanning in Dunedin and this is the key focus of this, first draft of the radiology strategy.

Unfortunately, the Ministry of Health does not collect intervention rates for radiology. However, we have managed to gain access to a brief study that was completed by the Waikato District Health Board (WDHB) in 2019. We have included this study in our appendices. If the study is accurate then it

indicates the following intervention rates for the Waikato, Southern DHB, Bay of Plenty DHB and Lakes DHB's respectively:

MRI intervention rates (per 10,000 population):

- Waikato DHB. 467 per 10,000.
- Southern DHB. 209 per 10,000.
- Bay of Plenty DHB. 232 per 10,000.
- Lakes DHB. 300 per 10,000.

CT intervention rates (per 10,000 population):

- Waikato DHB. 1,077 per 10,000.
- Southern DHB. 616 per 10,000.
- Bay of Plenty DHB. 796 per 10,000.
- Lakes DHB. 582 per 10,000.

Ultrasound intervention rates (per 10,000 population):

- Waikato DHB. 737 per 10,000.
- Southern DHB. 380 per 10,000.
- Bay of Plenty DHB. 668 per 10,000.
- Lakes DHB. 497 per 10,000.

Noting that these intervention rates are not standardised (factored to allow for differences in the populations such as age) our MRI intervention rate is low when compared to this cohort, with the Waikato scanning at over twice our rate. CT is also low, with the Waikato scanning at 1.75 times our rate. And ultrasonography is low, with the Waikato scanning at nearly twice our rate. The Bay of Plenty has a similar overall MRI intervention rate to Southern and Lakes has a lower overall CT intervention rate than Southern. Unfortunately this benchmarking is based on the limited information that we have. It should be noted that the high Waikato intervention rate may also be a function of the level of inter district service provided by their main tertiary hospital for other centres.

As we have noted previously, our initial focus for ultrasonography must be on successfully filling existing ultrasonography vacancies. Additional staffing would allow us to staff more sessions and as equipment is mobile and relatively inexpensive to purchase it does not pose a significant constraint for us. As we continue to develop this strategy, we will model the staffing and sessional requirements to systematically lift the intervention rate for ultrasonography so that is more closely aligned with other DHBs.

A key focus for this strategy is to systematically increase access to CT and MRI in Dunedin to address the relatively low intervention rates and the challenges that lack of access to these modalities causes (as indicated earlier).

Examples of the impacts caused by a lack of access to the CT and MRI modalities (also known as high technology imaging) are per the following quotes which have been obtained from our Clinical Leader for Radiation Oncology, our Clinical Leader for our Neurology service and our Clinical Leader for our Orthopaedic service.

"I have patients that are diagnosed with cancer but then have to wait for months to have their staging scans (this will show how advanced their disease is). During this time, cancer can spread further. For some cancers, this delay is often the difference between providing curative or palliative treatment. It is very stressful for patients and me personally. The waiting times for CT and MRI also delay patients receiving a diagnosis. As a treating clinician in Radiation Oncology, I am frequently faced with explaining the delays in receiving high tech imaging to patients."

Dr Shaun Costello, Radiation Oncologist Southern DHB

“The neurology service gets a large number of primary care referrals for headache. We cannot accommodate all of these in our clinics, yet some do require brain imaging. Some referrals state they are requesting for CT head only, and a clinic is not required. Processing these referrals, generally every day when on-call, takes time but is “double handling”. Direct GP access, when accepted criteria are met, would reduce the extra time we are having to spend managing ERMS referrals and requesting scans.”

Dr Nick Cutfield, Neurologist Southern DHB

“Delays and difficulty of access to Radiology makes planning of urgent inpatients difficult. Management of these patients is often time critical in Orthopaedic Surgery. We see that delays in radiology compounds the problem we have of limited resources for acute and urgent elective operating.

We should not be delaying surgery due to lack of advanced imaging, especially peri-articular fracture and acute spines. In a well-functioning acute hospital, Radiology should have the resources required to deliver both the acute time critical scanning and their elective load.

Broadened access to advanced imaging should only be considered with strict guidelines.”

Michael Chin, Orthopaedic Surgeon and Clinical Director

To demonstrate the current and future growth in demand for CT services in Dunedin we have developed the following model. The model is based on schedules (A) to (F) which are further clarified in the notes, below.

Dunedin CT machine and staffing requirements over time

Growth in CT Volumes and Machine & Staffing Requirements										
(A) CT Volumes with Destravis Growth + Additional Volumes to get to Required Intervention Rate over 3 Years										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2031
CT scans per annum (3%):	12,844	13,229	13,626	14,035	14,456	14,890	15,336	15,796	16,270	17,261
Increase intervention rate:	2,646	5,450	8,421	8,674	8,934	8,934	9,202	9,478	9,762	10,055
Total scans per annum:	12,844	15,875	19,077	22,456	23,130	23,824	24,538	25,274	26,033	26,814
Scans outside Dunedin hospital	3,511	3,616	3,725	3,837	3,952	4,070	4,192	4,318	4,448	4,581
Scans in Dunedin Hospital	9,333	12,259	15,352	18,619	19,178	19,753	20,346	20,956	21,585	22,233
Current scan capacity 1 machine:	9,333	9,333	9,333	9,333	9,333	9,333	9,333	9,333	9,333	9,333
Proposed scan capacity 2nd machine:	4,992	4,992	4,992	4,992	4,992	4,992	4,992	4,992	4,992	4,992
Total:	14,325	14,325	14,325	14,325	14,325	14,325	14,325	14,325	14,325	14,325
Dunedin capacity required:	1.0	1.3	1.6	2.0	2.1	2.1	2.2	2.2	2.3	2.5
Dunedin capacity required (80% utilisation)	1.3	1.6	2.1	2.5	2.6	2.6	2.7	2.8	2.9	3.1
Dunedin capacity supplied:	2.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00
(B) Scans per Current Machine										
average scan time	0.4									
Hours per session (Mon-Thurs):	12.5									
scans per day	30									
Scans from Monday to Thurs:	120									
Hours per session (Friday):	8									
Scans per Friday sessions:	19									
Hours per Sat & Sun On-Call:	16									
Scans @ 2 per Hour Sat & Sun:	32									
Total scans per 7 day week:	171									
Call back scans (overnight)	431									
scans per annum	9,333									
(C) Scans per Second Machine										
average scan time	0.4									
Hours per session (Monday to Friday)	8									
scans per day	19									
Scans Monday to Friday	96									
scans per annum	4,992									
(D) Additional Staffing Requirements (2021)										
Additional Nurse (Monday to Friday) p.a. cost:	80,000									
Loading (leave cover etc. at 15%):	12,000									
Nursing Total:	92,000									
Additional Medical Imaging Technologist:	80,000									
Loading (leave cover etc. at 15%):	12,000									
Medical Imaging Technologist Total:	92,000									
Additional Radiology Assistant:	50,000									
Loading (leave cover etc. at 15%):	7,500									
Medical Imaging Technologist Total:	57,500									
SMO for Monday to Friday shift	265,000									
Loading (leave cover etc. at 20%):	53,000									
	318,000									
RMO for Monday to Friday shift	145,000									
Loading (leave cover etc. at 20%):	29,000									
	174,000									
Total Costs to Staff a 2nd CT machine (annual):	733,500									
(E) Lifting the Intervention Rate over 3 Years										
interventions per 10,000	550									
target intervention rate per 10,000	880									
% increase	60%									
increase p.a. for first 3 years at 1/3rd	20%									
(F) Forecast Volumes on Dunedin Machine for 2021										
Average monthly scan volumes (July-Oct):	1,067									
Less Outsourcing (total of 108):	27									
	1,094									
Extrapolation for 10 months:	10,943									
Average monthly:	1,094									
Christmas shut down:										
5 days @ 70% reduction:	1.5									
25 days at normal volume:	25									
	26.5									
Percentage of normal month:	87%									
Percentage applied to average monthly Jan:	951									
Percentage applied to average monthly Feb:	951									
Forecast Volumes (total):	12,844									

Schedule (A) shows the projected growth in demand for CT imaging in Dunedin over time. We have computed a projection of current year demand (per schedule (F) and uplifted this with the Destravis planning assumptions for the New Dunedin Hospital which translates into an annual growth rate of 3% per annum. Their planning assumption appears to account for population growth, aged population

growth and growth and anticipated growth in the use of the CT as a diagnostic. We have further uplifted this growth with planned increased interventions in order to grow Dunedin's intervention rate so that it is comparable to Invercargill and the rest of the South Island over a 3 year period (per schedule (E)).

Our planning assumptions are that the scanning currently completed for Dunedin hospital by other locations (such as Oamaru) will continue. The current Dunedin sessions on the existing CT machine will continue (schedule (B)), and the new machine will be employed on the basis of running an '8 till 5', Monday to Friday service (schedule (C)).

We have further assumed that the machines should optimally have 20% of latent capacity in order to optimise flow.

We have set the target intervention rate at circa 880 per 10,000 as this is both the rate achieved in Southland and the average rate achieved for the rest of the South Island.

On the basis of these assumptions the model provides the following conclusions:

- Required CT capacity grows from 1.3 machines in 2021 until progressively reaching 2.5 machines at around the time that the ambulatory building will increase the number of CT machines from 2 to 3. Demand continues to grow progressively out to 2031 from requiring 2 full machines to requiring 3 full machines.
- Immediate staffing requirements to staff a normal Monday to Friday shift on the second CT machine amount to an additional \$734k of operational expenditure being required per annum.
- This model provides us with the ability to increase CT volumes by increasing resourcing and scheduling longer weekday shifts and weekend shifts on the second CT machine should this be required in the future.

On the basis of these assumptions, the additional staffing required to operate the new CT scanner will cost us \$734k per annum, and our proposal for additional medical imaging funding will propose this amount of additional funding.

We have undertaken similar modelling for the second Dunedin MRI machine, as follows.

Dunedin MRI machine and staffing requirements over time

Growth in MRI Volumes and Machine & Staffing Requirements											
(A) CT Volumes with Destravis Growth + Additional Volumes to get to Required Intervention Rate over 3 Years											
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
MRI scans per annum (3%):	5,355	5,516	5,681	5,852	6,027	6,208	6,394	6,586	6,784	6,987	7,197
Increase at 3%:		161	165	170	176	181	186	192	198	204	210
Increase intervention rate:		857	883	909							
Total scans per annum:	5,355	6,533	7,581	8,660	8,836	9,017	9,203	9,395	9,592	9,796	10,006
Current capacity 1 machine:	5,355	6,533	7,581	8,660	8,836	9,017	9,203	9,395	9,592	9,796	10,006
Proposed capacity 2nd machine:	2,971	2,971	2,971	2,971	2,971	2,971	2,971	2,971	2,971	2,971	2,971
Total:	8,326	9,505	10,553	11,632	11,807	11,988	12,175	12,366	12,564	12,767	12,977
Dunedin capacity required:	1.0	1.2	1.4	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.9
Dunedin capacity required (80%):	1.2	1.5	1.8	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.3
Dunedin capacity supplied:	1	2	2	2	3	3	3	3	3	3	3
(B) Scans per Current Machine											
average scan time	0.7										
Hours per session (Mon-Thurs):	12.5										
scans per day:	18										
Scans from Monday to Thurs:	72										
Hours per session (Friday):	8										
Scans per Friday session:	11										
Hours per Sat & Sun (shift):	16										
Scans per Sat & Sun (2/3):	15.3										
Total scans per 7 day week:	99										
Call back scans (overnight):	230										
scans per annum	5,355										
(C) Scans per Second Machine											
average scan time	0.7										
Hours per session	8										
scans per day	11										
Scans Monday to Friday	57										
scans per annum	2,971										
(D) Additional Staffing Requirements (2021)											
Additional Nurse (Monday to Friday) p.a. cost:	0										
Loading (leave cover etc. at 15%):	0										
Nursing Total:	0										
Additional Medical Imaging Technologists (2):	160,000										
Loading (leave cover etc. at 15%):	24,000										
Medical Imaging Technologist Total:	184,000										
Additional Radiology Assistant (0.5):	25,000										
Loading (leave cover etc. at 15%):	3,750										
Medical Imaging Technologist Total:	28,750										
SMO for Monday to Friday shift	265,000										
Loading (leave cover etc. at 20%):	53,000										
	318,000										
RMO for Monday to Friday shift	145,000										
Loading (leave cover etc. at 20%):	29,000										
	174,000										
Total Costs to Staff a 2nd MRI machine (annual):	704,750										
(E) Lifting the Intervention Rate over 3 Years											
interventions per 10,000	187										
target intervention rate per 10,000	276										
% increase	48%										
increase p.a. for first 3 years at 1/3rd	16%										
(F) Forecast Volumes on Dunedin Machine for 2021											
Average monthly scan volumes (July-Oct):	465										
Less Outsourcing (total of 108):	-9										
	456										
Extrapolation for 10 months:	4,563										
Average monthly:	456										
Christmas shut down:											
5 days @ 70% reduction:	1.5										
25 days at normal volume:	25										
	26.5										
Percentage of normal month:	87%										
Percentage applied to average monthly Jan:	396										
Percentage applied to average monthly Feb:	396										
Forecast Volumes (total):	5,355										

Schedule (A) shows the projected growth in demand for MRI imaging in Dunedin over time. We have computed a projection of current year demand (per schedule (F)) and uplifted this with the Destravis planning assumptions for the New Dunedin Hospital which translates into an annual growth rate of 3% per annum. We have further uplifted this growth with planned increased interventions in order to grow Dunedin's intervention rate so that it is comparable to Invercargill and the rest of the South Island over a 3 year period (per schedule (E)).

Our planning assumptions are that the current Dunedin sessions on the existing MRI machine will continue (schedule (B)), and the new machine will be employed on the basis of running an '8 till 5', Monday to Friday service (schedule (C)).

We have further assumed that the machines should optimally have 20% of latent capacity in order to optimise flow.

On the basis of these assumptions the model provides the following conclusions:

- Required MRI capacity grows from 1.2 machines in 2021 until progressively reaching 2.1 machines at around the time that the ambulatory building will increase the number of MRI machines from 2 to 3. Demand continues to grow progressively out to 2031 from requiring 2 full machines to requiring 2.3 full machines.
- Immediate staffing requirements to staff a normal Monday to Friday shift on the second MRI machine amount to an additional \$705k of operational expenditure being required per annum.
- This model provides us with the ability to increase MRI volumes by increasing resourcing and scheduling longer weekday shifts and weekend shifts on the second MRI machine should this be required in the future.

On the basis of these assumptions, the additional staffing required to operate the new MRI scanner will cost us \$705k per annum, and a future request for additional medical imaging investment would require a request of this sum.

On face value matching demand to supply leaves us in a sub-optimal situation. More than 1 MRI machine is required between now and 2024, necessitating an investment in an additional MRI

machine if we are to match supply and demand (taking into account our desire to improve intervention rates). However, the opening of the ambulatory building will supply a 3rd MRI machine and the capacity from this machine won't be required until after 2031.

As the modelling suggests that we will need more MRI capacity but will not immediately utilise the capacity of one machine as part of our proposal for an additional MRI machine we should consider opportunities to partner with the public sector. This partnership could occur in a number of ways:

- SDHB purchases and installs a second MRI but sells some sessional capacity to a private provider.
- A private provider purchases an MRI but sells us sessional capacity.
- We enter into a joint venture with a private provider to purchase a machine and supply sessional capacity under either of the above two scenarios.

On the basis that our proposal to develop a case for a second MRI is progressed, we further propose undertaking an expression of interest process to establish whether the existing private provider or other providers would like to partner with us to bring additional capacity to Dunedin or to better utilise the capacity they have on their existing machinery.

However, additional MRI capacity does allow us the opportunity to move the boundaries for Southland, allowing future growth in demand for Southland imaging to be re-directed to Dunedin and balancing the overall growth in demand across the district. When we develop a proposal for investing in a second MRI machine for Board consideration we will take this into account in the overall modelling.

In the case of both CT and MRI it has been assumed that it will be possible to recruit additional Specialist Medical Officers (SMOs) and Registrars. We have been more successful with recruitment recently, but it has been challenging to recruit into Radiology SMO vacancies in the past. On the additional volumes indicated above, if we were unsuccessful in recruiting Radiologists and had to outsource the scans to be read externally, on the assumption of \$200 to read each scan, the costs to provide the additional capacity would increase and the range of scans that could be completed (as a proportion require SMO supervision) would decrease. At 4,992 additional CT scans per annum, the additional SMO would cost in the region of \$64 per scan. I.e. the cost of outsourcing scanning would be circa 3 times the cost of recruiting an SMO. Similarly at 2,971 additional MRI scans at a similar price to read these, the additional SMO cost would be in the region of \$107 per scan, or approximately half the cost of outsourcing the reading of these scans.

Southland CT and Staffing Requirements over Time

Further work is required to model the machine and staffing growth in Southland over time and this will be provided in a future update of this strategy. However, it is not anticipated that growth between 2021 and 2031 will warrant investment in an additional CT machine and other options to increase capacity in Southland can be considered, including:

- Resourcing more sessional capacity on the existing CT machine.
- Adjusting the borders to allow some of the machine capacity that we have modelled is likely to exist for Dunedin to be used for Southland. For example, returning Balclutha patients to the Dunedin catchment.
- Ramping up the use of the Queenstown scanner which has additional capacity that can be commissioned with additional resourcing.
- Consider partnering with the private sector to share the costs of adding more capacity (purchasing capacity on a sessional basis).

Southland MRI and Staffing Requirements over Time

Mitigations similar to those for CT will need to be considered for the Southland MRI, noting that the modelled available capacity on the future Dunedin MRI machines and lower growth projections for Southland MRI than for Southland CT provide more opportunities to re-direct future Southland MRI demand to Dunedin by adjusting the boundaries.

Other Immediate and future Equipment Considerations – Digital Subtraction Angiography Suite (DSA) and Positron Emission Tomography (PET) Scanning

Our DSA suite in Dunedin has reached the end of its life and is due for replacement. The suite is used for a range of interventional procedures including vascular thrombosis, renal cell carcinoma and liver procedures. The vascular service is very dependent on this service and 90% of referrals to the DSA service come from vascular surgery. As the suite is due for replacement and will have an expected life of approximately 8-10 years it will be important that we replace the asset as soon as practicable so that we can maximize the useful life of the replacement asset prior to moving into the new suite when we move across to the New Dunedin Hospital. This capital item has been put on the proposed capital list for 2021/22 and a proposal will be developed for Board consideration.

Due to the high cost of PET scanning equipment, PET scanning is currently centralized in Christchurch (although the service is supplied by a private provider). Our patients travel to Christchurch and we are charged an inter district flow (IDF) price for this service. The service is currently delivered in a timely manner with most scans completed within 2 weeks. A PET scanner has been planned as part of New Dunedin Hospital. In the meantime, with anticipated growth in the demand for PET scanning and the relatively high cost of sending patients away from our district for a scan, a future decision by a private provider to establish a PET scanner in Dunedin would be a good catalyst to consider entering into a partnership to provide a more cost effective service that would avoid the need for patients to travel.

The team believe that there is sufficient machine capacity for the other (non CT and MRI) modalities and that growth will be able to be managed with the existing machinery. For Dunedin this is supported by the modelling work done by Destravis for the New Dunedin Hospital. A draft equipment replacement schedule has been constructed but will be developed in detail so that we can ensure that equipment is replaced in a manner that does not leave stranded assets with significant useful life in them when the ambulatory and acute buildings are opened in Dunedin.

Strategy - Short Term Initiatives

As noted earlier, our initial focus is on improving access to the key modalities – CT and MRI in Dunedin and Ultrasonography across both sites. We also want to progress with understanding and improving equity, and we need to develop an overall capital programme that is designed on the basis that the existing Clinical Services Building now has a finite life. Key short-term initiatives which we must turn our attention to in support of these objectives include:

- **Completion of a training proposal for Sonographers.** The proposal needs to be developed in partnership with our Director of Allied Health and will be constructed as a 5 year plan. It needs to take into account how we will balance ongoing recruitment for ultrasonographers with our inability to recruit and therefore how the existing budget will be split between recruiting into vacant positions and incurring the cost of trainees. We are targeting June for the completion of this proposal.
- **Completion of a resourcing proposal for Dunedin CT.** The proposal will need to be part of the investment prioritisation process. We are also targeting June for the completion of this proposal.

- **Completion of a business case for the purchase, installation, and resourcing of a second MRI machine in Dunedin.** The case needs to be worked out carefully and proposed to both the ELT and the Board. The second machine is on the 2021/22 capital list but the list has not yet been finalised by the ELT. Staffing the machine will need to be worked out carefully as this is likely to be 2022/23 expenditure and we will have to get the balance right in terms of not pre-determining the priorities for the next financial year whilst needing to confirm an overall commitment to MRI investment. As noted earlier, our proposal should consider opportunities to partner with the private sector to introduce additional capacity in a more optimal manner (i.e., by sharing in the costs and benefits associated with the implementation of another machine in Dunedin). We propose that the business case is worked through ELT with the intention of targeting December for Board approval. This data has been proposed based on feedback from the CEO where he has noted that the annual plan must be approved before capital can be released. It also provides us with the opportunity to thoroughly test the market for potential partnerships which could allow the capital and operating costs associated with a second machine to be shared as noted above. The procurement process would be stated immediately so that the timeframe for the 2nd MRI machine is not extended as it would be if we were to take a linear approach with gaining approval and then starting the procurement exercise.

In addition to these key proposals, in the short term we need to develop our approach to equity, develop our overall capital replacement plan, develop cases for the next large items that will need replacement (the DSA machine and the CT machine in Southland) and optimise our overall demand management across both sites (with the intention of optimising the use of available machine capacity across the district). We also need to quantify how much of the ongoing Improvement Action Plan revenue we will need to apply to our key modalities (CT, MRI and Ultrasonography) whilst we await the arrival of the additional capacity from the CT and MRI proposals.

Medium Term Initiatives

In the medium-term key initiatives that will need to be progressed include the following:

- **Development and use of health pathways with an initial focus on using health pathways for primary care to gain access to ultrasonography.** The team will need to work with the pathways team in the Quality and Clinical Governance Directorate and further dialogue is required to clarify timeframes. The team also believes that it is important that health pathways are developed which would allow direct access to complex imaging (CT and MRI) for primary care as occurs at other hospitals. We believe that these pathways will be an important step towards improving access which will translate into improved intervention rates which will result in improved timeliness and outcomes. Further dialogue is required with the relevant pathways team. We will work towards having initial access pathways in place by June 2022 and we will update the strategy with firmer dates once this has been worked through.
- **Centralised scheduling developed to support Equity.** Using the initial learning from the earlier work planned for equity in radiology we need to translate this into a focus on equity when we centralise scheduling and to use this to actively target equity in how scanning is prioritised, with a specific focus on the high technology imaging (CT and MRI). We are targeting March 2022 to commence with these changes.

Longer Term Responses

In the longer-term key initiatives that need to be progressed include the following:

- Active planning for the additional machine capacity (CT and MRI) which will be made available with the opening of the ambulatory building in early 2025.
- Model of care delivery changes (where appropriate) in support of this.

- Active planning ahead of the move to the acute building in early 2029.
- Model of care delivery changes (where appropriate) ahead of this.

Across the short, medium and longer term timeframes we also need to undertake improvement work to optimise the manner in which sessions are rostered and staffed. As well as honouring Multi Employer Collective Agreement (MECA) obligations, rostering our weekend shifts rather than using 'call backs' to staff these shifts is likely to lead to the ability to manage higher volumes of scanning.

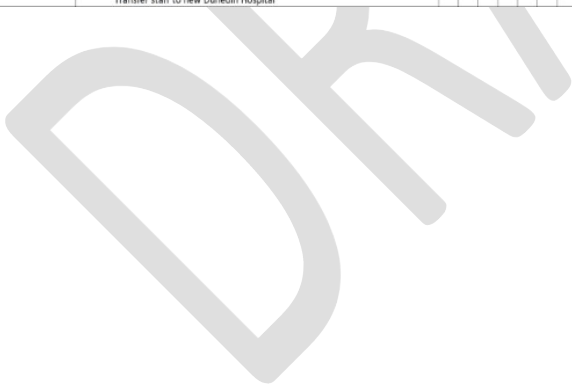
We are conscious that this, our initial draft for a Radiology Strategy, has focused on the Dunedin CT, MRI and district wide Ultrasonography services. Whilst improvement in these key areas is key to the achievement of our overall vision for the service, we are also conscious that further engagement must occur with primary care and the rural hospitals if we are to develop a strategy that provides the direction necessary for radiology services across our district. We envisage that this strategy will be a live document and will evolve as we engage with the providers and users of radiology services who are outside of Dunedin and Southland hospitals.

DRAFT

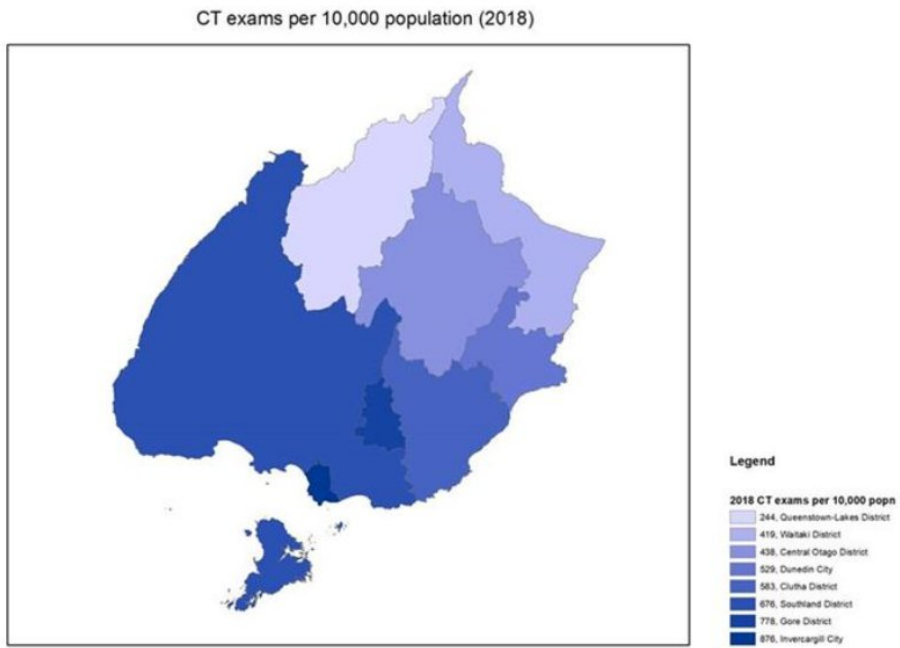
Appendices

Appendix 1 – High level work plan outlining key activities and dates

Radiology 10 Year Strategy - High level workplan and milestones		2021												2022												2023												2024 onwards					
		April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December									
Current and short- term initiatives																																											
Training of clinical staff, now and future	Increase training of Sonographers and create a 5 year plan.																																										
Use of private Radiology services	Develop options for private capacity in ultra-sound given constraints on internal capacity.																																										
Additional CT capacity	Propose additional staffing in Dunedin																																										
	Commission machine																																										
Additional MRI capacity	Propose additional MRI in Dunedin																																										
	Start procurement process																																										
Equity	Commission machine																																										
	Introduce pro equity scheduling to reduce inequity for Māori and Pacifica																																										
Production planning	Design a forecast model for both sites that links changes in demand to machine capacity and staff resources. MITs/SMOs/Admin/RMOs/Nursing -																																										
Capex replacement	Develop capital replacement schedule forecasting spend for next 10 years																																										
	Procurement																																										
Replacement DSA	Business Case approved																																										
	Commissioning																																										
	Procurement																																										
Replacement CT Southland	Business Case approved																																										
	Commissioning																																										
Medium - term initiatives																																											
Integration with Primary Care	Health Pathway protocols - focus on US initially																																										
	Open GP direct access high tech imaging in line with improved access																																										
Equity	Design and implement centralised scheduling																																										
Planning DSA Services	Reduce variation in intervention rates for CT and MRI																																										
	Develop a Service Plan for DSA Services																																										
Longer - term initiatives																																											
Ambulatory Building, Dunedin (2025)	Plan for staffing implications of another CT and MRI																																										
	Recruit additional staff																																										
	Transfer staff to Ambulatory building																																										
New Dunedin Hospital (10 years)	Plan for staffing implications of another CT and MRI																																										
	Recruitment of additional staff																																										
	Transfer staff to new Dunedin Hospital																																										



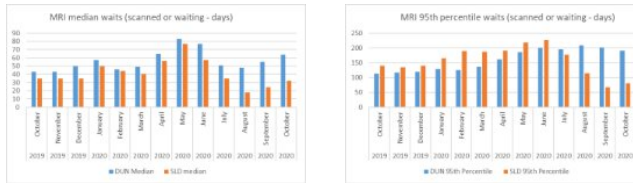
Appendix 2 – intervention rates across the district (per 10,000 population)



Appendix 3 – MRI and CT Wait Times Median and 95th Percentile



MRI – wait times at median and 95th percentile

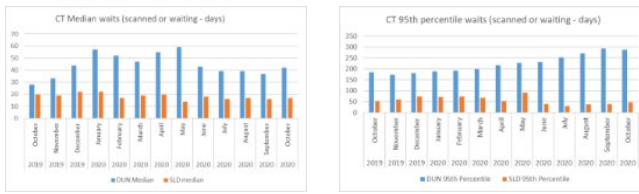


- Ministry of Health funded 120 additional exams for Dunedin Jun/Jul 2020
- Dunedin MRI then had outage for two weeks late August 2020, losing c. 130 elective appointments
- Southland MRI was replaced between 14 August and 30 September 2020 – work done before to reduce the waitlist, which grew by c.300 patients during this service closure

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CT – wait times at median and 95th percentile

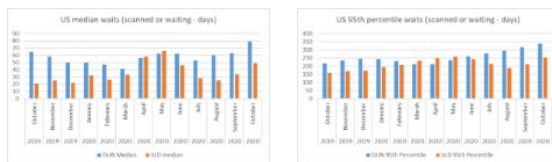


- Ministry of Health funded an additional 109 CT examinations Jun/Jul-20 for Dunedin
- Evening shift expansion commenced mid Sep-20 at Dunedin Hospital
- Earlier start time for morning shift commenced Dec-20 at Dunedin Hospital
- SPECT-CT training commenced Jul-20 at Dunedin Hospital

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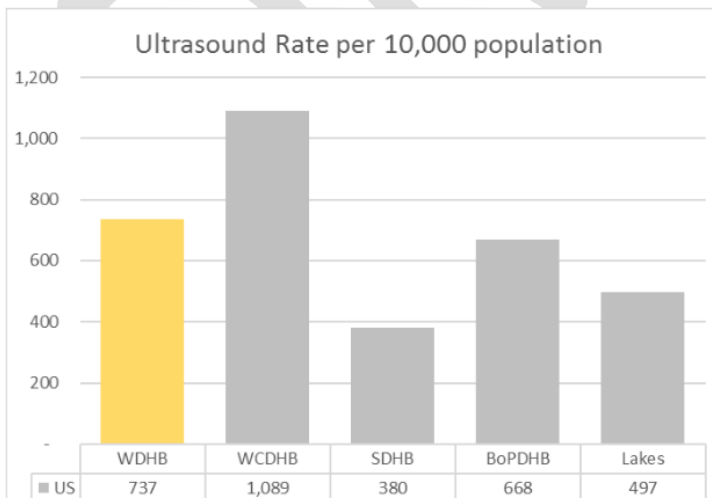
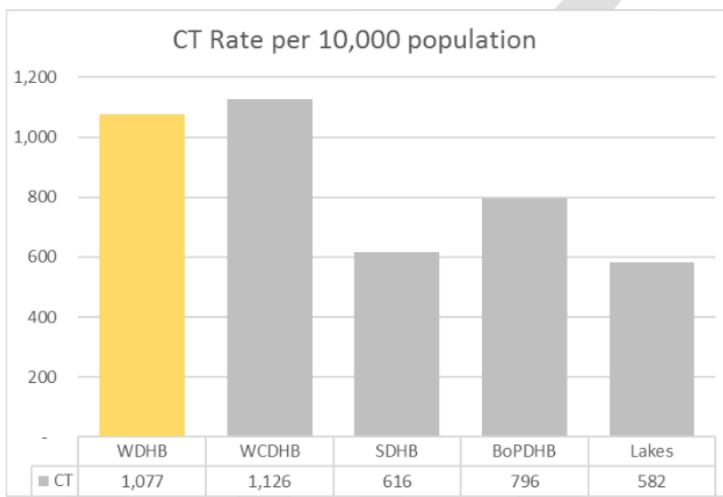
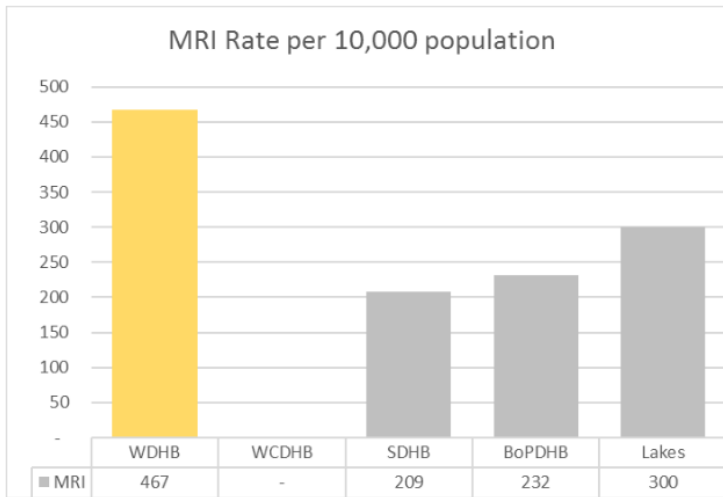
US – wait times at median and 95th percentile



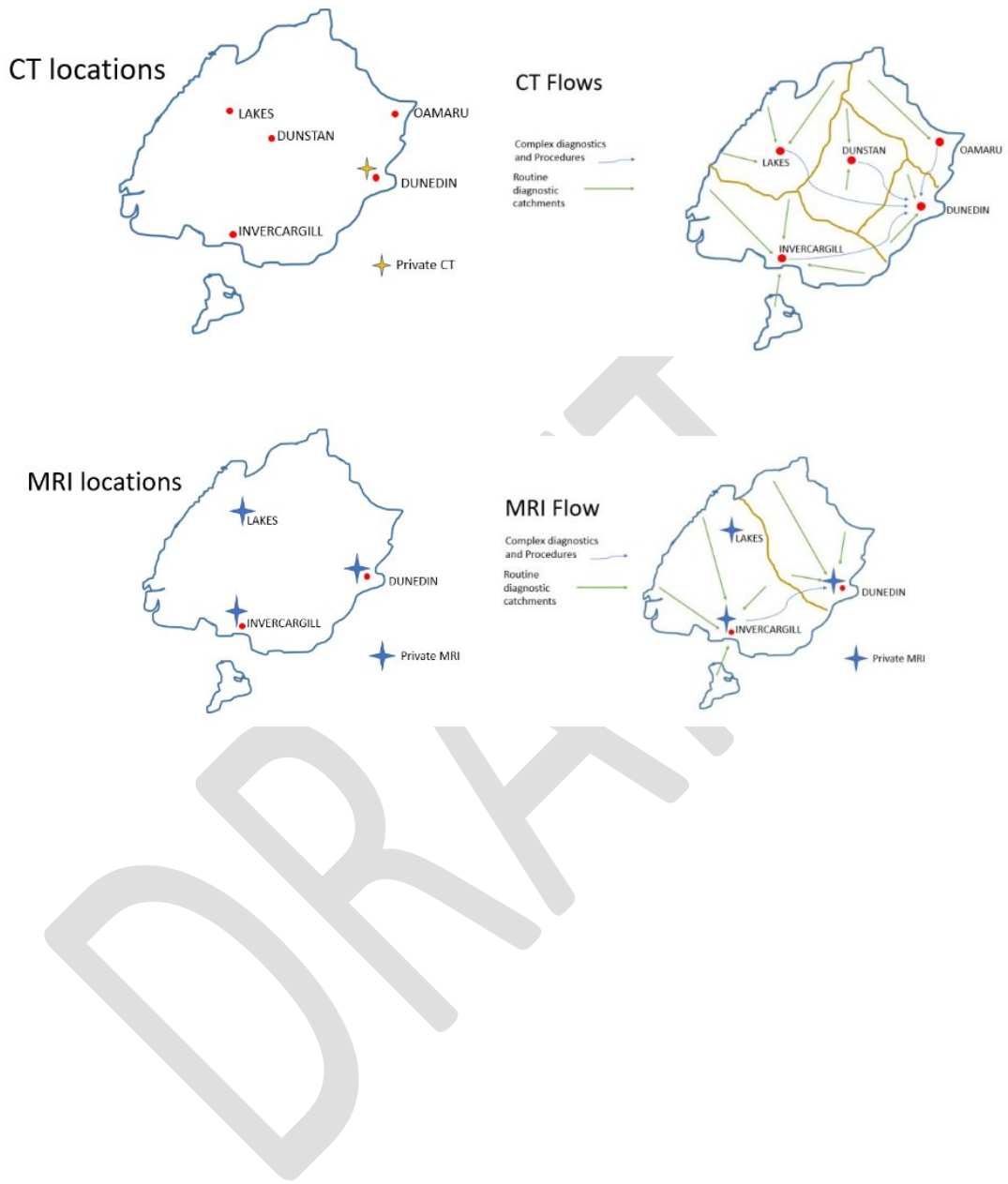
- Dunedin MRI had locums in place from Jan – Mar 2020 reducing numbers waiting. Ended Mar-20
- Southland MRI had locum in place from Mar-20 and evening shift from Jun-20. Sonographers undertook additional sessions between Jun and Aug-20
- Change in how obstetrics patients coded in Southland occurred Sep-20, further reducing numbers of elective patients waiting.

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Appendix 4 – Intervention Rates compared to other District Health Boards



Appendix 5 – Equipment Locations across the District



FOR INFORMATION

Item:	Enhanced Generalism/Medical Assessment Unit (MAU) Dunedin Hospital Quarterly Update
Proposed by:	Patrick Ng, Executive Director of Specialist Services
Meeting of:	03 May 2021

Recommendation

That the Hospital Advisory Committee notes the progress of planning and implementing the Enhanced Generalism/MAU project which was approved on 20 December 2020.

Purpose

To provide the Hospital Advisory Committee with a status update for the Enhanced Generalism/Medical Assessment Unit (MAU) project.

Specific Implications for Consideration

1. Financial

- Costs are now being incurred (in line with the project plan) with the project manager commencing in late March, and with the recruitment of two house officers as required by the two 6 team roster model. None of the additional SMO's have been appointed yet but recruitment efforts appear to be successful as outlined later in this report. These costs are being incurred in internal medicine but the budget is held in the CEO cost centre. Overall less cost than was budgeted for is being incurred. Additional costs will start to be incurred as the SMO are recruited and once the Medical Assessment Unit opens, which will necessitate the recruitment of the additional nursing staff planned for in the case.

Financial benefits realisation can be measured once Generalism is implemented, and sub-specialty referrals are accepted by the General Medicine (formerly Internal Medicine) team. This is anticipated to commence by June 2021. Work is currently underway to develop the measures that will demonstrate that financial benefits are being realised. Full benefit realisation will not be able to be measured and confirmed until the co-located medical assessment unit has been built and is operational.

2. Quality and Patient Safety

- The move to the General Acute Medical Admitting (GAMA) model of care will provide improved overall care for patients, allow for improved patient flow, and improve communication between specialities and the General Medicine team. The improved communication has already been evident using the components of the 6-team model that have now been implemented.

3. Operational Efficiency

- The business case identified the requirement for a Project/Change Manager (PM) for the Enhanced Generalism and MAU co-location with the Emergency Department projects. These projects now have (see Appendices 1 – 4):
 - A Project Milestone Timeline Chart to illustrate when anticipated milestones are expected to occur.

- A project plan with key milestones identified along with a work breakdown structure (WBS) and accompanying GANTT chart.
- A Benefits Realisation register with key performance indicators and associated metrics. This is in an initial draft state and further work is required to develop robust benefit realisation measures and to ensure that regular reporting occurs.
- A Project Risk Register with potential mitigations currently being considered.
- Service level agreements are being progressed between General Medicine and the sub-specialty teams for Generalism. General Medicine is currently admitting Endocrinology, Rheumatology, and Neurology patients, and is yet to admit Gastroenterology, Respiratory, or Cardiology patients. The appropriate socialisation and training for staff will also need to occur.
- The following baseline metrics are being established to demonstrate the impact of Generalism. Once established these will be routinely reported in future updates noting that benefit realisation will only incrementally increase following the establishment of the Generalism model (anticipated June 2021), but will start to become more evident with SMO recruitment (August 2021) and with the establishment of the MAU proximal to the Emergency Department (2022). These metrics form the foundation of the Benefits Realisation Plan register (Appendix 2) and include:
 - Average Length of Stay focused on General Medicine patients admitted under the new model of care
 - Improvement in the overall 'Shorter Stays in the Emergency Department (SSED) SSED performance (3-5%)
 - Reduction in the number of re-admissions
 - Reduction in number of stranded patients (>10 days)
 - Reduction in number of super-stranded patients (>21 days)

4. Workforce

- Recruitment has been underway since January 2021. Three job offers for General Medicine Consultants have been extended and the individuals are anticipated to arrive in July/August 2021. Further interviews have been completed and reference checks are underway to complete the necessary recruitment of medical staff.

5. Equity

- The steering group has been established with membership from the Maori Health Directorate.
- Metrics for benefit realisation will include monitoring of Maori and Pasifika patients.

6. Other

- Building and property are engaged in supporting the decanting process for the physiotherapy and rheumatology area in preparation for the establishment of the MAU next to the Emergency Department. The General Manager for Building and Property recently presented a de-canting plan to the ELT and the Building and Property team will now engage with the Executives who have staff in the space that needs to be de-canted to ensure that de-canting occurs as quickly as possible so that the construction of the MAU can occur as quickly as possible.

- The communications team have been engaged to undertake a phased communication approach to distribute information at all levels across the organisation. The strategy for communication during the establishment of the Generalist model will be intended to be operationally informative for the organisation whilst enhanced and more extensive external communication will occur for the establishment of the MAU.

Discussion

The Generalism and MAU project requires the General Medicine team to admit sub-speciality patients and the MAU to be constructed in order to adopt the new model of care and to maximise the realisation of benefits. Good progress is being made on planning for these changes to occur and a number of issues are being worked through.

7. Delays in obtaining Service Level Agreements/Referral Guidelines with all applicable sub-specialities due to Holiday schedules, credentialing that was postponed from last year due to Covid-19, and other changes have pushed the GAMA model of care implementation out to the end of May 2021.
8. Finding office space for five (5) doctors on or near the 8th floor is a challenge due to the availability of unoccupied space. A potential solution is in being worked on, but there is a dependency on other planned moves.
9. Protocol Training will not be able to be fully developed and presented to relevant staff until the Service Level Agreements are signed and in place. The information required to train the staff will be contained in these Agreements.
10. There is a risk of delays in the decanting of the space required to build the MAU due to dependencies on the timing of other projects being coordinated by Building and Property along with the approvals they require to move forward with the temporary relocation of impacted staff. Updates will continue to be provided.
11. Full establishment of the Enhanced Generalism model of care requires a fully recruited roster. This will not occur until August 2021 at the earliest.
12. A high level Project Dashboard included in Appendix 5

Next Steps & Actions

- Service Level Agreements (SLA) on admission criteria with Gastroenterology, Respiratory and Cardiology.
 - Protocol training with applicable staff of SLAs prior to GAMA implementation date.
 - Initiate Communication plan implemented throughout the organisation utilising a phased approach with appropriate communication based on level within organisation.
 - On-going recruitment activities to bring new staff on board as quickly as possible with potential start dates in July/August 2021.
 - On-going timely progress with decant process and new co-located MAU reconfiguration and build is required. Engagement is occurring with Building and Property to progress as there is a dependency on them completing the de-cant and construction work as quickly as possible.
-

Appendices

Appendix 1	Project Milestone Timeline Chart
Appendix 2	Project Plan with WBS and GANTT
Appendix 3	Benefits Realisation Plan Register
Appendix 4	Project Risk Register
Appendix 5	Enhanced Generalism/MAU Project Dashboard

Appendix 1

Enhanced Generalism and Medical Assessment Unit

Project Milestone Timeline




Appendix 2

Project Plan with WBS and GANTT, refer to Appendix 2.

Appendix 3

Enhanced Generalism Benefits Realisation Register							
Item #	Benefit (Description)	Assumptions	KPIs	Associated Metric	Benefit Owner	Transition to Operational State	Sustainment/Closure Plan
B-1	Reduction in average LOS for General Medicine patients	Wholistic approach Reduces avoidable investigations; Prompt access to diagnostics; Accurate Patient List Reports; Fully rostered staff	Reduced LOS Reduced # Stranded Patients Reduced # Super Stranded Patients	Avg LOS (days) Number of patients >10 days		Full implementation of Enhanced Generalism Model of Care	Sustained gains in reducing average LOS for GenMed patients
B-2	Improvement in overall SSED performance (3-5%)	MAU co-location with ED Timeliness of patient move from ED to MAU	ED performance to target Establish timeframe goals for move from ED to MAU	95% Target - ED Performance SSED performance Specialties vs General Medicine To be established		Co-located MAU with ED	Sustained gains in meeting ED target
B-3	Reduction in the number of re-admissions	Improved outcomes for patients Greater continuity of patient care	Reduced # re-admissions	Number of re-admissions for GM patients		Inherent to process	Sustained gains in low re-admission rates
B-4	Reduction in stranded patients	Reduction in avg LOS Greater continuity of patient care Prompt access to diagnostics	Reduced LOS Reduced # Stranded Patients	Avg LOS (days) Number of patients >10 days		Full implementation of Enhanced Generalism Model of Care	Sustained gains in reducing number of patients >10 days
B-5	Reduction in super stranded patients	Reduction in avg LOS Greater continuity of patient care Prompt access to diagnostics	Reduced LOS Reduced # Super Stranded Patients	Avg LOS (days) Number of patients >21 days		Full implementation of Enhanced Generalism Model of Care	Sustained gains in reducing number of patients >21 days
	NOTE: The Benefits Realisation register is a working document and will evolve as the project is implemented and matures. Benefits may be modified, added, or redefined to reflect changes in business processes or as additional benefits are identified.						

Appendix 4

 Enhanced Generalism Project Risk Register						
Risk No.	Risk Description	Risk Level	Risk Owner	Status (RAG)	RIP (Risk Impact to Project)	Risk Mitigation
GR-1	Service Level Agreements/Referral Guidelines - impacted by resignation of Cardiology CD, credentialling and holiday schedules	2	Dion Astwood/ Kathy Orr		GAMA implementation rescheduled for end of May	Meetings are scheduled for those Sub-specialties with Clinical Directors
GR-1a	SLAs - Cardio and Rheum currently without CD	2	Dion Astwood/ Kathy Orr		Will need to find a different path if CDs are not identified by 23 Apr. Plan in work.	D. Astwood will work towards coordinating agreements with current staff, if Clinical Director is not in place by end of April
GR-2	Office Space for 5 in-coming SMOs on or near 8th floor	2	Building & Property/ Kathy Orr		Potential spaces identified; dependent on other project moves	Current MAU registrar area has room for 2 SMOs
GR-3	Protocol Training	2	Dion Astwood/ Kathy Orr		Cannot be conducted until SLAs are completed	Training being developed, specific criteria from agreements will be plugged into training when complete
GR-4	GAMA implementation	2	Dion Astwood/ Kathy Orr		Implementation impacted by risks GR-1 and GR-3. Both must be complete prior to implementation	Resolutions for risks GR-1 and GR-3 are in place
GR-5	Recruitment - SMO and AH	2	Sarah Kalmakoff/ Human Resources		Recruiting process is taking longer than expected. SMOs not available to start until July/Aug 2021. AH position (OT) has not been posted as of 08/04/21	
	Risk Levels:			Status:		
	1 - low			Red - Plan at risk		
	2 - medium			Amber - Plan off track, but being worked		
	3 - high			Green - Plan on track, no longer at risk		

Enhanced Generalism/MAU Project Dashboard



Item	Status	% Complete	Notes/Help Needed
Enhanced Generalism			
SLA/Referral Guidelines		50%	Baseline SLAs created, need services approval signatures
ED	●		Patients currently being admitted for Endocrine, Rheumatology and Neurology. Not yet admitting Gastroenterology, Cardiology or Respiratory patients
Neurology	●		
Cardiology	●		
Gastroenterology	●		
Respiratory	●		
Communication Plan	●	25%	Phased approach; initial communication in work
Protocol Training	●	15%	Based on SLAs; given to applicable staff; location TBC
GAMA Implementation	●	20%	Requires approved SLAs, Protocol Training completion
Recruitment	●	85%	Two offers made; 1.7 SMO in recruitment process
Office Space	●	75%	Potential spaces identified; other projects movement required
MAU			
MAU Design	●	50%	Feasibility design complete; need final design approval
Decant Process	●	5%	Movement approvals in work, dependencies on other projects
MAU Build	●	0%	Decant and Procurement processes need to complete prior to start

Red Project has not started or cannot move forward due to roadblocks (help needed)
 Amber Project has a plan, but is off track, issues being addressed
 Green Project has a plan and is on track

Kind Manaakitanga	Open Pono	Positive Whaiwhakaaro	Community Whanaungatanga
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Hospital Advisory Committee - Matters Arising/Review of Action Sheet

WBS WITH GANTT CHART

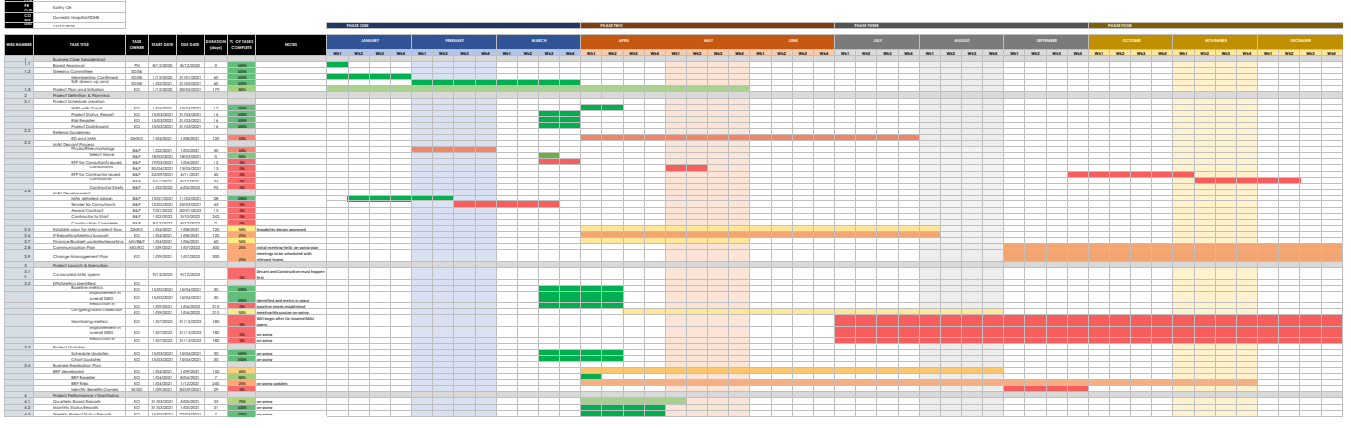
Table with 4 rows: PROJECT, MANAGER, COMPANY, DATE

Main Gantt chart table with columns for months (January-December) and rows for various tasks with progress bars and completion percentages.

5.3

Hospital Advisory Committee - Matters Arising/Review of Action Sheet

WBS WITH GANTT CHART



5.3

FOR INFORMATION

Item:	Executive Director of Specialist Services (EDSS) – March 2021 report
Proposed by:	Patrick Ng, EDSS
Meeting of:	Hospital Advisory Committee, 03 May 2021

Recommendation

That the Hospital Advisory Committee notes the content of this report.

Purpose

This report is to update the Hospital Advisory Committee on key activities and issues occurring within Specialist Services.

1. Equity

The EDSS, GM Surgery, Chief Maori Health Officer and others met to review the Business Intelligence dashboards that are currently available for reporting equity information. Unfortunately, the quality of the information currently presented on these dashboards is relatively low (e.g., the information is not well contextualised) and work is required in two key areas:

- Better reporting of the information that is available and;
- Determining whether more data points should be captured and how we might achieve this.

The information that is currently available is primarily captured on our patient administration systems (both IPM) and is based on what patients identify their ethnicity to be. We are keen to understand whether other DHB's are going beyond this to capture other data points related to ethnicity and through contacts that our Chief Maori Health Officer has we are organising to have a Zoom call with relevant members of Auckland based DHB Maori Health and Reporting teams to gain insights into how they are collecting and reporting equity data.

The resources available to analyse the data is another challenge for us. The Information Technology Team are lean on reporting resources, particularly after the loss of a talented data scientist several months ago. They have confirmed that they will be recruiting for a Reporting Analyst who will have a specific focus on equity reporting and this role will be recruited for in partnership with the Maori Health Directorate.

In the meantime, the business analyst, Demand and Capacity who resides in the EDSS structure has been asked to prioritise the development of an initial range of business intelligence reports which focus on equity. The key to developing good reports will be for key stakeholders to workshop what is useful to report on and we will organise for this to occur once we have met with our colleagues at the Auckland DHBs to gain initial insights into how they have developed their reporting. We envisage that we will then establish a regular set of equity reports which we will evolve once our IS colleagues have recruited the analyst and as we determine how we can capture more data points to serve as the basis for enhanced reporting.

In the meantime, our GM Surgery has met with our Respiratory Clinical Leader to discuss what an initial dashboard for equity should look like for that service, allowing us to understand equity for waiting times, unable to attend rates and intervention rates. She is also working towards having two weekly meetings in place with Radiology, Cardiology, and the Respiratory service to discuss equity and moving forward with improvement, starting at the end of April.

We believe that the following needs to guide our work programme:

- There is value in focussing on outpatients and radiology due to late presentation for cancer diagnosis and other long-term conditions.
- The Unable to Attend rates for Māori and Pasifika are 3-5 times higher than 'Other' members of our population.
- We have an equity tool in Oncology that could be adapted to be used in outpatients and Radiology.
- Our current systems and processes for arranging outpatient appointments are high risk when it comes to successful engagement of Māori and Pasifika.

On this basis, our GM Surgery has outlined an initial work programme that she would like to discuss with the services which is along the following lines:

Draft Timeframe	Activity
Quarter 4 2020/21	Establish 'equity in Outpatients and Radiology group and meet on a 2 weekly basis.
Quarter 1 2021/22	Develop a suite of equity measures (intervention, referral and wait time rates by location, ethnicity and decile). Share results with operational staff as part of an awareness and education approach. Start to determine other high risk groups to include in the programme at a later date (e.g. ophthalmology).
Quarter 2 2021/22	Further development work on a range of interventions with stakeholders and operational staff. Consider the development of a modified version of the Equity Application developed for Oncology to apply to other interventions as well.
Quarter 3 2021/22	Trial a range of intervention tactics and measure their effectiveness.
Quarter 4 2021/22	Maintain intervention tactics which work. Measure and monitor performance.
Ongoing	Determine an approach that will allow the most effective interventions to be systematically introduced into our other services, too.

We will use the opportunity to learn from other DHBs about how they have improved their equity reporting and this will inform the reports we start to publish in our HAC papers going forward.

2. Surgical Performance – Case Weight Discharges

The following table outlines our case weight discharge (CWD) performance year to date compared to our elective plan.

YTD CASEWEIGHTS (with year on year comparison)

PUC	YTD Service Provider View			- YTD IFL			+ YTD OFL			YTD Population View			Previous FYTD Provider View		Previous FYTD Population View	
	Actuals	Target	Variance	Actuals	Target	Variance	Actuals	Target	Variance	Actuals	Target	Variance	Actuals	Year on Year Variance	Actuals	Year on Year Variance
Non Surgical PUC																
Non Surgical PUC with Surgical DRG	1,040.5	892.2	148.3	18.0	21.0	-3.0	337.3	460.3	-123.0	1,359.7	1,331.5	28.2	1,091.7	-51.2	1,521.5	-161.8
PUC Total	1,040.5	892.2	148.3	18.0	21.0	-3.0	337.3	460.3	-123.0	1,359.7	1,331.5	28.2	1,091.7	-51.2	1,521.5	-161.8
Surgical PUC																
S00.01 General Surgery	2,544.9	2,256.7	288.1	7.6	2.0	5.7	152.3	182.2	-29.9	2,689.5	2,437.0	252.5	2,403.2	141.7	2,482.8	206.7
S05.01 Anaesthesia Services	8.1	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0	8.1	0.0	8.1	12.1	-4.0	12.3	-4.3
S15.01 Cardiothoracic	1,097.8	1,065.8	32.1	16.7	14.6	2.1	26.6	17.1	9.5	1,107.8	1,068.2	39.5	1,105.8	-8.0	1,102.8	4.9
S25.01 Ear Nose and Throat	987.6	1,024.8	-37.2	3.5	1.2	2.3	20.8	15.5	5.2	1,004.9	1,039.2	-34.3	909.0	78.6	937.6	67.2
S30.01 Gynaecology	781.7	848.7	-67.0	5.1	1.2	3.9	131.3	70.7	60.5	907.9	918.2	-10.3	735.2	46.5	812.7	95.2
S35.01 Neurosurgery	324.4	279.9	44.5	28.0	31.3	-3.4	140.6	132.0	8.5	437.0	380.6	56.4	315.2	9.2	462.5	-25.5
S40.01 Ophthalmology	744.9	914.6	-169.7	1.8	0.6	1.2	13.7	5.2	8.5	756.7	919.2	-162.4	690.4	54.4	698.1	58.6
S45.01 Orthopaedics	3,226.3	3,540.4	-314.0	244.7	218.3	26.5	71.9	88.4	-16.5	3,053.5	3,410.5	-357.1	3,745.6	-519.2	3,587.1	-533.7
S55.01 Paediatric Surgical Services	95.8	141.7	-45.9	0.0	0.0	0.0	105.6	62.3	43.3	201.4	204.0	-2.6	88.2	7.6	266.9	-65.5
S60.01 Plastic & Burns	417.0	502.1	-85.0	1.3	1.9	-0.6	51.3	144.9	-93.6	467.0	645.1	-178.1	413.3	3.7	445.5	21.5
S70.01 Urology	907.9	825.0	82.9	3.6	2.0	1.6	31.2	28.2	3.0	935.4	851.1	84.3	765.3	142.6	794.4	141.0
S75.01 Vascular Surgery	566.2	655.8	-89.6	0.2	8.4	-8.2	8.4	22.3	-13.8	574.4	669.7	-95.2	567.6	-1.4	570.9	3.6
PUC Total	11,702.5	12,055.4	-352.9	312.6	281.5	31.1	753.6	768.8	-15.2	12,148.5	12,542.7	-399.2	11,750.9	-48.4	12,173.8	-30.2
PUC Total	12,742.9	12,947.6	-204.6	330.5	302.5	28.1	1,090.9	1,229.1	-138.2	13,503.3	13,874.2	-370.9	12,842.5	-99.6	13,695.3	-192.1

6.1

The 'service provider' view is the share of the elective plan that is delivered by our hospitals and is 205 case weights behind plan on a year-to-date basis. The 'provider' is focused on achieving this target. The 'population' view includes net inter / intra district flows (other DHB populations being treated in our DHB and our patients being treated at other DHBs). This view shows that we are a further 166 CWD behind plan when the planned CWD activity for our population in other centres (primarily Christchurch) are taken into account.

However, there is a further 283 CWD of 'improvement action plan' CWD that will be funded if we can complete the extra surgery.

As shown in the above table, the biggest deterioration in performance has been in orthopaedic surgery. This has been partially offset by over delivery in medical procedures which count in our elective surgical CWD results and also by higher than planned general surgery, which has been attributed to a higher cancer workload earlier in this calendar year.

Overall, when underperformance in service provider, population and improvement action plan are taken into account, there is 654 CWD of funded surgery that can be completed if we can increase our delivery of elective surgery prior to the end of the financial year on 30 June 2021. At \$5.5k per CWD this translates into \$3.6m.

Our inability to deliver orthopaedic surgery is primarily due to our inability to provide inpatient beds which in turn has been due to nurse vacancies, roster gaps and the closure of beds earlier in the calendar year. There is also a tie in with the pressures which caused us to cancel elective surgery in the latter part of December 2020 and to subsequently form the Patient Taskforce, although this was also associated with high acute volumes, particularly in Southland in December, as outlined in previous HAC reporting.

The following (brief analysis) of the service provider view traces our orthopaedic challenges back to December 2020 in order to provide more context and an explanation for our current CWD performance. This is then followed by a brief explanation about the steps which are being taken to maximise our CWD delivery by the end of the financial year.

The following table shows that orthopaedics was ahead of their year-to-date elective plan in November 2020 by 104 CWD. This was primarily due to additional outsourcing which was completed immediately after COVID. The additional outsourcing was completed because a significant backlog had accumulated during the COVID lockdown as no elective surgery took place during the lockdown. Initially, the additional volumes that were completed allowed us to earn IAP recovery revenue, but as we must complete our elective plan volumes before, we earn our IAP revenue we now anticipate that the revenue we previously earned will be offset by under delivery year to date.

In December we reduced elective surgery in the weeks prior to Christmas. As previously reported, in January orthopaedic activity in particular was reduced because of inpatient beds being closed in the orthopaedic surgical ward, which led to less orthopaedic surgery being able to be booked. This continued into February and March and it has only been in the latter part of March that the nursing graduates who were recruited in late January have been able to be counted on the roster, leading to more of a return to normal for resourced beds in the orthopaedic ward. Nursing gaps continue to be challenging for Southland Hospital.

	Mth	YTD
	Ortho Var	Ortho Var
November	-1	104
December	-64	41
January	-77	-36
February	-106	-142
March	-172	-314

The following table shows that despite orthopaedic surgery deterioration since December, this deterioration has effectively been offset by additional volume elsewhere (e.g., General Surgery and Medical (primarily cardiac procedures performed in the Cather Laboratory). And as a consequence, despite negative performance compared to plan overall for February, in February the year-to-date performance was still ahead of plan.

However, March was significantly adverse to plan (half of which was orthopaedic surgery) and by the end of March year to date performance for the Service Provider view as -205 CWD.

	Total	Total YTD
	Var	Var
November	-16	195
December	62	257
January	35	292
February	-148	144
March	-348	-205

March was also planned as a relatively high productivity month compared to other months in the phasing of the annual elective plan (which is based on the actual delivery patterns of previous years after taking into account whether statutory holidays have moved between months between years), and this has therefore compounded the relatively low delivery when compared to plan, per the following chart.

	Mth	Mth	Mth	Target
	Ortho	Total	Target	% Yr
July	538	1,801	1,527	8.8%
August	404	1,519	1,619	9.3%
September	403	1,391	1,543	8.8%
October	446	1,557	1,477	8.5%
November	415	1,503	1,519	8.7%
December	272	1,288	1,225	7.0%
January	216	1,073	1,073	6.1%
February	260	1,188	1,336	7.7%
March	273	1,282	1,630	9.3%
April			1,297	7.4%
May			1,648	9.4%
June			1,553	8.9%
			17,445	100%

The impact of the above issues on orthopaedic surgery in particular has been quite pronounced, with average orthopaedic CWD delivery for the period February to March 36% lower than it was for the period August to November.

Average Ortho Delivery Aug-Nov:	417
Average Ortho Delivery Feb-Mar:	266
Monthly Variance:	151
Variance Percentage:	36%

Since the middle of March our GM Operations has been tracking the impact of roster gaps on bed closures on the Dunedin site. This is currently captured manually but will be developed into a regular Business Intelligence report in the future.

The following tables show that on the 15th of March there were 23 bed closures (primarily in the surgical wards), but on the 6th of April there were no bed closures.

Monday 15th of March. How Did We Respond To Roster Gaps?						Tuesday 6th of April. How Did We Respond To Roster Gaps?					
	RG Total	Resource	'Stretch'	Unclosed Gap	Bed Closure		RG Total	Resource	'Stretch'	Unclosed Gap	Bed Closure
Medical Wards						Medical Wards					
Ward 7A	0	0	0	0	0	Ward 7A	1	-1	0	0	0
Ward 7B	0.5	0	0	0.5	0	Ward 7B	0	0	0	0	0
Ward 7C	0	0	0	0	0	Ward 7C	1	-1	0	0	0
Ward 8 MED	2	0	0	2	3	Ward 8 MED	0	0	0	0	0
MAU	0	0	0	0	2	MAU	0	0	0	0	0
Ward 8C	0	0	0	0	0	Ward 8C	0	0	0	0	0
	2.5	0	0	2.5	5		2	-2	0	0	0
Surgical Wards						Surgical Wards					
Ward 4A	1	0	0	1	4	Ward 4A	1	-1	0	0	0
Ward 4C	0	0	0	0	0	Ward 4C	0	0	0	0	0
Ward 3 Surg B	1	0	0	1	6	Ward 3 Surg E	0	0	0	0	0
Ward 3 Surg C	2	0	0	2	8	Ward 3 Surg C	0	0	0	0	0
	4	0	0	4	18		1	-1	0	0	0
Combined	6.5	0	0	6.5	23	Combined	3	-3	0	0	0

From the 1st of April until the 14th of April there have generally been zero surgical ward bed closures with the exception of Monday April 12th when 8 beds were closed in Ward 3 Surgical 'B'. We will look into what happened on that day to understand it better.

The above observations (that the situation with nursing vacancies and roster gaps is improving, particularly on the Dunedin site) is being reflected back from the daily 1pm bed access meeting led by the GM Surgery, who is reporting that the conversations have shifted away from nursing gaps to now being focused on the management of acute volumes and the delivery of elective volumes.

Managing our elective surgical demands alongside our acute surgical demands has always been challenging. Whilst overall acute volumes do not appear to be significantly growing year on year, managing acute volume whilst maximising elective surgery is an ongoing challenge. Overbooking elective lists leads to relatively high rates of cancellation which are distressing for our Service Managers and our patients. Under booking elective surgery creates the risk that we underutilise our overall theatre capacity which comes with a high opportunity cost.

The right answer is to have sufficient acute capacity planned for (scheduled acute theatre lists) so that we get the balance right most of the time. Immediately after COVID we put 2 additional 8 hour acute lists into the Dunedin theatre schedules each week. This had a positive impact as previously we were sometimes accumulating 50 or more hours on our 'acute whiteboard' by the end of the week which is a challenging volume to clear. Since implementing the additional lists, we have generally been within the vicinity of 30 acute hours on the whiteboard, although we have occasionally been higher than this. However, one of the two acute lists is routinely being used for neurosurgery and other work and we believe that we will need to create the equivalent of 2 additional 8 hour acute lists in order to get the acute lists better optimised to meet typical demand. A proposal is being worked on that is focused on achieving this outcome and we believe this will allow us to better balance the typical elective and acute demands on our perioperative services.

Whilst the above commentary provides a perspective on our current challenges, we also need to take steps to try to maximise the elective surgery (CWD) that is delivered by the end of the financial year. We are focusing on the following:

- Outsourced surgery. Our planned care manager and service managers have been working on plans to increase the rate at which we outsource surgery in the lead up to the end of the financial year. Where there is insufficient capacity on private lists in our district, we will also investigate options outside of the district, although this is not considered an optimal solution in many cases because of the need to provide ongoing follow up and care after surgery.
- Monitoring of inpatient bed resourcing. We are monitoring bed closures on a daily basis so that we can be responsive to specific situations which may cause us to have to close inpatient beds (particularly for surgery) which would then impact on the acute and elective surgery than can be completed.
- Provision of additional acute lists. We are provisioning additional acute lists where we can get uptake at times when we have high acute volume and for periods where there is likely to be an accumulation (e.g., we ran extra lists during Easter and are planning to do the same on Anzac weekend). This provides us with the opportunity to complete more acute work which allows more elective work to occur without disruption.
- The team have been working closely with Timaru hospital to finalise arrangements for some of our orthopaedic patients to receive surgery there. This has now been worked up on the principle that the orthopaedic surgeons in Timaru will do the surgery (the earlier proposal was that one of our orthopaedic surgeons would travel to Timaru and do the surgery there). A list of patients has been identified and the arrangements that need to be in place have been worked through by both the Timaru team and our own team. We will now get surgery underway under these arrangements as soon as possible. We also need to agree on an inter district transfer price which reflects our use of their spare theatre and inpatient bed capacity whilst reflecting the benefit to us from getting more elective volumes completed. We plan to get the surgery going and to work through the pricing arrangements in parallel.

These are the key initiatives that are being focused on. We will provide a more comprehensive update in the HAC meeting about where we have got to with these initiatives.

3. Outpatient Performance ESPI 2

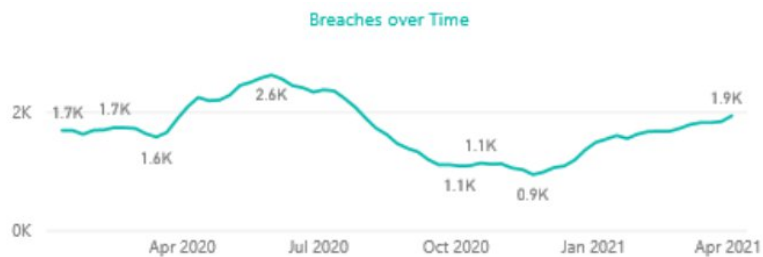
Following COVID good performance had been made in getting the total number of first specialist appointment outpatient breaches down and we had dropped from 2,600 breaches (across all specialties) to circa 900 by December. During December and January, we typically see an increase (as we accept at approximately the same rate during triaging but have less clinic capacity due to annual leave). However, further recovery work is required for us to start returning onto a downward trajectory.

Two key services with large breaches are Orthopaedics in Dunedin and the ENT service in Southland. In the case of Orthopaedics, we had successfully reduced breaches to 49 by the end of November (they had previously been as high as 300). This was achieved through a combination of raising the acceptance threshold (reflecting that capacity in the service was less than what was previously being accepted), using the Ministry prioritisation tool to achieve this, and working with the rural hospitals on the breaches that were occurring through rural clinics. Due to the inability to get inpatient surgery completed, the service reduced the number of outpatient appointments attended to earlier this calendar year. However, as they did not reduce the number of patients accepted onto the waiting list (because of concerns that the threshold is already high), this has caused an imbalance and increased the number of ESPI 2 breaches. We have asked the service to either reintroduce the

outpatient capacity or to re-consider the threshold. The service is organising for an engagement session with the wider stakeholders (including primary care) to determine the best way to recover. In the case of the ENT Invercargill service the high breaches reflect limited capacity in the Southland service (which has previously been largely dependent on periodic visits from a locum). The service has now confirmed an appointment into Southland. We have previously asked the Business Development Manager to work with the service to implement the Ministry prioritisation tool and initial work has occurred. We now need to implement the tool in conjunction with the new appointment to ensure that the service can match its capacity to demand and improve long wait performance.

Many of the medical specialities are closer to ESPI compliance and the Planned Care Manager is working with the GM for Medicine to optimise which FSA and follow up activity is optimally completed in specialist services rather than completed in primary care. The intention with this initiative is that it will help to fine tune how demand for outpatient services to better match it to supply and therefore get these services into balance and therefore ESPI compliant.

ESPI2 Breaches over Time



4. Inpatient Performance ESPI 5

Inpatient ESPI 5 breaches have deteriorated primarily due to the reduced elective surgical activity for the reasons outlined in the CWD reporting earlier.

Overall, breaches have climbed from circa 3,600 in January to 4,060 by the end of March. Of these breaches, orthopaedics had grown by 318 over this period (264 in Dunedin and 54 in Southland).

General Surgery breach growth was more modest, growing by 64 over this period (36 in Dunedin and 28 in Southland).

ESPI Wait list

- Dental Surgery
- E.N.T
- General Surgery
- Gynaecology
- Neurosurgery
- Orthopaedics
- Plastic Surgery
- Urology
- Vascular Surgery

score

0 100

- Dunedin
- Invercargill

- Rebooked
- Not Specified
- Given Certainty
- Exit
- Deferred
- Booked
- Active Review
-

ESPI 5 I/P Waitlist										
Start of Week	1 Months	2 Months	3 Months	4 Months	5 Months	6 Months	7 Months	8 Months	9 Months >	Total Waitlist
15 November 2020	580	537	574	291	270	225	125	62	733	3397
22 November 2020	584	527	571	293	264	232	133	65	717	3386
29 November 2020	515	549	521	343	259	225	165	58	705	3340
6 December 2020	550	552	497	377	246	239	197	68	681	3407
13 December 2020	631	599	468	409	231	238	199	88	663	3526
20 December 2020	612	661	448	449	248	242	191	112	671	3634
27 December 2020	490	652	482	447	295	246	191	140	686	3629
3 January 2021	388	624	530	432	308	251	208	163	699	3603
10 January 2021	294	679	551	404	345	223	221	167	704	3588
17 January 2021	308	627	620	356	385	219	222	163	720	3620
24 January 2021	386	504	595	373	395	234	216	158	746	3607
31 January 2021	489	424	580	450	338	273	222	178	739	3693
7 February 2021	506	375	616	443	345	297	198	184	763	3727
14 February 2021	495	327	591	484	325	329	197	182	771	3701
21 February 2021	500	404	493	483	319	346	195	169	789	3698
28 February 2021	520	480	416	466	366	324	228	188	807	3795
7 March 2021	591	528	348	500	335	313	251	160	832	3858
14 March 2021	622	561	284	527	367	279	283	161	840	3924
21 March 2021	634	621	313	434	410	262	296	160	846	3976
28 March 2021	672	570	431	349	387	314	278	186	873	4060
4 April 2021	629	596	436	308	404	312	266	197	887	4035

Now that we appear to have less impact from inpatient bed closures and in parallel to the work that is underway on what acute surgical capacity is necessary, we need to focus on working towards recovering breach performance as quickly as possible.

Orthopaedics has incurred the most significant loss of capacity and the service managers in Dunedin and Southland have collaborated to develop a recovery plan which seeks to systematically work long waiting patients off the wait list. The first key initiative in this plan is the initiative to get orthopaedic surgery done for our population at Timaru hospital. We are likely to propose targeting future COVID recovery funding (Investment Action Plan, IAP) funding at this multi-year plan and when the plan has been further developed, we will put it on the agenda so that it can be presented at a future HAC meeting.

In the meantime, as elective surgical capacity starts to return to normal, we will also re-focus our efforts on prioritising the booking of the longest waiting patients per the reporting we put in place late last year.

5. Emergency Departments

The following summary table shows that ED presentations in the month of March started to return to more normal volumes. In previous HAC reporting we noted that ED presentations in the two weeks prior to Christmas were averaging 121 presentations per day in Southland and they now appear to have dropped back to an average of 103 presentations per day in the month of March.

Events	Location Count			
Location	Admit	Non Admit	Admit %	Total Presentations
Dunedin	35	85	29%	119
Southland	22	81	21%	103

The minimum number of presentations at Dunedin during the month was 96 in a day and the maximum number was 134. The minimum number in Southland was 88 and the maximum was 123.

Performance against the 95% target averaged circa 72% per week in Dunedin and circa 84% per week in Southland.

To improve performance in Dunedin we believe we need to achieve better patient flow into the inpatient wards and to implement the Medical Assessment Unit next to the Emergency Department. The GM Building & Property recently attended the Executive Leadership Team meeting to explain what is required to enable the decanting of the future medical assessment unit space to occur faster and will follow up by talking to relevant ELT stakeholders to enable the decanting to occur as quickly as possible. This in turn will allow the demolition and construction work to occur faster.

To improve performance in Southland we believe we need to get the fit for purpose space and the proposed additional beds constructed as quickly as possible and this requires us to complete our business case and to get this endorsed.

We have continued to work on the business case and have assembled our information under the headers for a Treasury Better Business Case (strategic case, economic case, commercial case, financial case, and management case).

For the economic case (which analyses the options and then provides an overall recommendation) we ran a modelling exercise where we took a representative 'busy' day and flowed ED presentations into the two building options (fit for purpose ED spaces combined with 4 ED beds and fit for purpose ED spaces combined with 4 medical focused beds). The modelling showed significantly improved flow from both scenarios and a consequential and material positive impact on the 95% target performance.

One major component of the business case that needs to be worked through is the benchmarking. The CEO has been very clear that we cannot build an expanded ED to cater for the demand the ED currently receives as we must work with our Primary Care colleagues to reduce the primary care presentations that would be more appropriately addressed in a primary care setting. We therefore need to be careful that what is proposed is appropriate for the population that we serve and to understand this better a degree of benchmarking is required.

For this reason, we have focused one of our colleagues on collecting benchmarking information from reasonably comparable base hospitals elsewhere in the country.

We have also modelled the Invercargill ED presentation data based on the domicile of the patients who present at the ED. What we have found is that the ED serves a population that is greater than just the Invercargill City population of circa 55,000. We found that for the high presentation day that

we modelled (which is the same day used for the options analysis) circa 35% of the presentations were outside of the Invercargill City domicile. We have corroborated this finding in discussions with our ED colleagues and we have also tested the situation in Dunedin. What we have found in Dunedin is that circa 19% of presentations are from outside the Otago district so Dunedin also has ED presentations that are outside of the city catchment, but at a much lower rate than Southland. This needs further investigation but suggests that a proportion of ED presentations may not be able to be served by the rural hospitals, or that the Southland Hospital may be more accessible for some districts outside of Invercargill city than the rural hospitals. We will continue to refine our understanding of this.

We believe that when benchmarking against comparable hospitals we are likely to need to upscale Southland hospital. Upscaling would utilise the following logic. If 65% of the population served by Southland hospital is within the Invercargill city boundaries (the total population for the city is 55,000), and 35% of the population served by Southland hospital is from outside of the city, then the population served by Southland hospital is circa 85,000 ($55,000 / 0.65$). Of the 85,000 population served, 65% (circa 55,000) live within Invercargill city boundaries and 35% (circa 30,000) are domiciled outside of Invercargill city. This would then allow more accurate benchmarking to be undertaken. We have collected the necessary information to undertake the benchmarking exercise but before we get underway with this, we will now collect more daily presentation data and test it to ensure that the 65:35 split is representative of the overall presentations received by Southland hospital.

Following 'code black' it has become evident that more planning is required ahead of long weekends. Pre-planning work to try to maximise discharges that occurred prior to Easter weekend included:

- Arrangements were put in place to get better access to allied health input and this was communicated.
- Extra RMO and house officer were rostered for the weekend and a backup roster was created in case of illness.
- There was engagement with the clinical leaders for the medicine, women and children service and some clinicians for surgery. We envisage that a planned engagement session will occur for those who are on-call ahead of a long weekend.
- The CMO and the General Manager Operations monitored ED activity during the Easter period and the GM Southland Hospital also monitored and reported on occupancy, the numbers waiting in the ED and the hours on the acute board on a daily basis during Easter.
- An additional acute session was planned in Dunedin on the Monday.

These initiatives appear to have been reasonably successful. Dunedin's occupancy was tight, and there were acute pressures following the long weekend, but the initiatives did appear to contribute to the result whereby discharges over the weekend were greater than admissions. Southland occupancy during and immediately following the long weekend appeared to be less problematic than Dunedin's.

We will now look at taking these steps ahead of every long weekend (our next long weekend is Anzac weekend towards the end of April). We are also working on having the eTXT service working for SMO's, RMO's and house officers and this would logically be extended to others as well, in time for Anzac weekend. The eTXT service will allow us to advise the relevant parties of the status of the hospital in accordance with the status outlined in the hospital escalation pathway, and to request action depending on what status the hospital is in, according to the steps identified in the Dunedin hospital escalation pathway.

A pathway is also required for Southland hospital and the EDSS and GM Southland Hospital will work on this using the Dunedin escalation pathway as the starting point but tailoring this to the specific needs of Southland hospital.

6. Radiology

Unfortunately, the reporting based on the data from the new Karisma system does not reconcile with the reporting information captured by the service manager for our CT and MRI modalities. It is likely that the reason for the discrepancy is due to the filters that have been applied in the reporting. The Radiology Service Manager is back from a period of leave next week and we will ask him to work with the reporting team to ensure that the reports that have been constructed are reconciled back to the performance measures he has recorded for the CT and MRI services. As soon as the reports have been robustly reconciled, we will include CT, MRI and Ultrasonography reporting for both the Dunedin and Southland sites and we will supply this on an ongoing basis. Initially, this reporting will only be available from January 2021, as the data sets from the old radiology reporting system and the new radiology reporting system need to be merged in order for a longer time series to be displayed. We will ask that this is also prioritised by the reporting team. In the meantime, we have used the overall performance reported by the Radiology Service Manager for the CT and MRI modalities and have provided supporting commentary which is consistent with what he has reported nationally.

CT Performance (The target is that 95% of planned CT's are completed within 42 days).

CT Performance (Across the District)			
Oct-20	63%	Jan-21	49%
Nov-20	58%	Feb-21	62%
Dec-20	62%	Mar-21	64%

The dip in performance reported in January is consistent with previous years and is attributed to the reduction in elective capacity on the CT machines due to the Christmas – New Year close down and annual leave. The pattern of improved performance from February onward is also consistent with previous years. The Dunedin scanner now has the extended evening sessions and Friday session on the Spec CT scheduled in and this is expected to result in improved performance going forward. The service has also reported high rates of acute demand on both the Dunedin and Southland machines, which impacted on overall CT performance.

Southland is referring patients who live in the northern parts of Southland to the CT scanner at Queenstown hospital in order to maximise the utilisation of machines across the district.

MRI Performance (The target is that 85% of planned MRI's are completed within 42 days).

MRI Performance (Across the District)			
Oct-20	44%	Jan-21	32%
Nov-20	48%	Feb-21	42%
Dec-20	43%	Mar-21	45%

The explanation for the dip in January performance is consistent with the explanation provided for CT performance. Performance in February and March followed the usual seasonal pattern of improvement after January.

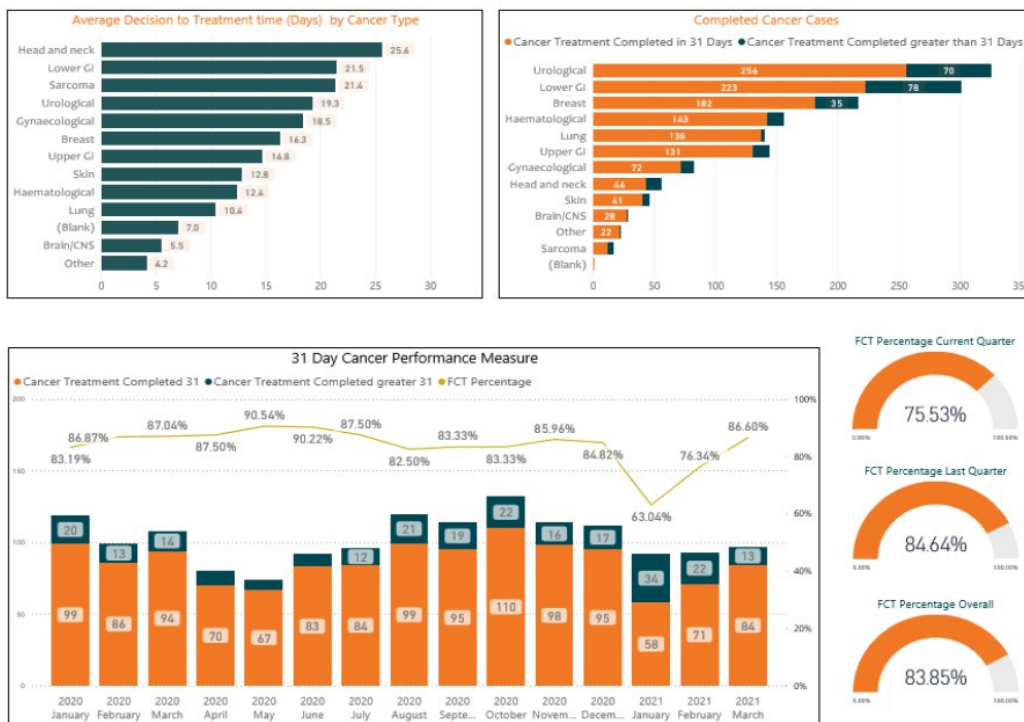
Similar to the explanation provided for CT performance, the service is reporting that acute demand, particularly at Dunedin hospital has been a key driver of overall MRI performance. The catchment area border between Dunedin and Southland hospitals has now been adjusted for MRI referrals in

order to maximise the use of MRI capacity at both Southland and Dunedin hospitals. This means that West and South Otago patients are being offered a scan at Southland hospital by default (rather than Dunedin hospital). Staffing has been adjusted to allow for these extra volumes to be completed on the Southland scanner.

7. Oncology

Oncology 31 day performance deteriorated in the last quarter. In the previous quarter it was materially on target but in the last quarter it deteriorated to 76% against a target of 85%. Urological, Lower Gastrointestinal and breast appear to have materially driven overall performance. At first glance performance deteriorated markedly in January. However, this does not appear to be seasonal as performance last January was above target.

We had high cancer volumes reported in December and January and we believe this to be related to delays caused by the COVID lockdown. This needs further analysis to confirm that it has driven performance but on the assumption that it has we hope to see the 31 day performance return to target on an ongoing basis as the 'wave' of cancer cases now seems to be dissipating.



31 day performance reflects the elapsed time from decision to treat until first treatment occurs.

The 'average decision to treatment time' and 'completed cancer cases' are currently being calculated on a period to date basis going back to January 2020. We are working on an enhancement to this report going forward which will allow us to report these results for the most recently completed quarter.

Unfortunately, our FCT 62 day performance deteriorated more markedly. 62 day performance essentially measures the elapsed time from the General Practitioner referral until the first definitive treatment. This adds possible delays to the triaging and acceptance of referrals, the requesting of

diagnostics (such as medical imaging) and possibly inpatient bed access before a decision to treat occurs.

We have completed two brief pieces of analysis to help us understand this performance better. The first piece of analysis looks at the delays for patients associated with medical imaging.

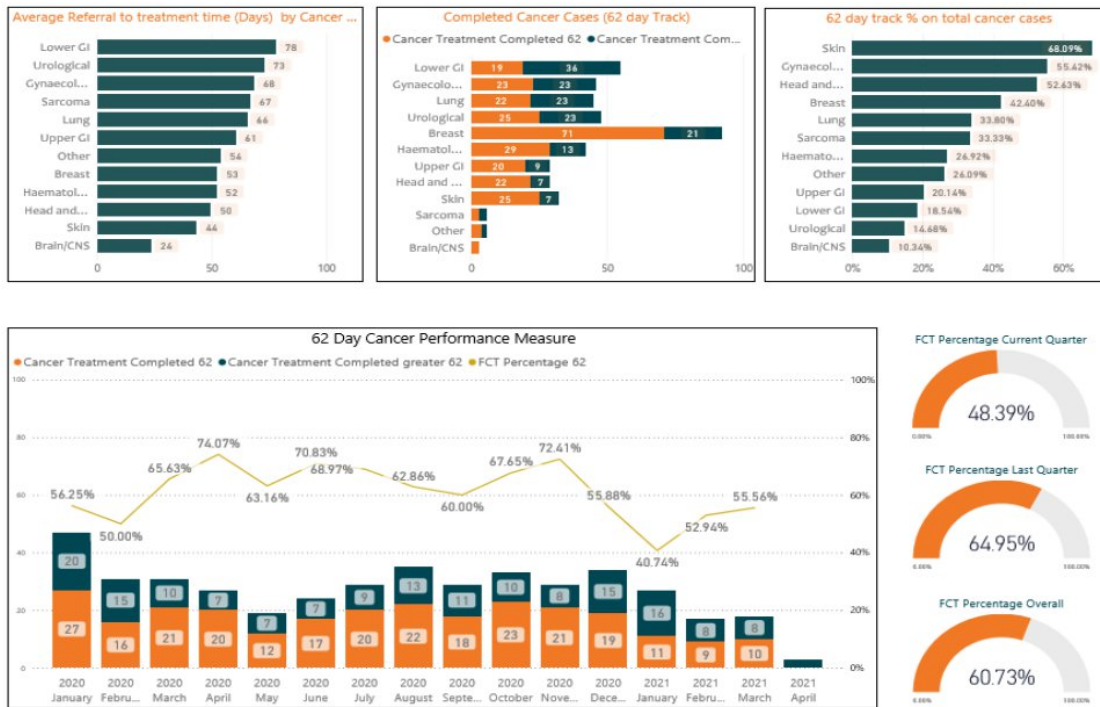
To complete this brief analysis, we took 313 patients who were counted as '62 day FCT target' patients over a 1 year timeframe. We then compared performance for those patients who required either CT or MRI imaging to those who did not.

The findings were as follows:

- For those patients who did not need a scan (either CT or MRI) their average performance against the FCT target was 78%. Circa 56% of the 313 patients sampled did not need a CT or an MRI scan.
- For those patients who needed a CT or an MRI scan their performance was considerably lower (only 53% met the target).
- The average wait time for a CT scan was 36 days for those who waited over 62 days and required a CT scan. However, the average wait time for an MRI scan for those who waited over 62 days was 87 days.
- Overall, those who waited longer than 62 days had a 41 day wait for their medical image, compared to 14 days for those who waited less than 62 days.

This brief analysis appears to support the focus that we collectively have made on getting better access to medical imaging for Dunedin. Whilst access to medical imaging is not the only determinant of overall 62 day FCT performance, the 56% who did not need medical imaging achieved the FCT target 78% of the time compared to only 53% of patients who needed medical imaging.

For the second analysis our colleagues in CDHB kindly shared a sample of their 62 day FCT capture with us and we compared our capture for the same period with theirs. This analysis showed some interesting differences in the case mix that made up their overall 62 day count compared to our 62 day count and we are undertaking further investigation to understand this better.



Per the 31 day reporting, the referral to treatment, completed cancer cases and 62 day track percentage tables are all based on the period to date from January 2020. We are working on refining the reporting so that these tables can also be run to demonstrate the performance for the current quarter.

The following table provides a brief summary of the wait lists for the oncology services – haematology, oncology and radiation oncology.

Combined Monthly View										
Year	Speciality desc Month	Haematology			Oncology			Radiation Oncology		
		FSA Authorised (Demand)	FSA SEEN	Waitlist	FSA Authorised (Demand)	FSA SEEN	Waitlist	FSA Authorised (Demand)	FSA SEEN	Waitlist
2020	July	39	27	56	72	48	57	93	65	90
	August	37	34	57	59	64	62	113	94	117
	September	40	27	80	76	63	52	133	113	92
	October	31	34	68	60	39	76	93	90	116
	November	30	33	61	83	61	80	126	103	129
	December	28	17	80	67	52	96	117	101	147
2021	January	21	29	77	38	36	77	81	69	118
	February	41	17	96	50	43	43	95	80	122
	March	29	27	108	55	53	29	113	99	127
	April	6	7	103	9	13	45	14	19	134

Capacity Average/ Month		
Haematology	Oncology	Radiation Oncology
27.60	57.00	95.30

This shows that the haematology wait list is growing (although noting that a large proportion of the haematology first specialist appointments are for non-cancerous conditions). The radiation oncology wait list is of most concern. It is currently at 134 whereas the ideal numbers on the waiting list would be in the region of 70 (which is less than 1 month of forward load).

We have developed a quantitative plan to understand what will be required to recover the radiation oncology wait list from circa 134 to circa 70. The plan has been tested with the service and will now have to be adapted. The adapted plan will then be re-tested with the service. It is very challenging to supply the required capacity to manage our volumes and catch up on our backlogs and in the meantime, we need to redouble our recruitment focus as the capacity created by the employment of a 6th radiation oncologist is key to the overall sustainability of the service.

In the meantime, we have recruited a speciality nurse and we have recruited a second RMO trainee (we previously only had 1 trainee in the service). The speciality nurse is seeing follow up appointments and is allowing us to schedule FSA's for one of our SMO team who has recently only had the capacity to see follow ups. The RMO trainee increases our chances of growing the future workforce of the service and will also be able to assist in follow up and FSA activity once they are at a suitable point in the training programme.

In the meantime, we are in the very challenging situation of having to try to expand the capacity of the service to address the FSA backlog and maintain FSA capacity without overloading our existing SMO colleagues. We will be meeting to discuss this further and will be proposing a recovery approach which includes the following:

- Asking colleagues from other centres to run targeted weekend clinics to catch up on FSA's and treatment courses. This has been successful in the past.
- Continuing to look for locum support which can be contracted in to get on top of our FSA backlog volumes.
- Running regular weekend clinics where our existing SMO can see more FSA (on a voluntary basis).
- Some targeted outsourcing to St Georges hospital in Christchurch.

We completed some outsourcing (10 cases) earlier in the year. It is not a preferred option as it is very expensive. Each FSA and treatment course averages approximately \$15k plus travel costs. It is also not preferred by our patients, a number of whom have previously preferred to face treatment delays and wait for treatment locally.

We have also commenced an initiative (in partnership with the medical oncology clinical leader and associate director of nursing) to implement an electronic whiteboard for oncology to make the status of oncology cases more visible. Once this is implemented and the delays are made more obvious, we then hope to continue to with a process improvement initiative to systematically work on improving the process where the delays are most evident.

8. Endoscopy

We are continuing to develop our reporting of colonoscopy wait times and performance.

The real time wait list (which was run on the 13th of April) continues to show good performance, with the average and median wait times for patients diagnosed as urgent or semi-urgent sitting inside the 14 and 42 day targets in both the Dunedin and Invercargill hospital locations.

Average wait times for surveillance scoping remain outside the 84 day target but are within target for Dunedin and are the subject of a recovery plan for Southland. The clinical leader for the Gastroenterology service has commenced an initiative where Surveillance patients in Southland are individually contacted and offered a scope in Dunedin in order to get their scope completed more quickly. We have targeted September to be caught up with surveillance scoping in Southland but hope that this and other initiatives will allow us to catch up more quickly than this.

Priority new	No of Waiting Patients	Average waiting time	Median Wait time	Longest Wait
Diag Urgent	4	7.25	7.50	8
Diag Non-Urgent	171	27.87	21.00	267
Diag Planned and Staged	76	31.32	34.00	118
NBSP	51	14.43	11.00	57
SURV	489	104.75	81.00	426

Hospital	No of Waiting Patients	Average waiting time	Median Wait time	Longest Wait
Dunedin				
Diag Urgent	2	7.50	7.50	8
Diag Non-Urgent	91	30.32	26.00	267
Diag Planned and Staged	46	34.72	35.00	118
NBSP	33	14.85	13.00	57
SURV	169	55.81	51.00	426
Southland				
Diag Urgent	2	7.00	7.00	8
Diag Non-Urgent	80	25.08	20.50	74
Diag Planned and Staged	30	26.10	20.50	70
NBSP	18	13.67	9.50	48
SURV	320	130.60	140.00	292

The longest waiting patient for a non-urgent diagnostic (267 days) is a cognitively impaired individual who needs a care plan following the scope. We have asked the GM for the service to identify a solution so that this patient can either receive their scope or it can be confirmed that a scope is not required.

The following table shows that there are 181 patients who have breached the 120 day target for surveillance scoping in Southland and 10 for Dunedin. This is the focus of the recovery plan for which the service is targeting a September completion date.

The table on the right shows that for non-urgent patients (with a 42 day target) 141 of the 172 patients in this category are within the 42 day target and the majority of the remainder are within 50 days.

Hospital	Urg >30	Non urg >90	SURV >120	NBSP >45
Dunedin		1	10	1
Southland			181	
Total		1	191	1

Hospital	42 days or lesser	42 to 50 days	50 to 60 days	60 to 70 days	70 to 80 days	80 to 90 days	90 days or greater	Total
Southland	65	5	3	5				78
Dunedin	76	11	2	2	1	1	1	94
Total	141	16	5	7	1	1	1	172

And the following table demonstrates our overall performance against the urgent, non-urgent and national bowel screening performance measures. For the month of March our performance was greater than the target in each of these measures.

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%	68.95%	-1.05%	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%	84.87%	14.87%	96.63%	1.63%
30 November 2020	100.00%	10.00%	79.87%	9.87%	100.00%	5.00%
31 December 2020	92.86%	2.86%	91.37%	21.37%	98.68%	3.68%
31 January 2021	79.49%	-10.51%	75.25%	5.25%	98.46%	3.46%
28 February 2021	88.89%	-1.11%	82.78%	12.78%	100.00%	5.00%
31 March 2021	93.62%	3.62%	78.40%	8.40%	97.44%	2.44%

Splitting this by region, however, the non-urgent performance for Southland was down for the month of March and we will investigate this further.

Region	End of Month	Dunedin						Southland					
		Diag Urgent 14 days (90%)	Var Urgent	Non Urgent 42 days (70%)	Var Non Urgent	NBSP 45 Days (95%)	NBSP Var	Diag Urgent 14 days (90%)	Var Urgent	Non Urgent 42 days (70%)	Var Non Urgent	NBSP 45 Days (95%)	NBSP Var
	31 July 2020	97.22%	7.22%	80.84%	10.84%	100.00%	5.00%	80.95%	-9.05%	54.68%	-15.32%	93.10%	-1.90%
	31 August 2020	85.71%	-4.29%	75.78%	5.78%	97.22%	2.22%	85.71%	-4.29%	72.55%	2.55%	97.30%	2.30%
	30 September 2020	87.10%	-2.90%	83.42%	13.42%	98.63%	3.63%	94.44%	4.44%	81.82%	11.82%	94.44%	-0.56%
	31 October 2020	94.59%	4.59%	83.33%	13.33%	96.49%	1.49%	88.24%	-1.76%	88.12%	18.12%	96.88%	1.88%
	30 November 2020	100.00%	10.00%	85.05%	15.05%	100.00%	5.00%	100.00%	10.00%	70.19%	0.19%	100.00%	5.00%
	31 December 2020	100.00%	10.00%	90.40%	20.40%	98.11%	3.11%	83.33%	-6.67%	93.59%	23.59%	100.00%	5.00%
	31 January 2021	80.00%	-10.00%	78.74%	8.74%	100.00%	5.00%	78.95%	-11.05%	69.01%	-0.99%	94.44%	-0.56%
	28 February 2021	90.00%	0.00%	87.59%	17.59%	100.00%	5.00%	87.50%	-2.50%	71.88%	1.88%	100.00%	5.00%
	31 March 2021	92.59%	2.59%	89.36%	19.36%	98.15%	3.15%	95.00%	5.00%	45.16%	-24.84%	95.83%	0.83%

Finally, our session utilisation (based on Provation data) was as follows:

Provision Data on Session Analysis (20 Minute Session turn around time)													
Location Room	Dunedin						Green Room					Southland Endoscopy	
	No of Procedures	Total Time	Utilization	Utilization by schedule	Utilization by room	No of Procedures	Total Time	Utilization	Utilization by schedule	Utilization by room	No of Procedures	Total Time	
2020	1247	49051	77.42%	83.08%	77.42%	676	24268	65.66%	72.23%	38.30%	1089	42571	
July	256	9583	79.86%	86.80%	86.80%	106	3516	56.35%	61.04%	31.85%	170	6573	
August	231	8831	83.63%	87.61%	87.61%	101	3683	69.75%	76.73%	36.54%	200	7590	
September	194	7649	75.88%	79.68%	72.43%	107	3954	68.65%	82.38%	37.44%	206	8061	
October	226	8719	82.57%	90.82%	82.57%	77	2751	52.10%	63.68%	26.05%	171	7221	
November	191	7737	70.08%	76.76%	76.76%	160	5747	70.43%	72.56%	57.01%	194	7454	
December	149	6532	71.62%	75.60%	59.17%	125	4617	73.99%	76.95%	41.82%	148	5672	
2021	575	22983	73.66%	82.55%	63.84%	367	13306	66.00%	68.45%	36.96%	532	20105	
January	173	6814	70.98%	78.87%	67.60%	137	4825	71.80%	77.32%	47.87%	158	5835	
February	194	7814	74.00%	90.44%	81.40%	118	4371	65.04%	65.04%	45.53%	171	6440	
March	208	8355	75.68%	79.12%	75.68%	112	4110	61.16%	63.43%	37.23%	203	7830	
Total	1822	72034	76.18%	82.91%	72.50%	1043	37574	65.78%	70.84%	37.82%	1621	62676	

Notes

Utilization - This is calculated by assuming that any given day if at the least one scope was done then the availability was 480 Minutes for that room.

Utilization based on Schedule - This is based on general schedule by which a room is released for 480 Minutes or 240 Minutes. Eg Green room is scheduled only for 240 minutes on a Monday and Tuesday, whereas its scheduled for 480 Minutes on a Wednesday. This is mapped and utilization is calculated on it. Day to day utilization can be more than 100% as the actual schedule on the day could be different to the generic schedule

Utilization based on Rooms - This is based on the assumption that rooms are physically available for use for 480 minutes from Monday to Friday. Utilization is measured on physical room

This report indicates that the 'blue' room in Dunedin was reasonably well utilised both in terms of the room's utilisation and the schedules that were completed in that room. However, the 'green' room whilst reasonably well utilised in terms of session utilisation was underutilised in room utilisation. In other words, if we had the resources to schedule more sessions there is plenty of additional capacity available to schedule more sessions into that room. This is important as we have recently encountered some challenges with being able to schedule the range of activity that needs to occur, for example, General Surgical training lists.

With more nurse resourcing it would be possible to schedule more sessions. However, this will need to be considered within the context of our overall budget priorities.

Unfortunately, the Southland Endoscopy suite performance does not fit onto the page (we are working on getting this amended). The schedule utilisation was high at 98% but the room utilisation was 63%, indicating that with more resourcing more sessions could be scheduled in Southland, too.

Overall, we sufficient physical capacity to complete more scoping schedules, but are currently constrained by staffing levels.

Further work is underway to enhance our colonoscopy reporting. We have a problem with surveillance scoping reporting (whereby when a date is booked for the scope it overrides the original date that was scheduled for the scope). This then impacts on our reporting of the waiting time for those scopes which have been booked. We have worked with the reporting team and believe we have a solution to this problem which will be implemented soon.

The other enhancement we are working on is to better understand the decline reasons for colonoscopy referrals, for example, when they are sent back for more information or are re-directed to another treatment path. Unfortunately, the amount of information available in our patient administration system currently is very limited, so we have developed and implemented a series of additional reporting codes in IPM which the gastroenterology administration team are now using. These additional codes will then allow us to break down the status of referrals which are ultimately declined either before or after the 2 stage referral triaging process so that we know with precision what led to the status being one of a decline. We are aiming to have the enhanced reporting included in our next HAC report.

9. Caseweight, Discharges and Volumes

<p>Planned Care Interventions Inpatient Surgical Discharges - Annual target 12,518</p>	<p>8,938 Actual YTD vs 9,294 Plan YTD, as at March 2021</p>
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Note the above discharges exclude improvement action plan volumes.

FOR INFORMATION

Item: Financial Report for the period ended 31 March 2021
Proposed by: Grant Paris, Management Accountant
Presented by: Patrick Ng, Executive Director of Specialist Services
Meeting of: 03 May 2021

Recommendation

That the Hospital Advisory Committee notes the Financial Report for the period ended 31 March 2021.

Purpose

1. To provide the Hospital Advisory Committee with the financial performance for the month and year to date ended 31 March 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.

Appendices

Appendix 1 Financial Report for the Hospital Advisory Committee

Appendix 1: Financial Report for the Hospital Advisory Committee

SOUTHERN DHB FINANCIAL REPORT – Summary for HAC

Financial Report for:
Report Prepared by:

March 2021
Grant Paris
Management Accountant
15 April 2021

Date:

Overview**Results Summary for Specialist Services****1. March 2021 Result**

Specialist Services encompasses the delivery of services across Surgical and Radiology, Medicine, Women's and Children's and Operations from Dunedin, Wakari and Invercargill Hospitals. It excludes the support services of Building and Property, Information Technology, Finance and Management and Mental Health Services.

Actual \$000	Month			Year To Date			Year End
	Budget \$000	Variance \$000		Actual \$000	Budget \$000	Variance \$000	Budget \$000
43,788	45,149	(1,361)	Revenue	406,607	406,424	183	541,965
26,396	26,215	(181)	Less Workforce Costs	221,705	216,812	(4,893)	292,043
13,503	11,814	(1,689)	Less Other Costs	114,496	104,597	(9,899)	138,761
3,889	7,120	(3,231)	Net Surplus / (Deficit)	70,406	85,014	(14,608)	111,161

For March 2021, Specialist Services had a surplus of \$3.9m, which is \$3.2m unfavourable to budget.

2. Surgical Performance – Case Weights and Discharges**Provider Activity View**

The table below shows the volumes delivered by our Provider arm; plus, any volumes the Provider arm outsources to meet targets. This Provider view includes any Inter District Flow activity delivered within our facilities for people who are domiciled in other DHBs, although it excludes services delivered by other DHBs for our population. This shows whether the Provider arm is delivering to the expected budgeted volumes.

The Planned Care targets have been agreed with the Ministry of Health. The elective case weights for March 2021 are 152 more than March 2020 while the year to date elective case weights are 350 higher than this time last year.

From now through to the end of the financial year, comparisons to the 2020 include COVID-19 preparation for the impact and the lock down period under Alert Level 4 which reduced levels of healthcare delivery.

Appendix 1: Financial Report for the Hospital Advisory Committee

Mar-21				Mar-20	YEAR ON YEAR		YTD 2020/21				YTD Mar-20	YEAR ON YEAR
Actual	Budget	Variance	% Variance	Actual	Monthly Variance		Actual	Budget	Variance	% Variance	Actual	YTD Variance
Medical Caseweights												
1,459	1,506	(47)	-3%	1,243	216		13,365	12,904	461	4%	13,352	13
930	996	(66)	-7%	846	84	Acute	8,947	8,523	424	5%	8,738	209
529	510	19	4%	397	132	Otago	4,418	4,381	37	1%	4,614	(196)
322	319	3	1%	293	29	Southland	3,041	2,595	446	17%	2,947	94
273	281	(8)	-3%	265	8	Elective	2,650	2,280	370	16%	2,518	132
49	38	11	29%	28	21	Otago	391	315	76	24%	429	(38)
1,781	1,825	(44)	-2%	1,537	244	Southland	16,406	15,499	907	6%	16,299	107
Total Medical Caseweights												
Surgical Caseweights												
1,247	1,297	(50)	-4%	1,302	(55)	Acute	10,975	10,936	39	0%	10,732	243
848	908	(60)	-7%	931	(83)	Otago	7,611	7,636	(25)	0%	7,598	13
399	389	10	3%	371	28	Southland	3,364	3,300	64	2%	3,133	231
1,190	1,518	(328)	-22%	1,129	60	Elective	11,703	12,055	(352)	-3%	11,736	(33)
872	1,103	(231)	-21%	845	27	Otago	8,696	8,766	(70)	-1%	8,640	56
318	415	(97)	-23%	283	35	Southland	3,007	3,289	(282)	-9%	3,095	(88)
2,437	2,815	(378)	-13%	2,430	6	Total Surgical Caseweights	22,679	22,991	(313)	-1%	22,468	210
Maternity Caseweights												
102	95	7	7%	113	(11)	Acute	885	803	82	10%	912	(27)
78	69	9	13%	87	(9)	Otago	649	585	64	11%	660	(11)
24	26	(2)	-8%	26	(2)	Southland	236	218	18	8%	252	(16)
404	368	36	10%	341	63	Elective	3,365	3,166	199	6%	3,076	289
238	221	17	8%	199	39	Otago	2,068	1,898	170	9%	1,832	236
166	147	19	13%	143	23	Southland	1,297	1,268	29	2%	1,244	53
506	463	43	9%	455	51	Total Maternity Caseweights	4,250	3,969	281	7%	3,988	262
TOTALS												
2,808	2,898	(90)	-3%	2,658	150	Acute	25,225	24,643	582	2%	24,996	227
1,856	1,973	(117)	-6%	1,864	(8)	Otago	17,207	16,744	463	3%	16,996	211
952	925	27	3%	794	158	Southland	8,018	7,899	119	2%	7,999	19
1,916	2,205	(289)	-13%	1,763	152	Elective	18,109	17,816	293	2%	17,759	350
1,383	1,605	(222)	-14%	1,309	74	Otago	13,414	12,944	470	4%	12,990	424
533	600	(67)	-11%	454	79	Southland	4,695	4,872	(177)	-4%	4,768	(73)
4,724	5,103	(379)	-7%	4,421	302	Total Caseweights	43,334	42,459	875	2%	42,755	579
TOTALS excl. Maternity												
2,706	2,803	(97)	-3%	2,545	161	Acute	24,340	23,840	500	2%	24,084	256
1,778	1,904	(126)	-7%	1,777	1	Otago	16,558	16,159	399	2%	16,336	222
928	899	29	3%	768	160	Southland	7,782	7,681	101	1%	7,747	35
1,512	1,837	(325)	-18%	1,422	89	Elective	14,744	14,650	94	1%	14,683	61
1,145	1,384	(239)	-17%	1,111	34	Otago	11,346	11,046	300	3%	11,158	188
367	453	(86)	-19%	311	56	Southland	3,398	3,604	(206)	-6%	3,524	(126)
4,218	4,640	(422)	-9%	3,967	250	Total Caseweights excl. Maternity	39,084	38,490	594	2%	38,767	317

6.2

It should be noted that whilst total elective case weights are ahead of plan on a year to date basis, only the surgical elective case weights and a minority of the medical case weights (primarily for cardiac implants) count towards the elective target. Overall, when the medical case weights which count and the surgical performance are taken into account, we are behind our elective surgical plan by circa 205 case weights on a year to date basis.

Recovery Plan

The Improvement Action Plan (Recovery Plan) covers five areas;

- First specialist appointments (FSA) and follow up appointments waitlists (ESPI 2)
- Inpatient surgical discharge waitlists (ESPI 5), including orthopaedics, general surgery, ophthalmology and urology waitlists
- Diagnostic procedures (MRI)
- Minor surgical procedures, being skin lesions
- Other procedures, being colonoscopies

The limitations on the resourced bed capacity impacted significantly on the achievement of the Planned Care targets, and budget for March was higher than previous months. As a result revenue has been adjusted down by \$2,057k to reflect the reduced activity.

The Improvement Action Plan also includes non-inpatient activity from FSAs, Follow-ups, Diagnostics, Gastro, Skin lesions community and other areas. The funding has been allocated by specialty and will be paid to us by the Ministry after the end of the financial year.

Appendix 1: Financial Report for the Hospital Advisory Committee

SDHB Monthly HAC Statement of Financial Performance -March 2021

Actuals \$000s	Monthly				Year to date				Annual Budget \$000s
	Budget \$000s	Variance \$000s	Variance FTE		Actuals \$000s	Budget \$000s	Variance \$000s	Variance FTE	
REVENUE									
Government & Crown Agency Sourced									
772	814	(42)		MoH Revenue	7,278	7,322	(44)		9,762
0	0	0		IDF Revenue	0	0	0		0
1,504	702	802		Other Government	9,074	6,403	2,671		8,603
2,276	1,515	761		Total Government & Crown	16,351	13,724	2,627		18,365
Non Government & Crown Agency Revenue									
29	184	(155)		Patient related	942	1,660	(718)		2,214
222	183	39		Other Income	1,477	1,648	(171)		2,197
251	368	(117)		Total Non Government	2,420	3,308	(888)		4,411
41,261	43,266	(2,005)		Internal Revenue	387,836	389,392	(1,556)		519,189
43,788	45,149	(1,361)		TOTAL REVENUE	406,607	406,424	183		541,965
EXPENSES									
Workforce									
Senior Medical Officers (SMO's)									
6,798	6,802	4	9	Direct	56,235	56,567	332	9	76,626
371	355	(16)		Indirect	3,319	3,196	(123)		4,262
362	156	(206)		Outsourced	3,120	1,343	(1,777)		1,777
7,531	7,314	(217)	9	Total SMO's	62,674	61,107	(1,567)	9	82,665
Registrars / House Officers (RMOs)									
4,185	4,221	36	(4)	Direct	35,842	35,559	(283)	(3)	48,299
305	230	(75)		Indirect	1,966	2,066	100		2,755
18	29	11		Outsourced	367	249	(118)		329
4,508	4,479	(29)	(4)	Total RMOs	38,175	37,874	(301)	(3)	51,383
12,039	11,793	(246)	5	Total Medical costs (incl outsourcing)	100,849	98,980	(1,869)	6	134,048
Nursing									
9,819	10,099	280	(22)	Direct	84,123	82,657	(1,466)	(42)	110,709
33	1	(32)		Indirect	159	9	(150)		12
3	3	0		Outsourced	42	28	(14)		37
9,854	10,103	249	(22)	Total Nursing	84,323	82,694	(1,629)	(42)	110,758
Allied Health									
2,340	2,259	(81)	(8)	Direct	19,922	19,172	(750)	(9)	25,827
155	180	25		Indirect	449	381	(68)		456
160	43	(117)		Outsourced	1,095	378	(717)		504
2,655	2,481	(174)	(8)	Total Allied Health	21,465	19,931	(1,534)	(9)	26,787
Support									
190	174	(16)	2	Direct	1,555	1,640	85	3	2,216
0	1	1		Indirect	5	8	3		11
0	0	0		Outsourced	0	0	0		0
190	175	(15)	2	Total Support	1,560	1,648	88	3	2,227
Management / Admin									
1,639	1,648	9	(0)	Direct	13,402	13,433	31	(6)	18,055
11	9	(2)		Indirect	61	77	16		102
7	6	(1)		Outsourced	44	49	5		66
1,658	1,662	4	(0)	Total Management / Admin	13,507	13,559	52	(6)	18,223
26,396	26,215	(181)	(23)	Total Workforce Expenses	221,705	216,812	(4,893)	(48)	292,043
3,374	3,190	(184)		Outsourced Clinical Services	29,704	27,493	(2,211)		36,350
0	0	0		Outsourced Corporate / Governance Serv	0	0	0		0
0	0	0		Outsourced Funder Services	0	0	0		0
8,236	6,921	(1,315)		Clinical Supplies	68,571	62,039	(6,532)		82,237
897	766	(131)		Infrastructure & Non-Clinical Supplies	7,800	6,825	(975)		9,075
Non Operating Expenses									
996	937	(59)		Depreciation	8,421	8,240	(181)		11,099
0	0	0		Capital charge	0	0	0		0
0	0	0		Interest	0	0	0		0
13,503	11,814	(1,689)		Total Non Personnel Expenses	114,496	104,597	(9,899)		138,761
39,899	38,029	(1,870)		TOTAL EXPENSES	336,201	321,410	(14,791)		430,804
3,889	7,120	(3,231)		Net Surplus / (Deficit)	70,406	85,014	(14,608)		111,161

Financial Report

Appendix 1: Financial Report for the Hospital Advisory Committee

3. Revenue**Ministry of Health (MoH) Revenue**

MoH revenue was \$0.04m unfavourable to budget for the month and \$0.04m unfavourable year to date. The main contributors are detailed below:

Category	Monthly Variance \$000s	YTD Variance \$000s	Comment
Personal Health-side contracts	(29)	(53)	The monthly variance continues to be driven by Bowel Screening revenue less than budgeted and Cancer Psychologists and Support Services revenue contract which was budgeted separately and is part of PBFF in 2021. YTD these unfavourable variances are offset by favourable Radiology revenue received.
Public Health-side contracts	7	184	Revenue received for Cervical Screening during the COVID period agreed by MoH at 2018/19 volumes which had been invoiced at delivery volumes during COVID-19
Clinical Training	(20)	(176)	Contracts have been reconciled to match eligible personnel to the delivery.
Other		1	
Total	(42)	(44)	

Other Government Revenue

Other Government revenue was \$0.80m favourable in March and \$2.67m favourable year to date. The major drivers for this are shown below.

Category	Monthly Variance \$000s	YTD Variance \$000s	Comment
Haemophiliac rebate	209	1,482	Rebate reflecting increased cost and volume year to date.
ACC	494	970	Additional Orthopaedics ACC revenue. High revenue in March due to back claimed revenue in recognition of invoicing for treatment injury claims.
Other	99	219	
Total	802	2,671	

Patient related revenue

Patient related revenue was under budget for the month by \$0.15m and \$0.72m year to date. Although year to date we have seen a drop in acute activity from the overseas tourist sector, the month of March was particularly low due to reversals.

Other Income

Other income is \$0.04m over budget in March and \$0.17m unfavourable year to date. This is mainly due to shortfalls in cost recoveries (offset by reduced costs) such as;

- No Orthopaedic fellow appointed therefore no chargeback for share of salary. (offset by lower salaries paid)

These were offset in the month by;

- Higher than budgeted CSSD revenue due to donated assets.

Appendix 1: Financial Report for the Hospital Advisory Committee

Internal Revenue

Internal revenue is \$2.0m under budget for the month and \$1.55m unfavourable year to date. The monthly variance includes a \$2.1m reduction related to under-delivery of Planned Care volumes. Volumes were slightly higher than previous month however continued bed block has seen a continued reduction in Orthopaedic volumes since November 2020.

The Planned Care delivery budget is higher in the last quarter of the financial year, therefore if the limitation to bed capacity continues then delivery of Planned Care targets and associated revenue may not be achieved. The deterioration in the March delivery performance is unlikely to be delivered in-house and Outsourcing would be required to supplement the delivery.

4. Workforce Costs**Monthly result**

Workforce costs (personnel plus outsourcing) were \$0.18m unfavourable to budget in March 2021 driven by Outsourced SMOs and allied Health costs. Operationally full time equivalent (FTE) were 23 unfavourable to budget.

FTE

FTE is 23 over budget in March summarised in the following table. Nursing continues to be the main driver of the unfavourable monthly and year to date variance, however the monthly overrun in Nursing continues to be less than the year to date average variance.

Staff Type	Actual FTE Jan21	Budget FTE Jan21	Monthly Variance	%	Actual FTE YTD Jan21	Budget FTE YTD Jan21	YTD Variance
SMO	246	255	9	3%	238	246	9
RMO	326	322	(4)	(1%)	319	316	(3)
Nursing	1,175	1,153	(22)	(2%)	1,192	1,151	(42)
Allied	295	287	(8)	(3%)	290	281	(9)
Support	37	39	2	6%	36	38	3
Mgmt / Admin	281	281	(0)	(0%)	278	272	(6)
	2,360	2,337	(23)	(1%)	2,353	2,305	(48)

Senior Medical Officer (SMOs)

SMOs were \$0.22m unfavourable and 8.8 FTE favourable for the month. Year to date SMOs are \$1.57m unfavourable, 8.7 FTE favourable.

Expected favourable direct SMO costs as a result of favourable 9 FTE (vacancies and lower levels of training) have been offset by higher overtime payments (\$0.20m driven by extra hour's payments, additional radiologist reads and SMOs covering RMO roster gaps), allowances and unpaid days accrual.

Outsourced costs are \$0.21m unfavourable in a number of areas where key cover of vacant positions has been required including Obstetrics & Gynaecology, General Medicine, Orthopaedics, Radiology and General Surgery.

Appendix 1: Financial Report for the Hospital Advisory Committee

RMOs

RMOs were \$0.03m unfavourable and 4 FTE unfavourable for the month. Year to date RMOs are \$0.30m unfavourable and 3 FTE unfavourable to budget.

- Invercargill RMOs were 11 FTE over budget in March, 9 of this in ordinary time. This was spread over a number of areas as shown below. The increase in Orthopaedics was largely due to paired roles which has been occurring due to the inexperience of the current registrars. While the non trainee registrars are still very junior pairing has now ceased leading to the consultant giving higher supervision when the non trainees are rostered on.

Additional RMO's have been recruited in other areas with 1 of these to assist with the Improvement Action Plan.

	Monthly Actual FTE	Monthly Budget FTE	Monthly Variance	YTD Actual FTE	YTD Budget FTE	YTD Variance
RMO Unit Medical Staff	30	29	(1)	30	28	(3)
RMO - Medical	9	8	(1)	8	8	(0)
RMO - Surgical	8	6	(2)	7	6	(0)
RMO - Anaesthetics	5	4	(1)	5	4	(1)
RMO - Emergency	7	6	(1)	7	5	(1)
RMO - Orthopaedics	8	5	(3)	6	5	(1)
RMO - Paediatrics	4	3	(0)	3	3	0
RMO - Obstetrics and Gynaecology	4	4	0	2	4	2
	75	65	(9)	67	63	(4)

- Dunedin RMOs are 7FTE favourable to budget. This does however include the budget for 5 Community Based RMO's. There was no FTE recorded against these positions in March.

We have been advised some of these positions have been recruited, however at this stage have been unable to determine where they were charged (this may have an impact on the Invercargill variance).

Nursing

Nursing was \$0.25m favourable and 21.6 FTE unfavourable for the month. Year to date Nursing was \$1.63m and 41.6 FTE unfavourable.

- Ordinary time (offset by back pays) variance was \$0.35m favourable which is higher than expected due to FTE only being 6 FTE under budget. (March year to date trend of 7.5 FTE unfavourable and \$0.64m under budget).

The March variance is skewed as it is a three pay period month for FN1. The budget assumes all staff are on three pay periods however in reality there are some staff within the FN2 pay group who only receive two pay periods. Part of this favourable variance will therefore be offset in June when the three pay periods fall for FN2 staff.

- Unpaid days were \$0.23m favourable in March and \$0.13m favourable ytd. We expect this to balance out across the year.
- Annual leave accrued was \$0.18m unfavourable for March and \$1.1m unfavourable ytd. This is an expected ongoing monthly variance.

Appendix 1: Financial Report for the Hospital Advisory Committee

4. Continued FTE variances remain for;

- FTE savings in Nursing for Valuing Patient Time (-22 FTE), Positive shifts (-10 FTE), Vacancy factors (-14.5 FTE).
- Health Care Assistants patient watch hours were recorded as 4,298 hours (17.9 FTE) which is partially offset by the HCA budget increase of 13.3 FTE in 2020/21.
- Sick leave unfavourable by 10.7FTE, which is not unexpected as vigilance to the possible spread of any illness means those unwell stay home, this increase has been consistent ytd. Additionally frontline staff have reportedly been feeling unwell after receiving the COVID vaccine.

6.2

Allied Health

Allied Health was \$0.17m and 8 FTE unfavourable to budget in March. Year to date Allied Health was \$1.53m unfavourable and 9 FTE unfavourable.

MRTs and Sonographers are 6 FTE over budget which is decreasing from their ytd average overrun of 7FTE, as natural attrition sees the over recruited roles moving into budgeted positions. The current phasing of the budget does not account for the higher recruitment during the graduate intake to ensure adequate staffing coverage with graduates and resignation movements and the phasing of the budget to account for this annual cycle of recruitment needs to be improved in budget planning.

There are also budgeted savings of 17 FTE.

Partially offsetting this were Technicians that were \$0.02m favourable (5 FTE).

Outsourced Technicians are \$0.1m unfavourable (\$0.72m year to date) mainly across Anaesthesia Service (Dunedin), Ophthalmology and Audiology continuing to cover vacant roles. The inability to recruit Anaesthetic Technicians is an ongoing challenge which has required us to utilise expensive locum resource to cover Anaesthetic Technician gaps in the theatre rosters.

Support

Support was close to budget for the month and 2 FTE favourable. Year to date support is \$0.10m favourable and 2.5 FTE favourable.

Management and Administration

Management/Admin dollars were on budgeted \$'s and FTE for the month. Year to date Management/Admin costs are \$0.05m favourable and 6 FTE unfavourable.

Annual leave taken is 1 FTE more than budget in the month and 4 FTE less than budget YTD (85% taken).

Appendix 1: Financial Report for the Hospital Advisory Committee

5. Outsourced Clinical Services Costs

Outsourced services were \$0.18m unfavourable in March and \$2.21m unfavourable year to date as shown below.

	Monthly Actual \$000s	Monthly Budget \$000s	Monthly Variance \$000s	YTD Actual \$000s	YTD Budget \$000s	YTD Variance \$000s	Annual Budget \$
Outsourced Clinical Services - Other	570	385	(185)	4,025	3,398	(627)	4,550
Radiology Service	215	164	(51)	1,753	1,423	(330)	1,912
MRI Scans	58	35	(23)	771	301	(470)	404
Breast Screening	119	103	(16)	1,030	890	(140)	1,196
Laboratory Sendaway Tests	14		(14)	15	4	(11)	5
Laboratory Service	1,477	1,477		13,295	13,296	1	17,728
Laboratory O/P Tests				1		(1)	
Other Radiology Procedures	41	41		358	353	(5)	475
Outsourced Surgical Services	789	790	1	7,330	6,142	(1,188)	7,813
Audiology		2	2	38	18	(20)	24
Lithotripsy		7	7	30	57	27	77
CT Scans	42	61	19	414	533	119	716
Vascular Assessments	46	78	32	599	679	80	913
Ophthalmology	2	46	44	47	398	351	535
	3,373	3,189	(184)	29,706	27,492	(2,214)	36,348

- 1) Other Outsourced clinical services are unfavourable in March primarily to Radiation Oncology activity at St George's Cancer Centre to assist with wait times. This and Orthopaedics are also the largest drivers of the ytd variance along with \$0.15m expended on the Improvement Action Plan.
- 2) Outsourced Surgical Services are on budget for the month and \$1.18m unfavourable YTD. The year to date variance includes activity in prior months related to the Recovery Plan.

6. Clinical Supplies (excluding depreciation)

Clinical supplies were unfavourable to budget by \$1.31m in March 2021, monthly variances are summarised below:

	Monthly Actual \$000s	Monthly Budget \$000s	Monthly Variance \$000s	YTD Actual \$000s	YTD Budget \$000s	YTD Variance \$000s	Annual Budget \$
Blood and Tissue Supplies	917	659	(258)	7,909	5,663	(2,246)	7,490
Pharmaceuticals	2,030	1,555	(475)	16,558	15,167	(1,391)	19,725
Patient Consumables	319	160	(159)	2,756	1,899	(857)	2,207
Cardiac Implants	222	111	(111)	1,732	1,102	(630)	1,420
Disposable Instruments	300	205	(95)	2,356	1,860	(496)	2,507
Pacemakers	101	102	1	1,294	909	(385)	1,213
Air Ambulance	477	426	(51)	4,036	3,699	(337)	4,971
Dressings	147	109	(38)	1,207	954	(253)	1,278
Clinical Equipment - Operating Leases	39	18	(21)	283	72	(211)	127
Clinical Equipment - Service Contracts	307	327	20	3,090	2,947	(143)	3,929
Renal Fluids & Supplies	118	92	(26)	944	810	(134)	1,085
Spinal plates and screws	83	71	(12)	733	617	(116)	829
Clinical Equipment - Gain/Loss on Dis	90		(90)	103		(103)	
Others (ytd variances < \$0.1m)	2,379	2,163	(216)	19,514	18,999	(515)	25,488
Screws, nails and plates	231	235	4	1,901	2,034	133	2,747
Shunts and Stents	173	186	13	1,400	1,609	209	2,162
Hip Prostheses	208	303	95	1,914	2,232	318	3,053
Knee Prostheses	95	199	104	841	1,466	625	2,006
	8,236	6,921	(1,315)	68,571	62,039	(6,532)	82,237

Appendix 1: Financial Report for the Hospital Advisory Committee

- 1) Pharmaceutical costs were \$0.48m over budget for the month and \$1.4m unfavourable year to date.

With the exception of the Oncology wards, as shown below the major drivers of this monthly variance have been consistently running similar variances all year. Budgets were based on the Pharmac Forecast on hand at the time however actual activity has varied from that forecast.

	Monthly Actual \$000s	Monthly Budget \$000s	Monthly Variance \$000s	YTD Actual \$000s	YTD Budget \$000s	YTD Variance \$000s	Annual Budget \$
Oncology & Haematology Outpatient Service	637	450	-187	4,800	4,782	-18	6,098
Gastroenterology 8th floor	181	101	-80	1,438	993	-445	1,289
Oncology Ward	349	270	-79	3,044	2,860	-184	3,651
Main Operating Theatres Expenditure	92	76	-16	714	670	-44	892
Childrens Ward	27	12	-15	161	109	-52	143
Orthopaedic Trauma 3B	48	34	-14	282	304	22	405
Day Surgery Expenditure	24	12	-12	144	107	-37	143
General Medicine 8A	30	19	-11	252	171	-81	226
Emergency Department	29	18	-11	179	160	-19	213
Medical Ward	35	25	-10	236	217	-19	289
Paediatrics Outpatients	4	15	11	115	139	24	182
Oncology / Haematology 8C	51	65	14	385	575	190	767
	2,028	1,556	-472	16,557	15,166	-1,391	19,721

2) Blood and Tissue Supplies

The majority of this variance is due to a \$0.21m unfavourable variance reflecting the increased usage of Haemophiliac products. This is predominantly offset by the Haemophiliac rebate (Other Government revenue), although other blood products are \$0.05m over budget due to price being higher than budgeted and acuity and patient requirements.

- 3) Patient consumables over budget driven by unmet clinical theatre supplies savings loaded from October onwards (\$0.06m per month increasing to \$0.11m from January and \$0.18m from March 2021).
- 4) Cardiac Implants are \$0.11m over budget in the months reflecting additional TAVI's implanted compared to budget (2 actuals v 4 budgeted). This increase in TAVI's also drives the \$0.63m unfavourable ytd variance.
- 5) Pacemakers are on budget for the month and \$0.40m unfavourable year to date. Implantable Cardioverter Deflator (ICD) costs are \$0.02m unfavourable for the month but this was offset by Pacemakers (non ICD) less than budget.
- 6) Clinical equipment – Gain/loss on disposal due to write off of assets as the asset ledger is tidied as part of the FPIM implementation.
- 7) Air ambulance was \$0.05m over budget for the month and \$0.34m unfavourable ytd. In March there were 35 flights at average \$13k per flight. Of these 35, 28 flights were rotary and 7 were fixed wing (rotary costs more), this includes:
- 1 neurosurgery flights for \$21k
 - 1 PICU flights for \$45k (plus rebate of \$16k)
- 8) Dressings were \$0.04m over budget for the month and \$0.25m over budget ytd due to an increase in the usage of negative pressure wound dressings and complexity of patients across the year.
- 9) Renal fluids and supplies was \$0.02m over budget for the month and \$0.13m unfavourable ytd. There has been a 25% increase in the price per treatment.
- 10) Clinical equipment – operating leases are \$0.02m over budget and \$0.21m unfavourable ytd due to costs incurred for hiring bariatric equipment. The DHB has

Appendix 1: Financial Report for the Hospital Advisory Committee purchased some of its own bariatric equipment recently recognising the increase in this patient cohort. Our expectation is that leased costs will be reducing.

7. Infrastructure and Non-Clinical (excluding depreciation)

These costs were \$0.13m unfavourable to budget in March 2021 and \$0.98m unfavourable year to date.

	Monthly Actual \$000s	Monthly Budget \$000s	Monthly Variance \$000s	YTD Actual \$000s	YTD Budget \$000s	YTD Variance \$000s	Annual Budget \$
Hotel Services, Laundry & Cleaning	463	429	-34	4,018	3,798	-220	5,057
Facilities	22	21	-1	223	187	-36	250
Transport	116	88	-28	812	770	-42	1,038
IT Systems & Telecommunications	129	86	-43	990	774	-216	1,034
Professional Fees and Expenses	5	24	19	273	219	-54	292
Other Operating Expenses	163	118	-45	1,484	1,077	-407	1,405
	897	766	-131	7,800	6,825	-975	9,075

These costs are driven by the following;

	Monthly Actual \$000s	Monthly Budget \$000s	Monthly Variance \$000s	YTD Actual \$000s	YTD Budget \$000s	YTD Variance \$000s	Annual Budget \$
Information Technology - Gain/Loss on Disposal	29		-29	29		-29	
Cost of Goods Sold	26		-26	143		-143	
Stock Adjustments	23		-23	104		-104	
Cleaning Supplies	48	27	-21	355	245	-110	324
Other Equipment - Minor purchases	34	16	-18	224	142	-82	190
Staff Travel - Domestic	84	69	-15	599	591	-8	801
Bureau and Outsourcing Fees	13		-13	145		-145	
Staff Accommodation & Meals	25	13	-12	160	128	-32	168
Corporate Training		14	14		122	122	163
Expense Recoveries	-29	-6	23	-34	-52	-18	-69
	897	766	-131	7,800	6,825	-975	9,075

- 1) IT – Gain/Loss on Disposal due to write off of assets as the asset ledger is tidied as part of the Finance, Procurement and Information Management System (FPIM) implementation.
- 2) Cost of Goods sold / Stock Adjustment relates to Pharmaceuticals and should be added to this variance. The coding of pharmacy transactions has changed with the implementation of ePharmacy hence there is no budget.
- 3) Bureau fees are driven by unbudgeted costs relating to the new IMedX transcription service that has been implemented in Southland. The analysis of the business case is currently being reviewed to show the cost / benefit.
- 4) The other variances are spread over a number of cost centres and while some are within budget year to date, half reflect consistent monthly overspends that need to be managed over the remaining year.

8. Non-operating Expenses

These costs relate to depreciation charges for clinical equipment and were over budget this month due to the unbudgeted depreciation incurred on the \$1.8m of Respiratory equipment donated by the MoH for COVID resurgence.

In Confidence Session:**RESOLUTION:**

That the Hospital Advisory Committee reconvene at the conclusion of the public Hospital Advisory Committee meeting and 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 34, Schedule 4 of the NZ Public Health and Disability Act (NZPHDA) 2000 for the passing of this resolution are as follows:

<i>General subject:</i>	<i>Reason for passing this resolution:</i>	<i>Grounds for passing the resolution:</i>
Previous Public Excluded Meeting Minutes	As set out in previous agenda.	As set out in previous agenda.
Executive Director of Specialist Services Report: 1. Planned Care Outpatient Recovery Targets 2. Faster Cancer Treatment	To allow activities and negotiations (including commercial negotiations) to be carried on without prejudice or disadvantage. Feedback is provided in confidence.	Sections 9(2)(i) and 9(2)(j) of the Official Information Act. 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.