Regional Executive Forum

Compiled papers relating to Vulnerable Services on following meeting dates:

- 30 April 2020
- 8 May 2020

NRHCC COVID-19 Request for Decision

Email your completed IMT Request for Decision form to nrhcceocm@adhb.govt.nz

(Issue, Recommendation and Outcome to be entered in the NRHCC Decision Tracker)

NRHCC Function Group:	**Regional Provider Capacity Planning and Response**	
Submitted by:	Joanne Brown	
Date:	30 April 2020	
Issue:	Need to progress regional planning in the next week to support delivery of planned care for all DHB populations in the next three months Priority areas established and opportunities for short term action identified: • Vulnerable services •	
Recommendation & Request:	Recommendations agreed by Regional Steering Group (see next page) requiring regional CEO agreement to proceed as outlined	
Does this recommendation incur a financial cost?		(*Yes or No*) Highly likely
If yes, what is the estimated cost that will be charged to COVID-19 RC?		$ not known
Interdependencies with other Functions: *(Ensure recommendation is agreed by other Function team prior to submission)*		

NHRCC Incident Controller:	
Decision: *(Approved / Declined / Comment)*	
Date of Decision:	

Recommendations – Regional Provider Capacity Planning Steering Group
30 April 2020

Vulnerable Services (Lead: Jo G)

1. Review list of priorities from equity perspective (Andrew/Rawiri)
2. Prioritise list of services based on equity perspective
3. Identify regional leads, initiate discussions and establish plans for implementation
4. Review Tertiary/Regional and National Referral response through separate discussion (Jo G, Jo B)
5. Review funding/pricing mechanisms to support new ways of working (Rosalie)
6. Equity leads to advise any other vulnerable services not on list (Aroha, Meg, Rawiri)

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NRHCC COVID-19 Information Paper

Email your completed NRHCC Information Paper to nrhcceocm@adhb.govt.nz

(Issue, Recommendation and Outcome to be entered in the NRHCC Decision Tracker)

NRHCC Function Group:	**Regional Provider Capacity Planning and Response**
Submitted by:	Joanne Brown
Date:	8 May 2020
Issue:	**Regional Provider Planning – Planned Care Steering Group update** Information presented to update CEOs regarding focus areas in planned care services' response for the next three months
Information for noting and/or discussion:	**CEOs to:** • **Note** updated actions against CEO approved recommendations following 7 May meeting • **Endorse** prioritisation of the Vulnerable services list, note need for CMO involvement in these discussions, seek views of CEOs as to relative priorities • **Note** Vulnerable services list includes priority being given to a regional surgical discussion regarding a consistent approach needed in prioritising routine surgery across specialties

Does this recommendation incur a financial cost?	*(Yes or No)*
If yes, what is the estimated cost that will be charged to COVID-19 RC?	$

Interdependencies with other Functions: *(Ensure recommendation is agreed by other Function team prior to submission)*	

NRHCC IC:	
Decision: *(Approved / Declined / Comment)*	
Date of Decision:	

Regional Provider Capacity Planning Steering Group
CEO approved recommendations – update 7 May meeting

	7 May update/actions	Lead
Vulnerable Services (Lead: Jo G)		
1. Review list of priorities from equity perspective (ORL, Oral Health, Ophthalmology, Sarcoma, Vascular), prioritise based on equity perspective and identify other vulnerable services based on equity perspective 2. Confirm scope, expected outcomes, initiate work with regional reps and develop proposals for implementing new regional way of working 3. Review Tertiary/Regional and National Referral response through separate discussion (7 May update – no further discussion needed) 4. Review funding/pricing mechanisms to support new ways of working	• Vulnerable services list agreed. Rapid methodology approach being developed • Need to engage all CMOs • Surgical prioritisation to be added to list (need rapid regional discussion) with specific focus on approach to Ortho including mgt of patients on list including development of MSK/OA pathway • DHB Leads confirmed ORL + H & N + Max Fax – ADHB Ortho – WDHB Ophthalmology - ADHB Vascular - ADHB Spinal – TBC Oral Health – CMDHB • Consideration needs to be given to future regional coordinated approach to managing Screening Programmes and review progressing lung cancer pilot rapidly given equity benefits	Jo B/Pete All Jo B Debbie Karen Aroha Meg

Pacific Clinical Technical Advisory Group

Compiled papers relating to Vulnerable Services on following meeting dates:

- 9 September 2020
- 30 September 2020
- 19 November 2020

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Vulnerable Services: Ophthalmology Pacific Clinical Technical Advisory Group

9 September 2020

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Service Overview

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Demand large - age & diabetes key drivers

Cataract Procedures by Diabetes Status and Ethnicity

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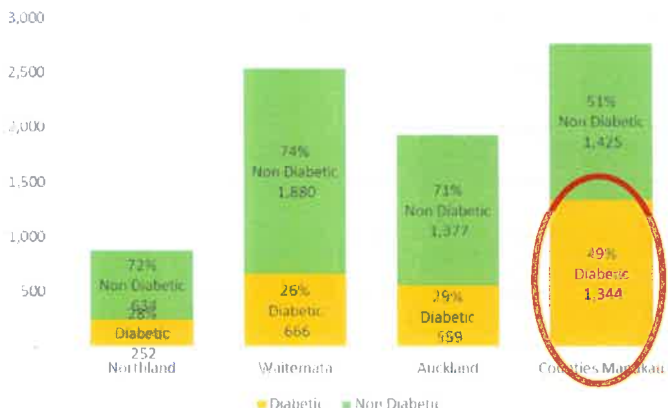
Of the 8,137 Cataract Procedures (incl outsourced) delivered for Northern Region domiciled patients:

NDHB made up 11% (886) of the regional volume.
- **72% was for non-diabetic.** 25% was for Maori with over half of the Maori patients receiving cataract were diabetic.

WDHB made up 31% (2.5K) of the regional volume.
- **74% was for non-diabetic.**
- 68% was for Other ethnicities, majority (81%) of which were non-diabetic.

ADHB made up 24% (1.9K) of the regional volume.
- **71% was for non-diabetic.**
- 47% was for other ethnicity with high proportion non-diabetic.
- 29% was for Asian, of which 65% of Asian patients receiving cataract were non-diabetic.

CMDHB had 34% (2.8K) of the regional volume.
- **51% was for non-diabetic.**
- 38% was for other ethnicity with high proportion non-diabetic.
- 30% was for Pacific, of which 70% of Pacific patients receiving cataract were diabetic.



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What's the problem we're trying to solve?

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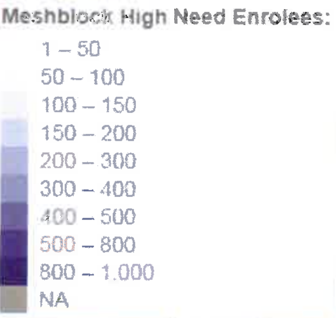
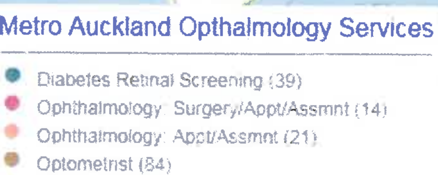
Equity of Access

Optometrists (brown) concentrated in low need areas. Retinal screening (green) in higher need areas (dark purple) .





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Equity of Access

Different CPAC thresholds for Cataracts

Auckland
45
Tairawhiti

Waitematā
48
Canterbury
West Coast

Wairarapa
Capital & Coast
Hutt Valley
Hawke's Bay

Lakes

Northland
52
NZ AVERAGE

Whanganui

South Canterbury
MidCentral

Counties
Manukau
55

Waikato

Taranaki

Bay of
Plenty

Nelson
Marlborough

Southern

Data source: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12219285, 9 April 2019 + Confirmation from Northern DHBs

Recommendation #1 – Development of new/ expanded community eye clinics run by optometrists, nurses and technicians – starting in high need areas. Also looking at virtual clinics.

Recommendation #2 – Commitment to equalise CPAC thresholds regionally

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Equity of Timeliness/Waits

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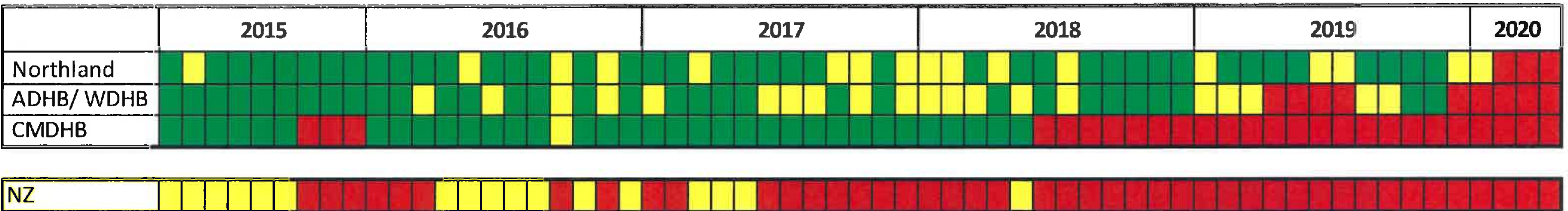
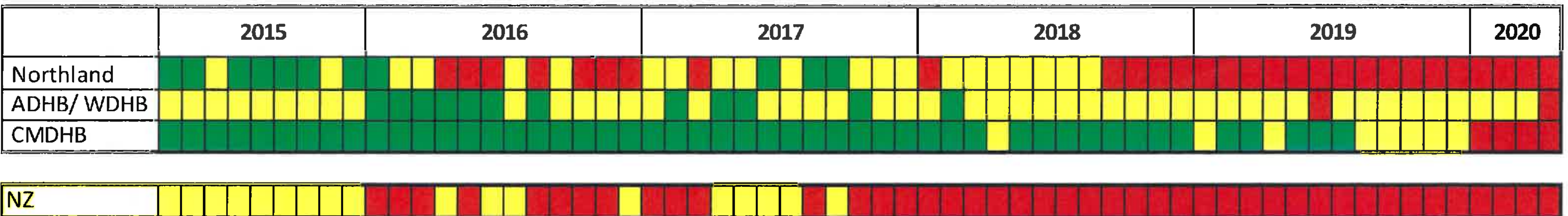
Equity of Waiting times

Wait times were getting worse pre-COVID

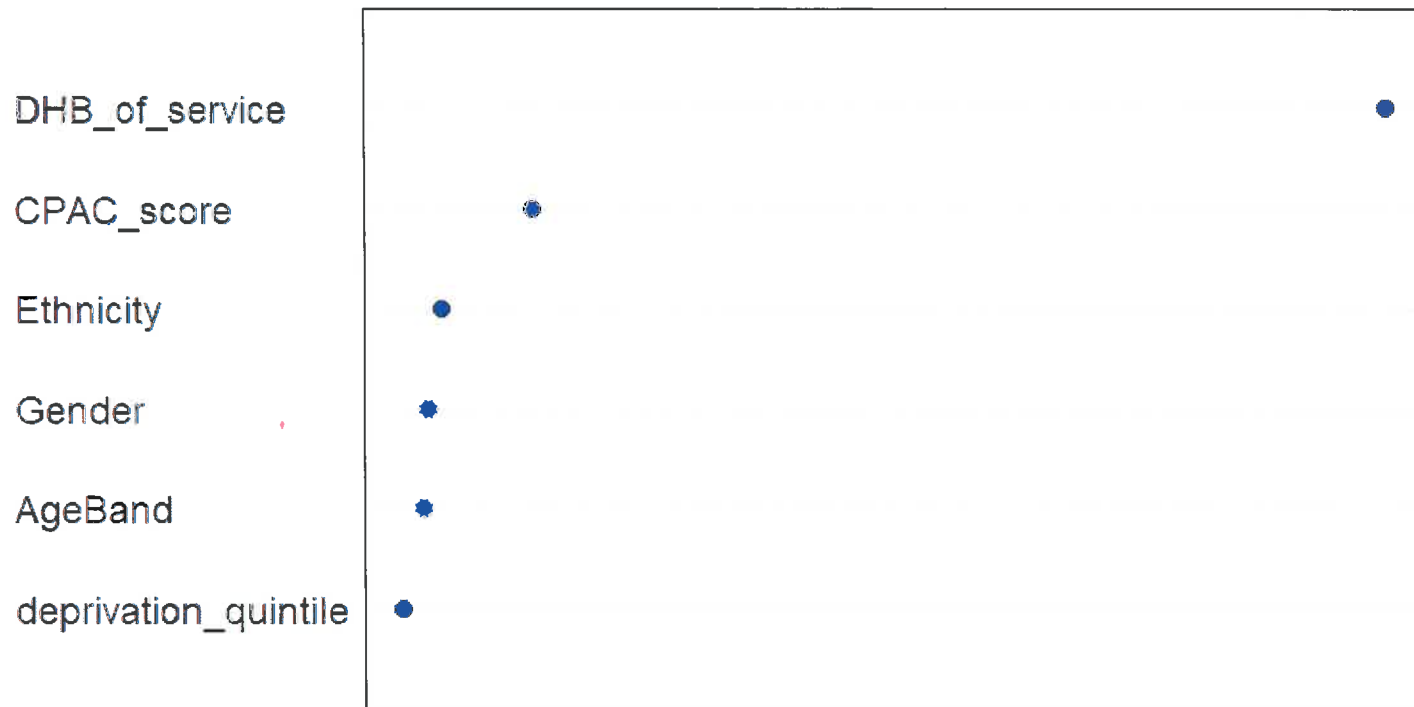
Ophthalmology ESPI 2 and 5 Indicators April 2015- April 2020





Source Quickr MOH

In analysing wait times, DHB of Service biggest driver of inequity – largely Northland



In analysing wait times, DHB of Service biggest driver of inequity – largely Northland

Regional equity = shoring up Northland. Pacific waits equal or better regionally

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Recommendation #3 – Provide additional regional support to Northland

Recommendation #4 – Implement prioritisation adjustment model for waiting & ethnicity (ADHB led)

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Significant demand pressures – age and diabetes

Northern Region	Actuals		2019 from 2015	
	2015	2019	Change	Avg Annual
FSA	19,732	20,671	4.8%	1.2%
FUP	63,236	76,977	21.7%	5.0%
Intraocular injections (1)	8,455	19,600	131.8%	23.4%
Orthoptist	12,297	11,901	-3.2%	-0.8%
Laser	3,324	3,647	9.7%	2.3%
Eye Procedures	1,056	1,207	14.3%	3.4%
Nurse Clinics	8,364	8,693	3.9%	1.0%
Diabetes Screening	33,039	35,375	7.1%	1.7%
Cataract	5,571	8,137	46.1%	9.9%
Other Inpatient	5,596	6,186	10.5%	2.5%
All Services	**160,670**	**192,394**	**19.7%**	**4.6%**
Population Projection Changes			**7.0%**	**1.7%**

Service growth almost 3x population growth

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Recommendation #5 – Committing to Ophthalmology as a regional priority and coordinate investment across the region

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Equity of Quality/ Outcomes – from ad hoc to systemic

Recommendation #6 – Quantify and systematically track quality and outcome equity gaps for ophthalmology across the region

#7 – Implement IT tools to support this e.g. CatTrax

Equity of Experience

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Maori & Pacific pathway support & experience

Common themes:

- **Navigating between services** e.g. ADHB & CMDHB
- **Communication** (what's next, technical language, style)
- **Cost** – transport, parking etc

Resultant system improvements e.g. clock 'resetting' practices, reconnection with patients

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Pacific Administrator

Increased attendance

Value regionally to share these insights through new regional 'oversight'

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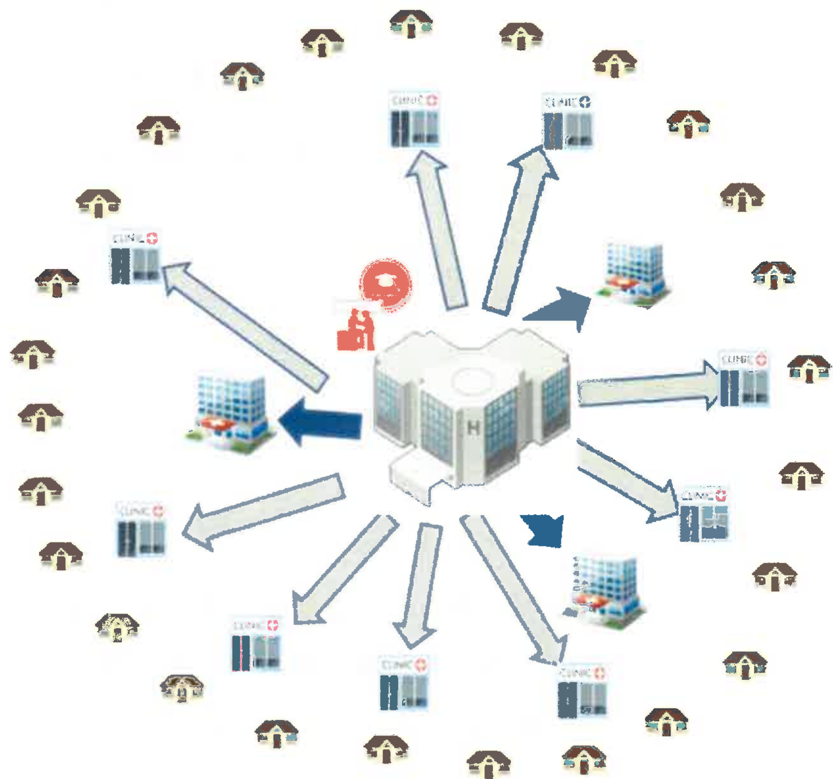
Greater Regional Working and Oversight

Greater Regional Working



- Regional Oversight and more regional multi-site service. Key benefits:
  - Great Regional Equity
  - Service resilience e.g staffing in Northland
  - Enhanced models of care
  - Service efficiency
- Key next step to establish initial group to co-design implementation, especially staffing, facilities/sites, and funding arrangements

Summary

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Action Summary

Greater Regional Working

Northland equity
Support to help cover staffing gaps then longer term options

Equity - access
Prioritisation & new community based models of care and follow up and commitment to equalise CPAC thresholds

Equity – Quality & outcomes
Develop systemic approach to identifying and tracking equity gaps

Technical solutions & IT
(e.g. Clinical Portal access & potential pilot of e-referral in ADHB – key to equity data)

Co-ordinated Investment
All DHBs prioritising eyes & equity in 2020/21 & the COVID-19 recovery $

Est. Regional Oversight
Focus on equity, pathways & service development. Pacific & Maori input/ membership

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Questions/Feedback?

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High intervention rates in Northern Region

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Ministry of Health Standardised Intervention Rates (SIRs)
– age, gender, ethnicity, deprivation

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CPAC score distribution – non diabetics most affected

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Estimated Distribution %: Ophthalmology: Cataract

Kernel Smoothing Applied: A technique used to remove noise in signal processing

45 48 52

CPAC score assigned for Diabetes

% Of Patients

0% 2% 4% 6% 8% 10%

0 10 20 30 40 50 60 70 80 90 100

CPAC Score

Northland
Waitemata
Auckland
Counties Manukau
Threshold N
Threshold W
Threshold A
Threshold CM

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Contextual Info – Diabetes Population

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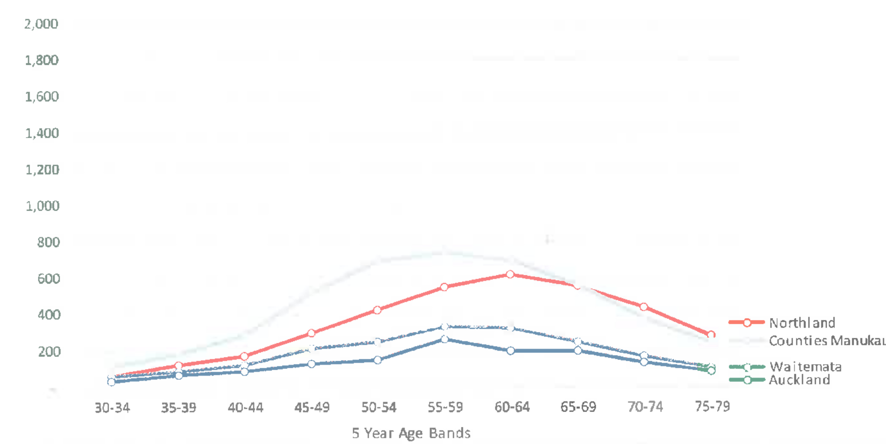
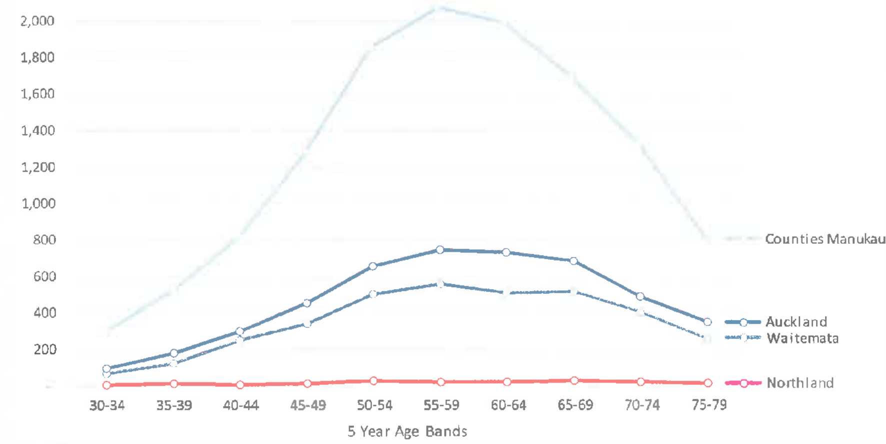
- In absolute numbers, the additional diabetic population for Maori and Pacific population in CMDHB is substantially higher than other DHBs, e.g. >2,000 Pacific diabetic population in age band 55-59 compared to other DHBs with less than 800.

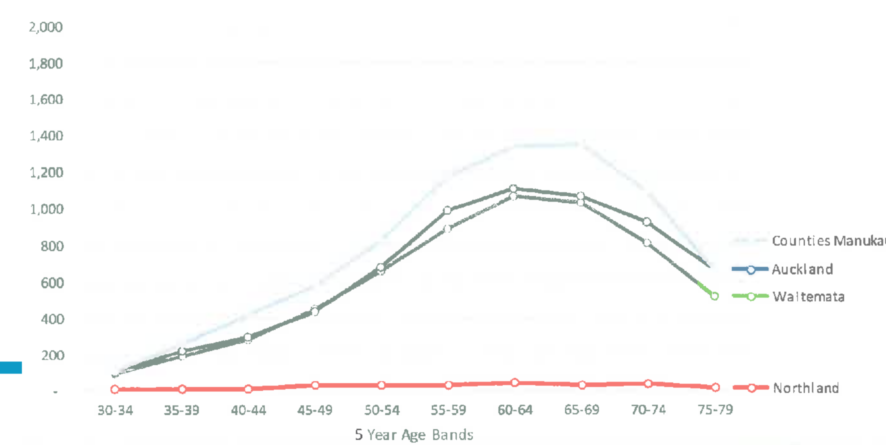
Maori



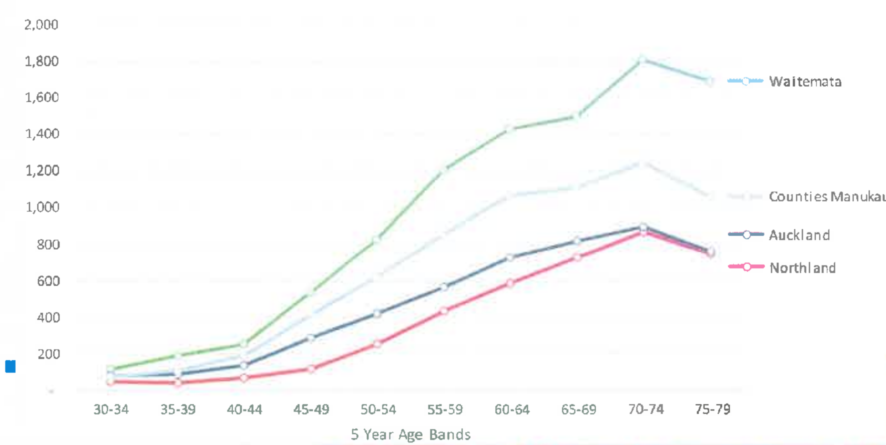
Pacific



Asian (Including Indian)

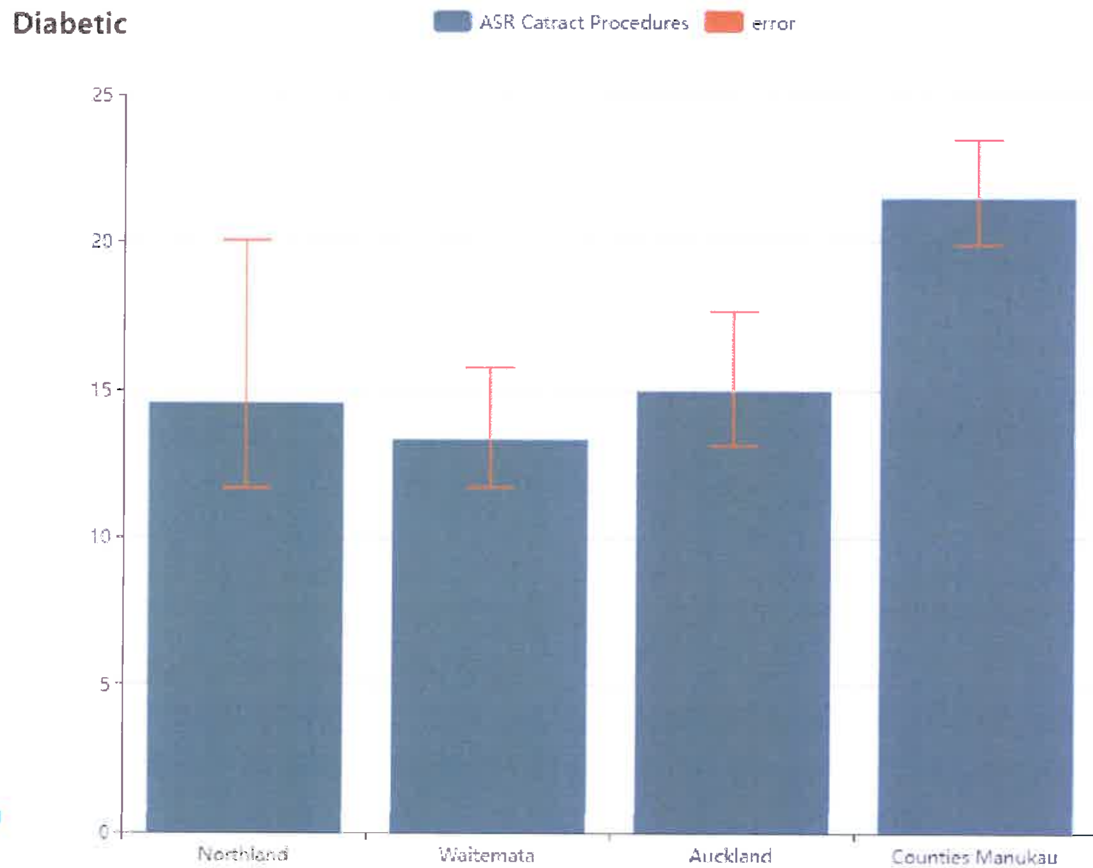


All Other



Standardised Intervention Rates Diabetics

- For diabetic population, age-standardised rates (for aged 30+) across DHBs. CMDHB currently has the highest age-standardised intervention rate (21.5 per 1,000), compared to ~15 per 1,000 in other 3 DHBs.



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Regional Vascular Services Re-configuration

Presentation to the Pacific Clinical Technical Advisory Group

9 September 2020

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"Vulnerable Service"

- **Principles**

  Services included for this work are:
  - not able to maintain appropriate, equitable access for patients without specific actions at regional level OR
  - the specific local actions required are not affordable AND
  - there is patient benefit in developing a regional service
- **Criteria**

1. Service is not able to maintain or develop capacity resulting in a patient access and safety impact
2. Service risks completely failing
3. Clear opportunity to take a specific regional action to maintain safe or equitable care

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Problem Statement

- Lack of an integrated, sustainable vascular service that provides equity of access and consistent quality outcomes for patients across the northern region DHBs

Proposed solution

Proposal for a regional 'hub and spoke' model with an integrated team, with appropriate levels of qualified staff, both in hours and after hours at each site, with clearly defined and agreed clinical pathways and protocols to allow for patients to be transferred to the appropriate centre to receive the consistent quality care for their specific condition at all times.

- *Initial equity impact – care closer to home and more accessible across all parts of region key enabler to improve access to specialist vascular care for Maori and Pacific patients.*

  - What more could/should we be doing ?

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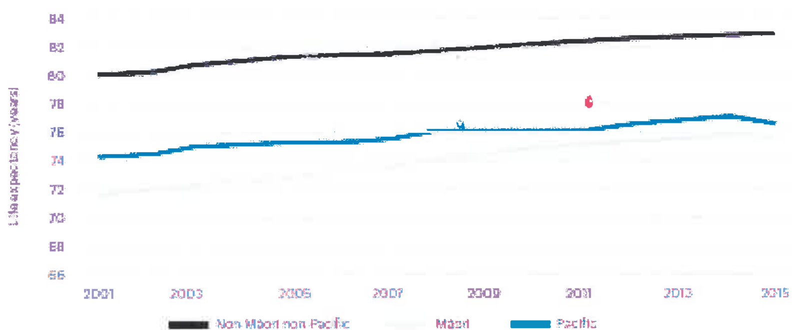

- Life expectancy has improved more slowly than NZ average
- LE gap approx 6 years
- >50% attributable to cardiovascular disease, diabetes and cancer
- Prevalence of diabetes x2 NMNP (10% vs 5%)
- Prevalence of high BP x1.25 (25% vs 20%)

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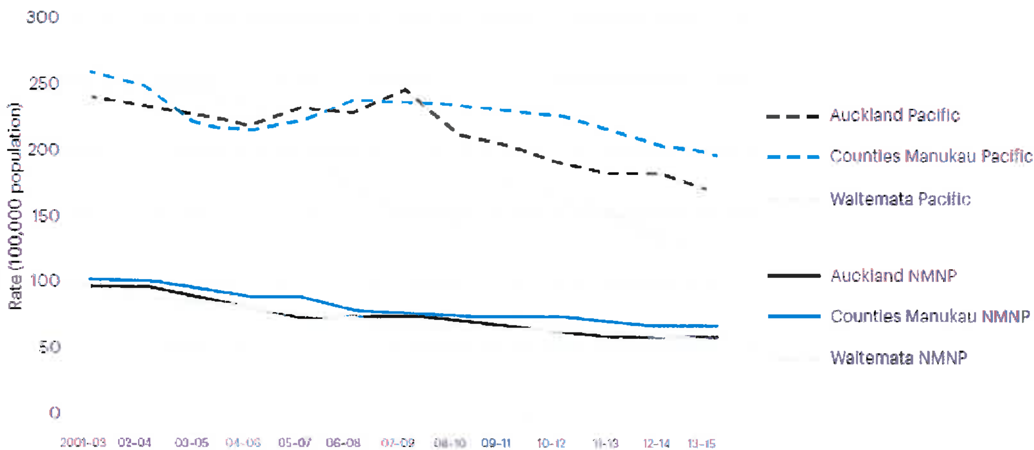
FIGURE 3: AMENABLE MORTALITY (2001–2015) FOR PACIFIC AND NMNP PEOPLE AT THE THREE METRO-AUCKLAND DHBS



SOURCE: (GREY ET AL., 2019)

- Amenable mortality : rate of deaths < 75 yrs that could potentially be avoided with effective and timely health care.
- Despite reduction, remains more than 2x NMNP

FIGURE 4: SPECIFIC CONDITIONS CONTRIBUTING TO THE LIFE EXPECTANCY GAP FOR PACIFIC MEN AND WOMEN

	Men	Women
CVD	1.7 years	1.3 years
Diabetes	0.7 years	0.6 years
Renal failure	0.03 years	0.04 years

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Lower Limb Amputation – Northern Region

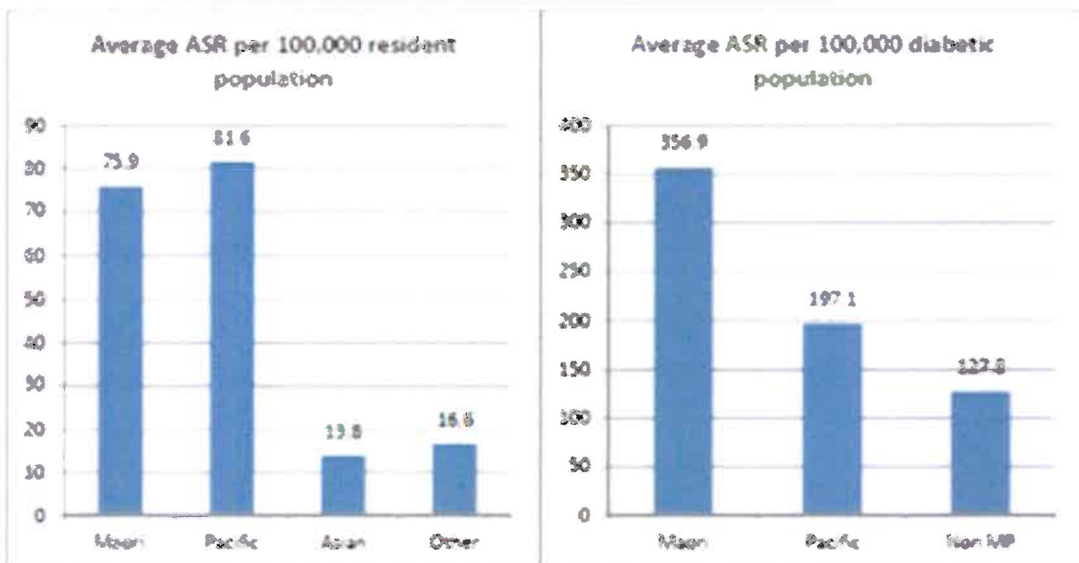

Figure 4 Average ASR per 100,000 resident / diabetic populations for admissions for diabetes related LLAs July 2013 – June 2016 by ethnicity for the Northern Region

- Prevalence of diabetes in Pacific population higher, driving high overall rate
- Rate within Pacific diabetic population much lower than Māori, ? indicating better control of risk...but still much higher than NMNP
- Average age of Pacific and Māori 60 vs NMNP 70 years.

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ADHB Equity Sprint 2018-19

Vascular – Planned Care Equity Overview

	Māori	Pacific	European	Asian	Other	Māori	Pacific	European	Asian	Other	Māori	Pacific	European	Asian	Other
	Referrals					*Referrals Rejected*					*Proportion of Referrals Rejected*				
Referrals	204	204	1436	227	89	19	23	95	21	10	9%	11%	7%	9%	11%
	Patient Count					*Mean Days Waiting*									
Waiting for FSA	94	136	900	163	57	64	51	58	60	63					
	Waiting <= 4 months					*Waiting > 4 months*					*% Waiting > 4 months*				
ESPI2 Compliance	95	136	900	163	57						0%	0%	0%	0%	0%
	Follow Up Appointment					*Waitlist for Surgery*					*Discharge to GP*				
FSA Outcome	55	72	465	86	29	3	5	26	3	2	36	59	409	74	26
	59%	53%	52%	53%	51%	3%	4%	3%	2%	4%	38%	43%	45%	45%	46%
	FSA DNAS					*FSA Attended*					*Ratio of FSA to 1 DNA*				
FSA Attendance	36	30	83			103	147	1,209			3	5	15		
	FSA					*FU*					*Ratio of FU to 1 FSA*				
FSA to Follow Up															
	Follow Up DNA					*Follow Up Attended*					*Ratio of FU to 1 DNA*				
F/U Attendance	36	72	126			246	281	2,407			7	4	19		
	DNA Procedure / Other					*Procedure / Other Attended*					*Ratio of Procedure to 1 DNA*				
Procedure Attendance	14	0	31			220	57	1,148			16	-	37		
	Surgery Completed					*Surgery Deferred*					*Surgery Suspended*				
Waitlist Outcome	150	139	600	132	21	27	35	93	13	4	6	5	39	5	3
	82%	78%	82%	88%	75%	5%	6%	4%	3%	10%	1%	1%	2%	1%	8%
	Deferred by Hospital					*Deferred for Medical Reasons*					*Deferred by Patient*				
Deferral Reason	16	22	58	8	2	6	2	16			5	11	19	5	2
	59%	63%	62%	62%	50%	22%	6%	17%	0%	0%	19%	31%	20%	38%	50%
	Suspended for Medical Reasons					*Suspended by Patient*									
Suspend Reason	3	2	27	2	1	3	3	12	3	2					
	50%	40%	69%	40%	33%	50%	60%	31%	60%	67%					

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ADHB Equity Sprint - Vascular Surgery; Pacific patients

- Waiting times similar – ESPI 2 compliant in all groups
  - Mean waits 51 days vs 58 days for NMNP
- DNA rate for FSA 3x higher than for NMNP
- DNA rate for FU 5x higher than for NMNP
- FSA outcomes similar
  - 53% vs 52% given FU; 4% vs 3% added to surgical wait list

- Surgery wait times longer – ESPI 5
  - 12% vs 3% waiting more than 4 months
  - 64 days mean vs 41 days
- Procedure attendance excellent – no DNA

Who are our patients? Inpatient ethnicity breakdown v Northern Region Population

Vascular Inpatient Discharges (Services provided by CMDHB & ADHB only for all regional DHBs)

2019	Maori	Maori %	Pacific	Pacific %	Other	Other %	Total
ADHB	194	16%	153	12%	1213	72%	1560
CMH	195	17%	283	25%	664	58%	1142
Total	389	14%	436	16%	1877	69%	2702

2019 Stats NZ Pop

	Maori	Maori %	Pacific	Pacific %	Other	Other %	Grand Total
Auckland	40,440	8%	54,260	11%	399,290	81%	493,990
CMDHB	94,250	16%	127,040	22%	357,360	62%	578,650
Waitemata	63,930	10%	45,100	7%	519,740	83%	628,770
Northland	69,160	36%	4,050	2%	119,960	62%	193,170
Grand Total	267,780	14%	230,450	12%	1,396,350	74%	1,894,580

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Who are our patients? Inpatient ethnicity breakdown v Northern Region Population

Vascular Inpatient Discharges (Services provided by CMDHB & ADHB only for all regional [illegible]

2019	Total
ADHB	1560
CMH	1142
Total	2702

2019 St[illegible] NZ Pop[illegible]

	[illegible]d Total
Aucklan[illegible]	[illegible]3,990
CMDHB	[illegible]3,650
Waitem[illegible]	[illegible]3,770
Northlar[illegible]	[illegible]3,170
Grand T[illegible]	[illegible]4,580

- Reflects all patients treated in ACH and MMH, ie not broken down by DHB
- Higher proportion of Pacific patients expected given higher disease prevalence

- Hub and spoke modelling suggests 50-60 complex arterial cases from total population (est. 10-15 Pacific patients) being treated in "hub"
- ...And 50-100 (12-25 Pacific) non-complex cases potentially moving to "spoke"

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Key Themes - Patient Experience of Vascular Services (ADHB only)

STRENGTHS

Staff – friendly, pleasant, helpful, involved me, listened to, not rushed, good manner, knowledgeable, efficient, professional, kind, smiling, easy to understand

Information – clear, concise explained simply, constructive, supports decision making

AREAS FOR IMPROVEMENT

Access closer to home
- Came through strongly for WDHB-domiciled patients
- Parking!!

Timeliness to diagnostics/clinics
- f/ups sooner post surgery
- Communication of what needs to happen, by when (ideally by email/text)
- Scan on the same day as clinic

Phone or telehealth appointments

Time of clinics
- Patient-choice

Post surgery/ discharge
- Communication with patient and family - care and after effects

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Key Themes - Patient Experience of Vascular Services (ADHB only)

- No specific Pacific patient group feedback available
- Plan to work with Cultural Navigator teams to acquire further insights
- Importance of language and interpretation services key part of ensuring good communication

Staff -
involve
good r
efficie
easy t
when

Inform
explai
suppo
and

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Pacific values that we aim to take account of in service design:

- Central place of family
- Everyone working together to achieve common goals
- Importance of spirituality
- Importance of reciprocity, mutual help and interdependence
- Importance of respect – particularly towards elders, parents, women and people in positions of authority
- Health focus holistic, intertwined with well-being of family and community, rather than on the disease

Pacific Clinical TAG – Initial thoughts - for discussion and advice

- Pacific values in service planning – are their other issues we need to consider?
- Service access – see patients locally rather than patients having to travel
- Access to telehealth – advantages/barriers to this?
- Ability to upload vascular assessment and photos onto DHB systems?
- Non-invasive testing options available in community
- Visiting services – Nursing/ Podiatry/ Clinical Nurse Specialists – links with GP/Practice Nurses/District Nursing
- Links with Māori and Pacific health providers
- Improve triaging/screening for DHB Vascular services to confirm if really necessary to be seen by the vascular service – or alternative approach to care?
- Access to equipment at each centre – mobile vs permanently-based machines for checking blood flow (PVD), or measuring aortic dimensions (AAA)

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To	Maaori Clinical Governance Group Pacific Clinical TAG
From	Richard Sullivan
	Exec Lead Vulnerable Services ORL
Date	23 September 2020
Subject	Paediatric ORL Vulnerable Services Recommendation and Next Steps
For	REF Decision
Do recommendations incur financial costs not previously planned /approved?	Yes

Recommendations and Request:

It is recommended that the Regional Executives Forum:

1. **Note** agreed principles in place across ORL-HNS for adults and paediatrics and this paper outlines the process, solutions and next steps for paediatrics.

2. **Note** from undergoing this process it has been agreed that greater co-ordination of secondary Paediatric ORL across the 3 Metro Auckland DHB would provide equitable access and sustainability

3. **Note** a regional process needs to be led in ORL to develop a strategy across the region to sustain Starship as a tertiary provider whilst ensuring secondary care services can be delivered closer to home.

4. **Note:** that there is support for a regional approach with measurable gains for paediatric ORL patients and their whanau however, we are at an early point in the regional discussion and that there will need to be a developmental approach to regional solutions.

5. **Request** funding for a Project Manager, Clinical Lead and a Pathway Project Manager to lead the development of a model of care across the region through further data analysis into pathways and further understanding on inequities which need to be addressed.

Background/Context:

- Post lockdown, the Northern Region's COVID-19 response turned to recovery. A key focus on the recovery was on planned care. The NRHCC established the Hospital Capacity Service Improvement Steering group to lead an equity focused recovery program for planned care which included a particular focus on seven potentially vulnerable services to help them a) recover from the impacts of the COVID-19 lockdown and b) be more resilient with a particular focus on equity.
- Paediatric ORL was identified as a vulnerable service with no regional consistency in levels of access for children. Three of the DHBs provide a combined adult and paediatric service with challenges to provide consistency of secondary care services and adequate cover 52 weeks of the year. Infrastructure remains a challenge with children often needing to be transferred to Starship due to capacity, equipment, co-morbidities and requirement for specialist workforce skills.
- This 'vulnerable services' work was initiated as a rapid process with key regional leads leveraging the rapid progress gained under COVID while incorporating some of the longer term goals articulated in the LTIP and elective deep dive.

Paediatric ORL

It was agreed by the steering group on 6 July 2020 this was an opportunity to make a change across the system to address vulnerabilities, particularly with regard to sustainability and impact of equity and patient experience) and principles agreed (Appendix 1). The paediatric discussion has progressed to agree that success will involve:

- Equitable outcomes for all patients
- Appropriate intervention rates, delivered in a timely and sustainable way
- Regional model / approach which supports this

Key problem

1. Equity of access and service provision within secondary care.

It is recognised that there are vulnerabilities within the system for Paediatric ORL in the Northern Region with inequities in access to secondary care treatment, particularly in Metro-Auckland with different thresholds in place. Within Metro-Auckland all DHBs provide FSA outpatients to secondary care patients, however there is variation in access to surgery due to long wait times within some DHBs and variable admission and patient oversight practices.

WDHB contracts ADHB to carry out tonsillectomies, whilst CMDHB is able to undertake this with an admission to Kidz First if necessary. There is recognition that tertiary services, high complexity or patients under multiple tertiary subspecialties will currently need to be carried out a Starship for Paediatrics. This is due to service requirements such as prolonged care, infrastructure such as theatre, equipment, ICU, and access to a range of subspecialties.

Delivery of tertiary care at Starship has been identified as necessary to maintain safe care for complex paediatric ORL patients. The model of secondary care by local DHBs will be considered with the full range of options worked through. Guidelines or updated Models of Care need to be put in place for secondary level care including age, BMI and co-morbidities and what would require a referral to Starship. Further work also needs to be undertaken for greater clarity as to what constitutes secondary care or tertiary referral for FSA. Where patients are referred for tertiary services, the referring DHBs are unable to have a real time view of the patients waiting for assessment or treatment.

High volumes of patients were waiting >4months for an FSA in June NDHB (n=141), WDHB (n=271) ADHB (n=183) and CMDHB (n=75). Patient waiting >4 months for treatment in June has increased in, in NDHB (n=62), WDHB (n=229) and ADHB (n=211) and reduced in CMDHB to one patient.

Currently there is a large amount of activity happening at Auckland for FUP and Inpatients in Paediatrics, which is to be expected in light of Starship being the Tertiary Provider, Waitemata patients are seen at Starship for tonsillectomies. Starship have also provided additional support to WDHB due to reduced capacity due to leave and recruitment issues. Data is reflective of patients being transferred to ACH from WDHB and CMDHB which is particularly evident for inpatient and follow ups.

Table 2 outlines that there is statistical difference in volumes of high need (Maori/Pacific or Deprivation Quintile 5) patients against non-high need for FSAs, Auckland and Counties Manukau are providing large coverage for their DHB of Domicile per 10,000 in comparison to other DHB's.

There is statistical difference in volumes of high need patients against non-high need for FUPs, Auckland is providing large coverage for their DHB of Domicile per 10,000 in comparison to other DHB's.

Table 1: Direct Aged Standardised Rates per 10,000 by High Need (Maori/Pacific or Deprivation Quintile 5) and Non High Need by DHB of Domicile[1]

DHB	FSA		FUP		ENT Minor Ops		Inpatient	
	High need	Non High Need	High need	Non High Need	High need	Non High Need	High need	Non High Need
NDHB	98.7	84.7	189.9	138.8	6.4	7.4	90.8	62.4
WDHB	87.1	79.1	114.7	98.1	4.2	4.5	69.8	52.5
ADHB	143.1	91.2	297.3	163.7	3.9	2.9	103.8	60.7
CMDHB	138.9	89.9	179.7	114.3	0.6	0.6	60.6	43.1
Northern Region	**119.5**	**85.2**	**190.3**	**121.8**	**3.2**	**3.4**	**76.1**	**53.3**

There is no significant difference between the volumes of patients for high need and non-high need being seen for ORL minor ops, there is high coverage in Northland compared to the Metro DHB's

There is statistical difference in volumes of high need patients against non-high need for inpatients, Auckland and Northland are providing large coverage for their DHB of Domicile, with lower volumes being seen per 10,000 for Counties and Waitemata.

Recommended Solutions:

Through the vulnerable services process it has been agreed by the Metro-Auckland DHB's that a regional approach for secondary care services would provide measurable gains for paediatric ORL patients and their whānau. It is acknowledged that we are at an early point in the regional discussion and that there will need to be a developmental approach to regional solutions.

The agreed next steps are:

1. Explore the development of a regional waitlist for paediatric ORL patients
2. Explore the development of a regional paediatric ORL pathway
3. Consider options for improved equity of access and outcomes for paediatric ORL patients

Options that have been identified through regional discussion have been detailed in table 2, it is anticipated that some of the options such a regional waitlist could be achieved to address inequities in access to treatment. Further work needs to be carried out to explore these options to determine what a regional model

[1] Please be aware that an age-standardised rate (ASR) has no absolute meaning; it is an artificial number based on a hypothetical population (adults and paediatrics) and is only useful for comparing with other rates calculated in the same manner. The ASR presented here is calculated by the direct method per 10,000. WHO world standard population is used as standard.

of care would look like and how it could be funded and delivered going forward. **Table 2: Options for improved equity of access and outcomes for the region population**

	Advantages	Disadvantages	For resolution
1. Status quo - each DHB delivers to own population, complex tertiary cases to Starship	no change or implementation requirements	Inequities of thresholds, timeliness and outcomes remain. Workforce vulnerabilities remain	Data to identify inequities across the population
2. Regional waitlist	Visibility of all patients and any inequitable waiting times	Will not result in any direct change regionally for patients or services Management of the waitlist and the associated ESPIs within one DHB would need to be resourced. Is this a service change?	The feasibility of a regional waitlist, determining what this would include, how patients would be allocated and who would own this.
3. Joint SMO appointment	Access to surgical expertise across DHBs Provides care closer to home for patients through the majority of services being provided within the DHB Maintains and builds on local DHB services	Less attractive to surgeons, complexities around managing leave, professional development, cover etc.	Models of joint appointments elsewhere across the region or nationally, determine full employment issues
4. Starship delivers regional ORL with some offsite activity for local DHB populations - surgeon only, local theatre teams	Retains anaesthetic and theatre nursing competency Provides care closer to home for patients More sustainable ORL medical workforce	Costly to deliver for employing DHB Limitations around overnight stay for patients Variable inpatient ORL medical presence	Full work-up of change requirements and feasibility
5. Starship delivers regional ORL with some offsite activity for local DHB populations - surgeon and theatre team	Provides care closer to home for patients More sustainable ORL medical workforce	Reduces anaesthesia and OR nurse competency for children in CMH, WDHB	Full work-up of change requirements and feasibility
6. Starship delivers regional ORL at Starship and Greenlane	Full suite of ORL sub-specialty expertise, inpatient and daystay cover and nursing expertise. More sustainable ORL	Loss of anaesthesia and OR nurse competency for children in CMH, WDHB	Full work-up of change requirements and feasibility

	medical workforce		

This programme of work will form a sustainable model of care for secondary care paediatric ORL services across the region. This will be monitored and overseen by Starship and with potential to scale across other specialties or population groups over time.

Measurements of success.

- Reduction in waiting times for FSA across the region
- Reduction in waiting times for treatment across the region
- Patient experience
- Patient outcomes

Recommendation

It is recommended a Project Manager (0.25), Clinical Lead (0.1) lead the process through ADHB with an addition Pathway Project Manager for pathway development (0.5 for 6 months to lead the development of a regional Model of Care across the region through further data analysis into pathways and further understanding on inequities which need to be addressed.

Proposed Timeline

A high-level timeframe for this project is as follows:

Commencement of Project Manager, Clinical Lead and pathway Project Manager	October 2020
Commencement of project team ensuring equity led leadership	October 2020
Detailed analysis of options outlined in Table 1	October – November 2020
Preferred option agreed	November 2020
Identify cost associated with agreed option	December 2020
Business case and implementation plan developed	December - January 2021
Implementation of model of care across the region to commence.	January 2021
Complete implementation plan	May 2021
Review and evaluate pathway approach and model of care	May 2021

The Project Manager and Clinical Lead will report through to ORL Clinical Director of Starship Hospital and General Manager. Reporting will be provided through to the Vulnerable Services group ORL steering group.

Risk and issues.

If there is not project management and clinical leadership to support this programme of work the service vulnerabilities will endure. If this was not agreed this would require the on-going commitment of GM's and CD's to lead the process resulting in delays and insufficient resource to complete some of the work programme.

Unmet need if there is not robust data analysis on the pathways and projected forecasts within paediatric ORL resulting in revised model of care not being sustainable and not adequately addressing inequities across the population.

Robust leadership and management will be required to ensure the programme of work is not delayed and any future change processes are supported.

Interdependencies with other Functions:	The recommendations will need to work in tandem with the Head and Neck Cancer Accreditation recommendations for Paediatric ORL and Head and Neck.
Equity considerations of recommendations:	This process has been equity driven and informed by service data and clinical expertise with recognised gaps in capturing wider population needs such as social determinants of health. Further engagement will be sought in the development of the recommendations from Māori and Pacific.
How recommendations align with Treaty responsibilities:	Aligns to regional service design principles including: - **Partnership** where these proposals have been reviewed by the Māori Clinical Governance Group and Pacific CTAG in late September and include the recommendations in here. - **Equity** as per above **Active Protection** of Māori taonga, culture and knowledge as per the Regional Service Design Principles are to be factored into any work moving forward

Cost estimate summary for recommendations with financial impact:				
One-off costs:	Capex:	-	Opex:	-$95,615
Recurrent costs (full year effect):	Capex:	-	Opex:	-
Source of funding, if approved:				
Provider cost within existing provider revenue allocation:				
DHB funder cost pressure 2020/21:	$65,000			
Pre-commitment to funding round 2021/22+:				
Alternate source of funds (please specify details):	Funding applied through the planned care recovery bid for Project Manager and Clinical Lead was submitted by ADHB for $30,615			

Basis for DHB cost split:	
Additional comments (please specify):	Additional resource is needed for a project manager across the region to support with pathways

Appendix 1: ORL-HNS Principles Adults and Paediatrics.

1. COVID and our regional response to this illuminated a number of service vulnerabilities including paediatric and adult ORL
2. Vulnerabilities may include service, workforce and sub-speciality volumes and may vary over time
3. There is current variability in equity of access and outcomes regionally which there is a commitment to addressing
4. Regional solutions for paediatric and adult ORL-HNS will seek to improve patient safety, quality and health equity
5. Decisions about any future changes will be data informed and regionally agreed
6. Issues and solutions may be different for adult and paediatric populations and will be considered separately

Appendix 2: ORL Paediatric snapshot.

Current Utilisation Profile by DHB of Patient Domicile 2019

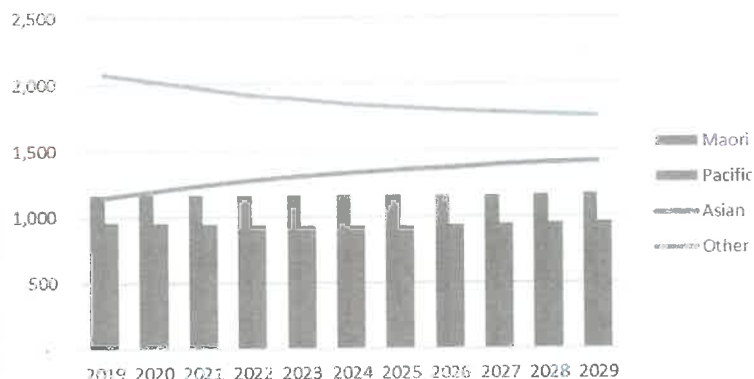
	DHB of Patient Domicile (Paeds)							DHB of Patient Domicile (Paeds) % Of Northern Region				
	Northland	Waitemata	Auckland	Counties Manukau	Northern Region	Outside Northern Region	Total	Northland	Waitemata	Auckland	Counties Manukau	Total
FSA	517	1445	1338	1969	5269	82	5351	9.8%	27.4%	25.4%	37.4%	100.0%
FUP	927	1724	2812	1899	7362	149	7511	12.6%	23.4%	38.2%	25.8%	100.0%
Other Inpatient	490	1368	1160	980	3998	185	4183	12.3%	34.2%	29.0%	24.5%	100.0%
Skin Lesions	2	3	1	1	7	0	7	28.6%	42.9%	14.3%	14.3%	100.0%
ENT Minor Ops	13	83	98	18	212	18	230	6.1%	39.2%	46.2%	8.5%	100.0%
FSA Dizzy clinic	0	76	28	2183	2287	5	2292	0.0%	3.3%	1.2%	[illegible]	100.0%
Nurse Clinics FUP	955	745	30	34	1764	3	1767	54.1%	42.2%	1.7%	1.9%	100.0%
Speech Therapy	0	3	4	15	22	0	22	0.0%	13.6%	18.2%	68.2%	100.0%
All Services	2904	5447	5471	7099	20921	442	21363	13.9%	26.0%	26.2%	33.9%	100.0%

Note:

- High number of Patient referred for ORL treatment at CMDHB
- High volumes of patients seen at CMDHB and ADHB
- High number of FSA in ADHB and CMDHB
- High FUP in ADHB
- High number of inpatients at ADHB which is to be expected
- High number of Nurse Clinics FUP at WDHB and NDHB
- High number of FSA Dizzy Clinics in CMDHB
- The largest growth across ORL services will be in the Asian population followed by other

Current Utilisation Profile by DHB Service 2019

	DHB of Patient Service (Paeds)					DHB of Patient Service (Paeds) % Of Northern Region				
	Northland	Waitemata	Auckland	Counties Manukau	Total	Northland	Waitemata	Auckland	Counties Manukau	Total
FSA	495	1,073	1,930	1,853	5,351	9.3%	20.1%	36.1%	34.6%	100.0%
FUP	907	677	4,434	1,493	7,511	12.1%	9.0%	59.0%	19.9%	100.0%
Other Inpatient	440	475	2,680	588	4,183	10.5%	11.4%	64.1%	14.1%	100.0%
Skin Lesions	2	3	1	1	7	28.6%	42.9%	14.3%	14.3%	100.0%
ENT Minor Ops	5	15	210	-	230	2.2%	6.5%	91.3%	0.0%	100.0%
FSA Dizzy clinic	-	75	-	2,217	2,292	0.0%	3.3%	0.0%	96.7%	100.0%
Nurse Clinics FUP	963	748	28	28	1,767	54.5%	42.3%	1.6%	1.6%	100.0%
Speech Therapy	-	-	9	13	22	0.0%	0.0%	40.9%	59.1%	100.0%
All Services	2812	3066	9292	6193	21363	13.2%	14.4%	43.5%	29.0%	100.0%



Appendix 3: Reported Current Position 6 July 2020 for Adults and Paeds

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WDHB

• Equity of access to services – 45% of patients are declined and referred back to the GP.
• Not seeing any P3
• Growth has caused the biggest challenge.
• Started as an elective service which outgrew resulting in SMO doing work outside of their JD's.
• Resources are limited – physical and FTE, no house surgeon, limited SMO due to clinic capacity and no inpatient beds.
• Ability to see patients and operate is hard due to the above
• Support to intensive care and emergency depart
• Cover H&N, paediatrics emergency and aftercare
• Lack of Theatre capacity for ORL
Paeds (2 September 2020)
• FSA OP secondary patients
• Minimal paediatric audiology
• Inpatient Grommets and adenoids [also a few more complex Daystay cases – ie. myringoplasty]
• No inpatient tonsils – all contracted to ADHB
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CMDHB

• ORL-HNS based at MSC and set up as an elective day case service.
• Infrastructure makes it challenging to provide an acute service
• Service is small, with ageing workforce, limits to on call provision and recruitment issues
• Issues working across two sites, no beds at Middlemore for ORL-HNS rely on plastics and ADHB
• Intervention rates for paediatrics is not good, with increasing waiting lists and waiting a long time in comparison to Starship. Starship would not be able cope the current volumes coming through to CMDHB.
Paeds (2 September 2020)
• FSA OP secondary patients
• 1x Paed ORL SMO shared with ADHB- selected tertiary OP
• Inpatient Grommets and adenoids [At CMDHB we do quite a lot of other ORL Paeds Surgery (in older children mainly >10 yrs or so) - some nasal and limited FESS surgery, Myringoplasties, a few mastoidectomies, some limited head and neck - ie. FNA or node biopsy, skin tags or lesions, pre-auricular sinuses etc.]
• Inpatient tonsillectomies – admission Kidz First if required(under Paeds Med)
• Longer waiting times than ADHB (& by default WDHB)
• Regular outsourcing to private
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ADHB

• Issues with patient care with different intervention rates between DHB's, aftercare and inpatient care
• Metro Auckland access to emergency theatre is restricted resulting in elective patients being cancelled or acute presentation waiting until the end of
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NDHB (12 June 2020)

• Functioning differently in NDHB
• Vulnerable with staffing but in a better position following service plan including peripheral hospital in place and to outsource for recent issues in Private
• Working well in resources but could do better.
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the list. • On call roster is problematic across the region due to clinicians opting out. This is made up of clinicians from each DHB. • ADHB does not have any SLA's in place with the other DHB's confirming what ADHB should deliver. • Support required for clinicians across the region • Two theatres which ORL-HNS do not have access to all of the time. Would be hard to find theatre space if anymore SMO were recruited. Potentially space in CTU but would result in split service. Paeds (2 September 2020) • FSA all ADHB patients and tertiary WDHB/CMDHB • Inpatient care all ADHB, WDHB tonsils and tertiary WDHB/CMDHB • Shorter waiting times than CMDHB but • Regular intra DHB additional lists to manage volumes	• Regional networks for complex and tertiary care and paediatrics are important and could be strengthened • On-call is different to Metro Auckland • Intervention rates provide a broad service from paediatrics to extensive H&N and in line with national intervention rates; however, some cases are turned away • More work could be done on quality of life cases. • Theatre provision is good with two new theatres being built.

Northern Regional Alliance
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To	Maaori Clinical Governance Group Pacific Clinical TAG
From	Richard Sullivan
	Exec Lead Vulnerable Services ORL and Head and Neck Surgery (HNS).
Date	23 September 2020
Subject	ORL-HNS Adult and Paediatrics Vulnerable Services Recommendation and Next Steps
For	**Decision**
Do recommendations incur financial costs not previously planned /approved?	**No**

Recommendations and Request:

It is recommended that:

1. **Note** agreed principles (detailed in appendix 3) in place across ORL-HNS for adults and paediatrics but the process and solutions have been separated and this paper outlines the next steps for Adults only and Paediatrics will be presented separately.

2. **Note** from undergoing this process, which has included two workshops and further clinical lead discussion the Adult ORL-HNS group at this stage is unable to draw to a conclusion what a regional solution would be. There is recognition from the Clinical Leads that four DHB services in their present state will continue to be vulnerable.

3. **Note** there is agreement that the following vulnerabilities in Adult ORL-HNS can be addressed **in Phase 1 to** include:
    - The acute on-call roster through an HR review of contractual requirements and the establishment of robust processes attached to the recruitment process going forward.
    - SLA's to be established between ADHB as the Regional/Tertiary Provider and the DHB's defining expected service delivery in the Northern Region.
    - Streamlining processes, protocols and models of care where there is regionalisation currently in place for free flap reconstruction.
    - Paediatrics

4. **Note** it is recommended a regional process needs to be led on ORL-HNS to develop a strategy across the region and the required investment using assessment against a Role Delineation Model (RDM) for the non-cancer components.

5. **Request** that option 4 is agreed and a Project Manager and Clinical Lead to lead the RDM assessment and recommended model of care for the region through the development of a 5-year strategy. Resource to be allocated from existing ADHB service management to work across the region to develop the 5 year strategy. This work will be overseen by the steering group.

Background/Context:

Post lockdown, the Northern Region's COVID-19 response turned to recovery. A key part of that recovery was on planned care. The NRHCC established the Hospital Capacity Service Improvement Steering group to lead an equity focused recovery program for Planned Care. The ORL- HNS Services a (Adults and Paediatrics) was

identified as one of the seven vulnerable services who would benefit from a structured recovery programme. The programme is to assist with the recovery from the impacts of the COVID-19 lockdown and the delays to be seen and treated which was an issue pre COVID-19 and to establish a more resilient service within the region with a particular focus on equity.

ORL- HNS is a vulnerable service due to common themes of subspecialisation with little integration across the regions DHBs, inequity of provision of service with different levels of access and prioritisation across the Northern Region. This is resulted in patient delays to FSA and treatment which leads to poor patient experience. Leadership across the region and maintaining a sustainable workforce to meet population need has resulted in capacity constraints which is resulted in patients been transferred to other DHB for treatment. This has resulted in an unsustainable service unable to provide adequate cover 52 weeks of the year.

This 'vulnerable services' work was initiated as a rapid process with a small regional group established including key regional leads so to develop an approach to build a more equitable and resilient service across the region. This includes incorporating some of the longer term goals articulated in the LTIP and elective deep dive. In addition to this there is the acknowledgement of the work has been undertaken through the HNCOG for Head and Neck Cancer a subspecialty of ORL-HNS where an RDM accreditation has been completed identifying gaps in workforce across the pathway and infrastructure in meeting the service level proposed.

Issues and Implications

ORL and Head and Neck Surgery (HNS)

It was agreed by the Hospital Capacity Service Improvement/Planned Care Steering group on 6 July 2020 this was an opportunity to make a change across the system to address vulnerabilities particularly with regard to sustainability and impact of equity and patient experience (documented in Appendix 1 and 2). ORL-HNS Adults and Paediatrics agreed principles (Appendix 3) and areas to be addressed in 2 stages:

Phase 1

1. Acute on call roster
2. Secondary and tertiary service delivery and streamlining regional processed
3. Establishment of SLA's between ADHB and the Regional DHB's
4. Paediatrics (submitted separately)

Phase 2

5. ORL-HNS 5 year strategy local and regional delivery including thresholds.
6. Recruitment and workforce planning.

Key problems agreed to addressed.

1. Sustainability of the on-call roster for acute care in and after hours

The on call roster for acute care is regionally staffed by SMOs from all 3 Auckland Metro DHBs. There are two rosters to cover Adult ORL-HNS issues: one for General ORL and one for H&N. The on-call roster has been identified as vulnerable and not sustainable due to the number of clinicians exempt (11 out of 29) and no cover for maternity or long term SMO absences. The Table below outlines the FTE and population supported by the General ORL and H&N on call rosters.

Table 1: FTE and population supported by the General ORL and H&N on call rosters per DHB

DHB	SMO's On Roster			SMO:100:000 Population			
	H&N	General ORL	Total	Adults (15> years	Total Pop	Exempt from Roster*	Total including exempt
WDHB	2	3	5	1.0	0.8	4	9
ADHB	4	3	7	1.7	1.4	3	10
CMDHB	3	2	5	1.1	0.7	4	9
Vacancy		1	1				1
Total	**9**	**10**	**18**			**11**	**29**

*reasons for exemption vary

The rosters are currently 1 in 9 frequency of call. This is despite one WDHB SMO coming off the General ORL roster in the past year which has been covered by various SMOs as additional duties, with no replacement even though recruitment processes were undertaken.

Several issues have been raised by SMOs regarding the roster, including:

- Non-participation in the roster by a significant proportion of SMOs.
- Older SMOs wish to leave roster at age of 60 years (as has been the tradition), but this is no longer possible owing to an ageing workforce, with limited succession planning.
- Increasing SMO workload owing to reduced RMO experience.
- ADHB SMOs take on the majority of care of acutely admitted patients as all patients admitted by a non ADHB SMO are transferred to the care of an ADHB SMO the next day.
- No cover provided for SMO maternity leave or long term SMO absences for various reasons including the lack of ability to recruit to fixed term contracts
- Leave granted to SMOs by WDHB and CMDHB without due consideration to regional roster
- Consultation on changes in the frequency of on call requirements need to be better communicated with SMO's by CD and Service Manager.

It has been identified that there is no consistency with regard to a process on recruitment of SMO's, the requirement to be on the regional on-call roster varies in detail in position description and contract of the SMO's. There is no regionally agreed process for an SMO becoming exempt from participating on the acute on call roster, this is currently carried out at a DHB level between the SMO and CD.

There is no agreed documentation defining which conditions warrant attendance of an ORL SMO for either the Head and Neck or General On Call Roster across Metro Auckland. The only documentation that has been sighted is the *Conditions Warranting On-Call Head and Neck Surgeon Attendance at Peripheral Hospital (WDHB & CMDHB)* 2010 which SMO's /General Managers were unaware of and needs to be reviewed and agreed regionally.

2. Equity of access and service provision within secondary care.

It is recognised that due to vulnerabilities within the Northern Region for ORL-HNS this has resulted in inequities in access to treatment, particularly in Metro-Auckland with different thresholds in place (Appendix 1

provides an ORL snapshot and Appendix 2 perceived current position). High volumes of patients waiting >4months for an FSA in June NDHB (n=141), WDHB (n=271) and ADHB (n=183). Patient waiting >4 months for treatment in June has increased in NDHB (n=62), WDHB (n=229) and ADHB (n=211). Note improvement plans should be reflecting improved positions against the numbers of patients waiting.

Data is reflective of patients being transferred to ADHB from WDHB and CMDHB which is particularly evident for inpatient and follow ups where patients would have been treated.

Twenty eight per cent of patients are aged 0 -14 years across all DHB's for FSA's (NR=5,144 / 18,353 2) and 41% over the age 50 (50+ NR =7,605/18,353).

Table 2 outlines that there is statistical difference in volumes of high need (Maori/Pacific or Deprivation Quintile 5) patients against non-high need for FSAs. Auckland and Counties Manukau are providing large coverage for their DHB of Domicile patients per 10,000 in comparison to other DHB's.

There is statistical difference in volumes of high need patients against non-high need for FUPs, Auckland is providing large coverage for their DHB of Domicile per 10,000 in comparison to other WDHB and NDHB.

There is no significant difference between the volumes of patients for high need and non-high need being seen for ENT minor ops, there is high coverage in Northland compared to the Metro DHB's.

There is statistical difference in volumes of high need patients against non-high need for inpatients, Auckland and Northland are providing large coverage for their DHB of Domicile patients, with lower volumes being seen per 10,000 for Counties and Waitemata.

Table 2: Direct Aged Standardised Rates per 10,000 by High Need (Maori/Pacific or Deprivation Quintile 5) and Non High Need by DHB of Domicile[1]

DHB	FSA		FUP		ENT Minor Ops		Inpatient	
	High need	Non High Need	High need	Non High Need	High need	Non High Need	High need	Non High Need
NDHB	98.7	84.7	189.9	138.8	6.4	7.4	90.8	62.4
WDHB	87.1	79.1	114.7	98.1	4.2	4.5	69.8	52.5
ADHB	143.1	91.2	297.3	163.7	3.9	2.9	103.8	60.7
CMDHB	138.9	89.9	179.7	114.3	0.6	0.6	60.6	43.1
Northern Region	**119.5**	**85.2**	**190.3**	**121.8**	**3.2**	**3.4**	**76.1**	**53.3**

Table 3 highlights the total volumes per 10,000 by ethnicity, this highlights high numbers of activity in Pacific, followed by Asian, Maori and Other.

[1] Please be aware that an age-standardised rate (ASR) has no absolute meaning; it is an artificial number based on a hypothetical population (adults and paediatrics) and is only useful for comparing with other rates calculated in the same manner. The ASR presented here is calculated by the direct method per 10,000. WHO world standard population is used as standard.

Table 3: Total volumes by ethnicity per 10,000 population by DHB of Service.

	Number per 10,000 population			
	Maori	Pacific	Asian	Other
FSA	33.2	74.8	51.3	31.2
FUP	55.2	120.2	68.5	49.4
ENT Minor Ops	0.9	1.3	1.2	1.4
Other Inpatient	25.4	48.9	22.3	18.5
Total	**115**	**245**	**143**	**101**

Across the northern region growth is anticipated to be 15.1% over 10 years from 2019 – 2029 or 1.4% per annum in FSA's. Follow ups are anticipated to grow by 14.3% and inpatients by 8.7% in this period. This predicated growth is highlighting the need for sustainable services across the region with the vulnerabilities addressed.

The largest growth across ORL services will be in the Asian population (41.2%) followed by Māori (16.3%), Pacific (14.5%) and then other (4%).

There is recognition that tertiary services, high complexity or high co-morbidly[2] will currently need to be carried out at ADHB for Adults and Paediatrics. This is due service requirements such as prolonged care, infrastructure such as theatre, equipment, ICU, staffing as subspecialties within the tertiary provider. Delivery of tertiary care is clearly defined as well as secondary care procedures that could be delivered by local DHB's, however, the issue that has become evident is that services are currently defined by SMO skill set rather than the requirement of equity of access for the Northern population. This has resulted in thresholds varying across the region with patients referred to where the infrastructure is and skill set to support the clinical need of the patient. More complex cases could be completed in other DHB's where the surgical skill mix is available however due to the size of departments and lack of infrastructure this is not able to occur. There is also risk where there is low volume / high complexity on patient outcomes if SMO's do not get enough practical opportunities to maintain skills and experience which could provide poor patient outcomes.

Recommendations

- From undergoing this process, the regional working group at this stage is unable to draw to a conclusion what a regional solution would look like despite recognition that the system in its present state will continue to be vulnerable.
- However, it has been acknowledged that there remains a requirement for 4 centres delivering accessible and timely secondary care which is consistent across the region.
- There is further agreement that work needed to be undertaken to develop what a regional solution or model of care would look like.

Phase 1

1. Acute On-Call Roster Metro-Auckland

The acute on call roster can be addressed in phase 1 through a review of contracted requirements through a robust HR process. There needs to be an agreement to ensure the recruitment processes include an

[2] This includes complex head and neck cancers and their surgery, neuroOtolgic problems (vestbular schwannomas, CSF leaks), non-cancer upper airway and neck surgery (orbital, inacranial, recurrent), complex endoscopic sinus surgery for complex disease as well as patients requiring prolonged admission for complexity co-mobility where there Is not the right infrastructure in the domicile DHB

expectation of participation on the on call roster. Due to a third of the eligible SMO's being exempt from the acute on-call roster has highlighted the vulnerability of having an aging workforce. This will require careful succession planning particularly at CMDHB where a high number of SMO are aged 60+ within OR-HNS department[3].

Recommendations

1. For all services, applicable wording in PD's and contracts need to align across Metro Auckland by the GM's with HR.
2. GM's need to agree with the CD's the documented requirements of the on-call roster across Metro-Auckland.
3. A clearly defined process in recruitment to ensure the on call roster is part of the discussion and employment contract across Metro-Auckland.
4. The development of a Metro-Auckland process for SMO's coming off the roster and what defines an exemption for participation.
5. An SLA needs to be established between ADHB and WDHB and CMDHB detailing the acute on call roster requirements.

2. Secondary and tertiary service delivery and streamlining regional processes

Secondary and Tertiary care needs to clearly defined across the region and formally documented in the form of an SLA between DHB's. This results in variation of service delivery.

Streamlining of processes and protocols regionally

The streamlined treatment of complex head and neck cancer patients that need free flap reconstruction needs to be formalised as a regional process.

This is currently in place for HNC patients discussed at the regional MDM at ADHB where patients are allocated to the appropriate DHB where they can receive their resection/reconstruction. There is a system in place at ADHB for HNC where patients are processed and booked for surgery following the MDM.

The process for co-ordinating complex metastatic skin cancer patients that need free flap reconstruction at CMDHB plastic surgical and ORL department is less defined. NDHB have experience delays with securing a theatre date in CMDHB, pre-assessing patients and providing a smooth patient journey.

Recommendations

1. SLA's to be established between ADHB as the Regional/Tertiary Provider and the DHB's defining expected service delivery in the Northern Region.
2. Streamlining processes, protocols and models of care where there is regionalisation currently in place for free flap reconstruction.

Phase 2

1.Providing equity of access within ORL-HNS secondary care across the Northern Region; particularly Metro-Auckland.

It has been recognised across the working group that a process needs to be undertaken to define what level of service should be provided to enable maturity of services including workforce and infrastructure. Using the Role Delineation Model would create an intention of how services are delivered. This would be for non-cancer

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[3] Over 7 of the SMO at CMDHB are over 60.

components of the service[4]. A 5-year strategy using LTRIP forecasting detailing expected demand, current capacity and individual service plans. This would include further in-depth analysis into procedures, day cases, inpatient activity elective and non-elective, LOS and associated support services, to enable an informed decision to be made on addressing long term vulnerabilities and a model of care.

Work would need to be undertaken to review waitlist times for treatment.

Recommendation

A regional programme of work needs to be led on ORL-HNS to using RDM across the region to be led by the ADHB NHC Service with a Project Manager and Clinical Lead to provide a stocktake on current provision and service plans and models of care to ensure a sustainable service across the region. This is so to ensure consistent regional triaging, access and waitlists to provide the same level and access to care across the Northern Region It is recommended that a 5-year strategy across the region taking into account the HNC RDM and recommendations to determine the model of care and investment required across the health system.

Recommended Options

Options going forward to ensure a sustainable and equitable service across the region.

- Option one: status quo which would result in continued risk of vulnerability in the system.
- Option two: address issues that can be achieved in phase 1 to improve sustainability e.g. acute on call roster, streamlining regional process, agreeing secondary care thresholds. This is likely to have cost implication to DHB's
- Option three: revised model of care across the region for adults to be delivered in phase 2 using the RDM and 5-year strategy to inform. This will determine gaps in the systems which will identify immediate or long term gaps and risks which will need to be addressed.
- Option four: option two and three combined are taken forward to ensure phase 1 issues are mitigated and to develop a model of care to ensure equity of access and sustainability of provision.

It is recommended that option four is taken forward and led by the ADHB Service with a Project Manager (0.25FTE) and Clinical (0.1)FTE lead to take this forward.

Actions and Progress

Action	Progress	Next steps
Metro Auckland Acute On Call Roster -	- PD and contracts across DHBs demonstrates variation - SLA being developed by ADHB to be put in place with WDHB and CMDHB - Conditions warranting on call requirements is to be reviewed and included as	- Protocol for exemptions to come off the on-call roaster to be developed and agreed across Metro-Auckland. - Agreement to align PD on call roster requirements - Agreement to provide cover of long term absences

[4] A RDM has been undertaken for Head and Neck Cancer with recommendations submitted to REF.

	part of SLA.	- Engagement with SCD, GM and HR.
Strengthening Regional Pathways - Free Flap reconstruction - Paeds	- Process at ADHB documented -	- JK to work on CMDHB Plastic surgery and ORL pathway for free flap reconstruction
Secondary Care Thresholds	- Agreed what procedures happen and secondary care.	- Agree referral thresholds across secondary care.
RDM Appraisal - RDM Framework agreed - RDM DHB Assessment - RDM ambition		Project Manager and Clinical Lead to be assigned to lead RDM process
ORL-HNS 5 year strategy - Capacity and demand projections across the region - RDM assessment - Secondary care thresholds - Recommended model of care across the region taking into account primary and community care		Project Manager and Clinical Lead to be assigned to lead RDM process.

Interdependencies with other Functions:	The recommendations will need to acknowledge the Head and Neck Cancer Accreditation recommendations and investment.
Equity considerations of recommendations:	This process has been equity driven and informed by service data and clinical experience with recognised gaps in capturing wider population needs such as social determinants of health. Further advice and collaboration will be sought in the development of the recommendations.
How recommendations align with Treaty responsibilities:	Aligns to regional service design principles including: - **Partnership** where these proposals have been reviewed by the Māori Clinical Governance Group and Pacific CTAG in late September and include the recommendations in here. - **Equity** as per above **Active Protection** of Māori taonga, culture and knowledge as per the Regional Service Design Principles are to be factored into any work moving forward

Cost estimate summary for recommendations with financial impact:				
One-off costs:	Capex:	-	Opex:	-
Recurrent costs (full year effect):	Capex:	-	Opex:	
Source of funding, if approved:				
Provider cost within existing provider revenue allocation:				
DHB funder cost pressure 2020/21:				
Pre-commitment to funding round 2021/22+:				
Alternate source of funds (please specify details):				
Basis for DHB cost split:				
Additional comments (please specify):	0.25 Project Manager and 0.1 Clinical Lead. Resource has not been allocated and should be considered within existing services across the region, overseen by the steering group.			

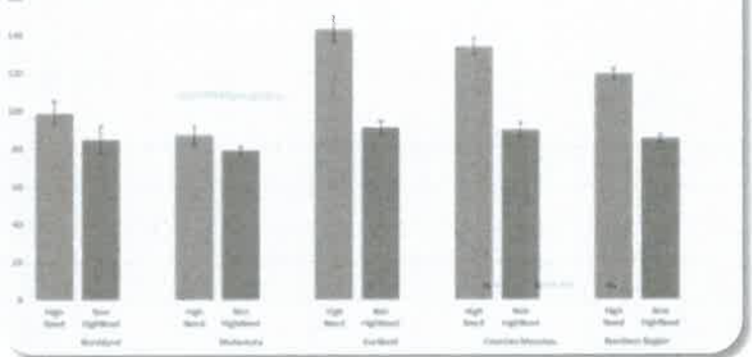
Appendix 1: ORL snapshot.

Current Utilisation Profile by DHB of Patient Domicile 2019

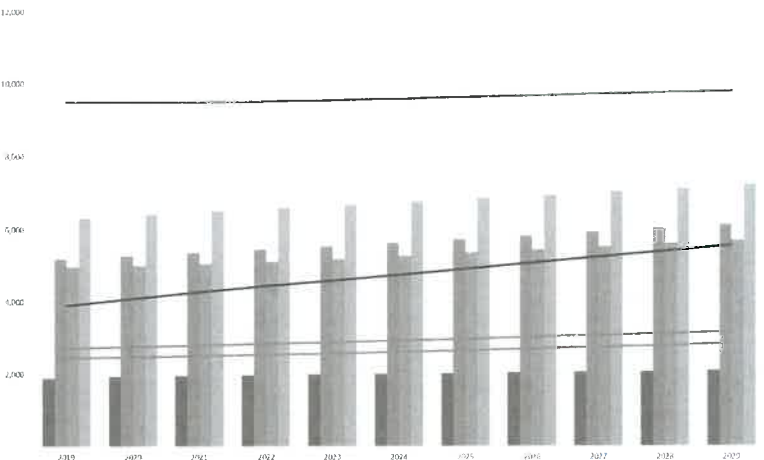
	DHB of Patient Domicile								DHB of Patient Domicile % Of Northern Region				
	Northland	Waitemata	Auckland	Counties Manukau	Metro Auckland	Northern Region	Outside Northern Region	Total	Northland	Waitemata	Auckland	Counties Manukau	Northern Region
FSA	1,893	5,191	4,968	6,301	16,460	18,353	220	18,573	10.3%	28.3%	27.1%	34.3%	100%
FSA Dizzy clinic	1	1,135	138	3,332	4,605	4,606	14	4,620	0.0%	24.6%	3.0%	72.3%	100%
Nurse Clinics FUP	3,493	1,277	1,130	376	2,783	6,276	19	6,295	55.7%	20.3%	18.0%	6.0%	100%
FUP	3.616	6,729	9,334	8,485	24,548	28.164	547	28,711	12.8%	23.9%	33.1%	30.1%	100%
Speech Therapy	97	652	1,252	841	2,745	2,842	75	2,917	3.4%	22.9%	44.1%	29.6%	100%
ENT Minor Ops	215	286	99	29	414	629	20	649	34.2%	45.5%	15.7%	4.6%	100%
Skin Lesions	145	133	63	20	216	361	1	362	40.2%	36.8%	17.5%	5.5%	100%
Bronchoscopies	9	22	10	21	53	62	-	62	14.5%	35.5%	16.1%	33.9%	100%
Botox	1	13	5	16	34	35	4	39	2.9%	37.1%	14.3%	45.7%	100%
Other Inpatient	1,500	3,250	3,142	2,780	9,172	10,672	342	11,014	14.1%	30.5%	29.4%	26.0%	100%
All Services	10,970	18,688	20,141	22,201	61,030	72,000	1,242	73,242	15.2%	26.0%	28.0%	30.8%	100%
							2019 Population Projections		10.2%	33.1%	26.2%	30.5%	100%

Utilisation Profile by DHB Service 2019

	DHB of Service						DHB of Service % Of Northern Region				
	Northland	Waitemata	Auckland	Counties Manukau	Metro Auckland	Northern Region	Northland	Waitemata	Auckland	Counties Manukau	Northern Region
FSA	1,793	4,362	6,393	6.025	16,780	18,573	9.7%	23.5%	34.4%	32.4%	100%
FSA Dizzy clinic	-	1,134	108	3.378	4.620	4,620	0.0%	24.5%	2.3%	73.1%	100%
Nurse Clinics FUP	3,521	1,258	1,155	361	2,774	6,295	55.9%	20.0%	18.3%	5.7%	100%
FUP	3,368	4,302	13,605	7,436	25.343	28,711	11.7%	15.0%	47.4%	25.9%	100%
Speech Therapy	-	-	2,315	602	2,917	2,917	0.0%	0.0%	79.4%	20.6%	100%
ENT Minor Ops	207	222	211	9	442	649	31.9%	34.2%	32.5%	1.4%	100%
Skin Lesions	145	133	65	19	217	362	40.1%	36.7%	18.0%	5.2%	100%
Bronchoscopies	9	21	12	20	53	62	14.5%	33.9%	19.4%	32.3%	100%
Botox	-	-	39	-	39	39	0.0%	0.0%	100.0%	0.0%	100%
Other Inpatient	1,409	1,378	6,348	1,879	9,605	11,014	12.8%	12.5%	57.6%	17.1%	100%
All Services	10,452	12,810	30,251	19,729	62,790	73,242	14.3%	17.5%	41.3%	26.9%	100%



Current



Note:

- Only FSA, FUP and Other Inpatient ORL activities are close to the expected % of Patients by DHB of Domicile
- High numbers of FUP in ADHB and CMDHB
- Low number of Nurse Clinics FUP at CMDHB
- Low number of Dizzy Clinics in Northland
- Low numbers of ENT minor Ops in CMDHB
- ADHB provides SLT provision for WDHB patients
- Significant difference in FSA activity between high need and non-high need in Auckland and Counties Manukau DHB and as a Northern Region.
- Significant difference in FUP activity between high need and non-high need in all DHB of domicile other than WDHB.
- Across the northern region growth is anticipated to be 15.1% from 2019 – 29 1.4% per annum in FSA's, FUP is anticipated to grow by 14.3% and inpatients by 8.7% in this period.
- The largest growth is seen in Bronhoscopies over this period of 19.9% (63 in 2020 – 74 in 2029 per annum).
- The largest growth across ORL services will be in the Asian population (41.2%) followed by Māori (16.3%), Pacific (14.5%) and then other (4%)

Appendix 2: Reported Current Position 6 July 2020 for Adults and Paeds

WDHB	CMDHB
• Equity of access to services – 45% of patients are declined and referred back to the GP. • Not seeing any P3 • Growth has caused the biggest challenge. • Started as an elective service which outgrew resulting in SMO doing work outside of their JD's. • Resources are limited – physical and FTE, no house surgeon, limited SMO due to clinic capacity and no inpatient beds. • Ability to see patients and operate is hard due to the above • Support to intensive care and emergency depart • Cover H&N, paediatrics emergency and aftercare • Lack of Theatre capacity for ORL	• ORL-HNS based at MSC and set up as an elective day case service. • Infrastructure makes it challenging to provide an acute service • Service is small, with ageing workforce, limits to on call provision and recruitment issues • Issues working across two sites, no beds at Middlemore for ORL-HNS rely on plastics and ADHB • Intervention rates for paediatrics is not good, with increasing waiting lists and waiting a long time in comparison to Starship. Starship would not be able cope the current volumes coming through to CMDHB.
ADHB	**NDHB (12 June 2020)**
• Issues with patient care with different intervention rates between DHB's, aftercare and inpatient care • Metro Auckland access to emergency theatre is restricted resulting in elective patients being cancelled or acute presentation waiting until the end of the list. • On call roster is problematic across the region due to clinicians opting out. This is made up of clinicians from each DHB. • ADHB does not have any SLA's in place with the other DHB's confirming what ADHB should deliver. • Support required for clinicians across the region • Two theatres which ORL-HNS do not have access to all of the time. Would be hard to find theatre space if anymore SMO were recruited. Potentially space in CTU but would result in split service.	• Functioning differently in NDHB • Vulnerable with staffing but in a better position following service plan including peripheral hospital in place and to outsource for recent issues in Private • Working well in resources but could do better. • Regional networks for complex and tertiary care and paediatrics are important and could be strengthened • On-call is different to Metro Auckland • Intervention rates provide a broad service from paediatrics to extensive H&N and in line with national intervention rates; however, some cases are turned away • More work could be done on quality of life cases. • Theatre provision is good with two new theatres being built.

Appendix 3: ORL-HNS Principles Adults and Paediatrics.

1. COVID and our regional response to this illuminated a number of service vulnerabilities including paediatric and adult ORL
2. Vulnerabilities may include service, workforce and sub-speciality volumes and may vary over time
3. There is current variability in equity of access and outcomes regionally which there is a commitment to addressing
4. Regional solutions for paediatric and adult ORL-HNS will seek to improve patient safety, quality and health equity
5. Decisions about any future changes will be data informed and regionally agreed
6. Issues and solutions may be different for adult and paediatric populations and will be considered separately

To	Pacific Clinical TAG
From	John Kenealy Exec Lead Vulnerable Services Sarcoma Project
Date	19 November 2020
Subject	Regional Sarcoma Services Recommendation and Next Steps
For	**Feedback**
Do recommendations incur financial costs not previously planned /approved?	N

Recommendations

It is recommended that the Pacific Clinical TAG:

- **Notes** the options for consideration for the Northern Region Sarcoma Service model.
- **Endorses** that the following immediate changes are taken to mitigate the vulnerability of the existing MDM and lists, pending transition to the agreed option in 2021/22
  - Address succession planning and funding for the MDM coordinator / data base manager role
  - Address concern about theatre access for operating lists at the MMH site
  - Address concern of regular access to GA radiology lists (supporting data to be provided).
- **Notes** the intent that the next stage development of the detail and implementation of change will be delivered with project leadership and clinical time as set out in the proposals agreed by REF for submission to the Ministry of health funding in response to the call for proposals for sustainability projects.

Background/Context

- Post lockdown, the Northern Region's COVID-19 response turned to recovery. The NRHCC established the Hospital Capacity Service Improvement Steering group to lead an equity focused recovery program for planned care which included a particular focus on seven potentially vulnerable services to help them a) recover from the impacts of the COVID-19 lockdown and b) be more resilient with a particular focus on equity.
- The Regional Sarcoma Service delivered through Counties Manukau was initially identified as a vulnerable service due to changes in the specialist workforce that led to a change in referral for surgery patterns between CMDHB and ADHB without a clear plan to support a change in provider arrangements and the consequence of sarcoma surgeries displacing patients within the orthopaedic service at Auckland DHB.
- This 'vulnerable services' project was initiated utilising a rapid process with key regional leads leveraging the rapid progress gained under COVID, while incorporating some of the longer term goals in the LTIP and Cancer Deep Dive. The Executive sponsor for this project is Margie Apa, who has delegated day to day leadership to Aroha Haggie and John Kenealy.
- The driver and purpose of this project is to address the issues with regard to orthopaedic sarcoma. Where related services interface and/or could be part of the solutions they are in scope.

The key problem to solve

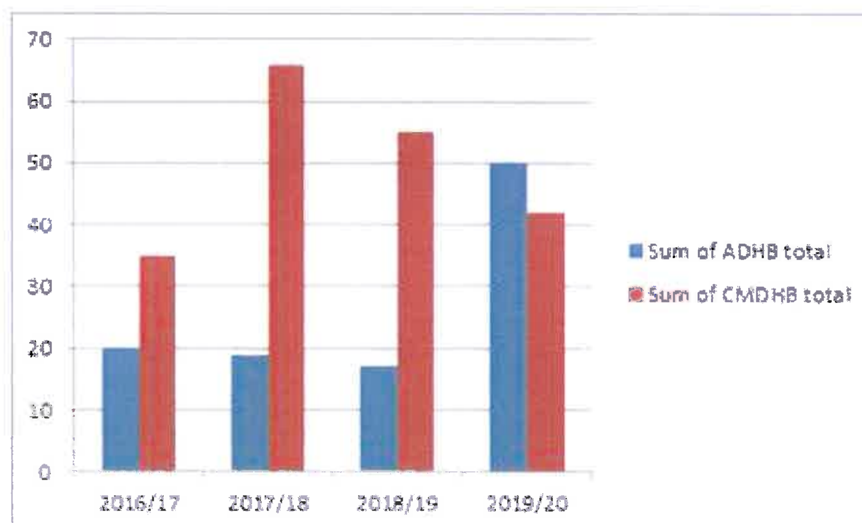
Equity of access and service provision

The regional sarcoma service operates on a split site basis across CMDHB and ADHB but there has been no lead taken by either DHB for planning the combined workforce, capacity and facility requirements of the service across the two providers. There has been a change in the sarcoma patient flow between ADHB and CMDHB, without visibility of the clinical pathway across the region, or coherent service planning to proactively identify and agree the resources required and associated funding.

A key consequence is that the time-critical nature of sarcoma surgery has displaced other patients within the orthopaedic service at ADHB who are already disadvantaged by disproportionately long waiting times for elective surgery.

Data for sarcoma inpatient events for CMDHB and ADHB shows the change in patient flow. Total volumes increased from 2016 to 2017 in CMDHB and subsequently decreased in 2019/20, whilst volumes at ADHB had more than doubled (see Figure 1) and the majority of orthopaedic surgical treatment now takes place at ADHB.

Figure 1. Sarcoma inpatient events at CMDHB and ADHB, 2016/17 to 2019/20 (NMDS data).



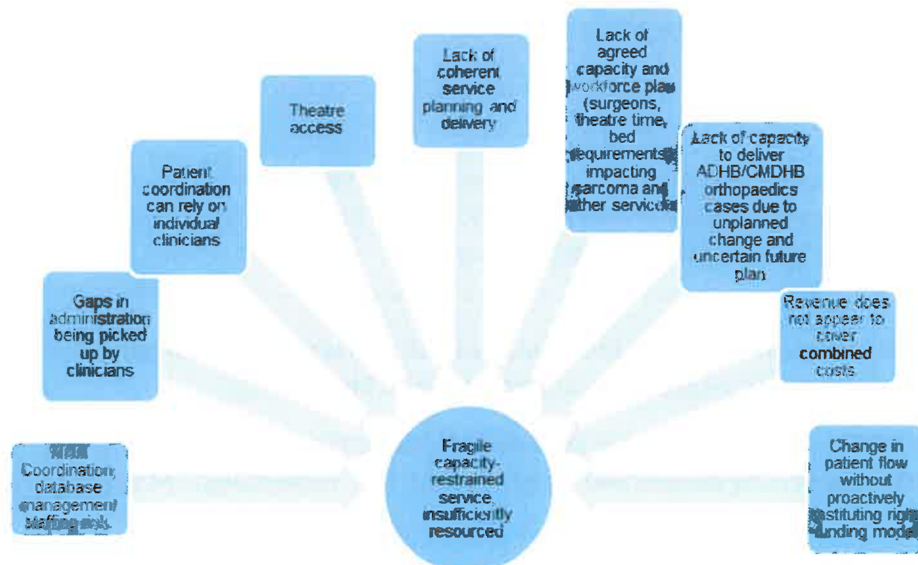
Discussion with service leads has identified gaps in the core resourcing of the MDM hosted by Counties Manukau which leave the service highly vulnerable to the loss of a single individual, as well as sporadic access to theatre time for surgery and interventional radiology at CMDHB which is contributing to sustained failure to meet treatment time standards.

Data on costs has not been quality assured but suggests a prima facie case that the current arrangements are not financially sustainable either, with the split site arrangement costing close to $3m on a WIES income of $2m for the number and complexity of patients treated. Figure 2 captures the various drivers contributing to fragility of the service.

Despite the substantially challenged nature of the organisational arrangements, it is apparent that the nationally recognised MDM expertise in pathology and radiology that is provided by CMDHB clinicians, and the collaborative practice of the orthopaedic surgeons working across DHB boundaries in a regional way, with

highly aligned views about future models of care mean there is the potential to create a high quality centre of excellence and equity for sarcoma care if managerial and service arrangements are addressed.

Figure 2. What's the problem we're trying to solve?



Providing a well-planned and appropriately resourced service will ensure optimal, equitable patient outcomes delivered in a timely manner, and importantly a well sign-posted and coordinated pathway for patients.

Current state

Sarcoma encompasses bone (orthopaedic), soft tissue and retroperitoneal sarcomas. Sarcoma is a low volume, high complexity tumour stream requiring treatment from a highly specialised multidisciplinary team.

Recommendations from the UK National Institute for Clinical Excellence (Improving Outcomes Guidance, IOG) and the London Model of Care for Cancer Services set out the catchment size and minimum volumes by provider for a range of cancer procedures. For sarcoma this was a catchment area of 7 million for bone and 2-3 million for soft tissues with 100 cases per year for soft tissue and bone or 50 for bone if also undertaking 100 for soft tissue. The 2018 NRLTIP Cancer Deep Dive highlighted that 76 new cases in total for the region in 2014 split between two surgical treatment sites with a supra-regional MDM in place at CMDHB was not compliant with these recommendations.[1]

The Sarcoma Multidisciplinary Meeting (MDM) is hosted by CMDHB and accepts referrals from all DHBs in the North Island. The MDM provides key diagnostic expertise to almost 1,000 patients per year, almost 90% of which do not go on to sarcoma surgery. There is specialised sarcoma radiology and pathology expertise at

[1] NRLTIP Cancer Deep Dive – Final Report 2018

CMDHB and specialist surgeons over both ADHB and CMDHB sites. The service has evolved over time due to the high level of expertise of the individuals in the region.

Access to other specialist services in line with tumour pathways such as Paediatric / Adolescents and Young Adults (AYA) Oncology, Medical Oncology and Radiation Oncology, and Plastic Surgery are also key to the provision of comprehensive specialised sarcoma services within the northern region. A view of the current Multidisciplinary Team (MDT) and a pictorial view of the current service model are shown in Appendix 1 and 2, respectively.

Waiting times

The service under current arrangements has consistently not been meeting Faster Cancer Treatment (FCT) wait time standards for patients for the last year of data collected: the FCT 62-day indicator was met in 78.6 % of patients vs target of 90% over 12 months from July 2019 to June 2020.

Equity

Sarcoma is a low volume tumour stream and due to the relatively small numbers it has been difficult to make any conclusions with regard to identifying inequities in care for patients with sarcoma.

According to data from the NZ Cancer Registry for new sarcoma registrations in the Northern Region (2015 to 2019) the percentage for Māori and Pacific peoples was 14.31% and 12.74%, respectively. Table 3 shows the data by ethnicity and age group.

Figure 3. New Sarcoma *Registrations

Ethnicity	0 to 24 years	25 to 64 years	65 years and over	Total
Pacific Peoples	12	40	21	73
Māori	11	45	26	82
European or Other	18	97	249	364
MELAA	1	3	3	7
Asian	8	28	11	47
	50	213	310	573

*mesothelial and soft tissue C45-49, bone and articular cartilage C40-41.

The percentage of Māori and Pacific peoples in the Northern Region population in the same time period was 14% and 12.08% respectively.

The northern region Faster Cancer Treatment performance data does not show a substantial difference between ethnicities, including for Māori or Pacific but the overall numbers are small (see Appendix 3.)

National FCT data have been requested and will be added when available.

The availability of survival data is limited, but the National 5-year survival rates for sarcoma in 2009 and 2010 were 49% and 46%, respectively (see Appendix 4 for survival data; not available by ethnicity).

A survival analysis in Adolescents and Young Adults (AYA) has shown that New Zealand achieves excellent survival outcomes for many common AYA cancers such as lymphomas, germ cell tumours, melanomas, and thyroid carcinomas and has also identified some specific cancers, namely bone and soft tissue sarcomas, CNS tumours, and adolescent ALL, where the overall survival does not currently appear to meet international

benchmarks[2]. In the same study, comparisons by AYA diagnostic group provided evidence of a higher incidence of bone tumours for Maori. Across all cancers in this study, Māori and Pacific had a lower 5-year survival compared with non-Māori/ non-Pacific peoples.

Patient experience
To date the Northern Cancer Network has not conducted sarcoma patient experience surveys or projects, and no information on sarcoma patient experience was available through the DHB patient experience services or the Cancer Society. Input from a patient perspective will be sought in this project.

What does good look like?

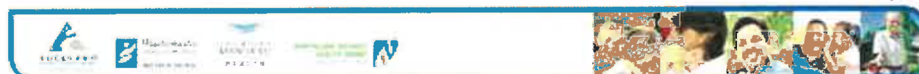
There is compelling evidence that for complex cancer procedures there is a positive relationship between the volume of patients that cancer services see and the outcomes that they achieve. This evidence suggests that perioperative mortality and long-term survival improves as hospital surgical volumes increase.

The Northern Region Expert Group has met several times over the past few months to discuss and work up what good looks like for a specialist sarcoma service, based on international literature and local experience. Figure 4 shows a summary of the aspirational picture agreed by the regional expert group.

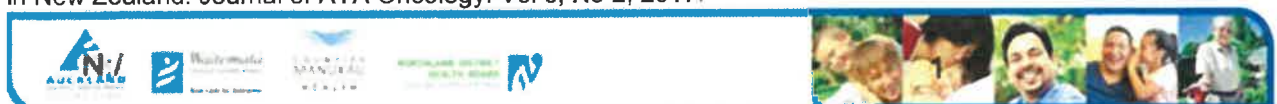
Figure 4. What does good look like – the aspirational picture.

What does good look like?

- Equitable access to treatment and outcomes for patients irrespective of domicile DHB
- Care is responsive to individual patient and family needs and priorities
- Appropriate support and rehabilitation for all people
- Continuity of access to regional specialist sarcoma expertise including an extended team of professionals including nursing, pathology, radiology, radiation oncology, medical oncology, allied health.
- Building on successful MDM with more systematised support
- Integration of specialised sarcoma cancer services
- Regionally agreed and costed service model in place including capacity, demand, infrastructure, workforce etc to ensure:
  - Resource in place to support and sustain delivery of high quality multidisciplinary care
  - Clerical support for clinicians
  - Theatre, clinic access etc.
- Funding plan agreed proactively



[2] Ballantine et al. Small Numbers Big Challenges: Adolescent and Young Adult Cancer Incidence and Survival in New Zealand. Journal of AYA Oncology. Vol 6, No 2, 2017.



At a workshop on 09 October 2020, the expert group agreed the following principles when considering the aspirational picture of what good looks like in the context of the northern region:

- Ideally each subspecialty would be on the same site
- Medical Oncology, Radiation Oncology and Paediatric Oncology/AYA can currently only be delivered at ADHB.
- Pathology and Radiology should be on the same site and they are part of wider specialist teams and work closely together.
- Most Radiology can be done at the local DHB with oversight from specialist sarcoma radiologists if the right clinical pathways and protocols and payment mechanisms are in place.
- Sarcoma surgeons (including Paediatric Oncology/AYA) should be located on the same site to facilitate working together and optimal patient care.
- Although noted that pathology should ideally be located with surgeons due to advantages for frozen sections and in-person conversations.
- Sarcoma patients should have access to clinical trials. Clinical trials are accessed through medical oncology at ADHB as the national accredited centre. Colocation at ACH fosters opportunity to expand trials access for sarcoma patients.
- Sarcoma service coordination (includes MDM coordination) should incorporate database management

Options for consideration

On the basis of the aspirational picture of what good looks like and the principles agreed by the expert group, the following are the options for consideration (see Appendix 5 for full options analysis):

- Single site for all tertiary and quaternary services related to sarcoma (**Option 1 or Option 2**).

  Noted difficulties with these options currently are:
  - Option 1: establishing sarcoma pathology and radiology expertise at ADHB
  - Option 2: Radiation Oncology, Medical Oncology and Paediatric Oncology delivered at ACH

- Dual site options:
  - All treatment at ACH and sarcoma service coordination/ database management with Pathology and Radiology at MMH (**Option 3a**) or All treatment and sarcoma service coordination/ database management at ACH, with Pathology and Radiology at MMH (**Option 3b**).
  - All adult surgery at MMH with Pathology and Radiology and sarcoma service coordination/ database management; other aspects of treatment at Auckland City Hospital (**Option 4**)

Essentially both options 3a and 3b mean that all surgeons are on one site to facilitate collaborative working, both between the sarcoma surgeons and with the other treatment modalities (medical oncology, radiation oncology and paediatric oncology), but are on a separate site from pathology and radiology. The items for resolution include the location of the sarcoma service coordination/ database management , protocols for when frozen sections and plastic surgery are required, and workforce planning to cover the non-sarcoma component of CMDHB sarcoma surgeon (25-30% of FTE) and orthopaedic backfill at ACH.

And option 4 means that the sarcoma surgeons are on the same site as pathology and radiology, but separate from medical oncology, radiation oncology and paediatric oncology.

It is recommended that the lead site for surgery take the lead on capacity planning and management of the service overall whether on its own site or at an alternate site to ensure there is clear management and accountability for the whole tertiary care pathway. Noted that according to NICE guidelines[3], there should be a nominated clinician (clinical lead) who takes responsibility for the service and this should be reflected in their job plan. The clinical lead should be a member of the core MDT.

Noted that the site on which surgery capacity is centralised will need to provide required weekly theatre sessions and weekly clinic hours on site, to ensure the service has sufficient capacity to maintain waiting time standards as an essential quality requirement *((data for weekly theatre session and clinic hours to be provided))*. It is recognised that for ACH or MMH this could require consideration of other work moving out of the site to make room to accommodate the service, and where this is not possible it may result in a reduction of access.

The service needs to deliver equitable access to treatment and outcomes for patients irrespective of domicile DHB and care that is responsive to the individual needs of patients, in particular to those who are most vulnerable. This includes having clear and visible pathways with attention to seamless coordination for patients throughout their journey.

Recommendations

- Note the options for consideration for the Northern Region Sarcoma Service model.
- Endorse that the following immediate changes are taken to mitigate the vulnerability of the existing MDM and lists, pending transition to the agreed option in 2021/22
    - Address succession planning and funding for the MDM coordinator / data base manager role.
    - Address concern about theatre access for operating lists at the MMH site.
    - Address concern of regular access to GA radiology lists (supporting data to be provided).

- Note the intent that the next stage development of the detail and implementation of change will be delivered with project leadership and clinical time as set out in the proposals agreed by REF for submission to the Ministry of health funding in response to the call for proposals for sustainability projects.

[3] NICE Guidance available at https://www.nice.org.uk/guidance/csg9/resources/improving-outcomes-for-people-with-sarcoma-update-pdf-773381485

Appendix 1.

The regional multidisciplinary team

	ADHB	CMDHB	
Core Multidisciplinary Team			NICE guidance Specification[4]
Specialist sarcoma surgeon	1 person, 0.8 FTE (orthopaedic) 1 person, FTE TBC (retroperitoneal)	1 person (0.70-0.75 FTE) (orthopaedic)	Min of 2 per MDT (These surgeons should have a major clinical interest in sarcoma)
Sarcoma clinical nurse specialist	TBC	1 person, 1 FTE	Sufficient to allocate a clinical nurse specialist/key worker for each patient (but a minimum of two)
Specialist sarcoma pathologist	-	5 people* 2.5 FTE	At least one and ideally two
Specialist sarcoma radiologist	-	2.0 FTE	At least two with a special interest in musculoskeletal/oncological imaging
Medical Oncologist	2 people 0.4 FTE	-	
Radiation Oncologist	TBC	-	
MDM Coordinator and secretariat support	N/A	Currently admin FTE in radiology; FTE TBC	
Palliative care specialist			
Extended Multidisciplinary Team			NICE guidance Specification
Specialist sarcoma physiotherapist			
Specialised allied health professionals			Consisting of other relevant AHPs, such as therapy radiographers, occupational therapists, dietitians and social workers, access to counsellors and/or psychologists
Specialist nurses			Including palliative care nurses and appropriately trained ward staff
Paediatric oncologist**	1 person, FTE TBC		
Other professionals including orthopaedic, plastic, head and neck, gynaecological, GI and vascular surgeons			

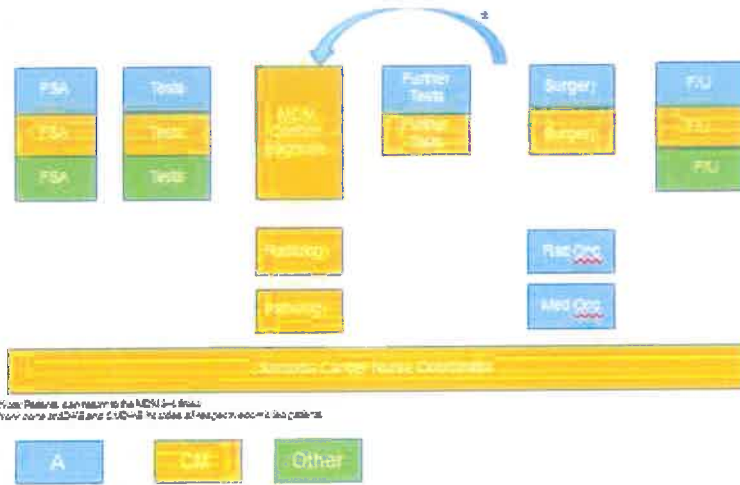
*Currently spread across 5 people, needs to be ≥3 people to allow for cover

**For Adolescents and Young Adults, there is crossover between ADHB orthopaedic oncology surgeon and paediatric sarcoma surgeon

[4] NICE Guidance available at https://www.nice.org.uk/guidance/csg9/resources/improving-outcomes-for-people-with-sarcoma-update-pdf-773381485

Appendix 2.

Current Service Model



Appendix 3.

Northern Region FCT performance for sarcoma by ethnicity (2019/2020)

	Asian	European	Maori	Other	Pacific	Total
NDHB	0	5/5	2/2		0/0	7/7
WDHB	1/1	21/22	3/3	1/1	2/2	28/29
ADHB	1/3	9/10	3/3		3/4	16/20
CMDHB	3/3	10/11	3/3		9/10	25/27
Total	5/7	45/48	11/11	1/1	14/16	76/83

Appendix 4.

Survival (%) by sarcoma type and region 2009- 2010.

Note 5yr survival can't be calculated beyond 2010

ICD 10 code C40, C41, C46, C48, C49

	2009					2010				
	<1yr	1yr	3yr	5yr	Total	<1yr	1yr	3yr	5yr	Total
Northern										
Bone	21%	21%	21%	36%	**100%**	11%	22%	6%	61%	**100%**
Soft tissue	26%	20%	7%	46%	**100%**	37%	17%	6%	40%	**100%**
Midland										
Bone	25%	0%	0%	75%	**100%**	10%	30%	0%	60%	**100%**
Soft tissue	48%	8%	0%	44%	**100%**	28%	19%	11%	42%	**100%**
Central										
Bone	38%	0%	0%	63%	**100%**	0%	13%	13%	73%	**100%**
Soft tissue	26%	13%	13%	47%	**100%**	21%	38%	8%	33%	**100%**
Southern										
Bone	22%	11%	0%	67%	**100%**	17%	17%	0%	67%	**100%**
Soft tissue	15%	30%	3%	52%	**100%**	18%	24%	11%	47%	**100%**
Overseas										
Soft tissue										
Grand Total	**27%**	**17%**	**7%**	**49%**	**100%**	**22%**	**23%**	**8%**	**46%**	**100%**

Continued: Survival (%) by sarcoma type and region, 2011-2013

Note 5yr survival can't be calculated beyond 2010

	2011					2012					2013			
	<1yr	1yr	3yr	>3yrs	Total	<1yr	1yr	3yr	>3yrs	Total	<1yr	1yr	>3yrs	Total
Northern														
Bone	0%	9%	9%	82%	**100%**	18%	18%	6%	59%	**100%**	29%	10%	62%	**100%**
Soft tissue	14%	17%	6%	63%	**100%**	12%	24%	2%	62%	**100%**	15%	15%	69%	**100%**
Midland														
Bone	25%	25%	25%	25%	**100%**	22%	22%	11%	44%	**100%**	14%	14%	71%	**100%**
Soft tissue	26%	11%	11%	51%	**100%**	30%	21%	0%	48%	**100%**	23%	13%	65%	**100%**
Central														
Bone	0%	50%	0%	50%	**100%**	30%	10%	5%	55%	**100%**	9%	27%	64%	**100%**
Soft tissue	18%	21%	4%	57%	**100%**	16%	28%	6%	50%	**100%**	16%	19%	66%	**100%**
Southern														
Bone	0%	22%	0%	78%	**100%**	10%	30%	0%	60%	**100%**	40%	10%	50%	**100%**
Soft tissue	32%	11%	8%	50%	**100%**	28%	9%	0%	63%	**100%**	23%	23%	55%	**100%**
Overseas														
Soft tissue				100%	**100%**				100%	**100%**				
Grand Total	**19%**	**16%**	**7%**	**58%**	**100%**	**21%**	**20%**	**3%**	**56%**	**100%**	**20%**	**17%**	**63%**	**100%**

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Appendix 5.

Table 1. Options analysis for regional sarcoma service model

	1) Have all specialties at ADHB	**2) Have all specialties at CMDHB**	**3a) Have all sarcoma surgeons on one site at ADHB**	**3b) Have all sarcoma surgeons, and sarcoma service coordination/ database management on one site at ADHB**	**4) Have all sarcoma surgeons, and sarcoma service coordination/ database management on one site at CMDHB**	**5) Current model: sarcoma orthopaedic surgery split over 2 sites**
What does this mean	All specialties at ADHB	All specialties at CMDHB (Note the difficulty of having rad onc,med onc and paed onc at CMH)	Surgeons together and with rad onc, med onc and paed onc but separate from sarcoma service coordination, pathology and radiology	Surgeons together and with rad onc, med onc, paed onc and sarcoma service coordination, but separate from pathology and radiology	Surgeons together and with sarcoma service coordination, pathology and radiology but separate from rad onc, med onc and paed onc.	Surgeons across two sites. Pathology and radiology together on one site and rad onc, med onc and paed onc together on other site. Note the following immediate changes to mitigate vulnerabilities: -succession planning for sarcoma service coordinator -availability of theatre lists at MMH and GA radiology lists
Advantages	-Ideal model of all specialties on one site providing integrated specialised sarcoma service -Fosters opportunity to	Ideal model of all specialties on one site providing integrated specialised sarcoma service	-Facilitates collaboration between sarcoma orthopaedic surgeons, including scheduling of combined surgeries. -facilitates collaboration	-Facilitates collaboration between sarcoma orthopaedic surgeons, including scheduling of combined surgeries. -Better collaboration	-Facilitates collaboration between sarcoma orthopaedic surgeons, including scheduling of combined surgeries. -In line with current	-Note immediate changes above

	expand trials access for sarcoma patients		with AYA/Paeds, medical oncology and radiation oncology (combined clinics) - only move one clinician for benefits above -Fosters opportunity to expand trials access for sarcoma patients	with AYA/Paeds, medical oncology and radiation oncology (combined clinics) -Fosters opportunity to expand trials access for sarcoma patients	agreed IDF funding arrangements	
Disadvantages	-Not ideal to move pathology and radiology from CMDHB because it is part of a wider specialist workforce -No Resident Plastic Surgery service -Increases capacity pressure at ADHB	-Expert group agreed not possible to move medical oncology, radiation oncology and paediatric oncology to CMDHB -Increases capacity pressures at CMH	-MDM not on the same site as surgeons -MDM not on the same site as CNS -No Resident Plastic Surgery service Increases capacity pressure at ADHB	-MDM not on the same site as pathology and radiology -No Resident Plastic - Surgery service Increases capacity pressure at ADHB	-Sarcoma orthopaedic surgeons not with other general sarcoma and paediatric surgeons, medical oncology and radiation oncology, for collaboration and combined clinics. -Increases capacity pressures at CMH	-Pathways not visible to the region -Funding model not agreed -Hinders collaboration between sarcoma surgeons -Current pressure on orthopaedics at ADHB not resolved
For resolution	- Impact of establishing pathology and radiology at ADHB -Management and leadership arrangements -Funding agreement - Strategy for when Plastic surgery needed (Provision of off-site complex plastic surgery reconstruction is suboptimal)	- Having medical oncology, radiation oncology and paediatric oncology at CMDHB is a barrier -Clinic and theatre capacity requirements available at CMDHB -Management and leadership arrangements - Funding agreement	-Strategy for when frozen sections needed - Strategy for when Plastic surgery needed (Provision of off-site complex plastic surgery reconstruction is suboptimal) -All clinic and theatre capacity need to be in place -Management and leadership arrangements -Funding agreement	-Logistics of establishing the sarcoma service coordination at ADHB -Management and leadership arrangements -Funding agreement - Strategy for when Plastic surgery needed (Provision of off-site complex plastic surgery reconstruction is suboptimal)	-Clinic and theatre capacity requirements available at CMDHB -Management and leadership arrangements -Funding agreement	-Service planning would need to be undertaken for 21/22 to ensure the right funding plan was in place to ensure sustainability -Management and leadership arrangements

Table 2. Description of options for regional sarcoma service model.

	1) Have all specialties on one site at ADHB	2a) Move sarcoma orthopaed surgery on one site at ADHB	2b) Move sarcoma orthopaed surgery and MDM on one site at ADHB	3) Move sarcoma orthopaed surgery on one site at CMDHB	4) Current model: sarcoma orthopaed surgery split over 2 sites	5) Have all specialties on one site at CMDHB
Orthopaedic sarcoma surgeons on same site	✓	✓	✓	✓	✗	✓
Orthopaedic sarcoma surgeons with general and paediatric sarcoma surgeons, medical oncology and radiation oncology	✓	✓	✓	✗	✗	✓
Pathology and radiology on the same site together	✓	✓	✓	✓	✓	✓
MDM on same site as pathology and radiology	✓	✓	✗	✓	✓	✓
MDM on same site as surgeons	✓	✗	✓	✓	✗	✓
MDM on same site as pathology and radiology and surgeons	✓	✗	✗	✓	✗	✓

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Sarcoma Vulnerable Services Project

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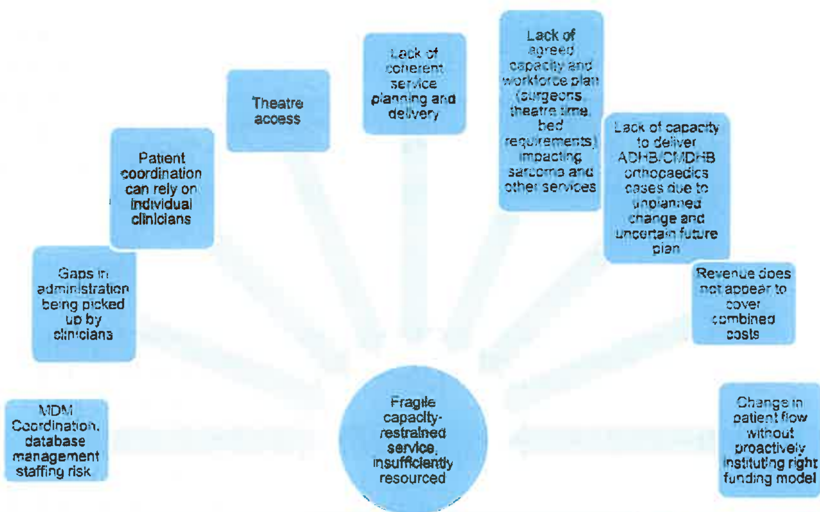
What's the problem we're trying to solve?



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What does good look like?

- Equitable access to treatment and outcomes for patients irrespective of domicile DHB
- Care is responsive to individual patient and family needs and priorities
- Appropriate support and rehabilitation for all people
- Continuity of access to regional specialist sarcoma expertise including an extended team of professionals including nursing, pathology, radiology, radiation oncology, medical oncology, allied health.
- Building on successful MDM with more systematised support
- Integration of specialised sarcoma cancer services
- Regionally agreed and costed service model in place including capacity, demand, infrastructure, workforce etc to ensure:
  - Resource in place to support and sustain delivery of high quality multidisciplinary care
  - Clerical support for clinicians
  - Theatre, clinic access etc.
- Funding plan agreed proactively

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Equity

- Sarcoma is a low volume tumour stream and due to the small numbers it is difficult to identify inequities in care from regional data.
- The Northern Region data showing wait times did not show a substantial difference between ethnicities (including for Māori or Pacific), but the numbers were small; *National FCT data have been requested.*
- For new sarcoma registrations in the Northern Region (2015 to 2019) the percentage in Māori and Pacific peoples was 14.31% and 12.74%. Data by ethnicity and age are shown below. The percentage of Māori and Pacific peoples in the population in the same time period was 14% and 12.08% respectively.

Ethnicity	0 to 24 years	25 to 64 years	65 years and over	Total
Pacific Peoples	12	40	21	73
Māori	11	45	26	82
European or Other	18	97	249	364
MELAA	1	3	3	7
Asian	8	28	11	47
	50	213	310	573

- A NZ survival analysis in Adolescents and Young Adults (AYA) showed excellent survival for many common cancers but overall survival in some cancers including bone and soft tissue cancers do not meet international benchmarks. There was a higher incidence of bone tumours in Māori.
- AYA analysis showed for all cancers Māori and Pacific had a lower 5-year survival compared with non-Māori/non-Pacific peoples.

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Agreed principles

- Ideally each subspecialty would be on the same site
- Medical Oncology, Radiation Oncology and Paediatric Oncology/AYA currently only delivered at ADHB.
- Pathology and Radiology are part of wider specialist teams and work closely together.
- Most Radiology can be done at the local DHB with oversight by specialist sarcoma radiologists if the right clinical pathways and protocols and payment mechanisms are in place.
- Sarcoma surgeons (including Paediatric Oncology/AYA) should be located on the same site to facilitate working together and optimal patient care.
- Sarcoma patients should have access to clinical trials. Clinical trials are accessed through medical oncology at ADHB as the national accredited centre. Colocation at ACH fosters opportunity to expand trials access for sarcoma patients.
- Sarcoma service coordination (includes MDM coordination) should incorporate database management

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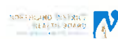

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Agreed immediate needs

- Address succession planning and funding for the MDM coordinator / data base manager role
- Address concern about theatre access for operating lists at the MMH site.
- Address concern of regular access to GA radiology lists (supporting data to be provided).
- Consider merits and feasibility of service model changes

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Service model options for consideration

- Single site for all tertiary and quaternary services related to sarcoma (**Option 1 at ADHB or Option 2 at CMH**).
- Dual site options:

  All treatment at ADHB, and sarcoma service coordination/ database management with Pathology and Radiology at CMH (**Option 3a**) or All treatment and sarcoma service coordination/ database management at ADHB, with Pathology and Radiology at CMH (**Option 3b**).

  All adult surgery at MMH with Pathology and Radiology and sarcoma service coordination/ database management; other aspects of treatment at ADHB (**Option 4**)

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Process to agree recommended model

- Week starting 16 Nov:
  - Canvas Expert Group including CNS, Allied Health, Plastic Surgery, General Orthopaedics, wider surgical services for feedback on service model options including resolutions and preferred option.
  - Confirm any relevant outstanding data requirements (e.g. weekly theatre session and clinic hours, National FCT data)
  - Seek input from a patient perspective
- Week starting 30 Nov:
  - Collate and review expert group feedback
  - Draft report with recommended option
  - Request endorsement of recommended model
- Next stage of development: develop detail and implementation plan

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Te Kahui Arataki – Maori Clinical Governance

Compiled papers relating to Vulnerable Services on following meeting dates:

- 20 August 2020
- 3 September 2020
- 1 October 2020
- 12 November 2020

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Regional Vascular Services Re-configuration

Presentation to the Maaori Clinical Governance Roopu

20 August 2020

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Problem Statement

- Lack of an integrated, sustainable vascular service that provides equity of access and consistent quality outcomes for patients across the northern region DHBs

Proposed solution

Proposal for a regional 'hub and spoke' model with an integrated team, with appropriate levels of qualified staff, both in hours and after hours at each site, with clearly defined and agreed clinical pathways and protocols to allow for patients to be transferred to the appropriate centre to receive the consistent quality care for their specific condition at all times.

- Initial equity impact – care closer to home and more accessible across all parts of region key enabler to improve access to specialist vascular care for Maori and Pacific patients.
  - What more could/should we be doing ?

Maori Health Inequities WAI2575 Ministry of Health evidence

Total cardiovascular disease mortality

- More than two and a half times higher for Maori than for non-Maori
- Cardiovascular disease
- Maori were twice as likely to be hospitalised than non-Maori

Lower Limb Amputation

- Lower limb amputation with concurrent diabetes were five times higher for Maori compared with non-Maori
- Lower limb amputations for Maori can be estimated as occurring at nearly twice the rate of non-Maori

Renal failure

- Population rates of renal failure with concurrent diabetes (aged 15+) were 9.4 times higher in Maori compared with non-Maori
- Maori are three and a half times more likely to have renal failure than non-Maori

***Inequity in Dialysis-related practices and outcomes (Huria T et al, 2018)**

- Fewer Maori start dialysis with an arteriovenous fistula than non-Maori (23% v 26%)
- More Maori start dialysis with a non-tunnelled central venous catheter than non-Maori (47% v 43%)

Key Themes - Patient Experience of Vascular Services (ADHB only)

STRENGTHS

Staff – friendly, pleasant, helpful, involved me, listened to, not rushed, good manner, knowledgeable, efficient, professional, kind, smiling, easy to understand

Information – clear, concise explained simply, constructive, supports decision making

AREAS FOR IMPROVEMENT

Access closer to home

- Came through strongly for WDHB-domiciled patients
- Parking!!

Timeliness to diagnostics/clinics

- f/ups sooner post surgery
- Communication of what needs to happen, by when (ideally by email/text)
- Scan on the same day as clinic

Phone or telehealth appointments

Time of clinics

- Patient-choice

Post surgery/ discharge

- Communication with patient and family - care and after effects

Who are our patients? Inpatient ethnicity breakdown v Northern Region Population

Vascular Inpatient Discharges (Services provided by CMDHB & ADHB only for all regional DHBs)

2019	Maori	Maori %	Pacific	Pacific %	Other	Other %	Total
ADHB	194	16%	153	12%	1213	72%	1560
CMH	195	17%	283	25%	664	58%	1142
Total	389	14%	436	16%	1877	69%	2702

2019 Stats NZ Pop

	Maori	Maori %	Pacific	Pacific %	Other	Other %	Grand Total
Auckland	40,440	8%	54,260	11%	399,290	81%	493,990
CMDHB	94,250	16%	127,040	22%	357,360	62%	578,650
Waitemata	63,930	10%	45,100	7%	519,740	83%	628,770
Northland	69,160	36%	4,050	2%	119,960	62%	193,170
Grand Total	267,780	14%	230,450	12%	1,396,350	74%	1,894,580

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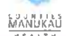
Maaori Clinical Governance Roopu – Initial thoughts - for discussion and advice

- Service access – see patients locally rather than patients having to travel
- Access to telehealth – advantages/barriers to this?
- Ability to upload vascular assessment and photos onto DHB systems?
- Non-invasive testing options available in community
- Visiting services – Nursing/ Podiatry/ Clinical Nurse Specialists – links with GP/Practice Nurses/District Nursing
- Improve triaging/screening for DHB Vascular services to confirm if really necessary to be seen by the vascular service – or alternative approach to care?
- Access to equipment at each centre – mobile vs permanently-based machines for checking blood flow (PVD)



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Vulnerable Services: Ophthalmology Māori Clinical Governance Rōpū Input

3 September 2020

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Service Overview

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What's the problem we're trying to solve?

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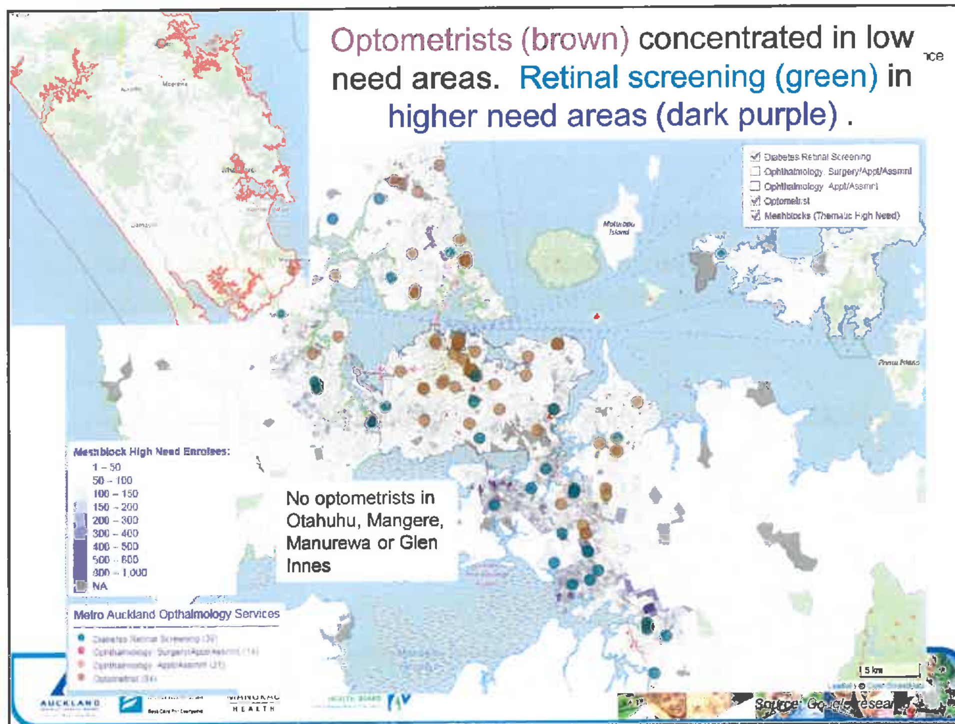
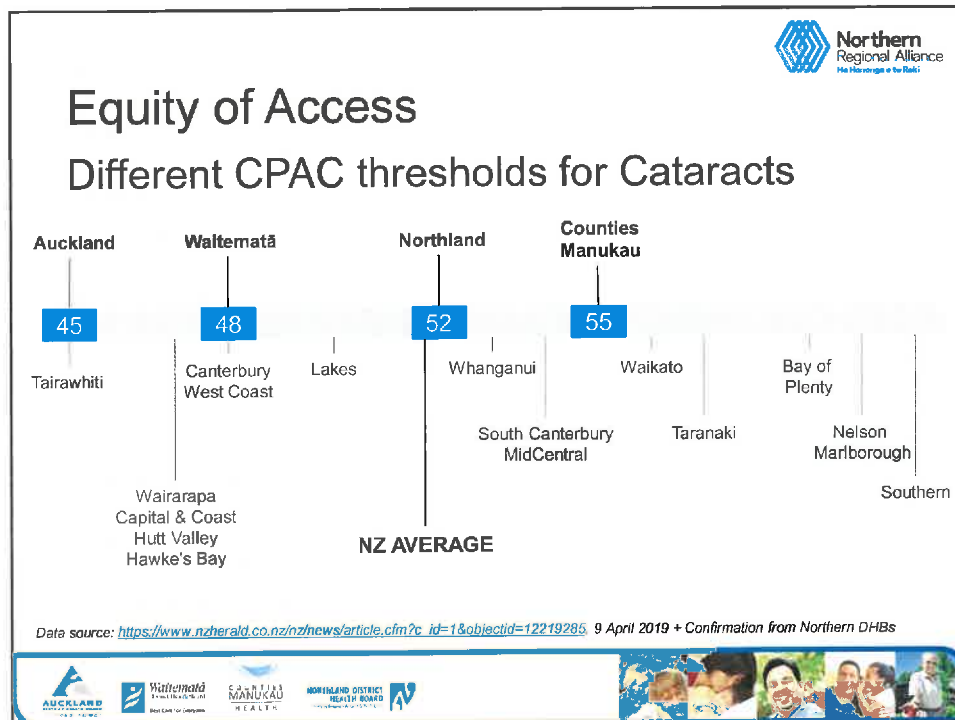
Access


Optometrists (brown) concentrated in low need areas. Retinal screening (green) in higher need areas (dark purple) .
Diabetes Retinal Screening
Optometrist
No optometrists in Otahuhu, Mangere, Manurewa or Glen Innes
Meshblock High Need Enrolees:
1 – 50
50 – 100
100 – 150
150 – 200
200 – 300
300 – 400
400 – 500
500 – 800
800 – 1,000
NA
Metro Auckland Opthalmology Services
AUCKLAND
MANUKAU
HEALTH
5 km
Source: Google research


Northern Regional Alliance
Equity of Access
Different CPAC thresholds for Cataracts
Auckland
Waitematā
Northland
Counties Manukau
45
48
52
55
Tairawhiti
Canterbury West Coast
Lakes
Whanganui
Waikato
Bay of Plenty
South Canterbury MidCentral
Taranaki
Nelson Marlborough
Southern
Wairarapa Capital & Coast Hutt Valley Hawke's Bay
NZ AVERAGE
Data source: https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12219285, 9 April 2019 + Confirmation from Northern DHBs
AUCKLAND
Waitematā
COUNTIES MANUKAU HEALTH
NORTHLAND DISTRICT HEALTH BOARD

Northern Regional Alliance

Recommendation #1 – Development of new/ expanded community eye clinics run by optometrists, nurses and technicians – starting in high need areas. Also looking at virtual clinics.

Recommendation #2 – Commitment to equalise CPAC thresholds regionally

Northern Regional Alliance

Timeliness/Waits

Equity of Waiting times

Wait times were getting worse pre-COVID

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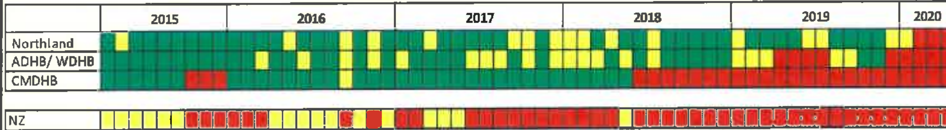
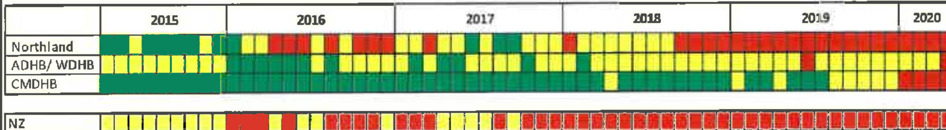
Ophthalmology ESPI 2 and 5 Indicators April 2015- April 2020

ESPI 2 - FSA within 120 days



ESPI 5 - Procedure within 120 days



Source Quickr MOH

In analysing wait times, DHB of Service biggest driver of inequity – largely Northland

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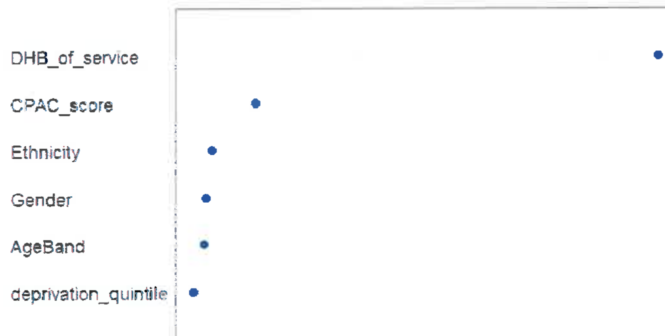
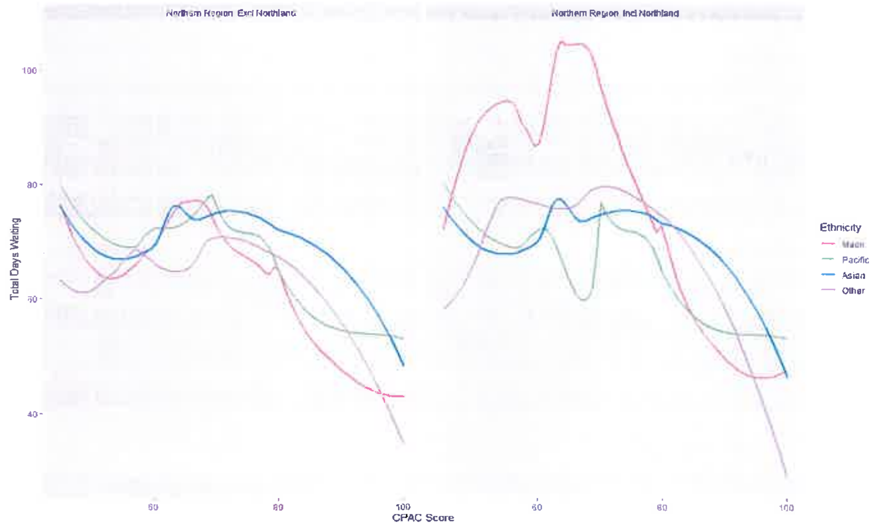
Factor Importance Wait Times Cataract: Prelim Data



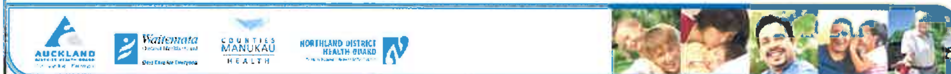
Importance

In analysing wait times, DHB of Service biggest driver of inequity – largely Northland



Recommendation #3 – Provide additional regional support to Northland

Recommendation #4 – Implement prioritisation adjustment model for waiting & ethnicity (ADHB led)



Significant demand pressures – age and diabetes

Northern Region	Actuals		2019 from 2015	
	2015	2019	Change	Avg Annual
FSA	19,732	20,671	4.8%	1.2%
FUP	63,236	76,977	21.7%	5.0%
Intraocular injections (1)	8,455	19,600	131.8%	23.4%
Orthoptist	12,297	11,901	-3.2%	-0.8%
Laser	3,324	3,647	9.7%	2.3%
Eye Procedures	1,056	1,207	14.3%	3.4%
Nurse Clinics	8,364	8,693	3.9%	1.0%
Diabetes Screening	33,039	35,375	7.1%	1.7%
Cataract	5,571	8,137	46.1%	9.9%
Other Inpatient	5,596	6,186	10.5%	2.5%
All Services	**160,670**	**192,394**	**19.7%**	**4.6%**
Population Projection Changes			**7.0%**	**1.7%**

Service growth almost 3x population growth

Recommendation #5 – Committing to Ophthalmology as a regional priority and coordinate investment across the region

Quality/ Outcomes – from ad hoc to systemic

Recommendation #6 – Quantify and systematically track quality and outcome equity gaps for ophthalmology across the region

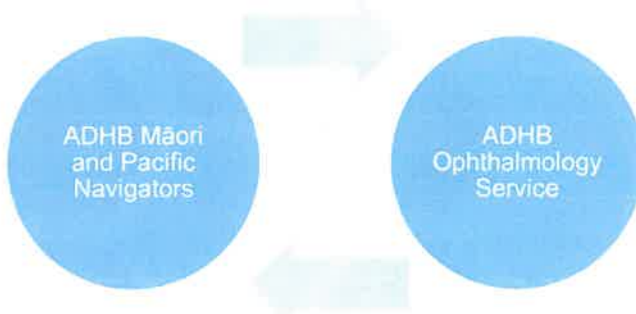
#7 – Implement IT tools to support this e.g. CatTrax

Experience

Maori & Pacific pathway support & experience

Communication (including process and what's next, technical language, customer care)

Cost – transport, and sometimes accommodation



e.g. clock 'resetting' practices, reconnection with patients
Value regionally to share these insights through new regional 'governance'

Pacific surgical pathway initiative in CMH

Summary

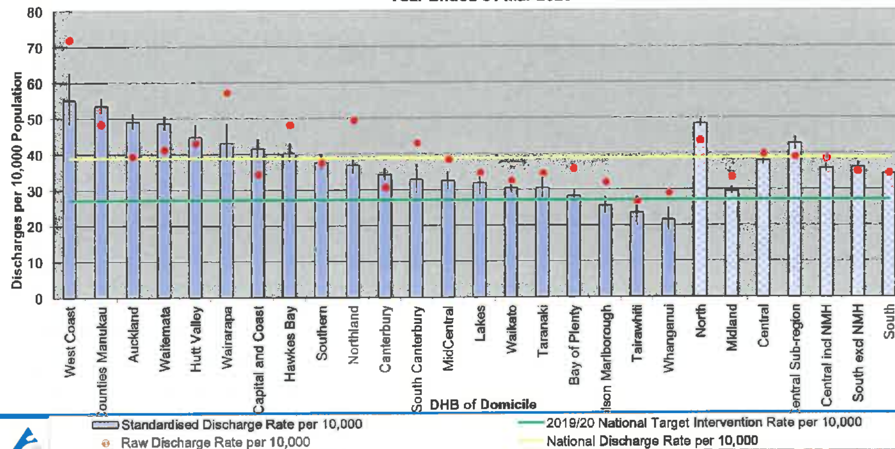
Action Summary

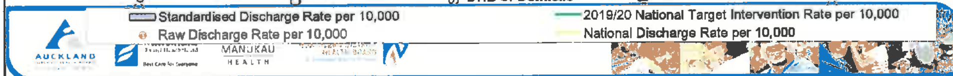
Questions/Feedback

- Pātai?
- Principles based feedback
  - **Partnership** - Advice on Maori involvement on the Regional Ophthalmology Governance group and design of services?
  - **Equity** – What else?
  - **Options** – What particular aspects should we be considering when thinking about kaupapa options, particularly in developing this community model?
  - **Active Protection** – any particular aspects we should be taking into account?

High intervention rates in Northern Region

Ministry of Health Standardised Intervention Rates (SIRs)
– age, gender, ethnicity, deprivation





CPAC score distribution – non diabetics most affected

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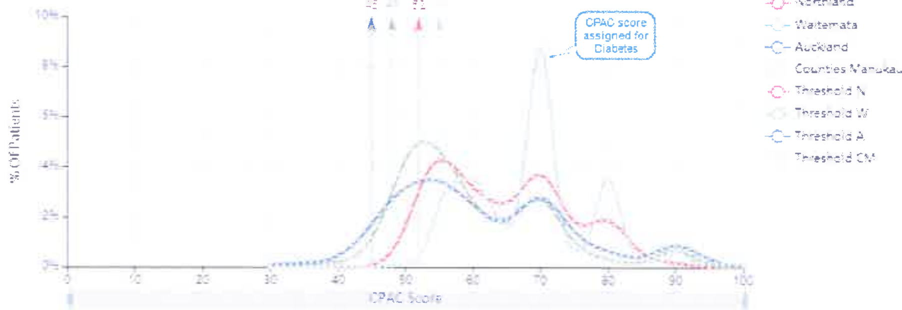
Estimated Distribution %: Ophthalmology: Cataract

Kernel Smoothing Applied: A technique used to remove noise in signal processing



Contextual Info – Diabetes Population

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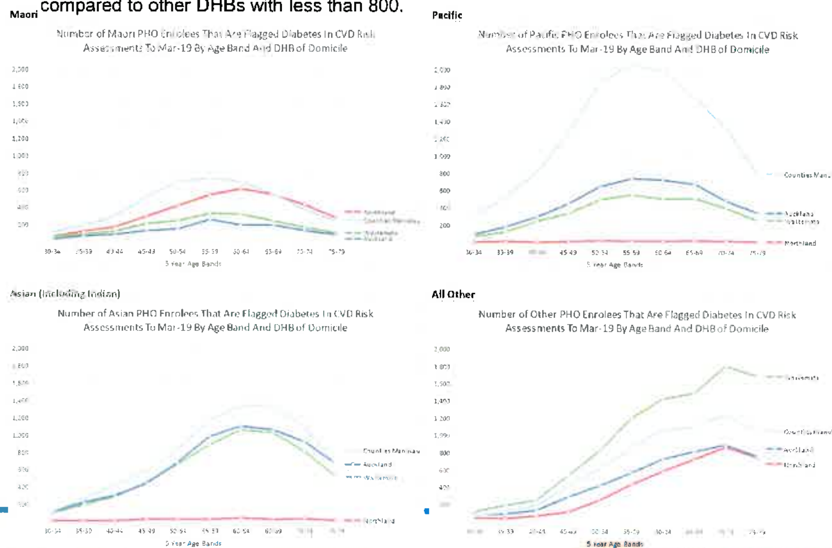
- In absolute numbers, the additional diabetic population for Maori and Pacific population in CMDHB is substantially higher than other DHBs, e.g. >2,000 Pacific diabetic population in age band 55-59 compared to other DHBs with less than 800.



Cataract Procedures –
Profile by Diabetes Status and Ethnicity

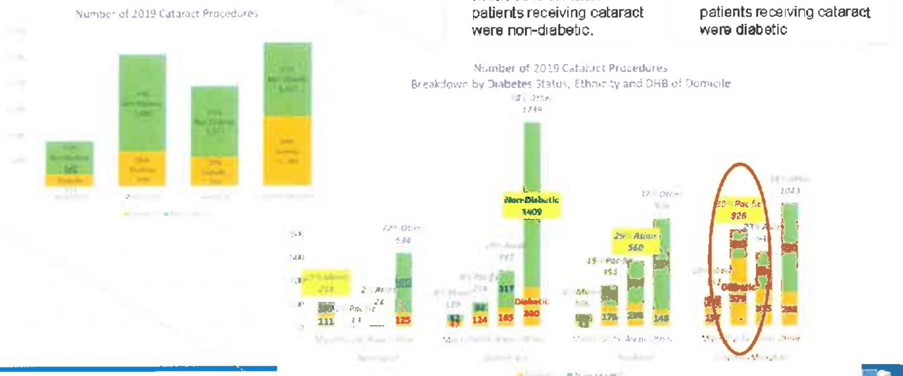
Of the 8,137 Cataract Procedures (incl outsourced) delivered for Northern Region domiciled patients:

NDHB made up 11% (886) of the regional volume.
- 72% was for non-diabetic. 25% was for Maori with over half of the Maori patients receiving cataract were diabetic.

WDHB made up 31% (2.5K) of the regional volume.
- 74% was for non-diabetic.
- 68% was for Other ethnicities, majority (81%) of which were non-diabetic.

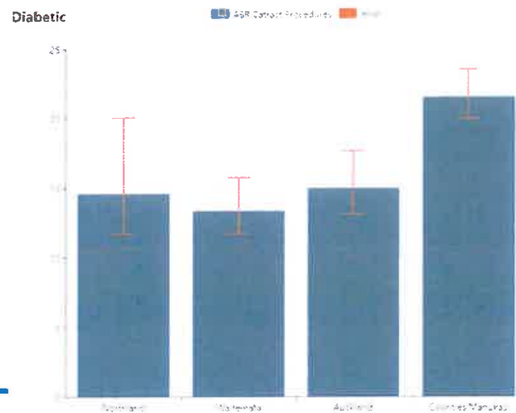
ADHB made up 24% (1.9K) of the regional volume.
- 71% was for non-diabetic.
- 47% was for other ethnicity with high proportion non-diabetic.
- 29% was for Asian, of which 65% of Asian patients receiving cataract were non-diabetic.

CMDHB had 34% (2.8K) of the regional volume.
- 51% was for non-diabetic.
- 38% was for other ethnicity with high proportion non-diabetic.
- 30% was for Pacific, of which 70% of Pacific patients receiving cataract were diabetic



Standardised Intervention Rates Diabetics

- For diabetic population, age-standardised rates (for aged 30+) across DHBs. CMDHB currently has the highest age-standardised intervention rate (21.5 per 1,000), compared to ~15 per 1,000 in other 3 DHBs.



Northern Regional Alliance
He Hononga o te Raki

To	Maaori Clinical Governance Group Pacific Clinical TAG
From	Richard Sullivan
	Exec Lead Vulnerable Services ORL
Date	23 September 2020
Subject	Paediatric ORL Vulnerable Services Recommendation and Next Steps
For	REF Decision
Do recommendations incur financial costs not previously planned /approved?	Yes

Recommendations and Request:

It is recommended that the Regional Executives Forum:

1. **Note** agreed principles in place across ORL-HNS for adults and paediatrics and this paper outlines the process, solutions and next steps for paediatrics.

2. **Note** from undergoing this process it has been agreed that greater co-ordination of secondary Paediatric ORL across the 3 Metro Auckland DHB would provide equitable access and sustainability

3. **Note** a regional process needs to be led in ORL to develop a strategy across the region to sustain Starship as a tertiary provider whilst ensuring secondary care services can be delivered closer to home.

4. **Note:** that there is support for a regional approach with measurable gains for paediatric ORL patients and their whanau however, we are at an early point in the regional discussion and that there will need to be a developmental approach to regional solutions.

5. **Request** funding for a Project Manager, Clinical Lead and a Pathway Project Manager to lead the development of a model of care across the region through further data analysis into pathways and further understanding on inequities which need to be addressed.

Background/Context:

- Post lockdown, the Northern Region's COVID-19 response turned to recovery. A key focus on the recovery was on planned care. The NRHCC established the Hospital Capacity Service Improvement Steering group to lead an equity focused recovery program for planned care which included a particular focus on seven potentially vulnerable services to help them a) recover from the impacts of the COVID-19 lockdown and b) be more resilient with a particular focus on equity.

- Paediatric ORL was identified as a vulnerable service with no regional consistency in levels of access for children. Three of the DHBs provide a combined adult and paediatric service with challenges to provide consistency of secondary care services and adequate cover 52 weeks of the year. Infrastructure remains a challenge with children often needing to be transferred to Starship due to capacity, equipment, co-morbidities and requirement for specialist workforce skills.

- This 'vulnerable services' work was initiated as a rapid process with key regional leads leveraging the rapid progress gained under COVID while incorporating some of the longer term goals articulated in the LTIP and elective deep dive.

Paediatric ORL

It was agreed by the steering group on 6 July 2020 this was an opportunity to make a change across the system to address vulnerabilities, particularly with regard to sustainability and impact of equity and patient experience) and principles agreed (Appendix 1). The paediatric discussion has progressed to agree that success will involve:

- Equitable outcomes for all patients
- Appropriate intervention rates, delivered in a timely and sustainable way
- Regional model / approach which supports this

Key problem

1. Equity of access and service provision within secondary care.

It is recognised that there are vulnerabilities within the system for Paediatric ORL in the Northern Region with inequities in access to secondary care treatment, particularly in Metro-Auckland with different thresholds in place. Within Metro-Auckland all DHBs provide FSA outpatients to secondary care patients, however there is variation in access to surgery due to long wait times within some DHBs and variable admission and patient oversight practices.

WDHB contracts ADHB to carry out tonsillectomies, whilst CMDHB is able to undertake this with an admission to Kidz First if necessary. There is recognition that tertiary services, high complexity or patients under multiple tertiary subspecialties will currently need to be carried out a Starship for Paediatrics. This is due to service requirements such as prolonged care, infrastructure such as theatre, equipment, ICU, and access to a range of subspecialties.

Delivery of tertiary care at Starship has been identified as necessary to maintain safe care for complex paediatric ORL patients. The model of secondary care by local DHBs will be considered with the full range of options worked through. Guidelines or updated Models of Care need to be put in place for secondary level care including age, BMI and co-morbidities and what would require a referral to Starship. Further work also needs to be undertaken for greater clarity as to what constitutes secondary care or tertiary referral for FSA. Where patients are referred for tertiary services, the referring DHBs are unable to have a real time view of the patients waiting for assessment or treatment.

High volumes of patients were waiting >4months for an FSA in June NDHB (n=141), WDHB (n=271) ADHB (n=183) and CMDHB (n=75). Patient waiting >4 months for treatment in June has increased in, in NDHB (n=62), WDHB (n=229) and ADHB (n=211) and reduced in CMDHB to one patient.

Currently there is a large amount of activity happening at Auckland for FUP and Inpatients in Paediatrics, which is to be expected in light of Starship being the Tertiary Provider, Waitemata patients are seen at Starship for tonsillectomies. Starship have also provided additional support to WDHB due to reduced capacity due to leave and recruitment issues. Data is reflective of patients being transferred to ACH from WDHB and CMDHB which is particularly evident for inpatient and follow ups.

Table 2 outlines that there is statistical difference in volumes of high need (Maori/Pacific or Deprivation Quintile 5) patients against non-high need for FSAs, Auckland and Counties Manukau are providing large coverage for their DHB of Domicile per 10,000 in comparison to other DHB's.

There is statistical difference in volumes of high need patients against non-high need for FUPs, Auckland is providing large coverage for their DHB of Domicile per 10,000 in comparison to other DHB's.

Table 1: Direct Aged Standardised Rates per 10,000 by High Need (Maori/Pacific or Deprivation Quintile 5) and Non High Need by DHB of Domicile[1]

DHB	FSA		FUP		ENT Minor Ops		Inpatient	
	High need	Non High Need	High need	Non High Need	High need	Non High Need	High need	Non High Need
NDHB	98.7	84.7	189.9	138.8	6.4	7.4	90.8	62.4
WDHB	87.1	79.1	114.7	98.1	4.2	4.5	69.8	52.5
ADHB	143.1	91.2	297.3	163.7	3.9	2.9	103.8	60.7
CMDHB	138.9	89.9	179.7	114.3	0.6	0.6	60.6	43.1
Northern Region	**119.5**	**85.2**	**190.3**	**121.8**	**3.2**	**3.4**	**76.1**	**53.3**

There is no significant difference between the volumes of patients for high need and non-high need being seen for ORL minor ops, there is high coverage in Northland compared to the Metro DHB's

There is statistical difference in volumes of high need patients against non-high need for inpatients, Auckland and Northland are providing large coverage for their DHB of Domicile, with lower volumes being seen per 10,000 for Counties and Waitemata.

Recommended Solutions:

Through the vulnerable services process it has been agreed by the Metro-Auckland DHB's that a regional approach for secondary care services would provide measurable gains for paediatric ORL patients and their whānau. It is acknowledged that we are at an early point in the regional discussion and that there will need to be a developmental approach to regional solutions.

The agreed next steps are:

1. Explore the development of a regional waitlist for paediatric ORL patients
2. Explore the development of a regional paediatric ORL pathway
3. Consider options for improved equity of access and outcomes for paediatric ORL patients

Options that have been identified through regional discussion have been detailed in table 2, it is anticipated that some of the options such a regional waitlist could be achieved to address inequities in access to treatment. Further work needs to be carried out to explore these options to determine what a regional model

[1] Please be aware that an age-standardised rate (ASR) has no absolute meaning; it is an artificial number based on a hypothetical population (adults and paediatrics) and is only useful for comparing with other rates calculated in the same manner. The ASR presented here is calculated by the direct method per 10,000. WHO world standard population is used as standard.

of care would look like and how it could be funded and delivered going forward. **Table 2: Options for improved equity of access and outcomes for the region population**

	Advantages	Disadvantages	For resolution
1. Status quo - each DHB delivers to own population, complex tertiary cases to Starship	no change or implementation requirements	Inequities of thresholds, timeliness and outcomes remain. Workforce vulnerabilities remain	Data to identify inequities across the population
2. Regional waitlist	Visibility of all patients and any inequitable waiting times	Will not result in any direct change regionally for patients or services Management of the waitlist and the associated ESPIs within one DHB would need to be resourced. Is this a service change?	The feasibility of a regional waitlist, determining what this would include, how patients would be allocated and who would own this.
3. Joint SMO appointment	Access to surgical expertise across DHBs Provides care closer to home for patients through the majority of services being provided within the DHB Maintains and builds on local DHB services	Less attractive to surgeons, complexities around managing leave, professional development, cover etc.	Models of joint appointments elsewhere across the region or nationally, determine full employment issues
4. Starship delivers regional ORL with some offsite activity for local DHB populations - surgeon only, local theatre teams	Retains anaesthetic and theatre nursing competency Provides care closer to home for patients More sustainable ORL medical workforce	Costly to deliver for employing DHB Limitations around overnight stay for patients Variable inpatient ORL medical presence	Full work-up of change requirements and feasibility
5. Starship delivers regional ORL with some offsite activity for local DHB populations - surgeon and theatre team	Provides care closer to home for patients More sustainable ORL medical workforce	Reduces anaesthesia and OR nurse competency for children in CMH, WDHB	Full work-up of change requirements and feasibility
6. Starship delivers regional ORL at Starship and Greenlane	Full suite of ORL sub-specialty expertise, inpatient and daystay cover and nursing expertise. More sustainable ORL	Loss of anaesthesia and OR nurse competency for children in CMH, WDHB	Full work-up of change requirements and feasibility

medical workforce

This programme of work will form a sustainable model of care for secondary care paediatric ORL services across the region. This will be monitored and overseen by Starship and with potential to scale across other specialties or population groups over time.

Measurements of success.

- Reduction in waiting times for FSA across the region
- Reduction in waiting times for treatment across the region
- Patient experience
- Patient outcomes

Recommendation

It is recommended a Project Manager (0.25), Clinical Lead (0.1) lead the process through ADHB with an addition Pathway Project Manager for pathway development (0.5 for 6 months to lead the development of a regional Model of Care across the region through further data analysis into pathways and further understanding on inequities which need to be addressed.

Proposed Timeline

A high-level timeframe for this project is as follows:

Commencement of Project Manager, Clinical Lead and pathway Project Manager	October 2020
Commencement of project team ensuring equity led leadership	October 2020
Detailed analysis of options outlined in Table 1	October – November 2020
Preferred option agreed	November 2020
Identify cost associated with agreed option	December 2020
Business case and implementation plan developed	December - January 2021
Implementation of model of care across the region to commence.	January 2021
Complete implementation plan	May 2021
Review and evaluate pathway approach and model of care	May 2021

The Project Manager and Clinical Lead will report through to ORL Clinical Director of Starship Hospital and General Manager. Reporting will be provided through to the Vulnerable Services group ORL steering group.

Risk and issues.

If there is not project management and clinical leadership to support this programme of work the service vulnerabilities will endure. If this was not agreed this would require the on-going commitment of GM's and CD's to lead the process resulting in delays and insufficient resource to complete some of the work programme.

Unmet need if there is not robust data analysis on the pathways and projected forecasts within paediatric ORL resulting in revised model of care not being sustainable and not adequately addressing inequities across the population.

Robust leadership and management will be required to ensure the programme of work is not delayed and any future change processes are supported.

Interdependencies with other Functions:	The recommendations will need to work in tandem with the Head and Neck Cancer Accreditation recommendations for Paediatric ORL and Head and Neck.
Equity considerations of recommendations:	This process has been equity driven and informed by service data and clinical expertise with recognised gaps in capturing wider population needs such as social determinants of health. Further engagement will be sought in the development of the recommendations from Māori and Pacific.
How recommendations align with Treaty responsibilities:	Aligns to regional service design principles including: - **Partnership** where these proposals have been reviewed by the Māori Clinical Governance Group and Pacific CTAG in late September and include the recommendations in here. - **Equity** as per above **Active Protection** of Māori taonga, culture and knowledge as per the Regional Service Design Principles are to be factored into any work moving forward

Cost estimate summary for recommendations with financial impact:				
One-off costs:	Capex:	-	Opex:	-$95,615
Recurrent costs (full year effect):	Capex:	-	Opex:	-
Source of funding, if approved:				
Provider cost within existing provider revenue allocation:				
DHB funder cost pressure 2020/21:	$65,000			
Pre-commitment to funding round 2021/22+:				
Alternate source of funds (please specify details):	Funding applied through the planned care recovery bid for Project Manager and Clinical Lead was submitted by ADHB for $30,615			

Basis for DHB cost split:	
Additional comments (please specify):	Additional resource is needed for a project manager across the region to support with pathways

Appendix 1: ORL-HNS Principles Adults and Paediatrics.

1. COVID and our regional response to this illuminated a number of service vulnerabilities including paediatric and adult ORL
2. Vulnerabilities may include service, workforce and sub-speciality volumes and may vary over time
3. There is current variability in equity of access and outcomes regionally which there is a commitment to addressing
4. Regional solutions for paediatric and adult ORL-HNS will seek to improve patient safety, quality and health equity
5. Decisions about any future changes will be data informed and regionally agreed
6. Issues and solutions may be different for adult and paediatric populations and will be considered separately

Appendix 2: ORL Paediatric snapshot.

Current Utilisation Profile by DHB of Patient Domicile 2019

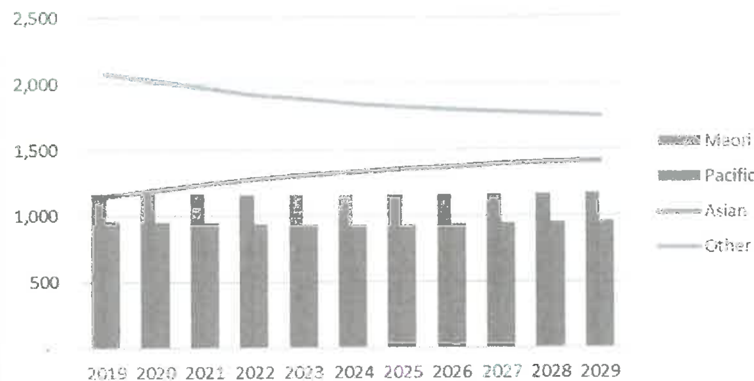
	DHB of Patient Domicile (Paeds)							DHB of Patient Domicile (Paeds) % Of Northern Region				
	Northland	Waitemata	Auckland	Counties Manukau	Northern Region	Outside Northern Region	Total	Northland	Waitemata	Auckland	Counties Manukau	Total
FSA	517	1445	1338	1969	5269	82	5351	9.8%	27.4%	25.4%	37.4%	100.0%
FUP	927	1724	2812	1899	7362	149	7511	12.6%	23.4%	38.2%	25.8%	100.0%
Other Inpatient	490	1368	1160	980	3998	185	4183	12.3%	34.2%	29.0%	24.5%	100.0%
Skin Lesions	2	3	1	1	7	0	7	28.6%	42.9%	14.3%	14.3%	100.0%
ENT Minor Ops	13	83	98	18	212	18	230	6.1%	39.2%	46.2%	8.5%	100.0%
FSA Dizzy clinic	0	76	28	2183	2287	5	2292	0.0%	3.3%	1.2%	[illegible]	100.0%
Nurse Clinics FUP	955	745	30	34	1764	3	1767	54.1%	42.2%	1.7%	1.9%	100.0%
Speech Therapy	0	3	4	15	22	0	22	0.0%	13.6%	18.2%	58.2%	100.0%
All Services	2904	5447	5471	7099	20921	442	21363	13.9%	26.0%	26.2%	33.9%	100.0%

Note:

- High number of Patient referred for ORL treatment at CMDHB
- High volumes of patients seen at CMDHB and ADHB
- High number of FSA in ADHB and CMDHB
- High FUP in ADHB
- High number of inpatients at ADHB which is to be expected
- High number of Nurse Clinics FUP at WDHB and NDHB
- High number of FSA Dizzy Clinics in CMDHB
- The largest growth across ORL services will be in the Asian population followed by other

Current Utilisation Profile by DHB Service 2019

	DHB of Patient Service (Paeds)					DHB of Patient Service (Paeds) % Of Northern Region				
	Northland	Waitemata	Auckland	Counties Manukau	Total	Northland	Waitemata	Auckland	Counties Manukau	Total
FSA	495	1,073	1,930	1,853	5,351	9.3%	20.1%	36.1%	34.6%	100.0%
FUP	907	677	4,434	1,493	7,511	12.1%	9.0%	59.0%	19.9%	100.0%
Other Inpatient	440	475	2,680	588	4,183	10.5%	11.4%	64.1%	14.1%	100.0%
Skin Lesions	2	3	1	1	7	28.6%	42.9%	14.3%	14.3%	100.0%
ENT Minor Ops	5	15	210	-	230	2.2%	6.5%	91.3%	0.0%	100.0%
FSA Dizzy clinic	-	75	-	2,217	2,292	0.0%	3.3%	0.0%	96.7%	100.0%
Nurse Clinics FUP	963	748	28	28	1,767	54.5%	42.3%	1.6%	1.6%	100.0%
Speech Therapy	-	-	9	13	22	0.0%	0.0%	40.9%	59.1%	100.0%
All Services	2812	3066	9292	6193	21363	13.2%	14.4%	43.5%	29.0%	100.0%



Appendix 3: Reported Current Position 6 July 2020 for Adults and Paeds

WDHB	CMDHB
• Equity of access to services – 45% of patients are declined and referred back to the GP. • Not seeing any P3 • Growth has caused the biggest challenge. • Started as an elective service which outgrew resulting in SMO doing work outside of their JD's. • Resources are limited – physical and FTE, no house surgeon, limited SMO due to clinic capacity and no inpatient beds. • Ability to see patients and operate is hard due to the above • Support to intensive care and emergency depart • Cover H&N, paediatrics emergency and aftercare • Lack of Theatre capacity for ORL Paeds (2 September 2020) • FSA OP secondary patients • Minimal paediatric audiology • Inpatient Grommets and adenoids [also a few more complex Daystay cases – ie. myringoplasty] • No inpatient tonsils – all contracted to ADHB	• ORL-HNS based at MSC and set up as an elective day case service. • Infrastructure makes it challenging to provide an acute service • Service is small, with ageing workforce, limits to on call provision and recruitment issues • Issues working across two sites, no beds at Middlemore for ORL-HNS rely on plastics and ADHB • Intervention rates for paediatrics is not good, with increasing waiting lists and waiting a long time in comparison to Starship. Starship would not be able cope the current volumes coming through to CMDHB. Paeds (2 September 2020) • FSA OP secondary patients • 1x Paed ORL SMO shared with ADHB-selected tertiary OP • Inpatient Grommets and adenoids [At CMDHB we do quite a lot of other ORL Paeds Surgery (in older children mainly >10 yrs or so) - some nasal and limited FESS surgery, Myringoplasties, a few mastoidectomies, some limited head and neck - ie. FNA or node biopsy, skin tags or lesions, pre-auricular sinuses etc.] • Inpatient tonsillectomies – admission Kidz First if required(under Paeds Med) • Longer waiting times than ADHB (& by default WDHB) • Regular outsourcing to private
ADHB	**NDHB (12 June 2020)**
• Issues with patient care with different intervention rates between DHB's, aftercare and inpatient care • Metro Auckland access to emergency theatre is restricted resulting in elective patients being cancelled or acute presentation waiting until the end of	• Functioning differently in NDHB • Vulnerable with staffing but in a better position following service plan including peripheral hospital in place and to outsource for recent issues in Private • Working well in resources but could do better.

the list. • On call roster is problematic across the region due to clinicians opting out. This is made up of clinicians from each DHB. • ADHB does not have any SLA's in place with the other DHB's confirming what ADHB should deliver. • Support required for clinicians across the region • Two theatres which ORL-HNS do not have access to all of the time. Would be hard to find theatre space if anymore SMO were recruited. Potentially space in CTU but would result in split service. Paeds (2 September 2020) • FSA all ADHB patients and tertiary WDHB/CMDHB • Inpatient care all ADHB, WDHB tonsils and tertiary WDHB/CMDHB • Shorter waiting times than CMDHB but • Regular intra DHB additional lists to manage volumes	• Regional networks for complex and tertiary care and paediatrics are important and could be strengthened • On-call is different to Metro Auckland • Intervention rates provide a broad service from paediatrics to extensive H&N and in line with national intervention rates; however, some cases are turned away • More work could be done on quality of life cases. • Theatre provision is good with two new theatres being built.

To	Maaori Clinical Governance Group Pacific Clinical TAG
From	Richard Sullivan
	Exec Lead Vulnerable Services ORL and Head and Neck Surgery (HNS).
Date	23 September 2020
Subject	ORL-HNS Adult and Paediatrics Vulnerable Services Recommendation and Next Steps
For	**Decision**
Do recommendations incur financial costs not previously planned /approved?	**No**

Recommendations and Request:

It is recommended that:

1. **Note** agreed principles (detailed in appendix 3) in place across ORL-HNS for adults and paediatrics but the process and solutions have been separated and this paper outlines the next steps for Adults only and Paediatrics will be presented separately.

2. **Note** from undergoing this process, which has included two workshops and further clinical lead discussion the Adult ORL-HNS group at this stage is unable to draw to a conclusion what a regional solution would be. There is recognition from the Clinical Leads that four DHB services in their present state will continue to be vulnerable.

3. **Note** there is agreement that the following vulnerabilities in Adult ORL-HNS can be addressed **in Phase 1 to** include:
   - The acute on-call roster through an HR review of contractual requirements and the establishment of robust processes attached to the recruitment process going forward.
   - SLA's to be established between ADHB as the Regional/Tertiary Provider and the DHB's defining expected service delivery in the Northern Region.
   - Streamlining processes, protocols and models of care where there is regionalisation currently in place for free flap reconstruction.
   - Paediatrics

4. **Note** it is recommended a regional process needs to be led on ORL-HNS to develop a strategy across the region and the required investment using assessment against a Role Delineation Model (RDM) for the non-cancer components.

5. **Request** that option 4 is agreed and a Project Manager and Clinical Lead to lead the RDM assessment and recommended model of care for the region through the development of a 5-year strategy. Resource to be allocated from existing ADHB service management to work across the region to develop the 5 year strategy. This work will be overseen by the steering group.

Background/Context:

Post lockdown, the Northern Region's COVID-19 response turned to recovery. A key part of that recovery was on planned care. The NRHCC established the Hospital Capacity Service Improvement Steering group to lead an equity focused recovery program for Planned Care. The ORL- HNS Services a (Adults and Paediatrics) was

identified as one of the seven vulnerable services who would benefit from a structured recovery programme. The programme is to assist with the recovery from the impacts of the COVID-19 lockdown and the delays to be seen and treated which was an issue pre COVID-19 and to establish a more resilient service within the region with a particular focus on equity.

ORL- HNS is a vulnerable service due to common themes of subspecialisation with little integration across the regions DHBs, inequity of provision of service with different levels of access and prioritisation across the Northern Region. This is resulted in patient delays to FSA and treatment which leads to poor patient experience. Leadership across the region and maintaining a sustainable workforce to meet population need has resulted in capacity constraints which is resulted in patients been transferred to other DHB for treatment. This has resulted in an unsustainable service unable to provide adequate cover 52 weeks of the year.

This 'vulnerable services' work was initiated as a rapid process with a small regional group established including key regional leads so to develop an approach to build a more equitable and resilient service across the region. This includes incorporating some of the longer term goals articulated in the LTIP and elective deep dive. In addition to this there is the acknowledgement of the work has been undertaken through the HNCOG for Head and Neck Cancer a subspecialty of ORL-HNS where an RDM accreditation has been completed identifying gaps in workforce across the pathway and infrastructure in meeting the service level proposed.

Issues and Implications

ORL and Head and Neck Surgery (HNS)

It was agreed by the Hospital Capacity Service Improvement/Planned Care Steering group on 6 July 2020 this was an opportunity to make a change across the system to address vulnerabilities particularly with regard to sustainability and impact of equity and patient experience (documented in Appendix 1 and 2). ORL-HNS Adults and Paediatrics agreed principles (Appendix 3) and areas to be addressed in 2 stages:

Phase 1

1. Acute on call roster
2. Secondary and tertiary service delivery and streamlining regional processed
3. Establishment of SLA's between ADHB and the Regional DHB's
4. Paediatrics (submitted separately)

Phase 2

5. ORL-HNS 5 year strategy local and regional delivery including thresholds.
6. Recruitment and workforce planning.

Key problems agreed to addressed.

1. Sustainability of the on-call roster for acute care in and after hours

The on call roster for acute care is regionally staffed by SMOs from all 3 Auckland Metro DHBs. There are two rosters to cover Adult ORL-HNS issues: one for General ORL and one for H&N. The on-call roster has been identified as vulnerable and not sustainable due to the number of clinicians exempt (11 out of 29) and no cover for maternity or long term SMO absences. The Table below outlines the FTE and population supported by the General ORL and H&N on call rosters.

Table 1: FTE and population supported by the General ORL and H&N on call rosters per DHB

DHB	H&N	SMO's On Roster General ORL	Total	SMO:100:000 Population Adults (15> years	Total Pop	Exempt from Roster*	Total including exempt
WDHB	2	3	5	1.0	0.8	4	9
ADHB	4	3	7	1.7	1.4	3	10
CMDHB	3	2	5	1.1	0.7	4	9
Vacancy		1	1				1
Total	**9**	**10**	**18**			**11**	**29**

*reasons for exemption vary

The rosters are currently 1 in 9 frequency of call. This is despite one WDHB SMO coming off the General ORL roster in the past year which has been covered by various SMOs as additional duties, with no replacement even though recruitment processes were undertaken.

Several issues have been raised by SMOs regarding the roster, including:

- Non-participation in the roster by a significant proportion of SMOs.
- Older SMOs wish to leave roster at age of 60 years (as has been the tradition), but this is no longer possible owing to an ageing workforce, with limited succession planning.
- Increasing SMO workload owing to reduced RMO experience.
- ADHB SMOs take on the majority of care of acutely admitted patients as all patients admitted by a non ADHB SMO are transferred to the care of an ADHB SMO the next day.
- No cover provided for SMO maternity leave or long term SMO absences for various reasons including the lack of ability to recruit to fixed term contracts
- Leave granted to SMOs by WDHB and CMDHB without due consideration to regional roster
- Consultation on changes in the frequency of on call requirements need to be better communicated with SMO's by CD and Service Manager.

It has been identified that there is no consistency with regard to a process on recruitment of SMO's, the requirement to be on the regional on-call roster varies in detail in position description and contract of the SMO's. There is no regionally agreed process for an SMO becoming exempt from participating on the acute on call roster, this is currently carried out at a DHB level between the SMO and CD.

There is no agreed documentation defining which conditions warrant attendance of an ORL SMO for either the Head and Neck or General On Call Roster across Metro Auckland. The only documentation that has been sighted is the *Conditions Warranting On-Call Head and Neck Surgeon Attendance at Peripheral Hospital (WDHB & CMDHB)* 2010 which SMO's /General Managers were unaware of and needs to be reviewed and agreed regionally.

2. Equity of access and service provision within secondary care.

It is recognised that due to vulnerabilities within the Northern Region for ORL-HNS this has resulted in inequities in access to treatment, particularly in Metro-Auckland with different thresholds in place (Appendix 1

provides an ORL snapshot and Appendix 2 perceived current position). High volumes of patients waiting >4months for an FSA in June NDHB (n=141), WDHB (n=271) and ADHB (n=183). Patient waiting >4 months for treatment in June has increased in NDHB (n=62), WDHB (n=229) and ADHB (n=211). Note improvement plans should be reflecting improved positions against the numbers of patients waiting.

Data is reflective of patients being transferred to ADHB from WDHB and CMDHB which is particularly evident for inpatient and follow ups where patients would have been treated.

Twenty eight per cent of patients are aged 0 -14 years across all DHB's for FSA's (NR=5,144 / 18,353 2) and 41% over the age 50 (50+ NR =7,605/18,353).

Table 2 outlines that there is statistical difference in volumes of high need (Maori/Pacific or Deprivation Quintile 5) patients against non-high need for FSAs. Auckland and Counties Manukau are providing large coverage for their DHB of Domicile patients per 10,000 in comparison to other DHB's.

There is statistical difference in volumes of high need patients against non-high need for FUPs, Auckland is providing large coverage for their DHB of Domicile per 10,000 in comparison to other WDHB and NDHB.

There is no significant difference between the volumes of patients for high need and non-high need being seen for ENT minor ops, there is high coverage in Northland compared to the Metro DHB's.

There is statistical difference in volumes of high need patients against non-high need for inpatients, Auckland and Northland are providing large coverage for their DHB of Domicile patients, with lower volumes being seen per 10,000 for Counties and Waitemata.

Table 2: Direct Aged Standardised Rates per 10,000 by High Need (Maori/Pacific or Deprivation Quintile 5) and Non High Need by DHB of Domicile[1]

DHB	FSA		FUP		ENT Minor Ops		Inpatient	
	High need	Non High Need	High need	Non High Need	High need	Non High Need	High need	Non High Need
NDHB	98.7	84.7	189.9	138.8	6.4	7.4	90.8	62.4
WDHB	87.1	79.1	114.7	98.1	4.2	4.5	69.8	52.5
ADHB	143.1	91.2	297.3	163.7	3.9	2.9	103.8	60.7
CMDHB	138.9	89.9	179.7	114.3	0.6	0.6	60.6	43.1
Northern Region	**119.5**	**85.2**	**190.3**	**121.8**	**3.2**	**3.4**	**76.1**	**53.3**

Table 3 highlights the total volumes per 10,000 by ethnicity, this highlights high numbers of activity in Pacific, followed by Asian, Maori and Other.

[1] Please be aware that an age-standardised rate (ASR) has no absolute meaning; it is an artificial number based on a hypothetical population (adults and paediatrics) and is only useful for comparing with other rates calculated in the same manner. The ASR presented here is calculated by the direct method per 10,000. WHO world standard population is used as standard.

Table 3: Total volumes by ethnicity per 10,000 population by DHB of Service.

	Number per 10,000 population			
	Maori	Pacific	Asian	Other
FSA	33.2	74.8	51.3	31.2
FUP	55.2	120.2	68.5	49.4
ENT Minor Ops	0.9	1.3	1.2	1.4
Other Inpatient	25.4	48.9	22.3	18.5
Total	**115**	**245**	**143**	**101**

Across the northern region growth is anticipated to be 15.1% over 10 years from 2019 – 2029 or 1.4% per annum in FSA's. Follow ups are anticipated to grow by 14.3% and inpatients by 8.7% in this period. This predicated growth is highlighting the need for sustainable services across the region with the vulnerabilities addressed.

The largest growth across ORL services will be in the Asian population (41.2%) followed by Māori (16.3%), Pacific (14.5%) and then other (4%).

There is recognition that tertiary services, high complexity or high co-morbidly[2] will currently need to be carried out at ADHB for Adults and Paediatrics. This is due service requirements such as prolonged care, infrastructure such as theatre, equipment, ICU, staffing as subspecialties within the tertiary provider. Delivery of tertiary care is clearly defined as well as secondary care procedures that could be delivered by local DHB's, however, the issue that has become evident is that services are currently defined by SMO skill set rather than the requirement of equity of access for the Northern population. This has resulted in thresholds varying across the region with patients referred to where the infrastructure is and skill set to support the clinical need of the patient. More complex cases could be completed in other DHB's where the surgical skill mix is available however due to the size of departments and lack of infrastructure this is not able to occur. There is also risk where there is low volume / high complexity on patient outcomes if SMO's do not get enough practical opportunities to maintain skills and experience which could provide poor patient outcomes.

Recommendations

- From undergoing this process, the regional working group at this stage is unable to draw to a conclusion what a regional solution would look like despite recognition that the system in its present state will continue to be vulnerable.
- However, it has been acknowledged that there remains a requirement for 4 centres delivering accessible and timely secondary care which is consistent across the region.
- There is further agreement that work needed to be undertaken to develop what a regional solution or model of care would look like.

Phase 1

1. Acute On-Call Roster Metro-Auckland

The acute on call roster can be addressed in phase 1 through a review of contracted requirements through a robust HR process. There needs to be an agreement to ensure the recruitment processes include an

[2] This includes complex head and neck cancers and their surgery, neuroOtolgic problems (vestbular schwannomas, CSF leaks), non-cancer upper airway and neck surgery (orbital, inacranial, recurrent), complex endoscopic sinus surgery for complex disease as well as patients requiring prolonged admission for complexity co-mobility where there Is not the right infrastructure in the domicile DHB

expectation of participation on the on call roster. Due to a third of the eligible SMO's being exempt from the acute on-call roster has highlighted the vulnerability of having an aging workforce. This will require careful succession planning particularly at CMDHB where a high number of SMO are aged 60+ within OR-HNS department[3].

Recommendations

1. For all services, applicable wording in PD's and contracts need to align across Metro Auckland by the GM's with HR.
2. GM's need to agree with the CD's the documented requirements of the on-call roster across Metro-Auckland.
3. A clearly defined process in recruitment to ensure the on call roster is part of the discussion and employment contract across Metro-Auckland.
4. The development of a Metro-Auckland process for SMO's coming off the roster and what defines an exemption for participation.
5. An SLA needs to be established between ADHB and WDHB and CMDHB detailing the acute on call roster requirements.

2. Secondary and tertiary service delivery and streamlining regional processes

Secondary and Tertiary care needs to clearly defined across the region and formally documented in the form of an SLA between DHB's. This results in variation of service delivery.

Streamlining of processes and protocols regionally

The streamlined treatment of complex head and neck cancer patients that need free flap reconstruction needs to be formalised as a regional process.

This is currently in place for HNC patients discussed at the regional MDM at ADHB where patients are allocated to the appropriate DHB where they can receive their resection/reconstruction. There is a system in place at ADHB for HNC where patients are processed and booked for surgery following the MDM.

The process for co-ordinating complex metastatic skin cancer patients that need free flap reconstruction at CMDHB plastic surgical and ORL department is less defined. NDHB have experience delays with securing a theatre date in CMDHB, pre-assessing patients and providing a smooth patient journey.

Recommendations

1. SLA's to be established between ADHB as the Regional/Tertiary Provider and the DHB's defining expected service delivery in the Northern Region.
2. Streamlining processes, protocols and models of care where there is regionalisation currently in place for free flap reconstruction.

Phase 2

1.Providing equity of access within ORL-HNS secondary care across the Northern Region; particularly Metro-Auckland.

It has been recognised across the working group that a process needs to be undertaken to define what level of service should be provided to enable maturity of services including workforce and infrastructure. Using the Role Delineation Model would create an intention of how services are delivered. This would be for non-cancer

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[3] Over 7 of the SMO at CMDHB are over 60.

components of the service[4]. A 5-year strategy using LTRIP forecasting detailing expected demand, current capacity and individual service plans. This would include further in-depth analysis into procedures, day cases, inpatient activity elective and non-elective, LOS and associated support services, to enable an informed decision to be made on addressing long term vulnerabilities and a model of care.

Work would need to be undertaken to review waitlist times for treatment.

Recommendation

A regional programme of work needs to be led on ORL-HNS to using RDM across the region to be led by the ADHB NHC Service with a Project Manager and Clinical Lead to provide a stocktake on current provision and service plans and models of care to ensure a sustainable service across the region. This is so to ensure consistent regional triaging, access and waitlists to provide the same level and access to care across the Northern Region It is recommended that a 5-year strategy across the region taking into account the HNC RDM and recommendations to determine the model of care and investment required across the health system.

Recommended Options

Options going forward to ensure a sustainable and equitable service across the region.

- Option one: status quo which would result in continued risk of vulnerability in the system.
- Option two: address issues that can be achieved in phase 1 to improve sustainability e.g. acute on call roster, streamlining regional process, agreeing secondary care thresholds. This is likely to have cost implication to DHB's
- Option three: revised model of care across the region for adults to be delivered in phase 2 using the RDM and 5-year strategy to inform. This will determine gaps in the systems which will identify immediate or long term gaps and risks which will need to be addressed.
- Option four: option two and three combined are taken forward to ensure phase 1 issues are mitigated and to develop a model of care to ensure equity of access and sustainability of provision.

It is recommended that option four is taken forward and led by the ADHB Service with a Project Manager (0.25FTE) and Clinical (0.1)FTE lead to take this forward.

Actions and Progress

Action	Progress	Next steps
Metro Auckland Acute On Call Roster -	- PD and contracts across DHBs demonstrates variation - SLA being developed by ADHB to be put in place with WDHB and CMDHB - Conditions warranting on call requirements is to be reviewed and included as	- Protocol for exemptions to come off the on-call roaster to be developed and agreed across Metro-Auckland. - Agreement to align PD on call roster requirements - Agreement to provide cover of long term absences

[4] A RDM has been undertaken for Head and Neck Cancer with recommendations submitted to REF.

	part of SLA.	- Engagement with SCD, GM and HR.
Strengthening Regional Pathways - Free Flap reconstruction - Paeds	- Process at ADHB documented -	- JK to work on CMDHB Plastic surgery and ORL pathway for free flap reconstruction
Secondary Care Thresholds	- Agreed what procedures happen and secondary care.	- Agree referral thresholds across secondary care.
RDM Appraisal - RDM Framework agreed - RDM DHB Assessment - RDM ambition		Project Manager and Clinical Lead to be assigned to lead RDM process
ORL-HNS 5 year strategy - Capacity and demand projections across the region - RDM assessment - Secondary care thresholds - Recommended model of care across the region taking into account primary and community care		Project Manager and Clinical Lead to be assigned to lead RDM process.

Interdependencies with other Functions:	The recommendations will need to acknowledge the Head and Neck Cancer Accreditation recommendations and investment.
Equity considerations of recommendations:	This process has been equity driven and informed by service data and clinical experience with recognised gaps in capturing wider population needs such as social determinants of health. Further advice and collaboration will be sought in the development of the recommendations.
How recommendations align with Treaty responsibilities:	Aligns to regional service design principles including: - **Partnership** where these proposals have been reviewed by the Māori Clinical Governance Group and Pacific CTAG in late September and include the recommendations in here. - **Equity** as per above **Active Protection** of Māori taonga, culture and knowledge as per the Regional Service Design Principles are to be factored into any work moving forward

Cost estimate summary for recommendations with financial impact:				
One-off costs:	Capex:	-	Opex:	-
Recurrent costs (full year effect):	Capex:	-	Opex:	
Source of funding, if approved:				
Provider cost within existing ~~provider revenue~~ allocation:				
DHB funder cost pressure 2020/21:				
Pre-commitment to funding round 2021/22+:				
Alternate source of funds (please specify details):				
Basis for DHB cost split:				
Additional comments (please specify):			0.25 Project Manager and 0.1 Clinical Lead. Resource has not been allocated and should be considered within existing services across the region, overseen by the steering group.	

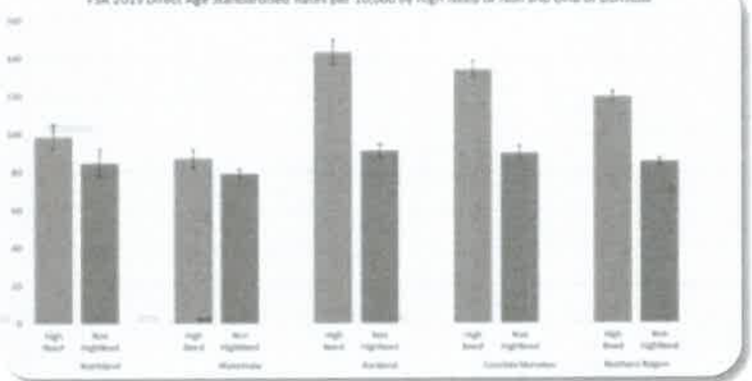
Appendix 1: ORL snapshot.

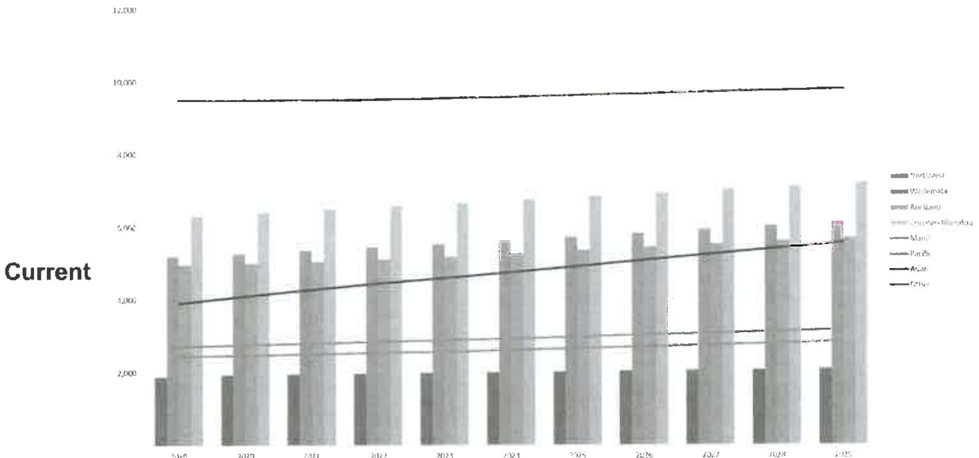
Current Utilisation Profile by DHB of Patient Domicile 2019

	DHB of Patient Domicile								DHB of Patient Domicile % Of Northern Region				
	Northland	Waitemata	Auckland	Counties Manukau	Metro Auckland	Northern Region	Outside Northern Region	Total	Northland	Waitemata	Auckland	Counties Manukau	Northern Region
FSA	1,892	5,191	4,968	6,302	16,460	18,353	220	18,573	10.3%	28.3%	27.1%	34.3%	100%
FSA Dizzy clinic	1	1,135	138	3,332	4,605	4,606	14	4,620	0.0%	24.6%	3.0%	72.3%	100%
Nurse Clinics FUP	3,493	1,277	1,130	376	2,783	6,276	19	6,295	55.7%	20.3%	18.0%	6.0%	100%
FUP	3,616	6,729	9,334	8,485	24,548	28,164	547	28,711	12.8%	23.9%	33.1%	30.1%	100%
Speech Therapy	97	652	1,252	841	2,745	2,842	75	2,917	3.4%	22.9%	44.1%	29.6%	100%
ENT Minor Ops	215	286	99	29	414	629	20	649	34.2%	45.5%	15.7%	4.6%	100%
Skin Lesions	145	133	63	20	216	361	1	362	40.2%	36.8%	17.5%	5.5%	100%
Bronchoscopies	9	22	10	21	53	62	-	62	14.5%	35.5%	16.1%	33.9%	100%
Botox	1	13	5	16	34	35	4	39	2.9%	37.1%	14.3%	45.7%	100%
Other Inpatient	1,500	3,250	3,142	2,780	9,172	10,672	342	11,014	14.1%	30.5%	29.4%	26.0%	100%
All Services	10,970	18,688	20,141	22,201	61,030	72,000	1,242	73,242	15.2%	26.0%	28.0%	30.8%	100%
						2019 Population Projections			10.2%	33.1%	26.2%	30.5%	100%

Utilisation Profile by DHB Service 2019

	DHB of Service						DHB of Service % Of Northern Region				
	Northland	Waitemata	Auckland	Counties Manukau	Metro Auckland	Northern Region	Northland	Waitemata	Auckland	Counties Manukau	Northern Region
FSA	1,793	4,362	6,393	6,025	16,780	18,573	9.7%	23.5%	34.4%	32.4%	100%
FSA Dizzy clinic	-	1,134	108	3,378	4,620	4,620	0.0%	24.5%	2.3%	73.1%	100%
Nurse Clinics FUP	3,521	1,258	1,155	361	2,774	6,295	55.9%	20.0%	18.3%	5.7%	100%
FUP	3,368	4,302	13,605	7,436	25,343	28,711	11.7%	15.0%	47.4%	25.9%	100%
Speech Therapy	-	-	2,315	602	2,917	2,917	0.0%	0.0%	79.4%	20.6%	100%
ENT Minor Ops	207	222	211	9	442	649	31.9%	34.2%	32.5%	1.4%	100%
Skin Lesions	145	133	65	19	217	362	40.1%	36.7%	18.0%	5.2%	100%
Bronchoscopies	9	21	12	20	53	62	14.5%	33.9%	19.4%	32.3%	100%
Botox	-	-	39	-	39	39	0.0%	0.0%	100.0%	0.0%	100%
Other Inpatient	1,409	1,378	6,348	1,879	9,605	11,014	12.8%	12.5%	57.6%	17.1%	100%
All Services	10,452	12,810	30,251	19,729	62,790	73,242	14.3%	17.5%	41.3%	26.9%	100%





Note:

- Only FSA, FUP and Other Inpatient ORL activities are close to the expected % of Patients by DHB of Domicile
- High numbers of FUP in ADHB and CMDHB
- Low number of Nurse Clinics FUP at CMDHB
- Low number of Dizzy Clinics in Northland
- Low numbers of ENT minor Ops in CMDHB
- ADHB provides SLT provision for WDHB patients
- Significant difference in FSA activity between high need and non-high need in Auckland and Counties Manukau DHB and as a Northern Region.
- Significant difference in FUP activity between high need and non-high need in all DHB of domicile other than WDHB.
- Across the northern region growth is anticipated to be 15.1% from 2019 – 29 1.4% per annum in FSA's, FUP is anticipated to grow by 14.3% and inpatients by 8.7% in this period.
- The largest growth is seen in Bronhoscopies over this period of 19.9% (63 in 2020 – 74 in 2029 per annum).
- The largest growth across ORL services will be in the Asian population (41.2%) followed by Māori (16.3%), Pacific (14.5%) and then other (4%)

Appendix 2: Reported Current Position 6 July 2020 for Adults and Paeds

WDHB	CMDHB
• Equity of access to services – 45% of patients are declined and referred back to the GP. • Not seeing any P3 • Growth has caused the biggest challenge. • Started as an elective service which outgrew resulting in SMO doing work outside of their JD's. • Resources are limited – physical and FTE, no house surgeon, limited SMO due to clinic capacity and no inpatient beds. • Ability to see patients and operate is hard due to the above • Support to intensive care and emergency depart • Cover H&N, paediatrics emergency and aftercare • Lack of Theatre capacity for ORL	• ORL-HNS based at MSC and set up as an elective day case service. • Infrastructure makes it challenging to provide an acute service • Service is small, with ageing workforce, limits to on call provision and recruitment issues • Issues working across two sites, no beds at Middlemore for ORL-HNS rely on plastics and ADHB • Intervention rates for paediatrics is not good, with increasing waiting lists and waiting a long time in comparison to Starship. Starship would not be able cope the current volumes coming through to CMDHB.
ADHB	**NDHB (12 June 2020)**
• Issues with patient care with different intervention rates between DHB's, aftercare and inpatient care • Metro Auckland access to emergency theatre is restricted resulting in elective patients being cancelled or acute presentation waiting until the end of the list. • On call roster is problematic across the region due to clinicians opting out. This is made up of clinicians from each DHB. • ADHB does not have any SLA's in place with the other DHB's confirming what ADHB should deliver. • Support required for clinicians across the region • Two theatres which ORL-HNS do not have access to all of the time. Would be hard to find theatre space if anymore SMO were recruited. Potentially space in CTU but would result in split service.	• Functioning differently in NDHB • Vulnerable with staffing but in a better position following service plan including peripheral hospital in place and to outsource for recent issues in Private • Working well in resources but could do better. • Regional networks for complex and tertiary care and paediatrics are important and could be strengthened • On-call is different to Metro Auckland • Intervention rates provide a broad service from paediatrics to extensive H&N and in line with national intervention rates; however, some cases are turned away • More work could be done on quality of life cases. • Theatre provision is good with two new theatres being built.

Appendix 3: ORL-HNS Principles Adults and Paediatrics.

1. COVID and our regional response to this illuminated a number of service vulnerabilities including paediatric and adult ORL
2. Vulnerabilities may include service, workforce and sub-speciality volumes and may vary over time
3. There is current variability in equity of access and outcomes regionally which there is a commitment to addressing
4. Regional solutions for paediatric and adult ORL-HNS will seek to improve patient safety, quality and health equity
5. Decisions about any future changes will be data informed and regionally agreed
6. Issues and solutions may be different for adult and paediatric populations and will be considered separately

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Auckland Regional Hospital Specialist Dentistry
Paediatric Secondary Service

Welcome Haere Mai | Respect Manaaki | Together Tūhono | Aim High Angamua

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Hospital Specialist Dentistry - Paediatric

- Regional dental service
- Provides secondary oral health care services to tamariki/rangatahi living in:
  - Auckland DHB
  - Waitemata DHB
  - Counties Manukau DHB
- Funded by the three metro Auckland DHBs, managed by Auckland DHB
- Accounts for approx. 70% of HSD service

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Issue Overview*

What is the issue	• Demand currently outstrips capacity – OR, clinic facilities. • Insufficient staffing to support service delivery requirements • The location where services are delivered does not match the areas with the most demand (e.g. high demand from children in CMDHB, but services are mainly delivered in ADHB) • The pathway to treatment for children involves multiple steps and duplication, with long waiting times at each step of the pathway.
Why is it an issue	Tamariki/rangatahi are living with pain, impacting their lives (eating, socialising, schooling, etc.)
Where is the issue occurring	Across the entire pathway: between and within primary, secondary and tertiary services
Who is impacted	A high proportion of demand comes from tamariki/rangatahi residing within the CMDHB district (approx. 52%), a large number are Māori and Pacific

* Vulnerable Service: Oral health presentation

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Demand vs. Capacity 2019/20

July 2020

Per 4 weeks

Current Outpatient Clinics				Current OR Demand			OR Capacity Shortfall		
Referrals	Resultant FSA (case)	No. tamariki/ rangatahi per clinic	Total clinics delivered	OR Case Demand	'Actual' OR Case Capacity	Case delivery per session	Current sessions	Additional sessions required every 4 weeks	Total required sessions
330	264 20% referrals not progressing due to declines, already under care, no longer wanting care, unable to contact etc	6 per clinic	44 Calculated at attendance of 6 per clinic	211	130	2.4	55 Average	33	88

- With no change this results in 79 patients being added to the surgical backlog every 4 weeks.
- This doesn't address the existing Outpatients Waiting List of 1626 patients (October 2020)
    - This has been decreasing incrementally from 2232 patients (September 2019)

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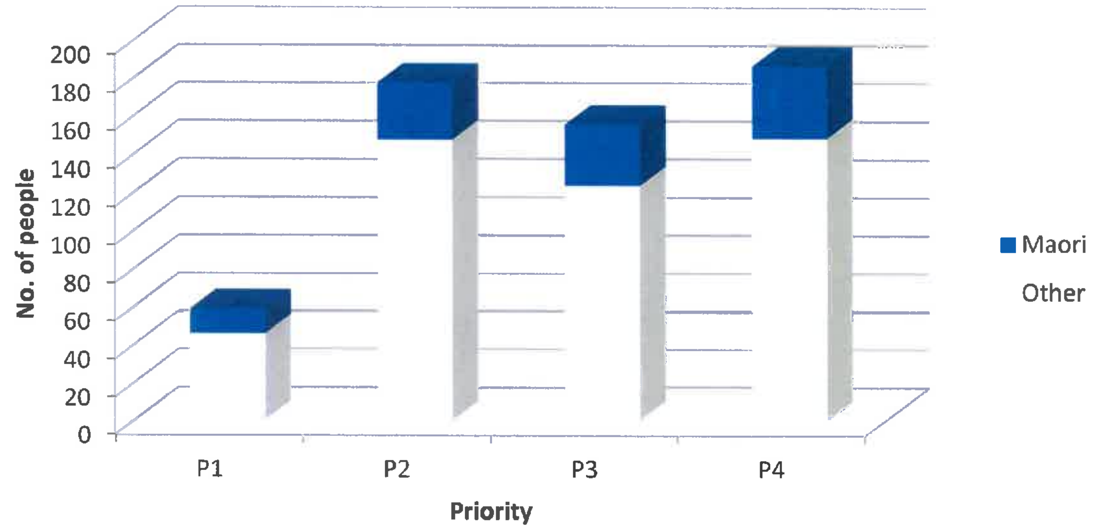
Wait list: Surgery



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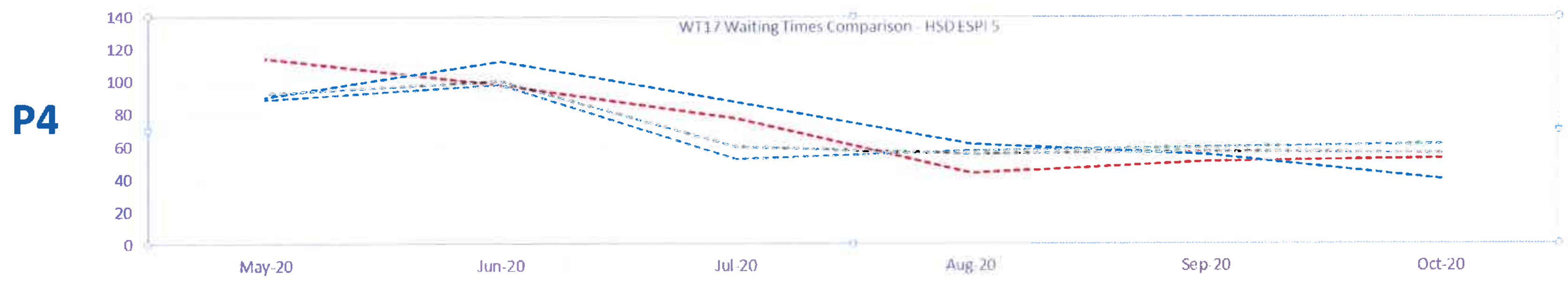
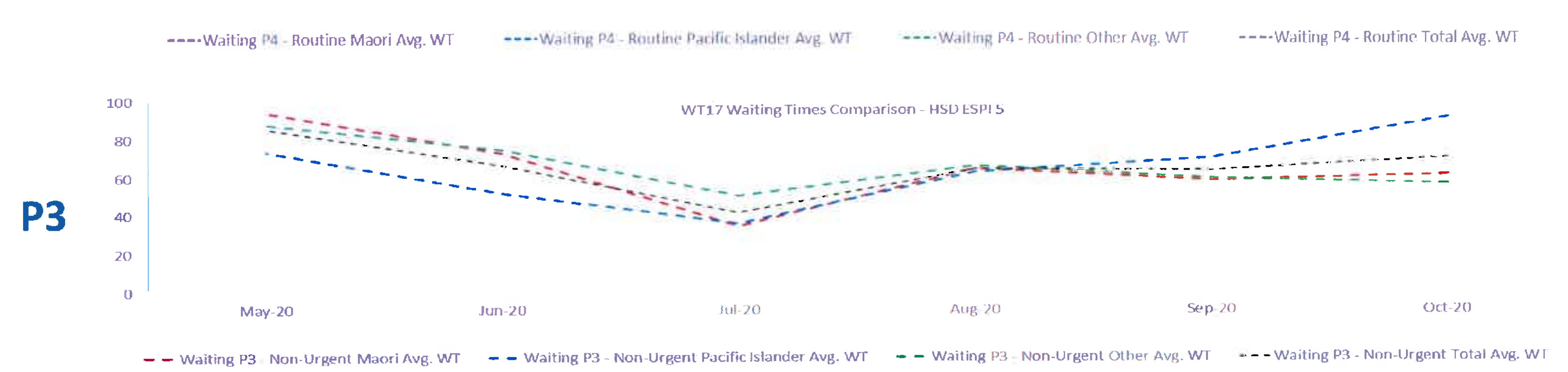
Waitlist: Surgery

P4



P3



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Initiatives

Issue		Action (to date)
Staffing to support service delivery requirements	Personnel	• Employed 3.0FTE HDO's. Commence Jan 2021. Effective April 2021. • Currently recruiting 2.2FTE SDO's. Shortlisted x4. Interviewing this week. Intended commencement Jan/Feb 2021 • Currently recruiting FTE SDO's on fixed term/locum contracts to manage upcoming vacant FTE (reduction in current SDO hours)
		• Kaiārahi Nāhi (Equity Focused Planned Care response) focusing on supporting tamariki/rangatahi and whānau journey for longest waiters.
Pathway and systems	Referral	• ARDS trained to utilise DEeR and Regional Clinical Portal to refer to HSD. Improved standard of referral and provision of information to appropriately triage
	Pre-Admit Clinic	• Revised anaesthetic form to triage requirement for pre-admit clinic - March 2020. 80% cases fast-tracked (not requiring pre-admit clinic)
	Patient Focused Booking	• Secured funds to initiate PFB in HSD service
-	-	• Project Manager employed 0.7FTE to develop workplan and commence initiatives to decrease waitlist, improve service delivery, address equity, define a model of care and develop associated pathways including access to Child Health programmes of work e.g. Wellness Checks, Was Not Bought.

Initiatives

Issue		Action (to date)
Capacity to deliver service	OR	• Time in motion study at GSU – theatre utilisation. How many more procedures can be accommodated full day vs. half day? • Using existing theatre space more effectively maximising utilisation. - Reduced the number of 'extraction-only' lists and include case of extractions-only with OCT theatres facilitating better use of theatre time. - Where possible scheduling 'all day lists' • Utilising released OR where possible • Mobile Surgical Bus – short term contract (10 May – 2nd July). • Provide service to 320-380 tamariki/rangatahi. Funding allocated from MoH Planned Care.
	Clinics	• Developing a workforce plan/rosters to deliver additional FSA with recruitment of additional FTE
	Equipment	• Identified requirement to purchase additional OR dental kits. Business case nearly finalised
	Facilities	• Identification of upgrade required to SSH dental outpatient facility
	FSA Overdue	• Identifying opportunities to contract private providers for short term provision of service to attend to OR waitlist resulting from overdue FSA

Northern Regional Alliance
He Hononga o te Raki

To	Maaori Clinical Governance Roopuu
From	John Kenealy Exec Lead Vulnerable Services Sarcoma Project
Date	12 November 2020
Subject	Regional Sarcoma Services Recommendation and Next Steps
For	**Feedback**
Do recommendations incur financial costs not previously planned /approved?	N

Recommendations

It is recommended that the Maaori Clinical Governance Roopuu:

- **Notes** the options for consideration for the Northern Region Sarcoma Service model.
- **Endorses** that the following immediate changes are taken to mitigate the vulnerability of the existing MDM and lists, pending transition to the agreed option in 2021/22
  - Address succession planning and funding for the MDM coordinator / data base manager role
  - Address concern about theatre access for operating lists at the MMH site
  - Address concern of regular access to GA radiology lists (supporting data to be provided).
- **Notes** the intent that the next stage development of the detail and implementation of change will be delivered with project leadership and clinical time as set out in the proposals agreed by REF for submission to the Ministry of health funding in response to the call for proposals for sustainability projects.

Background/Context

- Post lockdown, the Northern Region's COVID-19 response turned to recovery. The NRHCC established the Hospital Capacity Service Improvement Steering group to lead an equity focused recovery program for planned care which included a particular focus on seven potentially vulnerable services to help them a) recover from the impacts of the COVID-19 lockdown and b) be more resilient with a particular focus on equity.
- The Regional Sarcoma Service delivered through Counties Manukau was initially identified as a vulnerable service due to changes in the specialist workforce that led to a change in referral for surgery patterns between CMDHB and ADHB without a clear plan to support a change in provider arrangements and the consequence of sarcoma surgeries displacing patients within the orthopaedic service at Auckland DHB.
- This 'vulnerable services' project was initiated utilising a rapid process with key regional leads leveraging the rapid progress gained under COVID, while incorporating some of the longer term goals in the LTIP and Cancer Deep Dive. The Executive sponsor for this project is Margie Apa, who has delegated day to day leadership to Aroha Haggie and John Kenealy.
- The driver and purpose of this project is to address the issues with regard to orthopaedic sarcoma. Where related services interface and/or could be part of the solutions they are in scope.

The key problem to solve

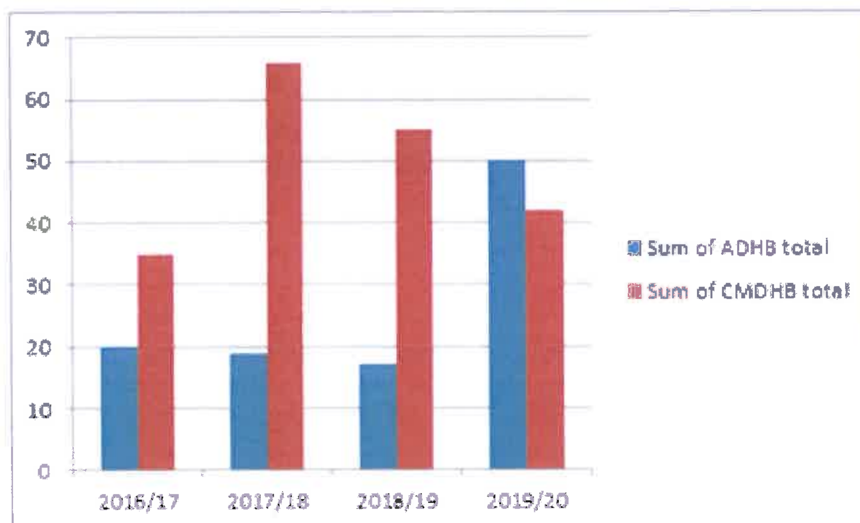
Equity of access and service provision

The regional sarcoma service operates on a split site basis across CMDHB and ADHB but there has been no lead taken by either DHB for planning the combined workforce, capacity and facility requirements of the service across the two providers. There has been a substantial unplanned change in the sarcoma patient flow between ADHB and CMDHB, without visibility of the clinical pathway across the region, or coherent service planning to proactively identify and agree the resources required and associated funding.

A key consequence is that the time-critical nature of sarcoma surgery has displaced other patients within the orthopaedic service at ADHB who are already disadvantaged by disproportionately long waiting times for elective surgery.

Data for sarcoma inpatient events for CMDHB and ADHB shows the change in patient flow. Total volumes increased from 2016 to 2017 in CMDHB and subsequently decreased in 2019/20, whilst volumes at ADHB had more than doubled (see Figure 1) and the majority of orthopaedic surgical treatment now takes place at ADHB.

Figure 1. Sarcoma inpatient events at CMDHB and ADHB, 2016/17 to 2019/20 (NMDS data).



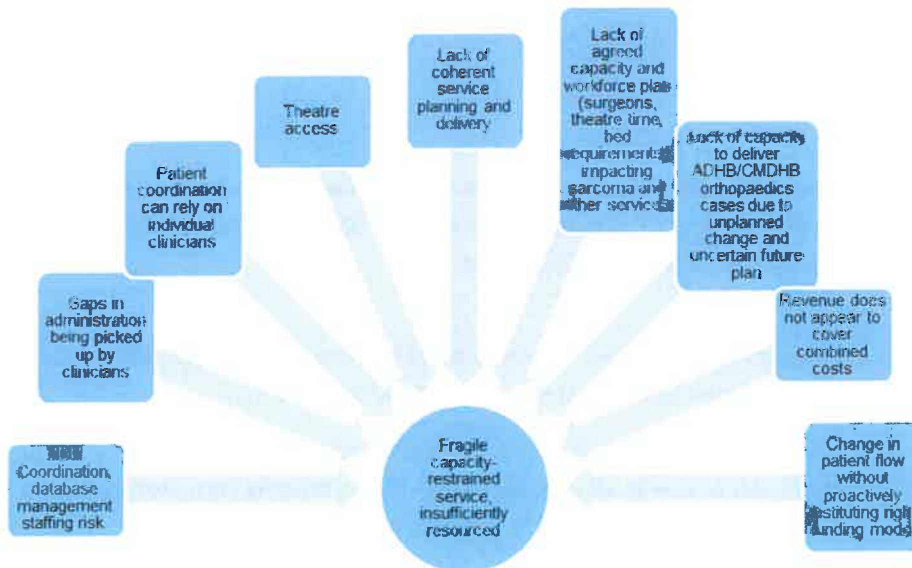
Discussion with service leads has identified gaps in the core resourcing of the MDM hosted by Counties Manukau which leave the service highly vulnerable to the loss of a single individual, as well as sporadic access to theatre time for surgery and interventional radiology at CMDHB which is contributing to sustained failure to meet treatment time standards.

Data on costs has not been quality assured but suggests a prima facie case that the current arrangements are not financially sustainable either, with the split site arrangement costing close to $3m on a WIES income of $2m for the number and complexity of patients treated. Figure 2 captures the various drivers contributing to fragility of the service.

Despite the substantially challenged nature of the organisational arrangements, it is apparent that the nationally recognised MDM expertise in pathology and radiology that is provided by CMDHB clinicians, and the collaborative practice of the orthopaedic surgeons working across DHB boundaries in a regional way, with

highly aligned views about future models of care mean there is the potential to create a high quality centre of excellence and equity for sarcoma care if managerial and service arrangements are addressed.

Figure 2. What's the problem we're trying to solve?



Providing a well-planned and appropriately resourced service will ensure optimal, equitable patient outcomes delivered in a timely manner, and importantly a well sign-posted and coordinated pathway for patients.

Current state

Sarcoma encompasses bone (orthopaedic), soft tissue and retroperitoneal sarcomas. Sarcoma is a low volume, high complexity tumour stream requiring treatment from a highly specialised multidisciplinary team.

Recommendations from the UK National Institute for Clinical Excellence (Improving Outcomes Guidance, IOG) and the London Model of Care for Cancer Services set out the catchment size and minimum volumes by provider for a range of cancer procedures. For sarcoma this was a catchment area of 7 million for bone and 2-3 million for soft tissues with 100 cases per year for soft tissue and bone or 50 for bone if also undertaking 100 for soft tissue. The 2018 NRLTIP Cancer Deep Dive highlighted that 76 new cases in total for the region in 2014 split between two surgical treatment sites with a supra-regional MDM in place at CMDHB was not compliant with these recommendations.[1]

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[1] NRLTIP Cancer Deep Dive – Final Report 2018

The Sarcoma Multidisciplinary Meeting (MDM) is hosted by CMDHB and accepts referrals from all DHBs in the North Island. The MDM provides key diagnostic expertise to almost 1,000 patients per year, almost 90% of which do not go on to sarcoma surgery. There is specialised sarcoma radiology and pathology expertise at CMDHB and specialist surgeons over both ADHB and CMDHB sites. The service has evolved over time due to the high level of expertise of the individuals in the region.

Access to other specialist services in line with tumour pathways such as Paediatric / Adolescents and Young Adults (AYA) Oncology, Medical Oncology and Radiation Oncology, and Plastic Surgery are also key to the provision of comprehensive specialised sarcoma services within the northern region. A view of the current Multidisciplinary Team (MDT) and a pictorial view of the current service model are shown in Appendix 1 and 2, respectively.

Waiting times

The service under current arrangements has consistently not been meeting Faster Cancer Treatment (FCT) wait time standards for patients for the last year of data collected: the FCT 62-day indicator was met in 78.6 % of patients vs target of 90% over 12 months from July 2019 to June 2020.

Equity

Sarcoma is a low volume tumour stream and due to the relatively small numbers it has been difficult to make any conclusions with regard to identifying inequities in care for patients with sarcoma.

Data from the NZ Cancer Registry shows that for 2017, the total number of sarcoma registrations in NZ was 176, and the percentage of Māori with sarcoma was 19.89% (35/176). This is broadly consistent with the percentage of Māori in the NZ population in 2017 was 15.67% (see Figure 3).

Figure 3. Sarcoma Registrations in NZ

	C40 to 41	C46	C48	C49	Total
Total	38	2	39	97	176
Māori	10	0	3	22	35
Non-Māori	28	2	36	75	141
Northern	9	2	16	31	58
Midland	5	0	4	10	19
Central	14	0	8	35	57
Southern	10	0	11	21	42

The northern region Faster Cancer Treatment performance data does not show a substantial difference between ethnicities, but the overall numbers are small (see Appendix 3.)

National FCT data have been requested and will be added when available.

The availability of survival data is limited, but the National 5-year survival rates for sarcoma in 2009 and 2010 were 49% and 46%, respectively (see Appendix 4 for survival data; not available by ethnicity).

A survival analysis in Adolescents and Young Adults (AYA) has shown that New Zealand achieves excellent survival outcomes for many common AYA cancers such as lymphomas, germ cell tumours, melanomas, and thyroid carcinomas and has also identified some specific cancers, namely bone and soft tissue sarcomas, CNS

tumours, and adolescent ALL, where the overall survival does not currently appear to meet international benchmarks[2].
In the same study, comparisons by AYA diagnostic group provided evidence of a higher incidence of bone tumours for Maori which begs the question of whether ethnic differences in tumour biology might contribute to the particularly poor survival outcomes that were identified for this group.

Patient experience

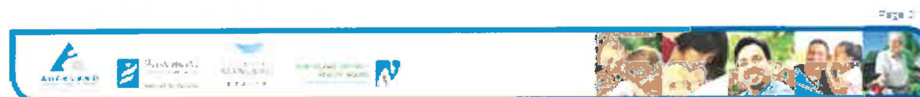
To date the Northern Cancer Network has not conducted sarcoma patient experience surveys or projects, and no information on sarcoma patient experience was available through the DHB patient experience services or the Cancer Society.

What does good look like?

There is compelling evidence that for complex cancer procedures there is a positive relationship between the volume of patients that cancer services see and the outcomes that they achieve. This evidence suggests that perioperative mortality and long-term survival improves as hospital surgical volumes increase.

The Northern Region Expert Group has met several times over the past few months to discuss and work up what good looks like for a specialist sarcoma service, based on international literature and local experience. Figure 4 shows a summary of the aspirational picture agreed by the regional expert group.

Figure 4. What does good look like – the aspirational picture.



At a workshop on 09 October 2020, the expert group agreed the following principles when considering the aspirational picture of what good looks like in the context of the northern region:

- Ideally each subspecialty would be on the same site

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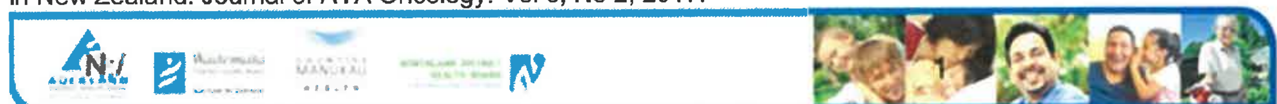
[2] Ballantine et al. Small Numbers Big Challenges: Adolescent and Young Adult Cancer Incidence and Survival in New Zealand. Journal of AYA Oncology. Vol 6, No 2, 2017.



- Medical Oncology, Radiation Oncology and Paediatric Oncology/AYA can currently only be delivered at ADHB.
- Pathology and Radiology should be on the same site and they are part of wider specialist teams and work closely together.
- Most Radiology can be done at the local DHB with oversight from specialist sarcoma radiologists if the right clinical pathways and protocols and payment mechanisms are in place.
- Sarcoma surgeons (including Paediatric Oncology/AYA) should be located on the same site to facilitate working together and optimal patient care.
- Although noted that pathology should ideally be located with surgeons due to advantages for frozen sections and in-person conversations.
- Sarcoma patients should have access to clinical trials. Clinical trials are accessed through medical oncology at ADHB as the national accredited centre. Colocation at ACH fosters opportunity to expand trials access for sarcoma patients.
- Sarcoma service coordination (includes MDM coordination) should incorporate database management

Options for consideration

On the basis of the aspirational picture of what good looks like and the principles agreed by the expert group, the following are the options for consideration (see Appendix 5 for full options analysis):

- Single site for all tertiary and quaternary services related to sarcoma (**Option 1 or Option 2**).

  Noted difficulties with these options currently are:
  - Option 1: establishing sarcoma pathology and radiology expertise at ADHB
  - Option 2: Radiation Oncology, Medical Oncology and Paediatric Oncology delivered at ACH

- Dual site options:
  - All treatment at ACH and sarcoma service coordination/ database management with Pathology and Radiology at MMH (**Option 3a**) or All treatment and sarcoma service coordination/ database management at ACH, with Pathology and Radiology at MMH (**Option 3b**).
  - All adult surgery at MMH with Pathology and Radiology and sarcoma service coordination/ database management; other aspects of treatment at Auckland City Hospital (**Option 4**)

Essentially both options 3a and 3b mean that all surgeons are on one site to facilitate collaborative working, both between the sarcoma surgeons and with the other treatment modalities (medical oncology, radiation oncology and paediatric oncology), but are on a separate site from pathology and radiology. The items for resolution include the location of the sarcoma service coordination/ database management , protocols for when frozen sections and plastic surgery are required, and workforce planning to cover the non-sarcoma component of CMDHB sarcoma surgeon (25-30% of FTE) and orthopaedic backfill at ACH.

And option 4 means that the sarcoma surgeons are on the same site as pathology and radiology, but separate from medical oncology, radiation oncology and paediatric oncology.

It is recommended that the lead site for surgery take the lead on capacity planning and management of the service overall whether on its own site or at an alternate site to ensure there is clear management and accountability for the whole tertiary care pathway. Noted that according to NICE guidelines[3], there should be

[3] NICE Guidance available at https://www.nice.org.uk/guidance/csg9/resources/improving-outcomes-for-people-with-sarcoma-update-pdf-773381485

a nominated clinician (clinical lead) who takes responsibility for the service and this should be reflected in their job plan. The clinical lead should be a member of the core MDT.

Noted that the site on which surgery capacity is centralised will need to provide required weekly theatre sessions and weekly clinic hours on site, to ensure the service has sufficient capacity to maintain waiting time standards as an essential quality requirement *((data for weekly theatre session and clinic hours to be provided))*. It is recognised that for ACH or MMH this could require consideration of other work moving out of the site to make room to accommodate the service, and where this is not possible it may result in a reduction of access.

The service needs to deliver equitable access to treatment and outcomes for patients irrespective of domicile DHB and care that is responsive to the individual needs of patients, in particular to those who are most vulnerable. This includes having clear and visible pathways with attention to seamless coordination for patients throughout their journey.

Recommendations

- Note the options for consideration for the Northern Region Sarcoma Service model.
- Endorse that the following immediate changes are taken to mitigate the vulnerability of the existing MDM and lists, pending transition to the agreed option in 2021/22
    - Address succession planning and funding for the MDM coordinator / data base manager role.
    - Address concern about theatre access for operating lists at the MMH site.
    - Address concern of regular access to GA radiology lists (supporting data to be provided).

- Note the intent that the next stage development of the detail and implementation of change will be delivered with project leadership and clinical time as set out in the proposals agreed by REF for submission to the Ministry of health funding in response to the call for proposals for sustainability projects.

Appendix 1.

The regional multidisciplinary team

	ADHB	CMDHB	
Core Multidisciplinary Team			NICE guidance Specification[4]
Specialist sarcoma surgeon	1 person, 0.8 FTE (orthopaedic) 1 person, FTE TBC (retroperitoneal)	1 person (0.70-0.75 FTE) (orthopaedic)	Min of 2 per MDT (These surgeons should have a major clinical interest in sarcoma)
Sarcoma clinical nurse specialist	TBC	1 person, 1 FTE	Sufficient to allocate a clinical nurse specialist/key worker for each patient (but a minimum of two)
Specialist sarcoma pathologist	-	5 people* 2.5 FTE	At least one and ideally two
Specialist sarcoma radiologist	-	2.0 FTE	At least two with a special interest in musculoskeletal/oncological imaging
Medical Oncologist	2 people 0.4 FTE	-	
Radiation Oncologist	TBC	-	
MDM Coordinator and secretariat support	N/A	Currently admin FTE in radiology; FTE TBC	
Palliative care specialist			
Extended Multidisciplinary Team			NICE guidance Specification
Specialist sarcoma physiotherapist			
Specialised allied health professionals			Consisting of other relevant AHPs, such as therapy radiographers, occupational therapists, dietitians and social workers, access to counsellors and/or psychologists
Specialist nurses			Including palliative care nurses and appropriately trained ward staff
Paediatric oncologist**	1 person, FTE TBC		
Other professionals including orthopaedic, plastic, head and neck, gynaecological, GI and vascular surgeons			

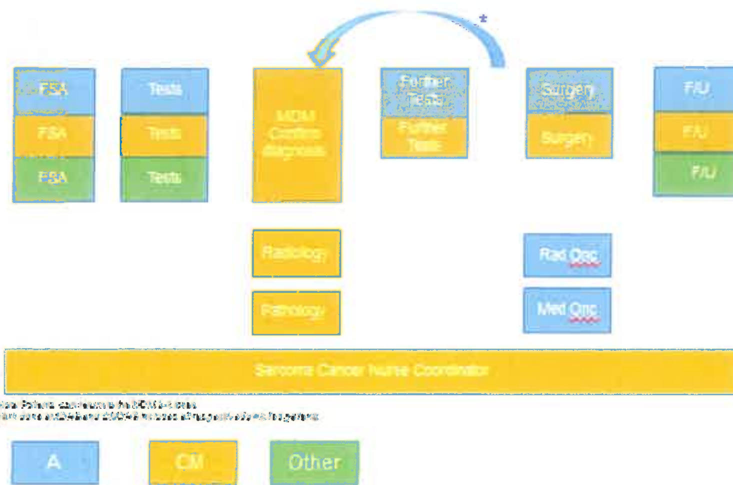
*Currently spread across 5 people, needs to be ≥3 people to allow for cover

**For Adolescents and Young Adults, there is crossover between ADHB orthopaedic oncology surgeon and paediatric sarcoma surgeon

[4] NICE Guidance available at https://www.nice.org.uk/guidance/csg9/resources/improving-outcomes-for-people-with-sarcoma-update-pdf-773381485

Appendix 2.

Current Service Model



Appendix 3.

Northern Region FCT performance for sarcoma by ethnicity (2019/2020)

	Asian	European	Maori	Other	Pacific	Total
NDHB	0	5/5	2/2		0/0	7/7
WDHB	1/1	21/22	3/3	1/1	2/2	28/29
ADHB	1/3	9/10	3/3		3/4	16/20
CMDHB	3/3	10/11	3/3		9/10	25/27
Total	5/7	45/48	11/11	1/1	14/16	76/83

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Appendix 4.

Survival (%) by sarcoma type and region 2009- 2010.

Note 5yr survival can't be calculated beyond 2010

ICD 10 code **C40, C41, C46, C48, C49**

	2009					2010				
	<1yr	1yr	3yr	5yr	Total	<1yr	1yr	3yr	5yr	Total
Northern										
Bone	21%	21%	21%	36%	**100%**	11%	22%	6%	61%	**100%**
Soft tissue	26%	20%	7%	46%	**100%**	37%	17%	6%	40%	**100%**
Midland										
Bone	25%	0%	0%	75%	**100%**	10%	30%	0%	60%	**100%**
Soft tissue	48%	8%	0%	44%	**100%**	28%	19%	11%	42%	**100%**
Central										
Bone	38%	0%	0%	63%	**100%**	0%	13%	13%	73%	**100%**
Soft tissue	26%	13%	13%	47%	**100%**	21%	38%	8%	33%	**100%**
Southern										
Bone	22%	11%	0%	67%	**100%**	17%	17%	0%	67%	**100%**
Soft tissue	15%	30%	3%	52%	**100%**	18%	24%	11%	47%	**100%**
Overseas										
Soft tissue										
Grand Total	**27%**	**17%**	**7%**	**49%**	100%	**22%**	**23%**	**8%**	**46%**	100%

Continued: Survival (%) by sarcoma type and region, 2011-2013

Note 5yr survival can't be calculated beyond 2010

	2011					2012					2013			
	<1yr	1yr	3yr	>3yrs	Total	<1yr	1yr	3yr	>3yrs	Total	<1yr	1yr	>3yrs	Total
Northern														
Bone	0%	9%	9%	82%	**100%**	18%	18%	6%	59%	**100%**	29%	10%	62%	**100%**
Soft tissue	14%	17%	6%	63%	**100%**	12%	24%	2%	62%	**100%**	15%	15%	69%	**100%**
Midland														
Bone	25%	25%	25%	25%	**100%**	22%	22%	11%	44%	**100%**	14%	14%	71%	**100%**
Soft tissue	26%	11%	11%	51%	**100%**	30%	21%	0%	48%	**100%**	23%	13%	65%	**100%**
Central														
Bone	0%	50%	0%	50%	**100%**	30%	10%	5%	55%	**100%**	9%	27%	64%	**100%**
Soft tissue	18%	21%	4%	57%	**100%**	16%	28%	6%	50%	**100%**	16%	19%	66%	**100%**
Southern														
Bone	0%	22%	0%	78%	**100%**	10%	30%	0%	60%	**100%**	40%	10%	50%	**100%**
Soft tissue	32%	11%	8%	50%	**100%**	28%	9%	0%	63%	**100%**	23%	23%	55%	**100%**
Overseas														
Soft tissue				100%	**100%**				100%	**100%**				
Grand Total	**19%**	**16%**	**7%**	**58%**	**100%**	**21%**	**20%**	**3%**	**56%**	**100%**	**20%**	**17%**	**63%**	**100%**

Appendix 5.

Table 1. Options analysis for regional sarcoma service model

	1) Have all specialties at ADHB	2) Have all specialties at CMDHB	3a) Have all sarcoma surgeons on one site at ADHB	3b) Have all sarcoma surgeons, and sarcoma service coordination/ database management on one site at ADHB	4) Have all sarcoma surgeons, and sarcoma service coordination/ database management on one site at CMDHB	5) Current model: sarcoma orthopaedic surgery split over 2 sites
What does this mean	All specialties at ADHB	All specialties at CMDHB (Note the difficulty of having rad onc,med onc and paed onc at CMH)	Surgeons together and with rad onc, med onc and paed onc but separate from sarcoma service coordination, pathology and radiology	Surgeons together and with rad onc, med onc, paed onc and sarcoma service coordination, but separate from pathology and radiology	Surgeons together and with sarcoma service coordination, pathology and radiology but separate from rad onc, med onc and paed onc.	Surgeons across two sites. Pathology and radiology together on one site and rad onc, med onc and paed onc together on other site. Note the following immediate changes to mitigate vulnerabilities: -succession planning for sarcoma service coordinator -availability of theatre lists at MMH and GA radiology lists
Advantages	-Ideal model of all specialties on one site providing integrated specialised sarcoma service -Fosters opportunity to	Ideal model of all specialties on one site providing integrated specialised sarcoma service	-Facilitates collaboration between sarcoma orthopaedic surgeons, including scheduling of combined surgeries. -facilitates collaboration	-Facilitates collaboration between sarcoma orthopaedic surgeons, including scheduling of combined surgeries. -Better collaboration	-Facilitates collaboration between sarcoma orthopaedic surgeons, including scheduling of combined surgeries. -In line with current	-Note immediate changes above

	expand trials access for sarcoma patients		with AYA/Paeds, medical oncology and radiation oncology (combined clinics) - only move one clinician for benefits above -Fosters opportunity to expand trials access for sarcoma patients	with AYA/Paeds, medical oncology and radiation oncology (combined clinics) -Fosters opportunity to expand trials access for sarcoma patients	agreed IDF funding arrangements	
Disadvantages	-Not ideal to move pathology and radiology from CMDHB because it is part of a wider specialist workforce -No Resident Plastic Surgery service -Increases capacity pressure at ADHB	-Expert group agreed not possible to move medical oncology, radiation oncology and paediatric oncology to CMDHB -Increases capacity pressures at CMH	-MDM not on the same site as surgeons -MDM not on the same site as CNS -No Resident Plastic Surgery service Increases capacity pressure at ADHB	-MDM not on the same site as pathology and radiology -No Resident Plastic - Surgery service Increases capacity pressure at ADHB	-Sarcoma orthopaedic surgeons not with other general sarcoma and paediatric surgeons, medical oncology and radiation oncology, for collaboration and combined clinics. -Increases capacity pressures at CMH	-Pathways not visible to the region -Funding model not agreed -Hinders collaboration between sarcoma surgeons -Current pressure on orthopaedics at ADHB not resolved
For resolution	- Impact of establishing pathology and radiology at ADHB -Management and leadership arrangements -Funding agreement - Strategy for when Plastic surgery needed (Provision of off-site complex plastic surgery reconstruction is suboptimal)	- Having medical oncology, radiation oncology and paediatric oncology at CMDHB is a barrier -Clinic and theatre capacity requirements available at CMDHB -Management and leadership arrangements - Funding agreement	-Strategy for when frozen sections needed - Strategy for when Plastic surgery needed (Provision of off-site complex plastic surgery reconstruction is suboptimal) -All clinic and theatre capacity need to be in place -Management and leadership arrangements -Funding agreement	-Logistics of establishing the sarcoma service coordination at ADHB -Management and leadership arrangements -Funding agreement - Strategy for when Plastic surgery needed (Provision of off-site complex plastic surgery reconstruction is suboptimal)	-Clinic and theatre capacity requirements available at CMDHB -Management and leadership arrangements -Funding agreement	-Service planning would need to be undertaken for 21/22 to ensure the right funding plan was in place to ensure sustainability -Management and leadership arrangements

Table 2. Description of options for regional sarcoma service model.

	1) Have all specialties on one site at ADHB	2a) Move sarcoma orthopaed surgery on one site at ADHB	2b) Move sarcoma orthopaed surgery and MDM on one site at ADHB	3) Move sarcoma orthopaed surgery on one site at CMDHB	4) Current model: sarcoma orthopaed surgery split over 2 sites	5) Have all specialties on one site at CMDHB
Orthopaedic sarcoma surgeons on same site	✓	✓	✓	✓	✗	✓
Orthopaedic sarcoma surgeons with general and paediatric sarcoma surgeons, medical oncology and radiation oncology	✓	✓	✓	✗	✗	✓
Pathology and radiology on the same site together	✓	✓	✓	✓	✓	✓
MDM on same site as pathology and radiology	✓	✓	✗	✓	✓	✓
MDM on same site as surgeons	✓	✗	✓	✓	✗	✓
MDM on same site as pathology and radiology and surgeons	✓	✗	✗	✓	✗	✓

Regional Provider Capacity Planning and Response – Steering Group

Compiled papers relating to Vulnerable Services on following meeting dates:

- 30 April 2020
- 7 May 2020
- 14 May 2020
- 28 May 2020
- 11 June 2020
- 25 June 2020
- 2 July 2020
- 16 July 2020
- 27 August 2020
- 10 September 2020
- 8 October 2020
- 5 November 2020
- 19 November 2020
- 3 December 2020
- 17 December 2020

Northern Region Vulnerable Services: definition, identification and management

Aim

Identify and intervene in vulnerable services where there is an opportunity for the Northern Region to act for health equity and patient safety reasons.

Note: This plan is intended for enduring vulnerability, not to address short term issues due to equipment failure or other emergency, but resolvable issues.

Principles

- Services included for this work are:
  - not able to maintain appropriate, equitable access for patients without specific actions at regional level OR
  - the specific local actions required are not affordable AND
  - there is patient benefit in developing a regional service
- Vulnerability is ikely to be workforce related, resulting in significantly reduced capacity or failure to maintain care for a period of time. The issues are likely to be one of the following:

  - Isolated services, which may have insufficient volumes to justify a large enough specialist workforce team to be resilient, or otherwise are reliant on scarce subspecialist staff

  - Clinical services having expanded to a level of complexity of clinical interventions beyond the role delineation level of the site's related services to support safe and high quality care

  - Established services which have had difficulty in sustaining workforce in the face of fast rising population needs and expanding clinical demand

  - Local provider service developments that have led to duplicated services where more differentiated roles between sites would improve efficiency and quality

  - Service facilities which have become congested to the point that efficient flow through the facility becomes compromised

  - Current pathway design and clinical practice which leaves services benchmarking poorly

  - The way in which the service or services are currently provided for a local, regional or national population is not cost effective and a different way of delivering the service or reduced duplication within the Northern region enables a more efficient and sustainable service for all populations served

Criteria

1. Service is not able to maintain or develop capacity resulting in a patient access and safety impact
2. Service risks completely failing
3. Clear opportunity to take a specific regional action to maintain safe or equitable care

30 April 2020 .

List of priority vulnerable services for review

- ORL (adult and paediatric) including all subspecialties (head and neck cancer etc)
- Maxillo facial surgery
- Ophthalmology
- Oral health
- Sarcoma
- Vasular surgery

Proposed approach

- Identify regional lead, DHB key people and NRHCC/NRA resources to support
- Identify scope and expected outcomes
- Identify local and regional actions and implementation timeframes