

Central Regional Resilience Plan - Overview

The purpose of this plan is to provide advice to DHBs, Ministry of Health and Minister of Health and Associates on what will be required to build the resilience of the Central Region healthcare system in anticipation of changes in pandemic management strategy and Government policy settings.

A function is considered resilient if it has the capacity and capability to support sustainable responses to recurring community resurgences of COVID-19, without limiting the ability to provide effective non-COVID related health care services.

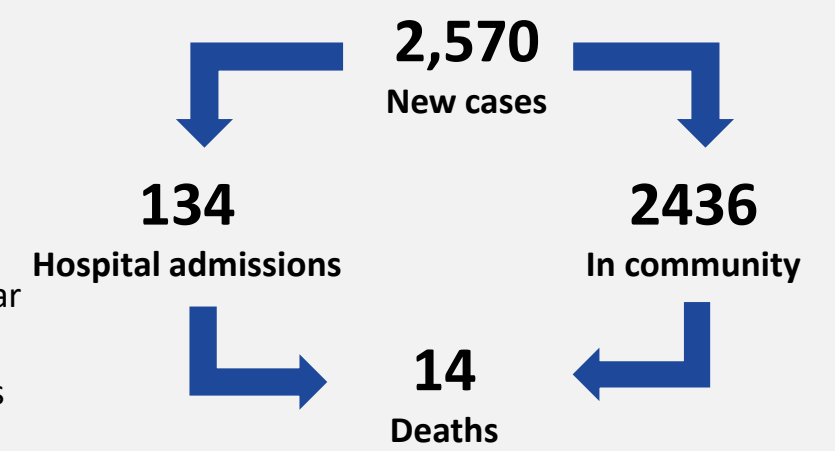
Key assumptions

(from modelling by TAS)

The “worst case scenario” modelling has been used to inform resilience planning.

- 90% adult (16+) vaccination rate.
- No vaccination of <12 year olds.
- Loose public health controls.
- Loose border restrictions.
- Funding assumptions based on period of 12 months (2022 Calendar Year). Existing Public Health and Testing funding ends June 2022.
- Priority and funding projections have not considered the scenarios effect on the provision of regional tertiary services.
- Funding requirements include a proportion of existing planned / committed funding.

Predicted regional numbers per week (in 2022)



Priorities to build resilience (DHB level and sub-regional initiatives)

Priority area	Recommendations by December-21	Estimated funding required (NC = Not Costed)
Increasing Māori and Pacific NGO Providers' capacity and capability to offer end-to-end COVID support services to their communities in a sustainable way	i. Offering flexible and sustained funding models for Providers, to fund end-to-end COVID service “packages” instead of individual activities including testing, vaccination and welfare support for isolating households. ii. Devolving certain activities (e.g. contact tracing case investigation) to Providers with specialised reach into vulnerable communities. iii. Providing funding security to allow workforce growth within Providers. iv. Support the establishment of appropriate linkages and pathways of care between Iwi, Māori and Pacific providers and primary health care providers.	\$29.5m
Developing and delivering care in the Community – Hospital in the home / allow people to self-isolate at home.	i) Digitally enabled treatment of Covid at home, in the community. ii) Hospital in the home for Non-Covid patients, releasing capacity in the hospital network. iii) Weighted towards supporting Māori, Pacific and disabled communities. Provide options in the case of overcrowding (e.g. MIQ or ability to rent a cabin for a limited time to isolate at home). iv) Identify people with current long-term conditions, including anyone immuno-compromised, who may need specialist support while in isolation (particularly in remote rural locations). v) Additional workforce, including training and development costs. vi) Acquiring thermometers, oximeters and other appropriate clinical equipment to support self-isolation. vii) Appropriate support / training given to ensure whānau can effectively utilise equipment to monitor their condition. viii) Investment in specific services for disabled people.	\$52.8m
Upgrading the facilities and infrastructure within DHBs to expand isolation rooms/ICU capacity/primary care facilities and adequately staff building access points	i. Air flow changes and negative pressure modifications within hospital facilities to create enduring COVID inpatient capacity. ii. Upgrade ICU facilities to ensure safe delivery of intensive care when living with COVID in the hospital. iii. Repurpose existing office space into clinical assessment and treatment areas. iv. IT and infrastructure to integrate clinical information. v. Managing front door to Hospital screening, assessment, triage disposition and flow streaming (consider rapid antigen testing for staff and patients entering hospital facilities). vi. Provide rapid and affordable access to Occupational Health & Safety assessors to review Primary Care facilities to provide home based monitoring of cases in quarantine at home and/or contacts isolating at home. vii. Additional infrastructure to increase outreach capacity to provide care extremal to hospital settings. viii. Improve ARC capacity and provide support for additional beds.	\$268.2m
Information Technology Infrastructure, Support and Equipment to support whole of DHB system resilience	i) Increasing collaboration by immediate rollout of Microsoft Teams to all DHB staff. ii) Implementation of eReferrals capability for key clinical services. iii) Expansion of clinical services on DHB sites. iv) Increased staffing count incurs software licensing costs and mobile devices. v) Implementation of hospital wide patient tracking. vi) Specific ICT resources with a specific focus on data, forms and information supporting pro-equity access, improvements to services and outcomes. vii) Implement or make visible a connected IT service between primary and secondary care to ensure connected health records can be visible.	\$22.6m
Sustainable Public Health Model that includes building the case investigation capacity within the region.	i. Expansion in case investigation and contact tracing teams and functional leadership support (including sufficient Māori and Pacific staffing and community liaison). ii. Resource FTE within Iwi and Māori providers to enact living with COVID requirements across Māori communities. iii. Catch up on recognised screening programmes e.g. breast, cervical, school dental, cardiovascular leading to better health outcomes through early detection. iv. Provide all community vaccination providers incl PHO, Maori and Iwi and other NGO providers funding security.	\$19.1m
Community Response	i. Increasing nurse led primary and community services, with appropriate clinical oversight to support the increase capacity needed in the area of frailty and paediatrics and acute demand in the community. ii. Coordinated and streamlined approach for the management of individuals and whānau within the community to provide care to enrolled and unenrolled patients aiming to reduce admissions, reduce ED and GP presentations. iii. To provide consistent clinical leadership to all residential providers to enable to them to extend the level of care that they provide within the service. iv. Rapid response for deteriorating Covid-19 patients or those with an acute exacerbation of a chronic condition at home or in care (e.g. aged and residential care, disability support service) to prevent avoidable hospital admission.	\$18.2m
Enhancing DHB Incident Management Capability and COVID19 Response	i. Enhanced leadership, clinical governance, quality, planning and delivery management teams. ii. Provide baseline community site capacity and increased mobile in-home testing capacity. iii. Prepare for surge testing capacity at established testing pop-up and targeted community (suburb-level) sites. iv. Meeting broad range of operational demands on a 24/7 basis, including Border, MIQ, Vaccination and community Isolation.	\$6.8m

Scenario modelling overview

The below assumptions have been used to model the predicted impact of COVID in the Northern Region in 2022.

Key assumptions (Full assumptions available on request)

- 90% adult vaccination rate by Dec 2021.
- Children ages 12-15 are vaccinated.
- 0-11 year olds not vaccinated.
- Borders are opened 1 Jan 2022.
- Restrictions remain on travel to some countries, but otherwise quarantine-free travel is occurring.
- Assume Delta variant is main issue, medium R0 = 4.5 per REF.
- Assume variation in coverage by community around the average vaccination coverages.
- Vaccine efficacy (Pfizer) against Delta = 88%, against severe disease 94%.
- Assume severity proportions as per REF.
- Vaccine reduction in transmission - 85%.
- No further community lockdowns, but case isolation and contact tracing e.g. as measles is managed now, drops R0 44% [REF p11].
- Health care workers at 93% coverage - assume other groups slightly lower.
- M + P have 2.5 and 3x the rate of hospitalisation as European/Other.

DHB	Over 2022 year					Average per week in 2022		
	Cases	Hospitalisations	Deaths	% cases M or P	% deaths M or P	Cases	Hospitalisations	Deaths
Capital and Coast	43,800	2,100	200	22.3	37.9	840	41	4
Hutt Valley	22,400	1,200	110	29.4	42.1	430	22	2
Wairarapa	6,700	380	40	26.5	30	130	7	1
MidCentral	25,800	1,300	140	27.9	33.6	500	25	3
Hawkes Bay	21,100	1,500	150	37.1	44.7	480	28	3
Whanganui	9,700	590	60	36.7	45.9	190	11	1
Total Regional	133,500	7,100	700	28.6	39.4	2570	134	14

Priorities to build resilience (Regional)

Priority area	Assumptions & notes	Estimated funding required (NC = Not Costed)
Establishment of Central Regional Health Coordination Centre	i. Establish governance, processes and procedures in the establishment of a virtual EOC for the region. ii. Provide infrastructure at regional hubs to support operations. iii. Increased analytics and forecasting resources.	\$9.4m
Regionwide Public Health Initiatives	i. Successfully deliver an integrated 2022 regional vaccination programme (included targeted booster shots, combined general population booster and seasonal flu vaccination).	\$39m
Psychosocial Response (Mental Health and Addictions)	i. Provide remote access and consult liaison services for regional specialist mental health and addiction services (as appropriate). Particularly for Maternal, Eating Disorders and Rangatahi services.	\$NC
Workforce Development, Training and Support (add capacity)	i. Supporting and enabling our teams to continue working effectively e.g., Wellness support and Fit testing programme. ii. Building sufficient equity workforce to support whanau. iii. Increased capacity and capability in infectious diseases and infection control, including outreach. iv. Enhancing Clinical advice and support, e.g., IPC advice, new testing etc. v. MoC staffing changes to support BAU alongside COVID (Screening security and orderlies). vi. Taking a whole of system training and education (e.g., rest homes). vii. Increasing disability team capacity to respond to whole of system resilience, including specific supporting workforce e.g. Kaiawhinas and resource development. viii. Increased support for General Practice (GP) teams due to low ratio of GP : Population. ix. Professional development and training, including pathways education, including pro-equity programmes. x. Growing the unregulated workforce including Door Screening workforce, rapid testing capacity xi. Development and maintenance of procedures and protocols e.g., IPC advice, screening, xii. Model of Care changes (i.e. hospital in the home).	\$26.8m
COVID Specific Facilities	i. Ongoing management of COVID in the community may require specific, dedicated facilities.	\$NC

Priorities to build resilience (National)

Priority area	Assumptions & notes	Estimated funding required (NC = Not Costed)
Psychosocial Response (Mental Health and Addictions)	i. National response to Mental Health and Addictions spike due to COVID restrictions and consequences.	\$NC
Workforce	i. Recruitment campaign to attract nursing and GP shortages (amongst other critical workforces).	\$NC
Clinical review of decision making and treatment option and ethics of COVID patients	i. Ensure Primary and Community; Hospital and Specialist services are aware of agreed clinical pathways. ii. Training, leadership and revised Governance Support. iii. Ensure all resources, staffing, medical devices and medications are available to support care at the appropriate site.	\$NC
Standardised welfare/manaaki package	i) Create a voucher system of food, clothing, children's items, medication, masks, hand hygiene and telecoms or clarify role of MSD and Whanau Ora to scale up welfare alongside health response: Thriving Communities. ii) The ability to retain SIQ when home isolation is unsuitable (e.g. domestic violence or overcrowding).	\$NC
Establish clinical senate that provides advice based on learnings, international and best practice	i. Establish structured webinars and forums for shared learnings to rapidly diffuse learnings across regional and nationally.	\$NC
Supply Chain Security	i. In the case that a community model of care was implemented that required a direct supply chain to individuals (not providers) there will be a substantial piece of work needed to uplift our supply chain capability to service this.	\$NC