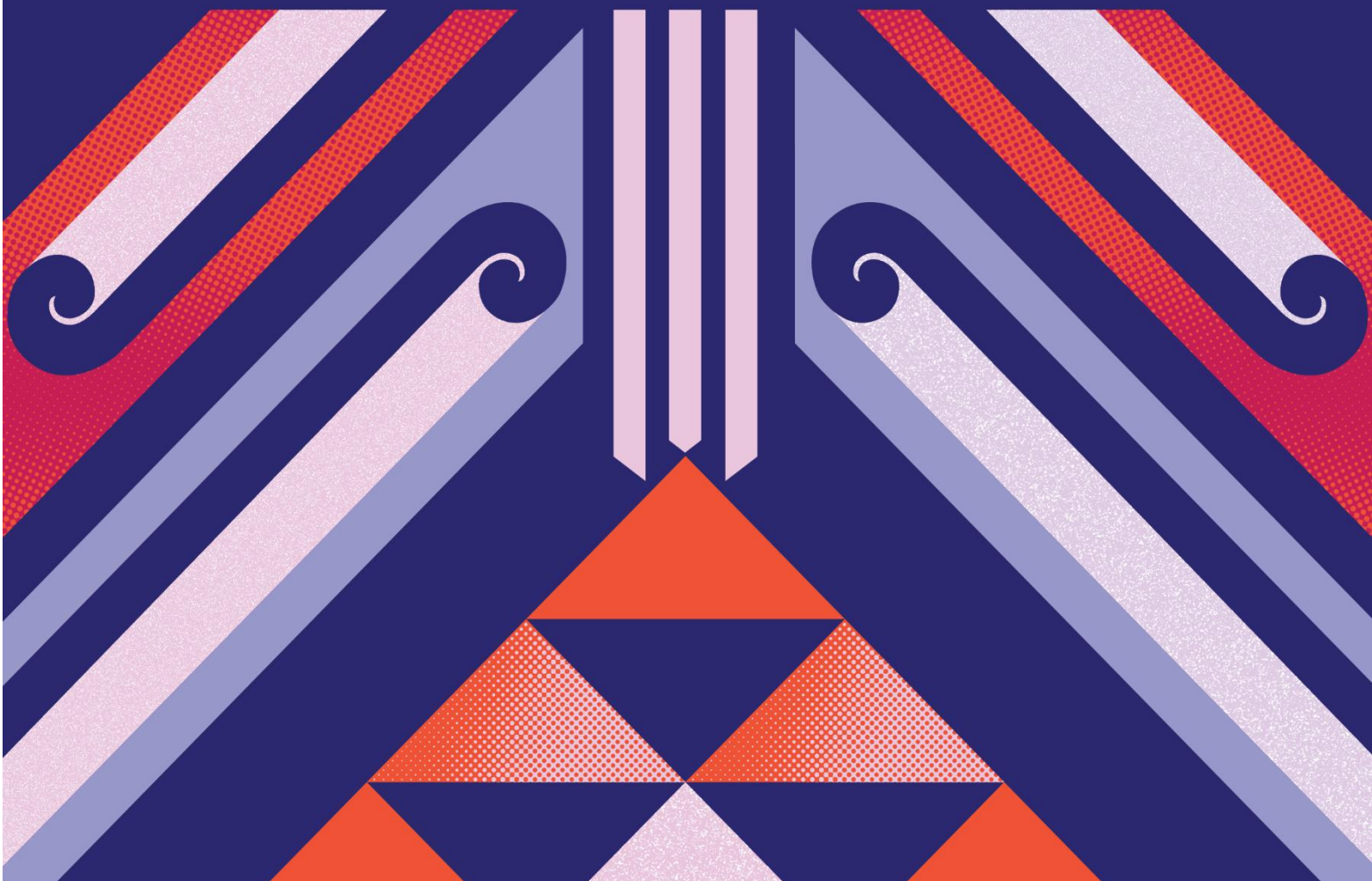
Te Tāhū Hauora
Health Quality & Safety Commission

Assessing system quality and safety: insights report

September 2024



Contents

Executive summary

This is the first of a series of reports providing insights into the quality and safety of the health system. It is informed by data collected by Te Tāhū Hauora Health Quality & Safety Commission (Te Tāhū Hauora) and Te Whatu Ora | Health New Zealand (Health New Zealand), alongside insights from members of the health workforce and consumers with input from a cross-sector panel of health leaders and experts.

Background

Patient outcomes and experiences are influenced by a range of system factors as set out in Appendix 1. We have classified our measures as those that assess the structures, processes and outcomes of the health system. Structures and processes support the reliability of care, the capacity to monitor system safety and the ability to anticipate and learn from problems. Outcome measures are those that provide us with an understanding of the physical and psychological harm that has already occurred in the system.

The information covered in this report provides evidence concerning five classes of information, reflecting different dimensions of safety, all of which assist in assessing the safety of the health system.

1. Measures of physical and psychological harm.
2. Measures of the reliability of care.
3. The information and capacity to monitor safety.
4. The ability to anticipate problems and be prepared to respond effectively.
5. The collation of information about, and learning from, safety problems.[1]

Like other countries, Aotearoa New Zealand has increasing pressure on the health system from an ageing population, increasing chronic disease prevalence and resulting increases in acute demand for treatment. New Zealand continues to experience difficulties in securing sufficient clinical workforce. These pressures have been compounded by delays in care due to the COVID pandemic.

In this context the reform of the New Zealand health system reduces the system's ability to respond to these longstanding issues.

Key insights

This section summarises our insights from the evidence gathered. Further analysis is required to understand risks to different groups of consumers and to assess potential variations in quality, safety and equity.

Patient access, outcomes and experience

Nationally, lagging quantitative measures of outcome and experience are generally stable, although there are signs of some patient harms worsening.

[1] Vincent, C. Burnett, S. Carthey, J. 2013. The measurement and monitoring of safety. Published by the Health Foundation. London. URL: www.health.org.uk/publications/the-measurement-and-monitoring-of-safety.

Locally, there are ‘hotspots’ (districts with multiple safety concerns) which we have reported to Health New Zealand. These need to be considered with other quantitative and qualitative data to provide context. Understanding local variances and emergence of these ‘hotspots’ may also be used to understand the safety of the wider system.[2]

Leading indicators of system structure, resources and culture show risks to health quality and safety. These include a lack of clinical governance systems and structures, challenges raising clinical concerns, delays in access to care and the eroding of a safety culture. Workforce was also a concern with shortages, burnout and a reduction of discretionary effort.

The workforce

There are well-trained and committed people employed within the health system; but their resilience is being tested.

Interviewees have told us that staff shortages are leading to safety concerns and stress. This results in increased sickness and time off, further exacerbating staff shortages. This impacts on staff wellbeing (moral injury), as they are unable to deliver the standard of care they expect to provide.

Staff expressed concern that there is a “simplistic” understanding of non-clinical roles, which are necessary for the effective and efficient functioning of the health system.

Interviewees told us that surgical operating lists and emergency departments have been affected by staff shortages, confirmed by data showing vacancies in the senior medical officer (SMO) and resident medical officer (RMO) workforces.

The reduced ability to access primary care and undertake preventative or early interventions risks longer-term poor outcomes from inadequately managed chronic disease or the early diagnosis of cancer.

Infrastructure

The ageing health infrastructure, inadequate clinical service planning and an inability to progress information technology projects, were also raised as concerns by the health workforce interviewees.

Clinical governance infrastructure and activities have been affected and there are uncertainties over decision-making authority. This is worsened by the breakdown of local clinical governance systems and unclear relationships between central and local clinical governance systems.

Clinical governance activities have also been impacted by the dissolution of relationships between primary and secondary care, with fewer local cross-sector clinical forums and the loss of some general practitioner liaison functions.

[2] National Advisory Group on the Safety of Patients in England. 2013. A promise to learn – a commitment to act: Improving the safety of patients in England. URL: https://assets.publishing.service.gov.uk/media/5a7cc74540f0b6629523bc31/Berwick_Report.pdf

Culture

Workforce interviewees told us that communication from Health New Zealand was unclear, impacting staff culture.

A reduction in discretionary effort applied by staff was reported with concerns about the impact this will have on patient care.

Background

This is the first in a series of reports assessing the quality and safety of the health system.

In response to a request from Hon Dr Shane Reti, Minister of Health, we have developed an approach for assessing the quality and safety of the health system. This includes a framework, presented in Appendix 1, incorporating data driven surveys and quality safety markers alongside the views of consumers, clinicians and an expert advisory panel.

The framework contains 12 leading (or forward looking) factors and five lagging factors, which describe events that have already occurred. Future reports will contain updated information and we propose to undertake in-depth analysis of some identified issues over the next three months.

This first report was developed over two-weeks. Due to the short timeframe for collecting qualitative information, some disciplines and districts are not represented here.

Quantitative data is primarily provided at the national or district level. This does not allow for an understanding of individual or local context or any associated resource availability.

This limitation is partially addressed through the thematic analysis of the workforce interviews and consumer surveys. However, to maintain confidentiality for workforce participants, we do not identify responses by district.

Assessing health system safety

It is not possible to definitively say if the system is safe or not by looking at single measures. However, by assessing which components of the system are functioning well, and which areas are raising concern, it is possible to form a view of system safety.

Vincent and colleagues[3] have identified five “fundamental classes of safety information reflecting different dimensions of safety” (pg 70). These are:

1. Measures of physical and psychological harm: including measures of patient and clinician safety and potential harm over time.
2. Measures of the reliability of care: dependent on the behaviour of health professionals and support people, clinical processes including the timely ordering of diagnostic tests and the clinical systems supporting the timely delivery of care.
3. The information and capacity to monitor safety: can the system respond to a crisis in a timely manner, whether there is sufficient staff capacity, and whether they are operating to standards and guidelines.

[3] Vincent, C. Burnett, S. Carthey, J. 2013.

4. The ability to anticipate problems and be prepared to respond effectively: how resilient is the organisation and how able is it to learn, adapt and respond to future challenges?
5. The collation of information about, and learning from, safety problems: gathering the information together from across the organisation and having a means to reflect and learn from the information gathered.

These classes of safety information are reflected in our indicators (Appendix 1). We have classified our measures as those that assess the structure, process and outcome of the health system. Structures and processes support the reliability of care, the capacity to monitor system safety and the ability to anticipate and learn from problems. Outcome measures are those that provide us with an understanding of the physical and psychological harm in the system.

Our approach

We have used a combination of both quantitative and qualitative data. Quantitative data generally measure past events, while qualitative data offers insights into current conditions, providing additional information about classes two to five of Vincent's model for measuring system safety. Combining these measures allows us to make general statements about issues in need of attention.

Quantitative measures

Patient experience surveys

The code of expectations for health entities' engagement with consumers and whānau,[4] required by the Pae Ora (Healthy Futures) Act 2022, underscores the importance of understanding the experience of consumers, whānau and their communities when assessing system quality and safety.

We conduct national patient experience surveys to regularly collect, measure and use patient experience feedback for quality improvement. These surveys are designed to find out what went well and what can be improved about patients' experiences of health care in Aotearoa New Zealand. Every three months, a national selection of adult hospital and primary care patients are invited to participate, while children under 15 years are not surveyed. Participation is voluntary and anonymous.

The patient experience survey programme includes three national surveys: the adult primary care patient experience survey, the adult hospital inpatient experience survey and the adult hospital outpatient experience survey. This report uses data from the primary care survey and the adult hospital inpatient experience survey.

[4] Te Tāhū Hauora Health Quality & Safety Commission. 2022. Code of Expectations for health entities' engagement with consumers and whānau. URL: www.hqsc.govt.nz/resources/resource-library/code-of-expectations-for-health-entities-engagement-with-consumers-and-whanau/

Quality safety markers as reported to Te Tāhū Hauora

We collate a series of quality and safety markers to evaluate the success of quality improvement programmes that have been implemented and whether these result in the desired changes in practice and reductions in harm.[5] Quality measures are dependent on district reporting. There is varying level of engagement with quality alerts across different regions of the country (see Appendix 1).

Perioperative mortality data

As part of the National Mortality Review function, Te Tāhū Hauora publishes the perioperative mortality explorer.[6] Perioperative mortality refers to deaths that occur during the hospital admission for the index surgery or within 30 days of the surgery. The explorer enables an examination of differences in perioperative mortality by ethnicity, gender, and deprivation level, as well as between surgical specialties and groups of surgical procedures.

Health New Zealand measures

We obtained quality and safety indicators from Health New Zealand (released 30 August 2024). Included in this report are the following measures:

a) System flow: 28-day unplanned readmission rate.
b) Clinical workforce.
c) Vacant FTE (as at 31 March 2024).
d) Medical locum spend (June 2024).

Qualitative information

Consumer survey

To supplement the information from patient experience surveys, which assess the quality of care received after services are accessed, an email invitation was sent to the members of Te Tāhū Hauora consumer groups to participate in a short questionnaire: Te Kāhui Mahi Ngātahi Consumer Advisory Group, Kōtuinga Kiritaki Consumer Network and Ngā Kōrero Māhuri Young Voices Group.

Fourteen consumers responded. Consumers were asked to respond to two questions:

a) In your experience, what is working well in the health system at the current time?
b) Can you provide examples of some of the challenges you believe the health system is facing right now?

[5] See URL: www.hqsc.govt.nz/our-data/quality-and-safety-markers/qsms-january-march-2024/
[6] From https://www.hqsc.govt.nz/our-data/subscribed-apps/perioperative-mortality-explorer/

Health workforce interviews

33 members of the health managers and clinicians were invited to take part in a 20-minute interview about their perceptions of safety in the health system.[7] The members were representative of:

a) primary health care
b) secondary health services
c) aged residential care
d) allied health services.

Of those invited, 22 were available to participate in an interview within 10 days. Table 1 provides an overview of the districts represented in the health workforce interviews, while Table 2 outlines the roles represented. Note: we have not provided a description of roles by district to maintain the confidentiality of participants.

Table 1: Distribution of workforce respondent districts

District	Number
Bay of Plenty	3
Lakes	3
Nelson Marlborough	3
National – aged residential care	2
Auckland	2
Wairarapa	2
Capital & Coast/Hutt Valley	2
Northland	1
Waitematā	1
Counties Manukau	1
Waikato	1
Canterbury/West Coast	1

[7] Due to the tight timeframes involved in the production of this report, participants were known contacts of Te Tāhū Hauora, or drawn from recommendations to the project team. We spoke to participants from a range of professions, regions and facility size.

Table 2: Distribution of roles represented

Role	Number
Aged residential care	2
Chief Medical Officer	2
HSS Manager	2
Mental health	2
Pacific provider	2
Primary care	2
Rural health	2
Midwife	1
Neonatal health	1
Prevocational training – postgraduate training year 1	1
Quality and risk	1
Quality and Risk Manager	1
Resident Medical Officer	1
Senior Medical Officer	1
Staff nurse	1

Interview participants were asked six questions:

a) What is working well in the health system at the current time?

b) Can you comment on any areas of clinical concern relevant to your practice that have emerged over the past month?

c) In the position you hold, what are the systems and structures that are in place to ensure that clinically safe care is always provided to patients? What is supporting or blocking these processes right now?

d) How would you describe the adequacy of current staffing in your service/region/area?

e) In your opinion, over the past month, have the staff that you work with been satisfied in their role? What have you noticed amongst staff that supports your view?

f) Over the past month, have you had any concerns about safety in the health system? From your perspective, which of these are most critical currently?

In a final open-ended question, participants were invited to provide any additional comments.

Our findings

We first report data on patient outcomes and experience, then go on to describe the themes that emerged from discussions with the workforce and the consumer survey. Quotes are used to illustrate the themes discussed. Findings related to different sectors of the health system are highlighted (for example, primary care, aged residential care or secondary care).

Lagging indicators of patient access, outcomes and experiences

(Appendix 1, factors 8, 13, 15 and 16)

Nationally, lagging quantitative measures of outcome and experience are generally stable, although there are signs that pressure injuries (whether occurring inside or out of hospital) and postoperative venous thromboembolism have worsened since the COVID pandemic. The reported experience of inpatients has remained consistent for the last four years. Experience of primary care patients has also remained stable (and for measures of communication concerning medication has even improved a little). However, primary care survey respondents report increased barriers to care, especially due to excessive waits for primary care appointments.

Most measures of access across the system highlight a long-term trend of increased demand and barriers to access. These include:

a) GP QED (WHO) data suggesting an increase in primary contacts of 9 percent in 2024 compared with a year earlier.
b) 2024 data suggest that 40 percent of practices have closed books nationally, though there is considerable variation regionally (Auckland 25%, Canterbury around 50%, Wellington more than 50%)
c) While there is month-on-month variation, performance against the 6-hour ED wait time target remains low, with 63 percent of patients meeting the target in July 2024.
d) Since 2022 there has been a doubling in self-discharges from ED among relatively urgent triage 2 and 3 patients (triage 1 most urgent, triage 5 least urgent). The 30-day mortality rate for this group has also doubled.

There is consistent evidence of a changing mix of patients presenting to the health system:

a) Over the last 3 years there has been a 12% increase in more urgent ED presentations (triage 1-3) and a 20% fall in less urgent triage 4-5 patients.
b) An increase in child ASH admissions compared with the pre-COVID-19 period.
c) Provisional peri-operative mortality calculations suggest an increase in risk of the patients operated upon, supporting the hypothesis that patients are becoming more complex over time.
d) Acute admissions as a percentage of all admissions have increased slightly since before COVID-19, while waiting list admissions are slightly lower. Local pressure points exist with shifts of 5-10% from elective to acute admissions in Canterbury, Nelson Marlborough, Counties Manukau and Auckland districts.

Locally, there are ‘hotspots’ (districts with multiple safety concerns) of increased patient harm (such as pressure injuries, hospital acquired infections, post-operative thromboembolism) and consistently poorer reported patient experience which we have reported to Health New Zealand through our quality alerts including Mid Central and Waikato districts. These need to be considered with other data sources and qualitative data to provide local context to enable interpretation and understanding. Understanding local variances and emergence of these ‘hotspots’ may also be used to understand the safety of the wider system.

Leading indicators of system strain

Leading indicators of system structure, resources and culture show threats to health safety defences. These areas include a lack of clinical governance systems and structures, challenges raising clinical concerns and risks, delays in access to care and the eroding of a safety culture. Workforce was also a major concern with shortages, burnout and a fall off of the discretionary effort.

While we have separated this discussion into themes for ease of understanding, there is an interplay among these themes. Deficiencies in one component of the health system lead to adjustments in others to adapt to these gaps. Over time, adaptations can create risks to patients and to the functioning of the health system, as described below:

> *“If resources were infinite, many risks could be eliminated. But resources are not infinite. Achieving a proper balance between risks and resources requires constant vigilance against reductions in resources – such as time, people or consumables – that raise risk to unnecessary and unacceptable levels.”* (pg 12)[8]

Consumers and the workforce told us about long-standing issues which have been compounded by the challenges of reforming the health system. Examples include loss of systems and processes to monitor quality and safety risks (Appendix 1 factors 1, 5), and ongoing workforce vacancies.

> *“Why have we got into this mess? I think probably it's been created by planning each part of the system in isolation from all the other parts. So commissioning, not talking to hospitals, not talking to people and capability…IT might have been one of the warm spots… they were pretty well linked in. So, all of that system was developed in silos, and I think the Commissioner summed it up when he stated, that I've never seen such a…swim lane system. So that was mistake number 1.*
>
> *We're just in the middle of mistake number 2, which is restructuring all of those parts in complete isolation from each other. So, I was talking to one of the [senior Health New Zealand district staff] today, who was saying this is impossible as these other bits are decomposing. They're just handing me work and work and work without any of the resources to do the work from all of these parts, it cannot work going forwards. The national resources are*

[8] National Advisory Group on the Safety of Patients in England. 2013.

being cut and we are handing things to regional without any resources there. So that's probably mistake number 2."

The following section provides evidence that the system is becoming less resilient to persistent shocks, a key aspect of system safety as described by Vincent.[9] We have divided this section into three key themes: workforce, infrastructure, and culture.

Workforce

The workforce is valued

Feedback from both the consumer survey and the workforce interviews reflects the ongoing commitment of the workforce despite current challenges. For example, a consumer survey participant commented on the *"incredible, versatile staff"*.

The workforce interviewees told us about *"good people working very hard, delivering great care for patients"*. They were described as:

a) well-trained
b) passionate
c) collaborative
d) doing the best they can with what they have.

However, ongoing pressures within the system were having a negative impact.

"Build-up of pressures in the system is cumulative – demand and workforce driven. Every month since covid people seem to be getting more and more stressed and this appears to be particularly impacting on junior staff."

Ongoing pressures may result in this commitment waning, as shown in reports of a reduction in discretionary effort from staff. (Appendix 1, factor 3)

Workforce-related safety concerns

Staff shortages were identified as a key safety concern. Hospital workers highlighted shortages of resident medical officers (RMOs) and senior medical officers (SMOs) as concerning (see also Appendix 1, indicator 3). Shortages were reported in many areas.

"I don't see any areas that are over-staffed for nurses".

The impact of these shortages was reported as follows:

a) increased reliance on locums
b) loss of surgical lists (see also Appendix 1, indicator 16)
c) patients not being adequately reviewed
d) jobs done quickly not thoroughly

[9] Vincent et al. 2013.

e) operating on minimum standards
f) no slack in the system or reserve when things go wrong.

Health New Zealand data shows increased expenditure on locums in July 2024 compared with July 2023 (Appendix 1, indicator 3).

Workforce shortages are compounding stress. Interviewees told us that this leads to more sick leave exacerbating workforce shortages.

> *"I can't remember it being this bad since the 80's. Same responses from the hospitals at that time – stopping overtime, stopping casual, delaying appointments…"*

This has the potential for a "progressive drift in practice" which can lead to deviations from standard operating procedures and increased potential for harm.[10] Reported examples indicate some deviations are occurring, such as jobs being done quickly rather than thoroughly, and patients not being adequately reviewed (appendix 1, factors 1, 3, 6).

Amalberti has observed that systems continuously adapting to new social and technical demands may approach the boundaries of safe operation and later move into unsafe practice. When such practices become ingrained due to the need to do more with less, patient harm, negligence, or reckless conduct may emerge.

> *"Violations… are a complex multifaceted phenomenon. They occur frequently and may save time and bring benefits to both individuals and systems. They may be tolerated by the wider clinical team and even actively encouraged if there is pressure to increase workload and throughput of patients. However, extreme violations may put both people and systems at risk."* (pg 67)[11]

Impact on service delivery

Hospital workforce interviewees report the impact of staff shortages on managing surgical waitlists and the service's ability to respond when demand increases. The impact of staff shortages is compounded by an increasing number of sicker patients. This impedes the ability to attend to elective surgery lists. (Appendix 1, factor 16).

> *"Lost a list last week because there was no staff – regular loss of surgical lists, not able to do what I am contracted to do because of staffing issues and the acuity of those who need a response"* (appendix 1, factor 3).

Delaying elective surgeries means that health concerns are not addressed until they become acute which can result in poorer outcomes for patients. Workforce interviewees expressed concern about the long-term impacts of these delays:

> *"There are a large number of undifferentiated patients who may or may not be high risk. The normal systems of waiting times have blown out. We need to think about how we put a safety net around those people."*

[10] Amalberti R, Vincent C, Auroy Y, de Saint Maurice G. Violations and migrations in health care: a framework for understanding and management. Qual Saf Health Care. 2006 Dec;15 Suppl 1(Suppl 1):i66-71. doi: 10.1136/qshc.2005.015982. PMID: 17142612; PMCID: PMC2464877.
[11] Ibid.

This concern was reinforced by consumer responses:

> *"From recent experience, with the harsher cost-saving and resource-tight measures, I've had two specialist referrals rejected where I believe otherwise, I would have been seen. Told not worth investigating and so nothing can be done. I wouldn't be able to be seen in the time-windows expected, so not being seen at all or cut out due to stricter requirements."*

A workforce interviewee expressed concern that this would result in a *"bolus of unmanaged cancer"*, while others were concerned about the quality of life for patients on waiting lists (Appendix 1, factor 9).

Workforce respondents also told us that the approach to non-clinical roles reflected a "simplistic view" of the health system and how it functions, undermining the value of these roles (appendix 1, factor 3, 6, 7).

> *"there's a failure to embrace the fact that in order for wait lists, for example to flow freely as you need it, operational support and enabling functions [are required] … for all enabling functions, we've not been able to recruit for the last four or five months"*

The experience of general practitioners and community services

Consumers have noted delays in accessing services and reduced consultation times with general practitioners, impacting engagement.

> *"I have waited 6 weeks for my last GP practice consult, and regular consult times have been reduced by 33 percent. I have had to rattle off all my issues in a very short period, which has meant my GP has not captured everything as there were too many points to cover off."* (Appendix 1, factor 13)

Appendix 1, factor 8 highlights the number of general practices with closed books. Consumers also told us that clinics are closing their books to new patients and withdrawing from providing after-hours and urgent care.

General practitioners highlighted that cost-pressures, and an increasing workload are leading to burn-out and affecting their ability to provide care. Staff shortages are reducing the ability to take leave, further compounding the risk of burnout. The aged residential care sector noted that shortages in primary care could impact the quality of care provided to residents (Appendix 1, factors 3, 6).

General practitioner services within lower socio-economic areas and within rural areas were identified as particularly vulnerable.

> *"I think we have reasonable triage systems in our practice, but patients don't always hear that and when they are experiencing barriers anyway…they just stop ringing…and then they get so sick that they have to go to hospital or they suffer…and that is happening a lot more for Pacific and Māori than it does for other patients."* (Appendix 1, factor 13)

While we have observed no change in the proportion of people of different ethnicities who are experiencing barriers to access to primary care from our patient experience survey. (Appendix 1, factor 13), a trend of worse access for Māori patients to primary care is long-standing.

Current pressures may further entrench this inequity as recognised by consumers.

> *"The related over-reliance on locums continues to discourage community members from consulting with a GP. For example: A young Māori man who is already experiencing gout attacks recounted to me today that he now rarely seeks help from a GP as these days it's always someone different. In contrast, when there was a long-term GP in the primary care practice with which he is a registered patient, he had built up a positive relationship with her over time, working closely together to better understand and manage his risk of 'the gout'. Back in those days this decreased his loss of income due to gout attacks."*

This is an example of short-notice withdrawals of after-hours general practitioner services.

For the aged residential sector, these changes were compounded by perceived 'gatekeeping' by ambulance services and emergency departments. As a result, the aged residential sector found themselves *"carrying the risk for someone who shouldn't be in your environment"* (which may be reflected in non-hospital acquired pressure injuries, Appendix 1, factor 15).

Midwifery interviewees also reported similar concerns:

> *"[It used to be] the same person would be seeing a woman all the way through her antenatal care and then be seeing her postnatally as well. Well, the best we can do at the moment is all sorts of different people providing that same care, so there's not the engagement with the staff. There's not the engagement for the woman. So, the women just stop engaging. You can understand that if it's difficult to get to see someone in the primary services.*
>
> *Then… it's much harder to get yourself there and you have to be really ill by the time you present. So, then they come in acutely. So, there's a lot more woman coming in more acutely and a lot sicker than they used to be…the services are struggling to cope with it. I must say that the number of unbooked women or women that have had very limited antenatal care has really increased. And when you say to the woman 'Oh, why didn't you, you know, come in earlier? Or why didn't you turn up for your appointment?' They'll go 'well, what was the point? I never saw the same person twice…and I had to tell my story again every time'."*

The impact of threshold setting in secondary care is observed within primary care (Appendix 1, factor 15):

> *"Mental health issues are huge – learned helplessness because the thresholds are so high that they [GPs] aren't making the referrals so are spending more time with very unwell people".*

Consumers supported this view:

> *"For us in our rural area its access to services in secondary care, we desperately need AOD and Mental Health Support."*

Adaptations

There is evidence of adaptations being built into the health system such as virtual triaging. (Appendix 1, factor 5).

> *"We have virtual triage for some patients that can be treated virtually. Patients adapting well for that. We also have things in place for people who don't have access to wi-fi or phones, such as social workers and health coaches… We have daily huddles where we manage within the team particularly complex cases. This allows us to capture complex cases if they are coming in and provide social work support for them if necessary."*

Infrastructure

Health infrastructure includes facilities such as hospitals and their components (for example equipment and operational theatres) and soft infrastructure includes the skilled workforce, research and regulation, training and educational resources and data connectivity[12] (Appendix 1, factor 4).

Ageing infrastructure and the inability to advance information technology projects were highlighted as concerns.

> *"We are going to have to employ retired staff because there is no longer training on the systems we are using".*

However, consumers identified instances where infrastructure was adapted successfully:

> *"There are mostly a wide range and variety of primary healthcare providers that provide diverse services tailored to different areas and demographics, particularly rangatahi and Māori. I believe that there are services out there that are suitable for everyone, however health consumers may need to search far and wide for the correct ones. I have personally had great success with accessing primary care that I am satisfied with as a rangatahi."*

Other examples of local initiatives include, Pacific providers delivering tailored preventative care services, and aged residential providers developing remote, 24/7 access to provide support in case of clinical escalations.

> *"We are developing local initiatives [funded within the PHO] that are supporting patients as a work around for tightly defined criteria for accessing publicly funded services that aren't responsive to people's needs… Our patients donate into this to pay it forward to others [low SES area]."*

Access to services

Consumers underscored the impact of poor health infrastructure on their ability to access services (Appendix 1, factor 8):

> *"Opotiki after hours - can't stay there even though they have beds there."*

[12] New Zealand Infrastructure Commission (2021) From https://tewaihanga.govt.nz/our-work/research-insights/sector-state-of-play-health.

"Dialysis: waiting list, long travel to access it, stressful."

Workforce interviewees told us that limited access to operating theatres and ageing equipment, combined with workforce issues, reduces health system safety (Appendix 1, factors 4, 8). Examples include:

a) *"People getting relapses before they can get the bone marrow transplants because we can't do them on time* (lack of surgical theatres)"
b) Making do with equipment that is not best practice.
c) *"Psychogeriatric hospitals – difficult to access and drive a desire for people to stay in the wrong environment"*
d) Long delays to access ambulance services.
e) Facilities not fit for purpose.

"We are managing on old facilities, with funding and resources simply aren't there. Especially for the high need population that we are serving."

Workforce interviewees told us that soft infrastructure also impacts the ability to access services. Examples include (Appendix 1, factor 8):

a) Reduction in GP liaison roles impacting on cardiology services: poor follow-up of investigations
b) Referrals not actioned
c) Lack of clarity about transfer destinations for patients
d) Concern about closure of rural services

There is a view that the increasing wait times in secondary care services are exacerbating pressures within general practice (Appendix 1, factors 5, 9).

"People on the waiting lists are using primary care so much more than anyone else. Waiting is placing demand on community and primary sector…adds to the burden when we are trying to reduce the number of contacts."

Appendix 1, factor 8 highlights the number of general practices with closed books.

Reduced access to care and early intervention may lead to worsened health and greater illness. An increase in the complexity of patients presenting for surgery is observed in our perioperative mortality dashboard.

Clinical governance

Many of the leading indicators in the *clinical quality and safety monitoring framework* (Appendix 1) are dependent on having clinical governance processes, such as mechanisms for monitoring quality and safety.

Prior to the establishment of Health New Zealand, district health boards (DHBs) had different approaches and different levels of maturity of their clinical governance systems and structures.

Nevertheless, local safety and quality concerns could be raised to the DHB boards through clinical governance and equivalent committees. In the new system, some of these local systems have remained in place, in others they have discontinued (Appendix 1, factor 1).

> *"a lot of places have probably given up on it at a local level, because what happened was that the quality roles, some of them would go to [a central Health New Zealand] team, some of them would stay in hospital specialist services, some of them ended up going to commissioning and some of them were just disestablished… what were cohesive teams has largely been fragmented and typically the smaller centres have suffered less fragmentation than larger because in the smaller centres, well, we were certainly very careful to try and make our staff indispensable by saying they work for three different teams and therefore they were left alone."*

The breakdown of some of the clinical governance structures has been seen within Health New Zealand and in relationships with primary care, local cross sector clinical forums stopping and the loss of some GP liaison functions (Appendix 1, factors 1, 5).

> *"we used to have a team of five GP liaisons…"*

> *"we've lost the relationship that we had…We don't have our joint clinical council meeting anymore"*

At a national level, the directorates within Health New Zealand have appeared functionally siloed, with key components and responsibilities of clinical governance sitting between them. The clinical leadership team operates separately, and the national clinical governance meeting as a coordination point has only recently been established. Furthermore, the relationships and reporting between this central function and local clinical governance structures are not clear (Appendix 1, factors 1, 5).

> *"National clinical governance still feels incredibly immature."*

This has led to concerns about the ability to raise issues that cannot be addressed at a local level, particularly regarding the appropriate escalation of clinical risk. Staff have also expressed concerns about the timeliness of response when issues are escalated (Appendix 1, factors 1, 5).

> *"Not just the escalating of clinical risk, but the decision making appears to have stalled – who has the authority to make a call, who is making decisions?"*

The ability to address issues locally has also been affected by the centralisation of some of functions and resources responsible for quality improvement.

> *"There are people we can talk to, but it doesn't feel like there is someone we can talk to who has the power to make change."*

The time taken to appoint to national clinical leadership roles and the failure to embed these roles at the establishment of Health New Zealand has also impacted clinical governance arrangements (Appendix 1, factors 1, 5).

The disestablishment of local consumer councils is concerning for service users: (Appendix 1, factor 13):

> *"With the inception of Te Whatu Ora regional consumer councils, a concern is how Te Whatu Ora will maintain connection to local consumer groups and consumer councils…our localities pilot was terminated 30 June 2024. Do not expect that the regional consumer councils are that local voice."*

"The decline in consumer engagement and taking on board the whānau voice."

Information technology

Some workforce interviewees expressed concern that information technology projects had been put on hold. They described an overlap between the impact of not investing in IT projects and the challenges in recruiting to non-clinical facing roles (Appendix 1, factors 2, 3, 4).

"There are roles that are not being recruited to – non-clinical facing, which have a real impact on clinical governance. Real impact on ability to measure and monitor what is going on with the system."

"Data and digital funding withdrawal – need this for clinical services planning – clear, fair decisions."

Workforce interviewees also highlighted the inability to 'close the loop' when reporting clinical risks and concerns. This issue overlaps with the disruption in clinical governance processes and is related to the lack of investment in information technology (Appendix 1, factor 5).

"No connections further up and nowhere to send reports or escalate – feedback loops don't appear to exist. Not sure about process of looking at controls and mitigations."

"we have locally developed, board of clinical governance meetings monthly, with good robust discussions and a good primary-secondary interface. However, I have a real worry about the data – a bit of turbulence around that."

Variability in access to information technology services between districts was noted, affecting the ability to deliver safe and efficient services (Appendix 1, factor 4).

"Auckland districts, they, you know, they've got e-referrals, they've got e-prescribing, they've got e-vitals, and these aren't fancy things. They're core essential data solutions, but it enables them to be safer, be more timely, help deliver good things and a good, timely way, whereas we just don't have any of that."

Clinical services planning

Workforce interviewees told us clinical services planning was inadequate (Appendix 1, factor 8).

"Look at the services we are delivering:

a) How do we deliver them?
b) What are the staff we need? (benchmark FTEs)
c) What are the skill sets required? (include a safe skill mix)
    a. Do we have the appropriate training systems in place? For example, admin staff, rural general practitioners, mentoring.
d) Data and digital required for planning
e) Digitally enabled safety (consider overseas models)"

Workforce interviewees told us that decision making had been removed from the districts (see also Appendix 1, factors 1, 5), leading to uncertainties about who holds decision-making authority.

Culture

Workforce told us about the impact of unclear communication on staff wellbeing and the health system's culture (Appendix 1, factors 3, 6, 7).

> *"So, this is one of the stresses is that we get, we feel quite blindsided. We used to be able to process something big was coming. All the senior leadership team would be pulled together [and] presented with it… we would process it. How can we support our staff so that this doesn't cause undue stress? What are our processes? What if someone doesn't want to do it? And we'd have a few days of figuring it out so that when it went public, we were really confident on our messaging. We had support and we knew what we were doing…that hasn't happened with this. It's just a decision is made, and it comes out… you look like a bit of a fool. You know, you're used to being the person with all the answers and you have none."*

Discretionary effort

Discretionary effort is effort expended beyond workplace agreements. An example from our interviews with the health workforce is the volunteering for additional shifts to provide cover when others are unwell.

Workforce interviewees noted that discretionary effort is beginning to wane (Appendix 1, factor 6).

> *"In last 2 months, there have been heightened feeling of distress at not being able to deliver adequate care to the point that people want to cut back their hours and leave – they can't deliver the care they think the patient should have."*

Examples of discretionary effort waning include:

a) … services effectively working to rule.
b) Refusing to train as a duly authorised officer (manage people and their family through the Mental Health Act process).
c) Cutting corners to try and finish on time.

Some interviewees reported that larger hospitals are *"pulling down the iron curtain"* and no longer supporting smaller secondary services in times of resource constraint.

These findings align with our observations for the quality and safety factors 5 and 6 (Appendix 1). Reductions in discretionary effort are likely to have flow-on impacts on the reporting of quality concerns.

Appendix 1: Clinical quality and safety monitoring framework factors

Leading or lagging (Structure, process or outcome)	Factor
Leading/Structure	1. Are the necessary quality structures (e.g. clinical governance groups, clinical risk reporting pathways) in place?
Leading/Structure	2. Is near real time data for immediate safe management of services consistently available and used?
Leading/Structure	3. Is the necessary clinical workforce in place and engaged?
Leading/Structure	4. Are there any gaps and assets in the safety infrastructure?
Leading/Process	5. Are quality structures operating effectively? E.g. Does required information flow as needed and is there authority and accountability to act at the right levels?
Leading/Process	6. Is there enough capacity to make discretionary efforts for quality activities? e.g., Reporting and response to incidents, collection of data necessary for quality activities
Leading/Process	7. Are workforce being supported in quality activities?
Leading/Process	8. Is increasing, changing or mismatched demand for services creating risks to available service supply measures: interpreted whole-system patient pathway?
Leading/Process	9. Modelling of likely effects of delay on acuity and complexity
Leading/Process	10. Are patients consistently following appropriate pathways for the management of disease?
Lagging/Process	11. Are there disruptions or other changes to patient flows that raise concerns about safety risks?
Lagging/Process	12. Is there any evidence of unsafe prescribing/dispensing practices in hospital or community?
Leading/Outcome	13. Are there any rapid changes in patient experience of care at a local level?
Leading/Outcome	14. Do ACC claims data reveal any patterns that point to changes in safety?
Lagging/Outcome	15. Are there any concerning trends in complications and harms?
Lagging/Outcome	16. Are mortality rates changing?
Lagging/Outcome	17. Qualitative review of HDC complaints and AE investigations to consider common ‘deep’ causes

Appendix 1a: Clinical quality and safety monitoring framework (expanded)

September 2024

Leading/Lagging (Structure/Process/ Outcome)	**Factor**	**Status**	**Evidence:** 1 - Health NZ evidence assessment from expert group 2 - Te Tāhū Hauora analysis of workforce and consumer evidence 3 - Measurement	**Synthesis and direction of travel including expert panel insights**

Leading/Structure	1. Are the necessary quality structures (e.g. clinical governance groups, clinical risk reporting pathways) in place?	**CONCERN** – not fully in place	**1 – Health NZ evidence**
			Clinical governance groups and reporting pathways:
			• Clinical governance structure available August 2024.
			• Regional structures a priority – not fully established.
			• Regional clinical governance groups established in two regions (not Northern, Te Waipounamu). Groups need alignment (for example standard terms of reference).
			• National structures in place:
			  ○ Cross-sector National Quality Forum established (meets every 3 months). Forum to escalate national issues/concerns
			  ○ Newly established ELT Quality & Safety Committee replacing Board committee (CQAC)
			  ○ National Clinical Governance Group (NCGG) well-established.
			Clinical risk reporting:
			• Updated organisation risk policy due to be published.
			• National Chief Quality & Safety is developing an - issues escalation protocol and strengthening clinical risk reporting.
			
			2 – Te Tāhū Hauora
			• A mixed level of engagement from different parts of the country around quality alerts – pointing to flows between local and central not being in place yet.
			• Clinicians identify reduced layers of safety as a particular risk.
				The structures that enable quality are not fully in place, but this is not just a matter of establishing structures and procedures but also reestablishing relationships
				
				There is a wide sense that existing quality structures were degraded (and in some cases removed) with the creation of Health NZ and that the needed multi-level structures have not been created to replace them. This particularly applies to being able to act as locally as possible but having the necessary escalation and capability support routes.
				
				Some concern of waiting for “new and improved” (i.e. waiting for a new clinical governance framework) infrastructure rather than using the current, perfectly serviceable (2017) one.

Leading/Structure	2. Is near real time data for immediate safe management of services consistently available and used	**PARTIAL CONCERN** – not consistently available	**1 – Health NZ evidence** • Many districts still using paper eg do not have electronic vitals, eLab orders & results, ePrescribing, e-referrals. • Lack of information about status in community & primary care. **2 – Te Tāhū Hauora** • Issues with the referral interface between primary and secondary care (even with e-referrals). • More difficulties with access to specialist, non-urgent, services. Reported by consumers, general practitioners (more referrals being refused), and secondary workforce (less able to attend to elective surgery). • Pressure of work causing people to be less responsive than they might have been previously. • Concern about the reduction in non-clinical roles impacting on data collection.	Concern about the inconsistency of digital supports to quality (especially lack of forcing functions which then required the right individual clinician behavioural choices when these are more tenuous in a pressured system). There is a widespread concern that disinvestment in digital is likely as a result of current fiscal restraints. As well as a direct effect on safety, this also reduces the opportunity to use technology enabled alternative care pathways to address supply demand mismatches.
Leading/Structure	3. Is the necessary clinical workforce in place and engaged	**CONCERN** – not fully in place	**1 – Health NZ evidence** • Workforce shortages in particular professional groups of concern: midwifery, mental health, MITs, anaesthetic technicians. • Workforce shortages in particular locations – rural hospitals Northland and West Coast. • Increase in locum expenditure year on year.	Available data and gathered intelligence triangulate to that pressures on availability of staff are real and a risk. There are particular hotspots in terms of professions and locations While clinicians interviewed by HQSC suggested that engagement remains high, there were less clear how much longer this may last. This is particularly relevant with regard to capacity for discretionary efforts around quality (see 6 below).

Leading/Lagging (Structure/Process/ Outcome)	**Factor**	**Status**	**Evidence:** 1 - Health NZ evidence assessment from expert group 2 - Te Tāhū Hauora analysis of workforce and consumer evidence 3 - Measurement	**Synthesis and direction of travel including expert panel insights**

			2 – Te Tāhū Hauora
			Clinician interviews
			• Highlighted staff shortages and a sense of constant pressure resulting from these.
			  ○ Safety concerns raised due to lack of workforce include
			  ○ Increased relying on locums.
			  ○ Loss of surgical lists.
			  ○ Patients not being adequately reviewed.
			  ○ Jobs done quickly not thoroughly.
			  ○ Operating on minimum standards.
			  ○ No slack in the system or reserve when things go wrong.
			• Clinician interviews suggest that engagement remains relatively high (although there were concerns that this may decline).
			  ○ Good people working very hard delivering great care for patients
			  ○ Well trained, passionate, committed to providing good care.
			  ○ Skill level of senior providers and registrars.
			  ○ Motivated – people wanting to see improvement and be engaged – though this might not continue (spread thin, trying to do the work of two people), all of the indicators are that things are going to get worse instead of better.
			  ○ Goodwill, dedicated staff.
			  ○ Good service when people are really unwell and need the health system
			  ○ Teamwork – collaborative, doing the best they can with what they have.
			  ○ Clinical supervision – though missing continuing education (junior staff) due to sickness or busyness.
			• Concerns were expressed about what was seen as the impact of rhetoric that only clinical roles matter.
			  ○ Simplistic view.
			  ○ Cannot function without administrative and back-up staff.
			  ○ Undermines the value of enabling functions.
			  ○ Key to system flow.
			
			3 – Measurement
			• Health NZ data shows 4000 clinical vacancies including 670 SMO and 190 RMO (March 24) It is unclear what the baseline this is being measured against, i.e. were long term unfilled vacancies excluded? what are the baseline workforce numbers?
			• Medical locum costs increased 28 percent from July 2023 to 2024.	

Leading/Structure	4. Are there any gaps and assets in the safety infrastructure?	**CONCERN** – not consistently available	**1 – Health NZ evidence** • Infrastructure gaps as above - many districts do not have electronic systems (eVitals, ePrescribing, eOrders, eNotes, eForms). • Do not have a national incident management system (cannot collate adverse events, complaints & risk data nationally). • Te Tāhū Hauora patient experience survey reports hospital cleanliness has remained broadly consistent. **2 – Te Tāhū Hauora** • Any CapEx projects are now on hold and cannot progress even if	CF 2 above – Variability between different parts of country in terms of available safety infrastructure. Fears that fiscal restraint will exacerbate this inequity.

Leading/Lagging (Structure/Process/ Outcome)	**Factor**	**Status**	**Evidence:** 1 - Health NZ evidence assessment from expert group 2 - Te Tāhū Hauora analysis of workforce and consumer evidence 3 - Measurement	**Synthesis and direction of travel including expert panel insights**
			they have already been started. • Future looking projects for IT on hold – data and digital is a big challenge. • Having to employ retired staff because there is no longer training on the systems we are using. *Clinician interviews:* "Auckland districts, they, you know, they've got e-referrals, they've got e-prescribing, they've got e-vitals, and these aren't fancy things. They're core essential data solutions, but it enables them to be safer, be timelier, help deliver good things and a good, timely way, whereas we just don't have any of that."	

Leading/Process	5. Are quality structures operating effectively? For example, required information flow as needed and is there authority and accountability to act at the right levels.	**CONCERN**
		– not fully in place
			1 – Health NZ evidence
			• Gaps in quality and safety data submission (June 2024 Quality Alerts; HRT) due in part to vacancies in district quality and patient safety teams and increasing workload (reflected in increasing numbers of adverse events and patient complaints).
			• Uncertainty among some staff about how and where to report safety concerns. National Chief Quality & Safety is developing an issues escalation protocol.
			• Per Te Tāhū Hauora: our interactions with Health NZ around quality alerts take place with several overlapping groups and we have had a mixed level of engagement from different parts of the country – pointing to flows between local and central not being in place yet.
			• Te Tāhū Hauora: reports of lack of local decision-making capacity stymieing improvement efforts.
			
			2 – Te Tāhū Hauora
			Clinician interviews:
			"Fundamentally flawed and under-valued by Te Whatu Ora"
			
			• Reporting up but no feedback loop.
			• Clinical Director positions dissolved.
			• Decision-making appears to have stalled:
			  ○ Who has the authority to make a call?
			  ○ Who is making the decisions?
			  ○ No strategic planning
			  ○ Lost the power and autonomy to progress things quickly.
			• Current situation:
			  ○ Feels chaotic
			  ○ Systems and processes have broken down
			  ○ Staff are reactive
			  ○ No redundancy in the system (allows for standardisation and flexibility)
			  ○ Constantly at the red line
			  ○ Working against protocols and feeling unsafe.
			
			"We almost know that we will have an increase in harm as a result of some of these decisions that are being urgently pushed out and we don't know if there's been due diligence around that process."
				CF 1 above loss of relationships and clear lines of accountability, support and information flow. It is not just a matter of structures and collateral (policies etc) not being place, but a loss of relationships, and work routines with the loss of positions and structures.

Leading/Lagging (Structure/Process/ Outcome)	**Factor**	**Status**	**Evidence:** 1 - Health NZ evidence assessment from expert group 2 - Te Tāhū Hauora analysis of workforce and consumer evidence 3 - Measurement	**Synthesis and direction of travel including expert panel insights**
Leading/Process	6. Is there enough capacity to make discretionary efforts for quality activities? For example, reporting and response to incidents, and collection of data necessary for quality activities?	**CONCERN** - not consistently available	**1 – Health NZ evidence** • High vacancy rate in quality and patient safety teams in districts contributing to inability to respond to adverse events and patient complaints in required timeframes. • Lack of national data on complaint and adverse event reporting (timeliness, close out). • Consistent pattern of a few districts struggling to report QSM data due to staff vacancies. • Lack of resource funded by HQSC for child and youth mortality reviews has resulted in reduced reviews occurring numerous parts of the country. • Growing disparity between adverse event reporting and ACC claims reporting for always report events. • Labs and MH data has been unreliable. **2 – Te Tāhū Hauora** *Clinician interviews:* • Discretionary effort waning – this includes the capacity to do required reporting, but also capacity to take up additional roles and support the sustainability of the system by mentoring and supervising junior staff. • Lack of recruitment to non-clinical roles has a real impact on clinical governance. **3 – Measurement** • Evidence of reduced quality processes being followed such as risk assessment and care planning for pressure injuries from QSMs (and in these places we also see an increase in pressure injuries).	There is a reduced ability for the system to identify and respond to risks in a timely manner as well as a reduction in the system to learn, adapt and respond to future challenges. The health workforce draws a direct association between the reduction in non-clinical roles and the ability to collect and report on quality and safety.
Leading/Process	7. Are workforce being supported in quality activities?	**PARTIAL CONCERN** – not consistently available	• Insufficient and inequitable distribution of quality improvement resource in regions and districts.	See factor (5)
Leading/Process	8. Is increasing, changing or mismatched demand for services creating risks to available service supply measures: interpreted whole-system patient pathway?	**CONCERN**	**2 – Te Tāhū Hauora** *Clinician interviews:* "We have reasonable triage systems in our GP practice, but patients don't always hear that and when they are experiencing barriers anyway…they just stop ringing…and then they get so sick that they have to go to hospital, or they suffer…and that is happening a lot more for Pacific and Māori than it does for other patients." "We are seeing more referrals declined…planned care where people are left waiting…people on the waiting lists are using primary care so much more than anyone else. Waiting is placing demand on community and primary sector…adds to the burden when we are trying to reduce the number of contacts." "Lost a list last week because there was no staff – regular loss of surgical lists, not able to do what are contracted to do because of staffing issues and the acuity of those who need a response." *Consumer survey responses:* "I have waited six weeks for my last GP practice consult, and	Figures showing restricting access to care which triangulate with consumer and clinician intelligence. There is evidence that the nature of demand (more than the total quantum) is changing and becoming more complex and urgent. However, more data is needed to fully understand the risks associated with restricted access. This includes understanding whole patient pathways including discharge into ongoing care, acute admissions of patients already on the waiting list. Cancer Control Agency data is likely to be particularly important here.

Leading/Lagging (Structure/Process/ Outcome)	Factor	Status	Evidence: 1 - Health NZ evidence assessment from expert group 2 - Te Tāhū Hauora analysis of workforce and consumer evidence 3 - Measurement	Synthesis and direction of travel including expert panel insights

			regular consult times have been reduced by 33 percent. I have had to rattle off all my issues in a very short period, which has meant my GP has not captured everything as there were too many points to cover off."
			
			"From recent experience, with the harsher cost-saving and resource-tight measures I've had two specialist referrals rejected where I believe, otherwise, I would have been seen. Told not worth investigating and so nothing can be done. I wouldn't be able to be seen in the time-windows expected, so not being seen at all or cut out due to stricter requirements."
			
			3 – Measurement
			• GP QED data suggest an increase in primary contacts of 9 percent in 2024 compared with a year earlier.
			• Despite this 20 percent of respondents report difficulties in accessing primary care in the primary care experience survey, more than the pre COVID period. However, this has slightly improved in each of the last three quarters (and marginally better than this time last year).
			• 40 percent of practices have closed books nationally, with variations:
			  ○ Auckland in general is around 25 percent,
			  ○ Canterbury around 50 percent
			  ○ Wellington more than 50 percent
			  ○ In more rural parts of the country only a quarter to a third of books are open.
			• 6-hour ED wait time remains consistently low, at 63.2 percent in July 2024.
			• Increase in self-discharges from ED since before COVID-19 and mortality rate within 30 days among this cohort with 3 hotspots.
			• Relative reduction in lower urgency triage presentations consistently over the last 3 years (while triage 1-3 have increased by around 12 percent triage 4-5 have fallen by nearly 20 percent).
			• Increases in child ASH admissions compared with the pre-COVID-19 period – Health NZ data from RAPID suggests that this may have stabilised in the last year).
			• Provisional peri-operative mortality calculations suggest a long-range and broadly linear increase in risk of the patients operated upon (supporting the hypothesis that patients are becoming more complex over time).
			• Acute admissions as a percentage of all admissions have increased slightly since before COVID-19 (while W/L admissions are slightly lower, but the changes are not dramatic at an overall national level). However, local pressure points exist there are substantial "swings" from elective to acute admissions in Canterbury, Nelson Marlborough, Counties Manukau and Auckland districts.	

Leading/Process	9. Modelling of likely effects of delay on acuity and complexity	**PARTIAL CONCERN** – concerns expressed by clinicians. Fuller data and analysis are required	**2 – Te Tāhū Hauora** *Clinician interviews:* • Acute work going up, limited capacity, elective work being delayed leading to compounding problems. • People who should have had a simple procedure are becoming more complex and likely costing the health sector more. • Transfer to other centres for diagnostic procedures enhances the likelihood that they will be lost to the system and not receive the	Additional work is required for a properly robust model, but there is common thread of evidence from clinician interviews that the effects are being seen.

Leading/Lagging (Structure/Process/ Outcome)	**Factor**	**Status**	**Evidence:** 1 - Health NZ evidence assessment from expert group 2 - Te Tāhū Hauora analysis of workforce and consumer evidence 3 - Measurement	**Synthesis and direction of travel including expert panel insights**
			care they require.	
Leading/Process	10. Are appropriate pathways for the management of disease consistently available?	**MORE DATA NEEDED**	**2 – Te Tāhū Hauora** *Consumer survey:* "An ongoing issue for our rural community is delays in prescriptions from our one and only pharmacist – waiting for hours (days) for prescriptions, even after calling the day before to ensure the pharmacy has received the prescription order from their doctor… many of our community live rurally. They travel long distances to their doctor's appointments and to the pharmacy, so there is a cost in time and dollars that is distressing for our small, rural, low socio-economic town. Another concern is that many of our community are elderly and some live by themselves. Getting their meds is challenging enough, without the added risk of taking the wrong pills." **3 – Measurement** • New diabetes atlas shows a small increase in appropriate medication being dispensed since 2018 but some hotspots of low dispensing and reasonably consistent inter-ethnic disparities. Admissions for diabetic complications are low.	This approach is likely to be valuable for addressing specific conditions and patient groups where risks may manifest. This is work that needs to be developed over time – including e.g. ANZICS-QI data and Atlas updates.
Lagging/Process	11. Are there disruptions or other changes to patient flows that raise concerns about safety risks?	**MORE DATA NEEDED**	**2 – Te Tāhū Hauora** *Clinician interviews:* • Concerns about: ○ Safety of hospitals overnight ○ Rushing people out the door ○ Discharge from hospital to aged residential care with high and complex needs ○ Daily risk of being unable to staff ED ○ Lack of continuity of care (primary care shortages). "A large number of undifferentiated patients who may or may not be high risk. The normal systems of waiting times have blown out. We need to think about how we put a safety net around those people." **3 – Measurement** • Health NZ data 28-day readmission rates are essentially flat over the last year, at around 8 percent. • The reported experience of discharge from hospital in patient experience surveys in terms of information and support available remains stable (even showing slight improvement since before COVID-19).	A clear view of concern expressed by clinicians about processes through hospital not operating optimally with safety implications. Current data inadequate to triangulate with this. Ambulance ramping and corridor use likely useful as measures to explore this (seeking available data now for next. Mental health KPIs.
Lagging/Process	12. Is there any evidence of unwarranted variability or risk in prescribing/dispensing practices in hospital or community?	**MORE DATA NEEDED**	**2 – Te Tāhū Hauora** *Clinician interviews:* • Aged residential care experiences: ○ closure of primary care resulting in delays and barriers in appropriate care and barriers in transferring residents to definitive care ○ Precipitous discharges from secondary care with poor discharge processes, not having the right prescriptions, not having their medications by 5pm on Friday.	
Leading/Outcome	13. Are there any rapid changes in patient	**MONITOR**	**2 – Te Tāhū Hauora** *Consumer survey responses:*	Patient experience of care once they have accessed services remains consistent. However, there is evidence of increased barriers

Leading/Lagging (Structure/Process/ Outcome)	**Factor**	**Status**	**Evidence:** 1 - Health NZ evidence assessment from expert group 2 - Te Tāhū Hauora analysis of workforce and consumer evidence 3 - Measurement	**Synthesis and direction of travel including expert panel insights**
	experience of care at a local level?		"Incredible, versatile staff." "Opotiki after hours - can't stay there even though they have beds there." "Dialysis: waiting list, long travel to access it, stressful." "If you get an ambulance in, then the hospital service is great, but any other way to get seen in the hospital, just forget it." **3 – Measurement** • General pattern of stable data for hospital patient experience measures with no significant changes since 2020. • Primary care patient experience survey: Ability to access healthcare and time spent waiting at the surgery for a walk in appointment are worse than 2021 baseline, otherwise reported experience is stable (a collection of questions around communication about medications show a shift up from 2021).	for accessing services. Decommissioning of local consumer groups and consumer councils will impact on the ability to identify rapid changes in patient experience of care at the local level.
Leading/Outcome	14. Do ACC treatment injury and other claims data reveal any patterns that point to changes in safety?	**CONCERN –** need ACC support for data & interpretation	**3 – Measurement** • Long term general trend of increase in claiming for treatment injuries – these are generally consistent with events reported in 15 (e.g. Pressure Injury Increase). • But interpreting is complex – changes in claiming behaviour points to not just than change in events but also underpinning safety cultures and pressures.	Conversations started with ACC to consider how these data can be included and interpreted. Data necessarily are lagging (as a claim has to be made after the event) but changes in patterns and how these triangulate with forms of discretionary reporting can be revealing of safety cultures and pressures.

Lagging/Outcome	15. Are there any concerning trends in complications and harms?	**PARTIAL CONCERN**	**2 – Te Tāhū Hauora**
			Clinician interviews - [lead indicator, the potential for future complications or harm]:
			• Afterhours care in Tairāwhiti.
			• Cardiology in Taranaki – referrals to Waikato not actioned.
			• Closing Buller – communicating to communities.
			• Bolus of unmanaged cancer.
			• Learned helplessness – thresholds are so high that they aren't making referrals so spending more time with very unwell people.
			
			3 - Measurement
			• Most Te Tāhū Hauora Quality Alert safety outcomes are stable in most places with these exceptions:
			  ○ Post-operative DVT/PE in most parts of the country
			  ○ Pressure Injuries both in and out of hospital onset
			  ○ There are some local hotspots with a larger number of safety measures deteriorating – most notable MidCentral, Waikato, Auckland.
				Workforce interviews and responses to the consumer survey (see indicator 6) indicate that there is the potential for concerning future trends in complications and harms to emerge. These relate to current barriers in accessing preventative or early response treatment and care, and the impact this has on patient health seeking behaviour, and subsequent impacts on complexity and risk of patients entering secondary care.

Lagging/Outcome	16. Are mortality rates changing?	**PARTIAL CONCERN** – need further analysis	**3 – Measurement** • NZ HDXSMR [redacted] appears to be higher than a year ago. [redacted] • North Shore Hospital and Waitakere HDxSMR April 2023 -March 2024 needs further investigation - data anomaly. • [redacted] HDxSMRs show some variance between districts with degree of triangulation between in hospital mortality and other safety markers. • Early analysis of post operative mortality does not point to recent increases in mortality rates (more to follow in the next month).	Early review of new peri-operative mortality reveals no significant increases in risk adjusted mortality rate, but: • widespread variation with Waikato, Mid Central, Lakes and Counties Manukau appearing to have higher SMR than elsewhere • a marked increase in the proportion of higher risk surgical patients particularly since 2020, in part reflecting an increase in acutely admitted patients. These are provisional results that are still being confirmed and investigated.

Leading/Lagging (Structure/Process/ Outcome)	**Factor**	**Status**	**Evidence:** 1 - Health NZ evidence assessment from expert group 2 - Te Tāhū Hauora analysis of workforce and consumer evidence 3 - Measurement	**Synthesis and direction of travel including expert panel insights**
Lagging/Outcome	17. Qualitative review of HDC complaints and AE investigations to consider common 'deep' causes	**MORE DATA NEEDED**	*This work is to follow.*	