



HEALTH QUALITY & SAFETY
COMMISSION NEW ZEALAND

Kupu Taurangi Hauora o Aotearoa

Guide to using the quality and safety markers dashboard

December 2020



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Introduction

The [quality and safety markers](#) (QSMs) are used by the Health Quality & Safety Commission to evaluate the success of its quality improvement programmes and determine whether the desired changes in practice and reductions in harm and cost have occurred. The QSMs are sets of related indicators concentrating on specific areas of harm.

The national QSM report has moved to a dashboard format. This guide has been created to help people use and understand the QSM dashboard and its features.

For enquiries, please email: gsm@hgsc.govt.nz.

Key findings

On each page, you can hover over different parts of the dashboard to see more information.

Select which district health board (DHB) or region, quarter and domains you want to view from the dropdowns. The key findings will reflect related results. In the case shown below, it is New Zealand (NZ) in July–September 2020 with all domains showing.



Home page

New Zealand in July–September, 2020

Hover here to see notes about the time periods of certain measures

Where? New Zealand

When? July–September, 2020

Domain All

Domain, Type and Name

The first three columns ('Domain', 'Type', 'Name') list the domains and types and names of measures.

For example, in the falls domain, there are two process measures (assessment, plan) and one outcome measure (in-hospital falls causing fractured neck of femur).

DHB selected quarter, NZ selected quarter, DHB previous quarter and Target

The next four columns give the current quarter measure for the DHB or region ('DHB selected quarter'), the selected quarter measure for New Zealand ('NZ selected quarter'), the previous quarter measure for the DHB or region ('DHB previous quarter') and the 'Target' for the measure, if applicable.

For example, in the falls domain for the assessment measure, New Zealand recorded an 83.9 percent result for the July–September 2020 quarter. In the previous quarter, a value of 0 was recorded and the target is 90 percent.

DHB selected quarter	NZ selected quarter	DHB previous quarter	Target
83.9	83.9	0.0	90
91.7	91.7	0.0	
5.4	5.4	10.7	
85.9	85.9	87.2	
0.2	0.2	0.2	

Comparisons and Trend

The column 'Compared with NZ selected quarter' provides a quick idea of where the DHB or region sits in relation to New Zealand. This is a comparison calculated using a 95 percent confidence interval using the Wilson score method for proportions.

A DHB or region is compared with New Zealand for the measure in the selected quarter in the following ways:

- 'Higher' means the DHB or region is significantly higher than the New Zealand measure.
- 'Same' means the DHB or region is not significantly different from the New Zealand measure.
- 'Lower' means the DHB or region is significantly lower than the New Zealand measure.

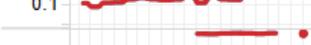
The trend gives an idea of how the DHB or region has changed over time.

You can select the time period for the trend graph above using the 'Trend time period (slide left and right)' filter. This lets you focus on time periods of interest, rather than view the entire time series.

The DHB trend is in blue; the New Zealand trend is in red.

■ DHB selected quarter Trend time period (slide left and right)
■ NZ selected quarter 2015 Q4 to 2020 Q3

lect data was temporarily suspended for quarter 1, 2020 and quarter 2, 2020. As a result,

ed	DHB previous quarter	Target	Compared with NZ selected quarter	Trend
	0.0	90	Same	
	0.0		Same	
	10.7		Same	
	87.2		Same	
	0.2		Same	
	0.0		Same	
	0.0		Same	
	0.0		Same	
	0.0		Same	

Marker pages

On each page, hover over different parts of the dashboard to see more information.

Navigation

At the top of the marker page is a section allowing you to navigate to helpful sections of the workbook. After clicking any one of the underlined titles, wait a couple of seconds. It can take time to load the page.

Summary

The 'Summary' section on the marker page allows you to select the DHB or region you want to focus on and the quarter you want to view. It shows a quick summary of results for that quarter.

All the measures are listed for the current and previous quarters.

For example, in New Zealand in July–September 2020:

- Assessment: 83.9 percent of audited older patients were assessed for the risk of falling.
- Plan: 91.7 percent of these people assessed as 'at risk of falling' also received an individualised care plan to address these risks.
- In-hospital falls causing fractured neck of femur: there were 13 falls in hospital causing fractured neck of femur, which gives a rate of 5.4 falls per 100,000 admissions.

Process measures

The 'Process measures' section displays all the relevant process measures over time for the DHB or region.

When a DHB is selected, information for the DHB and New Zealand will be displayed.

When a region is selected, all the DHBs in that region, the region as a whole and New Zealand will be displayed.

There is a time slider above the chart to allow you to change the period of time you want to view.

Outcome measures

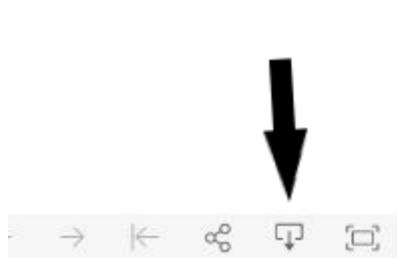
The 'Outcome measure' section displays the relevant outcome measure(s) in the form of a line chart, a run chart, a control chart or a rolling 12-month chart. For more information about each type of chart, see the section below about [Outcome measure \(times series\) charts](#).

Select the time period you want to see for the charts using the time slider.

Download selected pages

Set up

1. Select a DHB or region on the home page.
2. Click the download button at the bottom-right of the page (shown below).



Download just one page

Suggestion: choose image – this is the quickest to download and is reasonable quality.

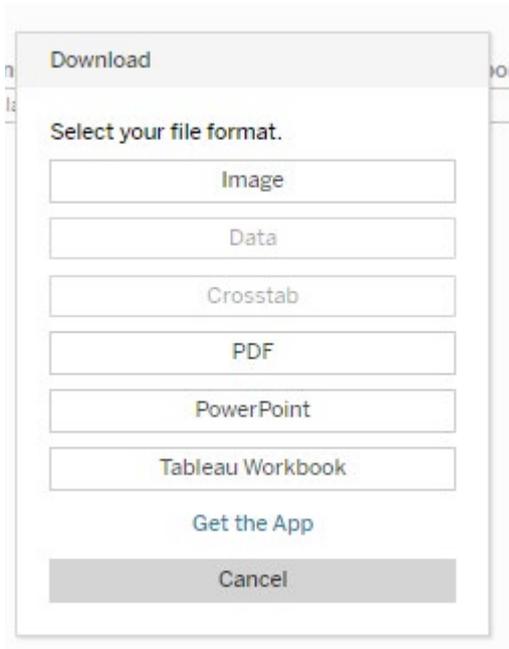
Follow steps 1 and 2 of [Set up](#) above then select 'Image'. Your page will download.

Download a full report

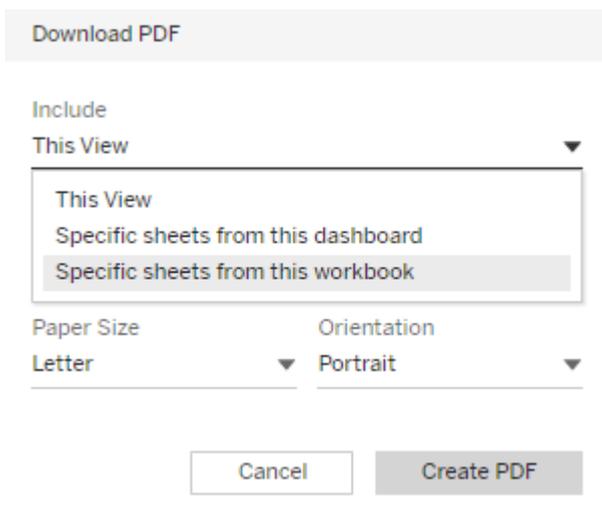
Suggestion: choose PDF or PowerPoint.

Follow steps 1 and 2 of [Set up](#) then follow these steps:

1. Choose your format for download (eg, PDF).



2. For a PDF or PowerPoint file, under 'Include', change 'This View' to 'Specific sheets from this workbook'. This will give you a selection of sheets to download.



3. Click the sheets you want for your report. One way to do this is to click 'Select All' then deselect the sheets you don't want.
4. For a PDF, you can change 'Scaling', 'Paper Size' and 'Orientation' as you like. These options are not available for PowerPoint.
5. Click 'Download'. Your report should start downloading.

Outcome measure (time series) charts

On each page, hover over different parts of the dashboard to see more information.

Line charts

Applies to the following markers: Electronic medicine reconciliation, Patient deterioration, Pressure injury, Safe surgery and Safe use of opioids.

The default chart displaying information about the outcome measures for the markers listed above is a line chart. This shows either the rate or the number of events, for the relevant marker.

- For example, the safe surgery marker shows the number of observed (blue) vs predicted (red) deep-vein thrombosis/pulmonary embolism cases.
- In patient deterioration, the graph shows both the number of cardiopulmonary arrests and the number of rapid response escalations per 1,000 admissions for both the selected DHB (blue) and New Zealand (grey).

Run charts

Applies to the following markers: Falls, Hand hygiene, Safe surgery, SSI cardiac and SSI orthopaedic.

Run charts are a type of statistical process control (SPC) chart. These run charts display a rate and its median.

The median, the middle value, displayed is the baseline median. For the falls marker, this baseline is calculated from two years of data (July 2012–June 2014); for the other markers, the baseline is calculated from one year of data.

If the rate has shifted statistically significantly lower or higher than the baseline, the median is recalculated based on the points after the shift. This shift usually occurs if there are at least six points in a row above or below the baseline median. However, some shifts are less meaningful than others, so a degree of manual interpretation is required.

Control charts

Applies to the following markers: Falls, Hand hygiene, Safe surgery, SSI cardiac and SSI orthopaedic.

Control charts are also a type of SPC chart. These control charts display a rate, its mean and the control limits, therefore this is an x-bar (\bar{x}) chart.

The mean, a form of average, displayed is the baseline mean. This is calculated on the same baselines as the median in the run charts.

Any statistically significant shift up or down is manually determined and the control limits are recalculated.

Rolling 12-month charts

Applies to the following markers: Falls, Hand hygiene, Safe surgery, SSI cardiac and SSI orthopaedic.

These charts display the aggregated rate for a 12-month period.

- For example, the falls marker shows the rolling 12-month rate for the selected DHB (blue) vs New Zealand (red). The rate ending September 2020 for New Zealand is 8.9 per 100,000 admissions.
- This is different from the rate for the July–September 2020 quarter, at only 5.4 per 100,000 admissions. This indicates that, in the period October 2019 to June 2020, there were generally higher rates of fall admissions resulting in a fractured neck of femur than in July–September 2020.

A rolling 12-month rate is a better rate to focus on for smaller DHBs than a quarterly rate (line chart, run chart or control chart), who face challenges of small numbers in the usefulness of their results.

Safe use of opioids composition of harm diagnoses chart

Applies to Safe use of opioids marker

The composition of harm diagnoses chart in the safe use of opioids marker displays the breakdown of the percent of admissions that have opioid-related harm by harm.

- The percentage of admissions with a harm diagnosis of opioid-induced constipation is displayed in bouquet colour.
- The percentage of admissions with a harm diagnosis of opioid-induced nausea and vomiting are displayed in pink salmon colour.
- The percentage of admissions with a harm diagnosis of opioid-induced ventilatory impairment are displayed in toast colour.