

# Core data set specifications

## The specifications help establish business as usual

The purpose of this document is to provide some specifications for the development and implementation of the core data set as a business as usual process. The document covers the following:

1. Assumptions underpinning core data set implementation.
2. Selection of measures for the core data set.
3. Process for collecting and collating the measures.
4. Display or visualisation of the data.
5. Use of the core data set.

## The core data set is underpinned by a number of assumptions

- The data being used for the core data set is accurate and complete.
- CCDM governance is in place and operational.
- There are established lines of accountability and responsibility.
- Monthly meetings occur at multiple levels of the organisation.
- The core data set will be integrated with the current DHB reporting processes (not separate or in addition to).
- Monitoring of the core data set occurs as per the agreed partnership model.
- Business information and information technology services will prioritise the development and implementation of the core data set as per the CCDM programme plan.
- Information technology system interfaces are functional.

## All the measures from the core data set need to be used

- All of the measures from the core data set need to be implemented for wards/units, services, directorates and the hospital.
- DHB or directorate goals or priorities may inform the initial selection.
- The local data council can choose a subset of measures from the core data set. Measures may be selected on the basis of identifying areas for improvement, dependent measures or those of concern or interest to staff. Once sustainable improvement in a measure has been achieved the next measure for focus should be selected.

## There needs to be a documented process for collecting and collating the measures

There needs to be a documented process for business as usual. As per stocktake for business as usual, this should include:

- Definition of the measure.
- Unit of measure.
- Frequency (monthly/quarterly).
- Trended over time.
- What data repository is the measure housed in?
- Who collates the measure?
- Who distributes the measure?
- At what time of the month is the data available?
- Who is the data distributed to?
- In what format?
- What action should be taken e.g. discuss at ward meeting, line manager monthly meeting?

## Data display needs to be user friendly

The data can be displayed electronically or be paper based. The DHB should work towards an automated visualisation tool that enables drill-down to a ward level and where relevant, by day and by shift. It's not just about sharing data, it's about sharing what the data *means*. Control charts are recommended to enable quick identification of special cause variation.

Where some charts cannot be displayed electronically, consider building background rules to highlight special cause variance, trends etc. Follow the 'if this, then check' flow chart from the core data set directory to determine likely cause/consequence.

The core data sets from the wards are aggregated for a service/directorate view. The service and directorate views are then aggregated to a hospital view. The ability to drill-down is maintained at all levels.

### Charting do's

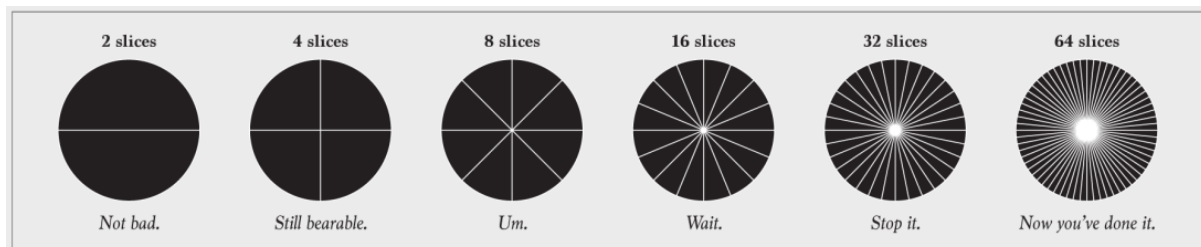
- Charts must have a scale, legend and labels.
- Label the x and y axis.
- Include the units e.g. hours, percentage.
- Keep circles and other two-dimensional shapes in proportion (size circles and other two-dimensional shapes by area).
- Include the source of the data.
- Show trends overtime.
- Take into account who and what your graphs and charts are for.
- Bar and line chart baseline must start at zero.
- Charts (such as pie charts) that should represent parts of a whole should show all of the parts that add up to 100%.
- Use plenty of white space.

- Use transparency so that symbols still appear when another is placed on top e.g. for charts with intersecting lines.
- Apply acceptable rules for the display of ordinal, interval and nominal data.
- Add simple infographics to highlight what you want people to focus on.
- Try to use a few simple contrasting colours that are both pleasing and easy to differentiate from each other at a glance. Use the same colours throughout. For more information refer to [http://www.perceptualedge.com/articles/visual\\_business\\_intelligence/rules\\_for\\_using\\_color.pdf](http://www.perceptualedge.com/articles/visual_business_intelligence/rules_for_using_color.pdf)

## Charting don'ts

- Don't go overboard with pie slices (see Figure 1).
- Avoid over plotting or presenting too much data on one chart.
- Don't go out of your way to delete information or skew your story one way or the other.
- Avoid using visual effects in graphs e.g. 2D.
- Avoid using a combination of red and green in the same display. Most people who are colour-blind cannot distinguish between groups of red and green data.

Figure 1 - Pie charts



## The core data set is only effective if you use it

- The CCDM council takes overall responsibility for monitoring the core data set (exception reporting only).
- The core data set:
  - is used to effectively manage care capacity demand management.
  - is used to align staff activities with DHB goals and priorities.
  - provides a framework for reporting to line managers, at council meetings, operations meetings, quality meetings and so on.
  - should be readily accessible and visible to staff at all levels of the organisation.
- There are regular opportunities to discuss the core data set with staff.
- Staff are engaged in identifying opportunities for improvement.
- An improvement plan is developed from the data.
- Concerns about the core data set results are escalated to the CCDM council.