This presentation is for all staff and aims to answer the following questions:

- What is Care Capacity Demand Management (CCDM)?
- Where are we at with CCDM?
- What is variance?
- How do DHBs respond to variance?
- What is CCDM variance response management?
- Need more information?

This slide show will take you about 15 minutes to read.
What is CCDM?

CCDM aims to ensure that you are in the right place, providing the right care, at the right time.

There are 3 main components in the programme

1. Core data set
2. Staffing methodology
3. Variance Response Management

Each of the components depends on the other, to get the most out of the programme.

The following slides focus on variance response management.
Where is this DHB at with CCDM?

DHBs will be at different stages of each part of the CCDM programme. There are a number of tools and processes included in the CCDM components.

Staff training is included as part of each component also.

The CCDM variance response management component will help us to better match our capacity to care with patient demand.
What is variance?

Variance is a mismatch between the patient demand and the capacity to care.
What is variance?

The graph below is an example of variance on an evening shift. The solid blue line shows care hours provided. The solid orange line shows actual patient demand.

As you can see at times there is a mismatch between patient demand and care hours provided.

As you would know patient demand can be variable. Being able to predict and respond to variance is really important for safety and efficiency.
How do DHBs respond to variance?

There are 3 possible ways to respond to variance:

<table>
<thead>
<tr>
<th>Decrease demand</th>
<th>Increase capacity</th>
</tr>
</thead>
</table>
| • Manage the front door i.e. admissions to ED  
• Increase discharges  
• Cancel planned and/or elective surgery/procedures | • Open beds and/or use treatment and side rooms  
• Call staff in and/or ask staff to work longer shifts  
• Share staff between wards  
• Increase staff skills and/or knowledge  
• Mobilise non-floor staff e.g. educators, nurse leaders, speciality clinical nurses  
• Mobilise ancillary staff e.g. security, orderlies |

<table>
<thead>
<tr>
<th>Reduce quality of care</th>
<th></th>
</tr>
</thead>
</table>
| • Provide essential patient care only  
• Have a lesser skill or staff mix |  

Variance response management is a set of agreed tools and processes used when there is a mismatch between patient demand and care hours available.

Your DHB will already have a number of tools and processes. CCDM builds on what is already in place.

There are 4 main tools and processes that are part of CCDM variance response management.
The 4 tools

1. Integrated operations centre
2. Capacity at a glance screens
3. Variance indicator system
4. Standard operating procedures
1. Integrated operations centre

An integrated operations centre is like an airport control tower. The control tower staff have a bird’s eye view. They use all available information to coordinate which planes can land and take off.

Similarly, a hospital operations centre provides whole of hospital, patient and staff coordination.

Whole of hospital coordination makes sure that you are in the right place, at the right time to provide patient care.
2. Capacity at a glance screens

Capacity at a glance screens display up to date patient numbers and acuity (TrendCare) information in the integrated operations centre.

The integrated operations centre staff use the information to make decisions about staffing and patient allocation, to your area.

Screens are often also located around the hospital, so you can see what's going on too.

The screens show the ward/unit status using a variance indicator system that is displayed as a ‘traffic light’.

Wix images, retrieved June 2018
3. Variance indicator system

The variance indicator system is an electronic tool for capturing variance indicators.

The variance indicator system is operated by you, by selecting indicators.

You need to assess your ward/unit once per shift and whenever there is a change.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missed breaks</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Poor skill mix</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Poor staff mix</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Negative hours variance</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Positive hours variance</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Care rationing</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Professional judgement deems it unsafe</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
3. Variance indicator system

Each indicator contributes to the overall status of the ward/unit which is displayed as a colour. The colours are mauve, green, yellow, orange or red.

The variance indicator score is displayed on the capacity at a glance screens. It signals what is going on in your ward/unit at any point in time.

There is an agreed and standardised procedure for each colour.
3. Variance indicator system

There is a set of standard responses for clinical, operational and executive staff. Responses are colour dependent.

Standard operating responses enable you to make decisions and take action quickly, under pressure. They remove the guess work.

<table>
<thead>
<tr>
<th>Ward</th>
<th>Operations centre</th>
<th>Executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-assign duties</td>
<td>Re-assign staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status quo Monitor</td>
<td>Status quo Monitor</td>
<td>Report Forecast</td>
</tr>
<tr>
<td>Monitor Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team huddle</td>
<td>Assess Re-assign staff</td>
<td>Forecast</td>
</tr>
<tr>
<td>Assess workload Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essential cares</td>
<td>Assess Re-assign staff</td>
<td>Invoke essential cares Report &amp; plan</td>
</tr>
<tr>
<td>Team huddle</td>
<td>Review plan</td>
<td></td>
</tr>
<tr>
<td>Emergency response</td>
<td>Report &amp; plan</td>
<td>Take charge</td>
</tr>
<tr>
<td>Report</td>
<td></td>
<td>Respond</td>
</tr>
</tbody>
</table>
4. Standard operating procedures

The essential cares guideline is a standard operating procedure. It provides an organisationally agreed way to respond when there is a mismatch in patient demand and care hours available.

The essential cares guideline describes what care to prioritise, under extreme conditions. It is usually activated when your ward/unit is in orange and red.

The guideline provides you with the what, when, how and who needs to know you are providing essential cares only.
4. Standard operating procedure

The reallocation guideline and smart 5s work together. The reallocation guideline standardises the process when you go and help in another ward. Smart 5 is a checklist you are given when you arrive on a ward/unit to help.

The checklist explains what you can do to help. The checklist also shows the ward layout and any other important ward/unit specific information.

There is usually a space for feedback – how did it go for you?
Pulling it all together

The operations centre, screens, variance indicator system and standard operating procedures work together. You can’t have one without the other.

The result is a ‘well oiled machine’.

The well oiled machine....great pieces make a top notch team!
If you have questions about the variance response management, talk with your clinical manager, CCDM Site Coordinator, health union delegate or organiser.

If you just want more information on CCDM or the core data set go to the CCDM website – ccdm.health.nz

If you want to get involved, start with doing TrendCare – **actualise every patient, every shift, every day**. This makes a massive difference to the data that will be used every day to make decisions on staff and patient allocation.