Through the Looking Glass

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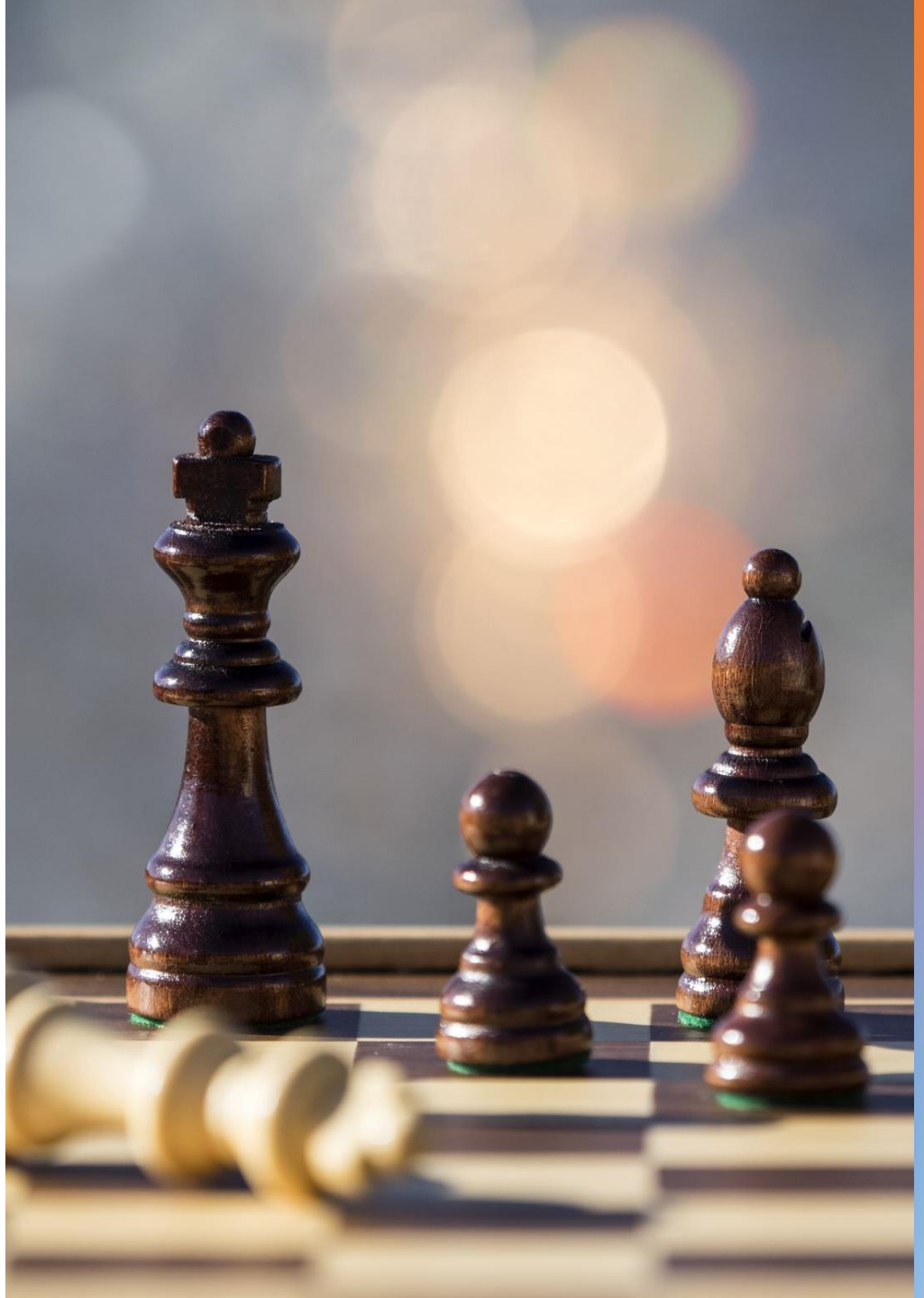
CCDM

- An elaborate game of chess
- A multiplicity of players
- A plethora of agendas
- Multiple rabbit holes
- An abundance of kings and queens
- More than a few Mad Hatters



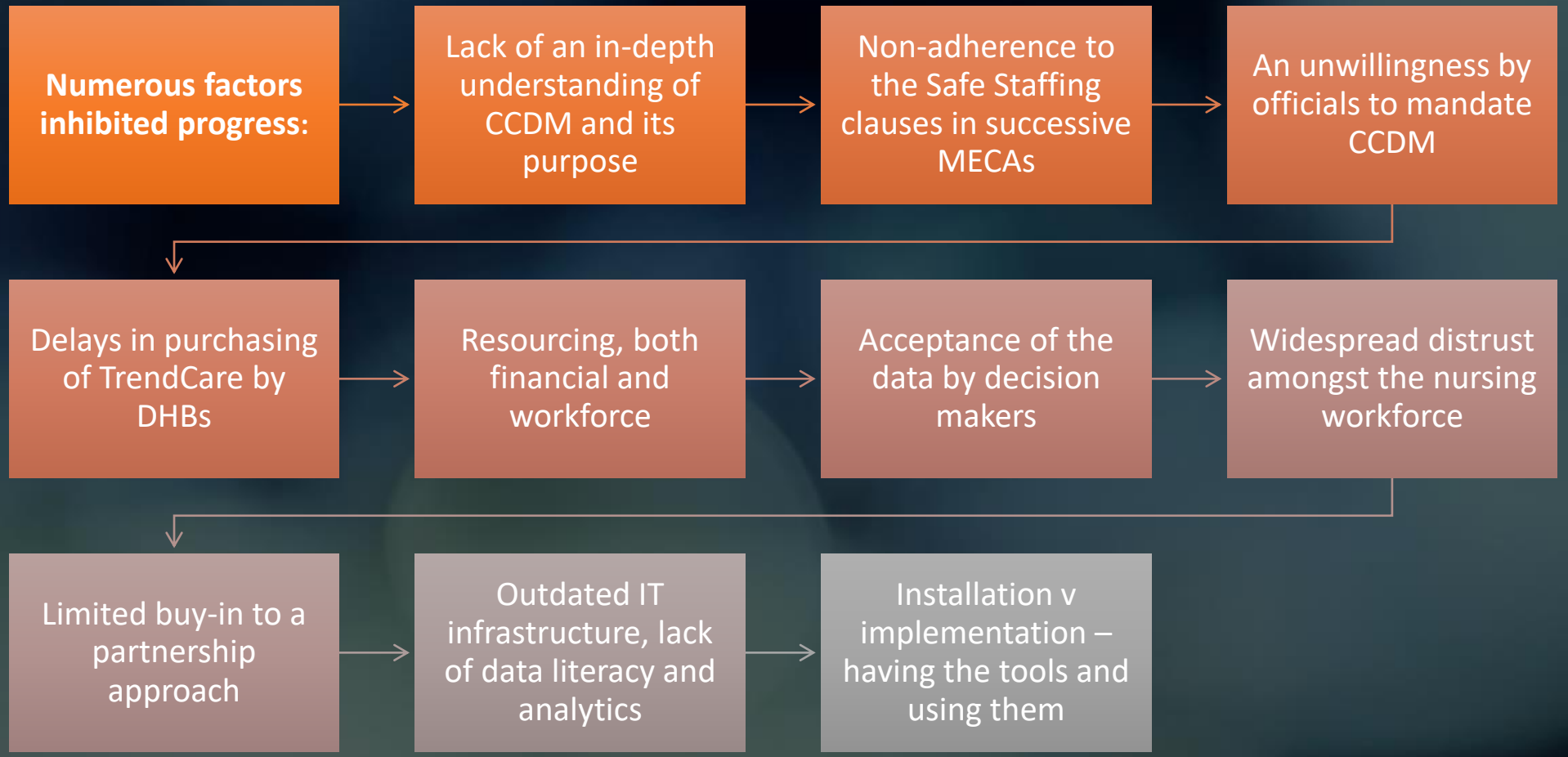
- The CCDM Programme is a set of tools and processes that help DHBs better match the capacity to care with patient demand
- The goal is quality patient care, quality work environment and best use of health resources

Programme Components:

1. **CCDM Governance** – operational structure to support implementation of CCDM, levels at DHBs such as CCDM councils
2. **Core Data Set** – 23 metrics to monitor performance, guide decision making and quality improvements
3. **FTE calculation** – validated process for determining staffing levels required to meet demands of patient acuity using TrendCare data
4. **Variance Response Management –** tools and processes to match demand for patient care

A potted history…

- 2005 MECA negotiations
- 2006 Committee of Inquiry
- 2007 SSHW Unit est
- 2009 3 DHB demonstration sites established
- 2010 independent review of the CCDM programme
- 2011 3 more DHBs start implementation. DHB funding is secured to progress CCDM implementation. Commitment to implementation in 12 DHBs by June 2013
- 2012 5 more DHBs sign up = 11 in total MECA clause commits to ongoing work on safe staffing
- 2014 CCDM programme independently evaluated
- 2018 14 DHBs signed up; 17 have TrendCare. MECA requires all DHBs to be implementing or have implemented by June 2021. The Safe Staffing Effective Implementation Accord is signed and extra funding is provided to support the implementation of CCDM


Numerous factors inhibited progress:
Lack of an in-depth understanding of CCDM and its purpose
Non-adherence to the Safe Staffing clauses in successive MECAs
An unwillingness by officials to mandate CCDM
Delays in purchasing of TrendCare by DHBs
Resourcing, both financial and workforce
Acceptance of the data by decision makers
Widespread distrust amongst the nursing workforce
Limited buy-in to a partnership approach
Outdated IT infrastructure, lack of data literacy and analytics
Installation v implementation – having the tools and using them

The Review

In view of the significant time and resources invested in CCDM, the Nurse Safe Staffing Review was commissioned by the then Minister of Health Andrew Little to:

- *Review implementation of CCDM*
- *Compare outcomes in DHBs*
- *Examine the impact of CCDM on safe staffing*
- *Make recommendations for next steps*

- 3 month timeframe – kick off in September 2021
- Secretariat provided by KPMG

Nursing Advisory Group (NAG)

Hilary Graham-Smith

Dr Rhonda McKelvie

Dr Jill Clendon

Kapua Quinn

Approach

Focus was inpatient wards and units including adult mental health

Qualitative data from the following sources:

13 interviews

19 focus groups

18 Directors of nursing – interviews and focus groups

2 site visits

For ED

3 focus groups and 3 interviews plus participation in the survey

Quantitative data

- National survey – open to all nurses, nursing leadership, HCAs and DHB leadership (3,992 responses)
- Data from the Core Data Set – care hours variance and shifts below target in a defined period
- DHBs divided into three groups
- Fully implemented
- Mostly implemented
- Least implemented

We concentrated on two metrics for making comparisons across DHBs with different level of implementation and across the 4 types of wards we focused on.

Data Dates

We received data from each DHB for the period: 1/10/2018 – 30/09/2021

Not all DHBs could provide data for the full period.

Wards Types

We concentrated on 4 ward types:
- Medical
- Surgical
- Adult Acute Mental Health
- Rehab (AT & R)

Metrics

Care Hours Variance
is the difference between the clinical hours (actual provided hours) and required hours (patient needed hours). It is recorded per shift. It can be represented as a percentage value which allows for easier comparison.

The ideal zone (green) is between 2 hours positive and a -4% variance.

DHBs

We analysed data from 19 out of 20 DHBs. All except for Waikato, which experienced a recent cyber attack and no data was available before October 2019 as they did not have TrendCare in place.

Ward Number

In total, we receive data for **260** wards.

Some wards merged or split out during the period of considered data. We analysed the number as they were at the time. 260 is the most recent number after all changes.

Shifts Below Target
A shift is considered below target if the difference in the care hours provided and the care hours required was smaller than negative 8.5% (or more than 40 minutes per FTE). It is calculated on a monthly level by dividing the number of shifts below target by the total number of shifts in that month.

Ideally, 0% of shifts are below target.

Our analysis grouped the DHBs per level of implementation (see Table 1). We also broke down the analysis per ward type. We were able to provide an overview across NZ in terms of Care Hours Variance and Shifts Below Target. Please see "Care Hours Variance Analysis Method" and "Shifts Below Target Analysis Method" in the appendices to understand the analyses and visualisations.

* D: Day E: Evening N: Night O: Overall

Shift Below Target	2018 Month Ave (%)				2019 Month Ave (%)				2020 Month Ave (%)				2021 Month Ave (%)			
	D	E	N	O	D	E	N	O	D	E	N	O	D	E	N	O
All NZ	32	16	11	20	34	18	12	21	28	15	11	18	36	19	14	23
Fully Implemented DHBs	38	20	12	23	40	20	13	24	30	16	11	19	43	23	15	27
Mostly Implemented DHBs	27	13	11	17	36	19	14	23	32	16	11	20	35	19	15	23
Least Implemented DHBs	12	8	5	8	9	5	4	6	17	10	9	12	27	13	11	17
Medical wards	32	19	13	21	37	21	16	25	29	16	12	19	42	23	18	28
Surgical wards	37	15	9	20	40	18	11	23	32	15	9	19	38	18	13	23
AAMH wards	30	16	8	18	25	11	6	14	27	14	10	17	34	14	7	18
Rehab (AT & R) wards	16	11	9	12	17	13	10	13	12	11	8	10	17	13	11	14

Table 2 : Shifts Below Target across NZ

Red zone Shifts	2018 Month Ave (%)				2019 Month Ave (%)				2020 Month Ave (%)				2021 Month Ave (%)			
	D	E	N	O	D	E	N	O	D	E	N	O	D	E	N	O
All NZ	25	13	9	**16**	27	13	10	**17**	21	11	8	**13**	29	14	11	**18**
Fully Implemented DHBs	31	15	10	**19**	31	15	10	**19**	23	12	8	**14**	34	17	12	**21**
Mostly Implemented DHBs	21	10	9	**13**	28	14	11	**18**	25	12	9	**15**	28	14	12	**18**
Least Implemented DHBs	8	6	4	**6**	6	4	3	**4**	14	9	8	**10**	21	10	9	**13**
Medical wards	25	14	11	**17**	28	15	13	**19**	21	12	10	**14**	33	18	14	**22**
Surgical wards	29	11	7	**16**	31	13	8	**17**	25	11	7	**14**	30	13	10	**18**
AAMH wards	26	14	8	**16**	21	9	6	**12**	23	13	9	**15**	28	11	6	**15**
Rehab (AT & R) wards	11	7	7	**8**	12	9	8	**10**	8	8	6	**7**	12	9	9	**10**

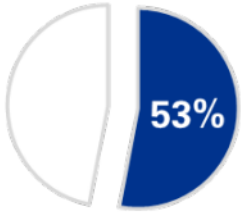
Table 3 : Shifts in VRM's Red Zone across NZ

83%

of staff said that patients in understaffed shifts are not receiving complete care

62%

of frontline staff reported that half or more of their last 10 shifts were understaffed



of frontline nurses reported being in a poor or very poor mental state on understaffed shifts

18%

Of all shifts in the 4 ward types we examined were in the "red zone" (critical care capacity deficit)

41%

of frontline staff reported being asked to take extra shifts weekly

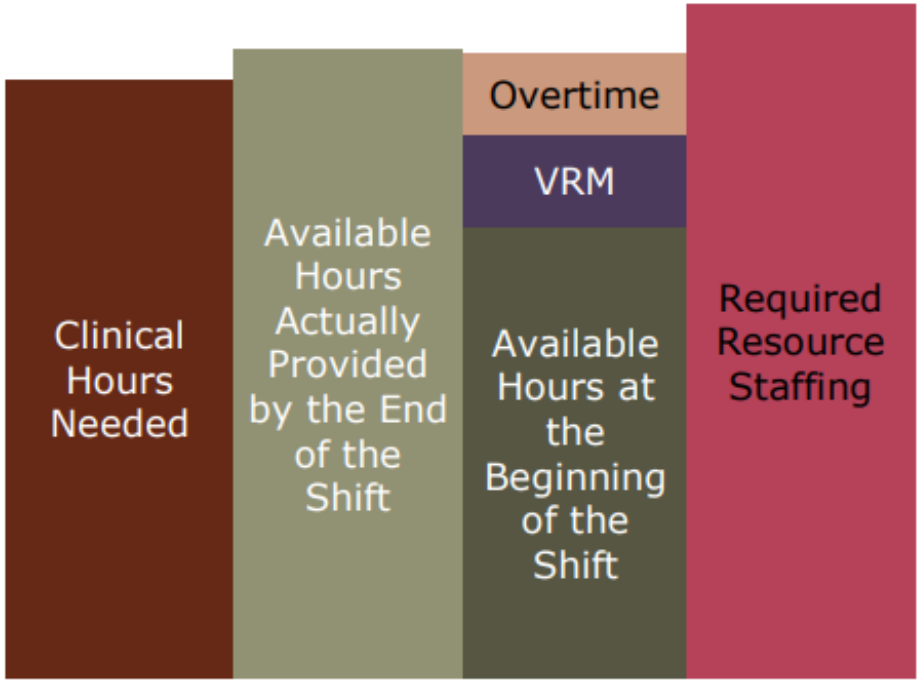
43%

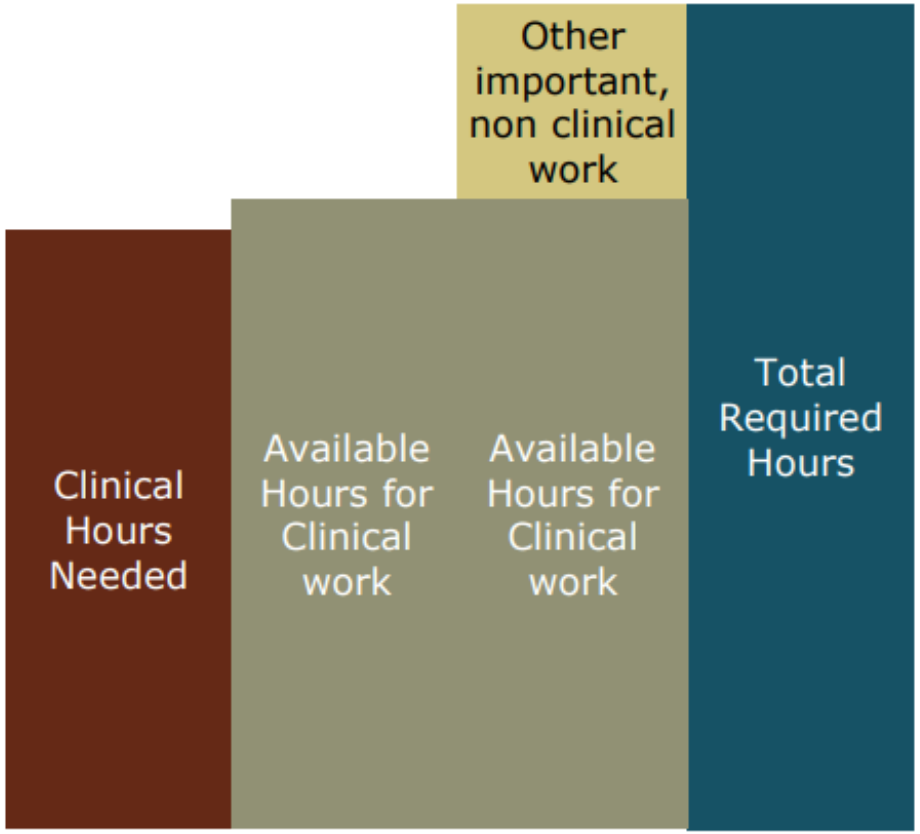
of day shifts in DHBs in which CCDM is fully implemented were Shifts Below Target in 2021

of all shifts over Aotearoa New Zealand were Shifts Below Target in 2021

70%

of frontline staff said that staff are not available when they are needed for Variance Response





Example 1

This view provides visibility of the mechanisms deployed to ensure the needed clinical hours were met. It displays where help came from and whether the required resource staffing has been met.

Example 2

This view provides visibility of the different types of tasks nurses and other floor staff are required to do.

Figure 14: Two examples of how Care Hours Variance can be visualised more effectively

The data collected through CCDM provides a transparent picture of the reality that frontline nursing staff face. Participants have reported pushback for "airing dirty laundry" when providing reports on the realities of the frontline, and risks of harm to patients to leadership.

- The review found CCDM can deliver meaningful outcomes, provided it is appropriately configured, supported and funded and there are sufficient nurses in the pipeline to recruit into vacancies
- In its current form CCDM does not serve the interests of Māori patients and their whānau and there is significant work to be done at both operational and governance level
- Critical connection has to be made between **patient safety and safe staffing**
- CCDM has highlighted the significance of the nurse staffing shortage and increased the visibility of the work that nurses do

	Key success factor	Limited	Variable	Widespread
1	Strong buy-in from DHB Executive Leadership	✓		
2	Active participation in CCDM Councils by DHB Executive Leadership	✓		
3	Mutual understanding and trust between DHBs and Unions		✓	
4	Data literacy programmes aimed at different levels across the DHB	✓		
5	Supporting IT and data infrastructure that is fit-for-purpose		✓	
6	Data analyst support to produce visualisations that allow actionable insights to be drawn easily	✓		
7	Sufficient funding and resourcing of CCDM teams		✓	
8	Visible actions are taken as a result of CCDM	✓		

- As part of the review we explored patient ratios and international research on safe staffing
- We do not have the supply of nurses required for ratios to be effective
- Ratios do not take into consideration Te Tiriti responsibilities
- Prevailing sentiment from those who we engaged was that ratios would not work in Aotearoa

Recommendations

1. Review the design, operation, implementation and governance of TrendCare and CCDM to recognise and uphold the articles of Te Tiriti

A fundamental review of the tools of CCDM and TC along with ongoing operational advisory and kaitiakitanga is required.

2. Re-design key components of the CCDM programme to ensure it is fit-for-purpose

Significant changes are needed to components of CCDM and the processes which underpin it. Key changes include re-defining, simplifying and standardising measures and reporting, linking CCDM tools to patient outcomes, and ensuring the programme encompasses Te Tiriti responsibilities

3. Strengthen leadership and accountability for the CCDM programme

Commitment to CCDM is currently varied across DHBs, with differing levels of engagement, ownership and buy-in across the Executive Leadership Team of different organisations. Having strong support from the top is critical to the success of CCDM.

4. Invest in the infrastructure which enables and underpins CCDM

The success of the CCDM programme is dependent on a number of external factors, including: funding, resourcing, legislation, governance, leadership, data literacy, and IT infrastructure.

5. Increase nursing supply immediately, and in the longer-term

CCDM will not be able to deliver its intended outcomes if there are insufficient nurses in the pipeline to recruit to vacancies. Existing plans to recruit additional nurses must be expedited, and that the longer-term workforce strategy reviewed to ensure it accurately reflects the expected increase in nurses required to meet care needs.

6. Review the role of the Safe Staffing Healthy Workplaces Unit

The Safe Staffing Healthy Workplaces Unit (SSHW) was initially established to develop CCDM and support and coordinate implementation at DHBs, however its role, purpose and the outcomes against which it is assessed are no longer clear.

7. Establish a national work programme and office to oversee delivery of changes to CCDM

Significant work will be required to enhance CCDM and enable it to deliver meaningful outcomes. A national work programme and office should be created to plan, coordinate and deliver key initiatives across DHBs, reporting on progress and achievement to the Minister and the Ministry of Health.

8. Emergency Department Nursing

The majority of EDs in Aotearoa New Zealand do not have TC available or working. Development work needs to be completed on the ED module. Once completed the ED TC module should be implemented nationwide to enable additional data to be collected at a national level. This will provide information to DHBs on current staffing shortages to inform FTE calculations.

CCDM should have a hospital-wide approach and include Community and out-patient services

In closing

Participating in this review was both humbling and distressing. Hearing first hand from nurses about the difficulties they face on a daily basis, the concern they have for their patients and the exhaustion they are feeling was deeply concerning. Hearing how they coped, their resilience, commitment and professionalism was awe inspiring.

- Kia kaha, kia maia, kia manawanui

Thank you