THE RIGHT CARE IN THE RIGHT PLACE AT THE RIGHT TIME

THE SAFE STAFFING HEALTHY WORKPLACES UNIT: 2007-2014

DOCUMENTING THE CONTRIBUTION OF THE SSHW UNIT TO THE JOINT DHB/NZNO SAFE STAFFING HEALTHY WORKPLACES AGENDA
THIS DOCUMENT WAS COMMISSIONED BY THE SAFE STAFFING
HEALTHY WORKPLACES UNIT

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EXECUTIVE SUMMARY

The Safe Staffing Healthy Workplaces (SSHW) Unit was commissioned in 2007, with funding from the Minister of Health, to support the 21 District Health Boards (DHBs) to implement the recommendations of the 2005 joint Safe Staffing Healthy Workplaces Committee of Inquiry.

The SSHW Unit was established with co-governance provided by the DHBs and the New Zealand Nurses Organisation (NZNO). The co-governance model represented the commitment of both parties to working in partnership to address long held concerns about the work environment of nurses and the ability to consistently provide high quality care.

Over the following seven years, the SSHW Unit worked with the parties to develop sophisticated solutions in order to address the key elements of safe staffing and healthy workplaces identified in the Committee of Inquiry’s report. The primary output of the Unit has been the development of the Care Capacity Demand Management (CCDM) Programme, a whole of system approach to ensuring that DHBs have the capacity on the day to meet the demand placed on the organisation.

This document provides an overview of the history and evolution of the work of the Unit and of the DHBs and unions which participated. The purpose is not only to capture the steps that were taken, but also to articulate the theory and aspirations behind the Safe Staffing Healthy Workplaces agenda.

The joint work programme to embed and optimise the CCDM Programme within DHBs continues and there is still much to be done before this work can be considered complete. This booklet, ‘The Right Care in the Right Place at the Right Time’, will act as a staging point to inform future activity. For those who are taking this work forward, it will explain how and why the programme developed as it did.
The CCDM Programme is a whole of organisation approach to ensuring that when patient care is delivered, the capacity is in place and resources are invested productively. The Programme is supported by technical, structural and social elements.

The key elements of the programme are:

**Mix & Match**

A methodology based on the actual needs of patients and the service. Mix & Match is used to establish the base nursing or midwifery resource for a service, including: total FTE, skill-mix, a schedule to match patient demand to nurse availability, realistic allowances for non clinically available time, seasonal variance, opportunities for improving the way work is carried out, opportunities for optimising the way the environment supports successful nursing care, and an accurate budget.

**Mid-range variance management**

Processes to identify emergent variance between demand and capacity in the period where adjustment to demand or capacity is feasible.

**Short-range variance management**

Strategies to make final adjustments to demand and capacity prior to resources being committed and care being delivered so as to maximise the use of the available resources.

**On the day deployment of resources**

Sophisticated processes that bring together information about real-time demand and capacity so as to maximise the use of available resources and minimise the negative impacts of significant capacity/demand variance.

**Assessment of impact**

The generation of a data set containing sentinel organisational metrics which enable the organisation to assess the impact of staffing and resource designs.

**Social scaffolding**

Multi-disciplinary, ‘ward to board’ structures to ensure intelligent decision making at all points in the annual forecasting/establishment/delivery cycle.
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INTRODUCTION & BACKGROUND

In 2005, following protracted employment negotiations, the 21 New Zealand District Health Boards (DHBs) and the New Zealand Nurses Organisation (NZNO) entered into an historic agreement to work together to resolve acknowledged issues with nursing and midwifery staffing in the public health system. This booklet documents the actions and interventions which followed, in pursuit of a sustainable outcome that ‘ensured quality care for patients, a quality work environment for staff and making best use of health resources’. It focuses on the contribution of the Safe Staffing Healthy Workplaces (SSHW) Unit to the safe staffing agenda in New Zealand (NZ), including the development of the industrial partnership between the parties, the steps taken, the lessons learned, the gains made, and the challenges that are still to be resolved.

THE GENESIS OF THE SAFE STAFFING AGENDA IN NZ

Extract from the Report of the Safe Staffing Healthy Workplaces Committee of Inquiry

Two decades of health reforms

During the mid 1980s the New Zealand health system underwent major reviews of services, driven by the need to seek efficiencies. One response to manage cost pressures was to reduce nursing numbers. The concerns of nurses about their increasing workloads went largely unheeded. Between 1989 and 2000, the average length of stay of medical and surgical patients fell by 20%. Over the same period, nurse numbers were reduced by 36%.

The introduction of the Employment Contracts Act 1991, by deconstructing the national award for nurses, hindered a national approach to the participation of nursing staff in the ‘management of change’, and reduced the ability of expert nursing judgement to inform decision making. A second wave of health reforms in the mid 1990s brought a greater demand for efficiencies, with the emphasis on pushing patients through the system more quickly. This had a flow-on effect to the community, with workload pressure shifting to the Community Nursing or District Nursing services. Again, there was a lack of meaningful tools to measure workload, and the associated provision of activities where service contracts did not adequately factor in workload requirements.

1 SSCOI Report, 2006, p.7
The workloads of nurses rose to unmanageable levels in some places. The recruitment and retention of nurses became a major problem. Nurses reported a loss of job satisfaction, stemming from their inability to provide complete care, and concern for their patients and for their own professional safety.

During the 2001 wage negotiations, nurses expressed their concerns about unsafe staffing. NZNO members sought some form of legislated or mandated minimum levels of staffing to give them some certainty as to workloads. By the 2004 bargaining round, nurses were signalling that the development of an enforceable mechanism to regulate staffing levels was a key issue. The NZNO launched a booklet, Nursing the System Back to Health, to support a claim for mandated nurse/patient ratios as the way to ensure safe numbers of nurses on each shift to deliver patient care.

Both parties agreed that nurse/patient ratios alone would not address all of the issues involved in safe staffing. An agreement was therefore reached to set up a Committee of Inquiry to investigate the workload issues of nurses and midwives, and to develop sustainable solutions.²

THE COMMITTEE OF INQUIRY – 2005-2006

The Safe Staffing Committee of Inquiry (SSCOI) came about because the DHBs and NZNO recognised that an issue existed which was beyond the ability of either party to resolve from a positional perspective, and would best be solved co-operatively. The joint Committee of Inquiry (COI) was formally convened in June 2005, with representation from the NZNO and the DHBs, ‘in response to nurses’ concerns about patient safety, unmanageable workloads, and the quality of the work environment’.³ An independent Chair was appointed. The terms of reference for the COI were detailed and prescribed specific outcomes:

1. Objective
   1.1 To develop and implement a system or systems of nursing and midwifery staffing levels which provide:
       • Efficient and safe services to patients and consumers
       • Manageable and safe workloads
       • Acknowledgment of the professional nature of their practice and time and support to maintain professional standards
   1.2 To agree on sustainable solutions to identified issues
   1.3 To ensure that evidence-based best practice is used in all DHBs, and avoid duplication of resources and effort
   1.4 To address the concerns raised in the MECA negotiations regarding these issues in a way that has the confidence of nurses and midwives and provides a mechanism for nurses and midwives to respond immediately if workloads exceed the determined levels.

² Report of the SSCOI, 2006, p.73
2. Scope

2.1 The scope of this Inquiry shall include the following:

- Service provision
- Models of care
- Patient classification systems e.g. acuity measures
- Patient flow
- Skill mix (RN/RM/EN/HCA mix)
- Skills mix (range of RN/RM skills – Levels of Practice)
- Infrastructure (includes senior nursing and midwifery support)
- Workloads
- Nursing and midwifery care intensity levels/workload measurement
- Healthy work environment
- Work/life balance
- Professional development opportunities

2.2 The key focus will be patient and nursing outcomes. 

The members of the SSCOI were committed to approaching their work from an evidence base. Over the following months, the literature was examined and a national ‘road-show’ was toured, with the aim of eliciting the major concerns of DHB nurses and midwives with regard to issues relating to safe staffing and the work environment.

In a survey of DHB Directors of Nursing conducted during the SSCOI process, just four of the fourteen respondents thought that staffing was adequate to deliver professional nursing care. Nurses themselves are reporting an increasing burden of care. Typically, they have reached medium levels of burnout, and 32% are signalling their intention to leave their jobs within the next year.

The Committee spent a period deliberating the findings and developing a set of recommendations, culminating in the submission of their Report. The recommendations were subsequently endorsed by the parties (NZNO and the 21 DHBs). After the Report was published, the Committee was disbanded in May 2006.

Several features related to the SSCOI are worth noting. First, the establishment and proceedings of the SSCOI heralded a significant change in the nature of the relationship between the NZNO and the DHBs. In committing themselves to working together on an agenda of mutual interest, both parties moved away from entrenched positions. This enabled a wider range of possible solutions to be considered without prejudicing either party’s overarching obligations. Secondly, there was a commitment to basing the recommendations on evidence, rather than on partisan positions.

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4 Ibid p. 80
5 Ibid p.74
While the partnership approach enabled the formulation of the recommendations, these approaches were not without risk to either party, as the new collaborative way of working was not universally welcomed in a sector where both the NZNO and the DHBs were more used to attempting to impose their will on each other.

The 2006 SSCOI recommendations provided the parties with a blueprint of what they were aspiring to. This document continued to anchor the work throughout the entire period of implementation and development that followed.

THE SAFE STAFFING HEALTHY WORKPLACES RECOMMENDATIONS - 2006

The SSCOI Report defined the essential components of safe staffing and healthy workplaces, outlined the evidence supporting their inclusion, listed recommendations for achieving the Terms of Reference, and set out a three-year action plan. The executive summary articulated the importance of and the commitment to translating the recommendations into real sector change.

*The Report of the SSCOI represents a shared commitment by the NZNO and DHBs to work together to agree on:*

- a mechanism for nurses, midwives and employers to respond immediately if workloads exceed the determined levels
- sustainable solutions to safe staffing levels, developed in a way that has the confidence of nurses and midwives

*The Committee acknowledges that there is an urgent need to address the way the nursing and midwifery workforce is currently managed and supported. While wholesale reform is not suggested, the actions proposed in this Report require urgent and sustained attention. The views of many nurses and midwives, combined with recent national and international research, paint a picture of a workforce under significant pressure.*

*While mandated ratios can provide a base level of staffing, it is agreed that this is a blunt tool that fails to account for the complexity of the healthcare system. The Committee proposes more comprehensive actions to address the elements that contribute to safe staffing and healthy workplaces*.

The SSCOI report identified seven elements necessary to achieve safe nursing and midwifery staffing and an effective healthcare environment:

- The requirement for nursing and midwifery care
- The cultural environment
- Creating and sustaining quality and safety
- Authority and leadership in nursing and midwifery
- Acquiring and using knowledge and skills

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6 Ibid p.7
• The wider team
• The physical environment, technology, equipment and work design.\(^7\)

The Report emphasised that these elements were interdependent, and that one could not be prioritised over another without having a detrimental effect on safe staffing. This was the beginning of the ‘whole of system’ approach which was to characterise the work over the next seven years.

The SSCOI recommendations provided a description of what is required in a system in order to match the requirement for patient care with the capacity of the nursing and midwifery workforce. However, the Committee recognised that without a mechanism to translate the recommendations into the sector, it was likely that little progress would be made. Thus a key component of the three-year action plan included a recommendation for the establishment of “a Safe Staffing/Healthy Workplaces Unit (SSHW Unit) within District Health Boards New Zealand (DHBNZ)”.\(^8\) This key strategy sought “to facilitate and coordinate the dissemination of best practice, to support change, and to evaluate the District Health Boards’ progress towards safe staffing and healthy workplace outcomes”.\(^9\)

### THE ESTABLISHMENT OF THE SAFE STAFFING HEALTHY WORKPLACES UNIT

Following endorsement of the SSCOI Report by the NZNO and the DHBs, the parties approached the government to seek funding for the establishment of the SSHW Unit. The Minister of Health endorsed the proposal and provided $1.3 million of funding to establish and support the Unit for three years. The Unit was established in 2007 within District Health Boards New Zealand (DHBNZ), a coordinating entity for DHBs. A joint governance group, with equal representation from the NZNO and the DHBs, was commissioned. A full-time Director for the Unit was recruited.

The SSHW Unit was tasked with the responsibility of supporting the parties to progress a number of key recommendations within the SSCOI Report. These were to facilitate the development and implementation of:

- Best practice guidelines for patient forecasting and patient workload management systems, for roll-out in all DHBs where systems do not meet these guidelines
- A “tool-kit” of best practice in nursing and midwifery staffing systems and the management of these systems, including models for providing direct clinical support
- Nursing and midwifery leadership and management competencies, which will guide the development of job descriptions, postgraduate and industry-specific training programmes, and on-the-job education and development

\(^7\) Ibid p. 8  
\(^8\) Ibid, p.8  
\(^9\) Ibid p.8
• Nurse-sensitive, patient-outcome data for inclusion in nationally collected data-sets, and DHB performance monitoring, to ascertain the impact of changes in the nursing and midwifery workforce and to benchmark patient outcomes within provider arms and across DHBs
• Nationally reportable information on the nursing and midwifery workforce (e.g. turnover, sick leave, qualifications, age, distribution) to monitor the health and status of the current and future workforce, in order to track trends, modify strategies and predict future requirements
• Processes to audit DHBs’ progress in implementing the Action Plan
• Strategies that DHBs will utilise to work with nurses, midwives and others to assess a preferred culture, and to develop and maintain that culture.\textsuperscript{10}

The remaining recommendations in the SSCOI Report were expected to be progressed through other concurrent activities and mechanisms within the sector.


During the 18 months following the establishment of the Unit, the Director provided the principal resource, with some support from contractors. There was an initial assumption made by the Director and the Governance Group that a systematic approach between the parties and supported by the Unit would be sufficient to secure progress. A decision was made by the Governance Group to focus the majority of effort in the area of escalation planning. This strategy focused on the development of mechanisms for nurses, midwives and employers to respond immediately if workloads exceeded determined levels. The reasoning appeared sound: to design and implement response mechanisms for times when workload exceeded safe boundaries.

A substantial body of work followed, involving all 21 DHBs and the NZNO. Genuine efforts were made to develop workable escalation plans, and the Unit provided guidance and support for this process. Despite this, by late 2008 it became clear that the strategy was failing to deliver tangible improvement, and the escalation plans were, in the main, unworkable. Around this time an Associate Director role was established, bolstering the resources of the Unit, but this appointment was closely followed by the resignation of the Director. Between the end of 2008 and the first quarter of 2009, there was a hiatus in the work, as the process of recruiting a new Director was undertaken. While this represented time ‘lost’ to the process, it also provided an opportunity for the Governance Group and the parties to reflect on the efficacy of the approach being taken.

\textsuperscript{10} SSHW COI report, pg. 15-16

STOCK-TAKE OF PROGRESS

Following the appointment of a new Director, the Unit secretariat (Director and Associate Director) undertook a stock-take of progress and reported their findings to the Governance Group, together with a recommendation to adopt a significantly modified approach.11 Their report concluded that the initial strategy was flawed, because while escalation plans act as temporary system stabilising mechanisms, they do not deal with any underlying system and staffing issues. A further primary contributor was considered to be the lack of good quality information relating to staffing, workload, the context of care, and impact. This was seen to be impeding the parties’ ability to engage in evidence-based change strategies.

The report to the Governance Group suggested that without better quality information and evidence, there was little hope of stabilising the system, and that if the current course was pursued, there was a high risk of under-adaptation failure. The report concluded that despite the efforts of many people, there was little evidence that the safe staffing agenda was in a measurably better position than it had been in 2006. However, the report recognised that although the last two and a half years had not seen the progress envisaged, they had allowed the parties to learn a lot more about what could make a real difference in terms of system change. The experience to date had provided the clarity required to present a new, definitive and radical strategy to the sector.

Time was not on the side of changing course, as at this stage in the three-year life cycle of the Unit, it had been expected that the work would be in its wind-up phase. However, the sector stocktake undertaken by the Unit provided a compelling analysis which proved critical to the decisions that were subsequently made about embracing a fresh approach.

OVERALL SECTOR SCORECARD 2007-2009

The assessment of progress in implementing the Action Plan set out in the SSCOI Report showed that at least half of the required changes had been progressed. The caveat was that the changes made were patchy and poorly coordinated. The actions in the SSCOI Report were not intended as a pick-list, and a 75% gain in some areas could not be balanced off against zero progress in others. A gain of 50% across the board would have been preferable. The areas of greatest progress were in the areas of the re-establishment of clinical leadership positions, a commitment to education, the evolution of clinical governance models, and emergent work around optimising work processes and patient flow.

11 Background to Recommendations document, Lawless, 2009
The areas of deficit were seen to relate to the sector’s ongoing difficulty in grappling with the concept of maximum productive capacity. This was seen to be a major contributor to the lack of progress in mounting credible responses to variation between capacity and demand, and the implementation of best practice guidelines for workload management.


The sector stock-take found it challenging to assess the contribution that the SSHW Unit had made to the changes, in part because of the wide-ranging facilitative approach that the Unit had taken. This made it difficult to attribute any specific change or improvement to the activities of the Unit. However, it was clear that the inclusion of the Safe Staffing Healthy Workplaces agenda within the Nursing and Midwifery Multi-employer Collective Agreement (MECA), the presence of the Unit, and the on-going partnership approaches within the sector had meant that the DHBs and NZNO members placed a continued focus on the agenda.

SUMMARY OF ISSUES FACING THE PARTIES

The stock-take report summarised the main issues outstanding at that point, noting that this was a generalised assessment of all DHBs:

- DHBs were still unable to identify maximum capacity in most services and therefore were breaching this, with or without intending to do so
- There was a failure to use robust methods to identify the requirement for care or to use an evidence-based approach to put in place the resource needed to deliver this
- There was little consistency around the data used to assess care capacity
- There was an inability to respond consistently to the data even when it was available
- There were significant gaps between the measures used at the executive level to assess the quality and safety of the system, and the evidence that was available (but not necessarily being generated) at the service delivery level
- There was difficulty responding appropriately to variance, due to not being clear on the goals, except for crude measures such as volume targets and budgeted FTE, and this was true at both local and national level
- There were limitations in forecasting ability, due to a lack of critical data on the current functioning of the system and of core workforce data
- DHBs did not have appropriate systems in place to monitor and alert variance
- There was a tendency to make changes to the system without knowing the true care capacity of the system, and this was resulting in unintended consequences, including reducing resource buffers and system resilience
- Some aspects of the system were getting more attention than others, i.e. not taking a whole of system approach
- DHBs were data rich but information poor, in that:
- vast amounts of data were being collected, but these were not necessarily the best markers, and commonly the information was either aggregated to too high a level or was not being collated at service level
- the available data collection processes were often not well utilised by staff, in terms of both entry and analysis
- there was a general lack of trust in the existing data
- conversely, ‘bad’ data was being used to make critical organisational decisions
- many of the DHBs owned reasonable information systems but were failing to use them to their full potential
- the variety of methods of data collection was seen to be seriously diluting the quality of the information used by the Ministry of Health to monitor and regulate the sector
- there was no agreed core data set to monitor either compliance or impact
- There was no effective point of regulation in the system – therefore responses could be late or absent
- There was a failure to fully realise the potential benefits of co-operation and collaboration between DHBs and professional and industrial health sector organisations.

It was suggested that the changes required would be dependent on: co-operation between the parties; the investment of appropriate authority; and the mobilisation of a willing workforce. DHBs could not realistically achieve the changes by organisational fiat, nor could professional groups and unions demand that DHBs ‘fix’ the issues on their own.

**ASSESSMENT OF THE CONSEQUENCES OF FAILURE TO ADDRESS THE ISSUES**

The consequences of failure to address the issues were assessed as:

- Limiting the potential for strategic innovation strategies to be successful, because of the lack of critical information about care capacity
- The sector continuing to struggle with a level of demand which it did not know whether it could consistently meet
- Severe limitations on budgeting and forecasting ability
- Significant limitations on more flexible use of the workforce
- Limitations on the potential that could be realised through inter-DHB cooperation
- Widening of inequities across services and DHBs
- The continued absence of a regulating mechanism to ensure that services were maintained in safe relation to maximum capacity
- Continued difficulty in mounting a credible response to variance, which had implications for patients, staff and organisational efficiency
- Continuation of the practice of making changes to models of care based on very poor evidence
- Failure to realise productivity gains.
FACTORS CONSIDERED TO BE IN FAVOUR OF SUCCESS

The overall picture, while far from ideal, was not considered wholly without potential. Factors were identified that could work in favour of the sector being successful:

- Continued sector pressure and a real sense of urgency
- A concurrent move towards national co-ordination of core systems and processes
- The learning that had emerged from the processes which had got the parties to this point
- The continued commitment of the parties.

COMMITTING TO A NEW COURSE

Following the production of the sector stock-take of progress, the Governance Group were faced with four possible courses:

1. To retrench from the current strategies (and there was evidence to suggest this was beginning to happen)
2. To do more of the same
3. To default to positional approaches
4. To do something different which targeted the fundamental issues.

The Unit secretariat proposed an approach for Option 4 that they felt could deliver a number of gains within the remaining time available, including:

- A single system of data collection for all DHBs
- Processes to enable a determination to be made around the best possible model of care for each unit
- A system that was being informed with consistent information and which generated consistent and trustworthy data
- A system that would support day to day management of the clinical workforce
- A mechanism to support credible mandatory responses to what the data showed.

The proposed vehicle to achieve this was the recruitment of three volunteer DHBs who would act as test sites for the DHB sector over a 9-month period. The Governance Group agreed to support Option 4, and pursue a new approach. This led to the recruitment and establishment of the three Demonstration Sites in late 2009. It was from this initiative that the Care Capacity Demand Management Programme emerged.
AIMS OF THE DEMONSTRATION SITE INITIATIVE

The Demonstration Site Initiative was designed to provide working examples of DHBs using a whole of system approach to progress the recommendations outlined in the SSCOI recommendations, and to support excellence in frontline service delivery, in the interests of:

- assuring patient safety and satisfaction
- supporting staff health and well-being
- maximising organisational efficiency.

Following refinement of the proposed new approach, the Demonstration Sites were established with three overarching aims:

1. To demonstrate and evaluate the implementation of best practice tools and guidelines for patient forecasting, patient workload management, and staffing systems

2. To provide measurement data and evaluation of the methods and implementation strategies used by the Demonstration Sites, in order to inform the sector and illustrate successes and opportunities

3. To provide an observational learning opportunity so all DHBs could gain knowledge and expertise that would assist them with effective patient forecasting, patient workload management, and staffing systems, and would contribute to a more nationally consistent approach.  

FEATURES OF THE REVISED APPROACH

The Unit secretariat report had suggested that socio-technical systems require a socio-technical response. The Demonstration Site (3D) Initiative was developed with a focus on the importance of:

- Knowing the requirement for care and being able to monitor care capacity at all times
- Being able to monitor even subtle variance in demand (up and down)
- Monitoring the effort required to achieve the outcomes
- Being able to identify system opportunities and inefficiencies
- Agreeing on credible response strategies that could be continually enacted as part of normal organisational functioning
- Engaging the workforce in developing, managing and monitoring the system.

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12 A Summary report of the 3D Initiative, June 2010
KEY STRATEGIES

FOUR KEY STRUCTURAL STRATEGIES WERE TO BE PURSUED:

1. The development of a sophisticated method for determining the requirement for care
2. The development of processes to sensitively match resources to the requirement for care
3. Developing and sustaining systems capable of managing an agreed system data set in a way that made it visible and relevant to all stakeholders
4. Developing and maintaining credible processes for responding to variation in care capacity.

SPECIFIC LOCAL AND SECTOR ACTIONS WERE RECOMMENDED TO SUPPORT THE APPROACH:

1. Gaining sector agreement to pursue these strategies collaboratively as a national DHB goal
2. Developing an agreed generic specification for care capacity management
3. Establishing joint stakeholder mechanisms through which to co-ordinate the strategy (locally and across the DHB sector)
4. Considering the national adoption of currently available data management tools to provide a consistent platform\(^\text{13}\)
5. Developing and implementing an agreed approach for mandatory responses to variation in care capacity\(^\text{14}\)
6. Identifying a consistent core data set and evaluation processes by which the health of systems would be monitored and managed.
7. An approach based on patient acuity
8. An initial focus on in-patient, community and maternity settings. The system would need to:
   - Be set up to be technically consistent across multiple settings
   - Be based on an evidence based understanding of what is required to deliver nursing and midwifery care, which includes the model of care and skill and competency mix
   - Actually measure and monitor the capacity and health of the system

\(^\text{13}\) The two leading systems at that stage were TrendCare and Cap Plan. The reasoning behind focusing on these two systems related to the capability of the respective systems and the significant existing investment that had already been made by DHBs. It was considered unwise to seek to introduce new systems if the capability already existed.

\(^\text{14}\) The need for this to be agreed between the stakeholders was acknowledged, as it was intended to provide the stabilising mechanism for the system to manage maximum care capacity.
• Be seen as trustworthy by all users
• Give a net gain to those who use it (input and expenditure)
• Use information consistently and meaningfully.

**ENGAGEMENT & FACILITATION STRATEGIES**

The Unit adopted and adapted strategies from a range of sources to support the sites to engage with the task of developing new approaches. Key influencers included Dannemillar-Tyson’s work on Whole Scale Change and the Australasian Practice Development movement. Both approaches included a strong facilitative component and the need to engage staff across the spectrum of the organisation. This resulted in the development of a range of unique resources, including the Discovery Days, and later the use of the Churchill war-room technique. Both proved to be powerful methods to grow engagement and understanding, and to increase the self-efficacy of the organisations to plan and engage with system-wide change.

**SITE RECRUITMENT**

In May 2009, the SSHW Unit invited the submission of proposals from all 21 District Health Boards (DHBs). Three out of the seven DHBs who expressed an interest were selected by the Governance Group. Selection was based on a number of criteria, including the strength of the leadership commitment to the venture, willingness to work in partnership with the NZNO, the ability to commit time and resource, and a need to recruit a range of DHBs in terms of size and geographical distribution. In recognition of the close and collaborative relationship between DHBs and DHBNZ, a letter of agreement, instead of a full commercial-style contract for service delivery, was signed by each participating DHB. The letter of agreement informed the three DHBs of the scope of SSHW Unit support, expected approach and outcomes, and reporting requirements. The DHBs agreed that by the completion of the initiative, they would be looking to demonstrate progress towards:

• Implementation of an evidence-based systematic approach to workload forecasting, workload management, and Full Time Establishment for nursing and midwifery
• Ensuring that the system was informed by and accounted for the historical, current and projected capacity of the DHB nursing and midwifery work force
• Ensuring that the system accounted for variables such as environment, model of care and non-staffing resourcing

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15 The Discovery Days took place in the first phase of the process and involved bringing together a cross-section of the organisation, with the purpose of raising the knowledge, shared commitment and self-efficacy of key personnel.

16 The Churchill war-room exercise was adopted from pioneer work at the Waikato DHB, where a day in the organisation was re-created in a desk-top exercise to illustrate to staff what knowledge was available to support decision making and how decisions were subsequently made. The purpose was to raise consciousness around the need for a more sophisticated and structured approach to capacity/demand variance.
• Increased efficiency and flexibility in the deployment of the nursing and midwifery workforce
• Improving evidence-based measures of safe staffing and healthy workplaces. This included systems, processes and actions that ensure ongoing monitoring, response and system modification
• Ensuring benefits for staff, including a work environment and culture that supported nurses and midwives to deliver care that was safe, effective and timely

THE DEMONSTRATION SITES: COUNTIES MANUKAU, BAY OF PLENTY & WEST COAST DHBS

SITE ESTABLISHMENT

A relatively uniform approach was taken to the structural establishment of the three Demonstration Sites (the ‘3D Sites’).
INTERNAL DEMONSTRATION SITE STRUCTURE

The governance structures established included the CEO as site sponsor, the Director of Nursing, members of the executive team, and NZNO representatives. A site steering group was formed with the role of facilitating participation and change. A site co-ordinator was appointed at each site, and this role was financially assisted by the SSHW Unit. Finally, a site operational group was appointed to undertake the work generated by the initiative.

CONTRIBUTION OF THE UNIT

The SSHW Unit set up a number of structures and processes to support the initiative, with the aim of extracting maximum sector learning.

a. Resourcing

The SSHW Unit provided fiscal support to the Demonstration Sites by covering 0.5 of a full-time position for the site co-ordinator. This role was to provide coordination within the key stakeholder group and liaison between the SSHW Unit and the DHB. The SSHW Unit also provided the Site Co-ordinators with financial assistance for their professional development, and other costs incurred through initiative related activities. The Director provided direct support to the two northern sites, with the Associate Director providing support to the South Island site.

b. Guidance

The SSHW Unit provided intensive facilitation and coaching. These processes were enhanced substantially by the input provided by the Partnership Resource Centre (PRC),¹⁷ which funded professional facilitators (Associates) to work with the Unit and the Demonstration Sites. The PRC Associates provided a range of inputs, including designing and facilitating workshops, coaching and mentoring, and building efficacy within the sites. The Associates also reflected back to the SSHW Unit the realities on the ground, and suggested approaches to improve transparency and smooth the change processes.

c. Resource development

The Unit, in conjunction with the three sites, developed the initial staffing methodology for trialling. This process was greatly assisted by the input of Cherrie Lowe, CE of TrendCare, who provided master-classes on staffing methodology at Counties Manukau DHB and the Bay of Plenty DHB.

¹⁷The Partnership Resource Centre was a semi-autonomous unit of the Department of Labour that operated until June 2012. The PRC was established to promote workplace partnerships between unions and employers.
The master classes focused on how to develop a valid staffing methodology, and were not related to TrendCare per se, although TrendCare data was used to illustrate how an acuity-based staffing calculation was informed. The master classes were provided by Ms Lowe pro bono, and the material and knowledge gained became the basis for the Mix & Match methodology that became a core part of the CCDM Programme. The SSHW Unit was given open access to use and develop the methodology, with appropriate source acknowledgment.

d. Expert advice

The SSHW Unit undertook a major literature review, and made this information available to the Demonstration Sites and the wider sector. This did not simply provide advice on staffing models, but also emphasised the whole of systems approach that was to prove crucial in the development of the Care Capacity Demand Management Programme. A number of conceptual models were developed.

The SSHW Unit also provided a theoretical framework to enhance site leaders’ understanding and knowledge of high performance work organisation, and to facilitate change processes and engagement with the workforce.

e. Evaluation

Evaluation processes, established at the beginning of the initiative, were aimed at capturing learning throughout the life of the Demonstration Sites.

A full-time research and evaluation position was established to support a sophisticated evaluation process. Two concurrent methods of evaluation took place. The first was a continuous evaluation involving the evolving learning. The information generated was used in the active processes of development taking place on the sites. The second was a more objective form of evaluation, seeking to understand the way that the three DHBs approached and managed their agreed changes, the outputs delivered, the outcomes achieved, and the implications of this for other sector DHBs. The Demonstration Sites agreed to collect and provide evidence to demonstrate progress against the expected outcomes. A range of sources were used to inform the evaluation, including documentation, interviews, direct observation and survey.

The 3D survey for nursing and midwifery was developed in consultation with the sites, using established international survey instruments. Ethical approval for the survey was granted by the Multi-region Ethics Committee. The surveys had six sections covering; demographics, work conditions and environment, staffing, workload and quality of patient care, staffing structure and processes, safe staffing and healthy workplaces, and job perception. The survey was administered on each site approximately 6 months into the initiative. The findings provided critical information about the effectiveness of the early changes, as well as baseline data from which to measure subsequent change. This survey instrument formed the basis for the survey that has been administered to all subsequent participating DHBs.
f. In addition to the internal structures and support, two external groups were established: a sector reference group to advise the SSHW Unit and the Demonstration Sites, and an active observer group comprised of members of other interested DHBs. These groups were invited to participate in a monthly learning forum via Tele-paed.

**APPROACH**

A standard approach was taken on each site for the early stages of the initiative. This consisted of a Discovery phase and an Action Planning phase.

1. **Discovery and analysis phase**

   The Discovery and analysis phase was strongly influenced by the work of Dannemillar-Tyson on securing Whole Scale Change, and also by emergent work on organisational resilience engineering. This phase was undertaken in three main stages.

   The first stage involved the SSHW Unit working with the sites to assemble as much material as possible on how staffing, and capacity and demand were currently managed. This process was supported by a template developed by the Unit, the ‘Care Capacity Management Specifications’ document. This (rather unwieldy) tool encompassed a systematic approach towards managing demand, and covered all the essential elements for safe staffing and healthy workplaces. The tool was used extensively by one of the sites, and to some extent by a second site.

   The second stage involved a large Discovery workshop on each site, designed and administered by the SSHW Unit and the PRC Associates. The purpose was to facilitate a shared understanding of the components of safe staffing and healthy workplaces in relation to each DHB’s existing operational context. It was a process of uncovering issues, exploring the workings of the organisations and understanding the purpose of the SSHW Demonstration Site initiative. The aims of the workshop were:

   - To bring a sense of urgency to the work around the need for change, and to open thinking to new possibilities
   - To empower the site leaders group and encourage ownership of the initiative
   - To encourage and emphasise a whole of system approach
   - To provide a theoretical framework for the work
   - To establish the desired partnership approach.
During the workshops, each site worked out site-specific issue statements and a vision for change. Regardless of the difference in size, demographics and context, similar common issues were identified: that the organisations were operating at the margin of acceptable performance, and that this was compromising the quality of patient care to some (unquantified) extent.

The third stage of discovery and analysis involved the material from the first two stages being collated and used to inform a large number of semi-structured conversations with different stakeholders within the sites, ranging from nursing staff on the floor to executive management and board level. This process resulted in the issues, gaps and opportunities being further identified and refined. Common themes included:

- At system level: all three DHBs were not managing the system consistently well in terms of minimising variation and matching the requirement for care to care capacity. For example, better quality information on the resources available and required, and better communication within the systems, were needed in order to consistently match care capacity and demand.

- At workforce level: issues at the nursing/midwifery staff level that had been identified and reported in the COI report were common, i.e. heavy workload and stressful work environment, which contributed to nurses’/midwives’ dissatisfaction with their jobs and high turnover.

- The discovery and analysis process uncovered widely differing perceptions between staff on the floor and other levels of the organisation that were effectively resulting in ‘blind-spots’.  

2. Action planning

Following the discovery and analysis phase, the SSHW Unit ran an Action Planning workshop with a microcosm group from each DHB. The subsequent action plans that emerged were based on their identified needs, on the opportunities/gaps, and on the expected outcomes outlined in the initiative framework which was developed by the SSHW Unit and articulated in the DHB Demonstration Site Initiative Support Plan. Each site was encouraged to employ evidence-based approaches as the basis for the development of effective models for implementation.

Each Demonstration Site elected to focus on reviewing the way they matched the requirement for patient care (demand) to their nursing and midwifery resources. The targeted areas included base Full Time Establishment, data integrity, forecasting demand, variance planning, rostering, and managing the variance (escalation).

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18 Organisational 'blind-spots' exist when critical information about organisational functioning is not visible to the management/resourcing level of the organisation.

19 A 'microcosm' is a group that is broadly representative of all layers of an organisation.
In addition, all sites elected to review the way variance between demand and capacity was identified, responded to and dealt with. The process of prioritising where to begin varied from site to site, due to variations in their existing staffing systems and structures, existing infrastructure, the level of evidence collected for informing staffing/workload, and current availability and usage of evidence for matching care capacity and demand.

**SUMMARY OF LEARNING FROM THE DEMONSTRATION SITES**

The 3D Initiative provided an excellent learning opportunity for the DHB sector to identify the critical success factors for getting traction on changes that would improve the quality of patient care, the quality of the work environment, and organisational functioning.

The conclusion reached by the Unit was that the fundamental problem facing all DHBs was an inability to consistently match the demand placed on services with the care capacity required to meet this. Evidence generated by the Demonstration Sites showed that each time a reasonable match was not achieved between demand and care capacity, there were potential or actual consequences for patients, staff and the efficient use of organisational resources.

The experiences of the three sites enabled the Unit to hone in on the specific areas that DHBs should focus on, and the order in which this should happen, and led to the development of specific resources and the emergence of the Care Capacity Demand Management (CCDM) Programme.

**THE EMERGENCE OF THE CARE CAPACITY DEMAND MANAGEMENT PROGRAMME**

The Demonstration Site Initiative had shown that care capacity/demand mismatches are a result of many contributory factors, and that organisational strategies tended to focus on single issues which manifested as dysfunction in frontline service delivery. This was observed to be a flawed approach.

What was learned was that the largest causative factor lay not in the frontline of service delivery, but in the way organisations were being designed and established. The initiative revealed that the work going into setting the organisation up to deliver services (base resourcing) was a strong determinant of success on the day that care was delivered. The gap between what was expected to happen when base resources were established and what actually happened when services were delivered was identified as the ‘Variance’.

The Care Capacity Demand Management (CCDM) Programme was developed and formalised as the recommended approach to enable an effective focus on base resource establishment, effective service delivery, and effective responsiveness to variance, through the use of robust processes and a self-informing system.
THREE OVER-ARCHING STRATEGIES

The experience and learning gained from the three sites identified that the strategies most likely to result in productive gain with a CCDM approach were anchored around three areas:

1. Strengthening the ability of those involved in setting base resourcing to accurately forecast, plan, establish resources and reduce known or predictable variance

2. Improving the quality of the information generated from the service delivery end of the organisation, so that those involved in resource design and logistical support know how the system is actually functioning and can respond effectively

3. Improving the ability of those involved in service delivery to respond effectively when variance occurs.

SEVEN SCAFFOLDING STRATEGIES FOR EFFECTIVELY IMPLEMENTING CARE CAPACITY DEMAND MANAGEMENT

Based on the knowledge generated from the three sites, it was recognised that success needs scaffolding. Seven framing strategies were identified, with the aim of collectively enabling a DHB to successfully implement the CCDM Programme and to realise the benefits of the changes. This was the recommended approach for subsequent sites.

1. Take a whole of organisation approach:
   - this is the way the business is organised
   - this is a long term approach, not an intervention
   - CCDM affects the entire organisation (wider than nursing alone).

2. Engage the organisation and invest in high quality relationships:
   - the COO must lead and drive the approach
   - nursing is the largest group, but medicine and allied health must also be engaged
   - a high quality collaborative relationship with sector unions secures engagement and enhances the ability to make change
   - a dedicated coordination resource speeds up the processes
   - an on-going governance and operational structure is required.

3. Map the organisation:
   - a clear picture of current status with all key functions is necessary to identify areas for attention or change.
4. Establish a common core data set:
   - you cannot plan effectively around what you cannot see
   - the data set is based on establishing ‘normal’ operating definitions and must include a description of maximum capacity
   - variance sensitive indicators must be included
   - untrustworthy data should be improved before it is included
   - the data set should include target and dashboard data.

5. Develop the system platform:
   - the minimum capability needs to include patient demand forecasting, including patient acuity and service utilisation (not bed occupancy or bed capacity)
   - the minimum workforce capacity needs to include numbers, skill mix, and scheduling
   - demand data and care capacity data must be integrated
   - data must be available in real time
   - processes must be established around how the data will be generated, disseminated, reviewed and responded to
   - no IT system should be regarded as having utility for only one group or area of the organisation.

6. Getting the base resourcing right: forecast, plan, establish resources based on what needs to be done, reduce known or predicted variance, and provide buffer resources\textsuperscript{20} to manage residual variance:
   - long term, medium term and short term
   - attached to specific accountabilities and expected outcomes related to care capacity/demand matching
   - organisational dashboards must be available for long term, medium term and short term
   - a primary goal is to detect and reduce (or plan for) variance.

7. Effective variance response management:
   - variance response management is a normal function of organisations, but should be around responding to residual variance (i.e. variance that was unexpected or could not be eliminated before the day)
   - the goal of variance management on the day is principally risk reduction and damage control
   - any resources used to manage dysfunction caused by variance are not available for service delivery (unproductive)
   - there are generally few good options available ‘on the day’.

\textsuperscript{20} ‘Buffer’ resourcing involves accepting ‘modest suboptimality’ in order to be able to sustain production and outcomes safely in the face of variation.
The first five strategies related to setting the organisations up to be able to manage care capacity demand management. The sixth was the core function in establishing the base resources, structures and processes required to effectively deliver services. The seventh, effective variance response management involved ‘on the day’ service delivery. It was believed that investing attention in getting base resourcing right would provide a better return than having to invest attention in dealing with variance that could have been eliminated or planned for.

EVALUATION OF THE DEMONSTRATION SITE INITIATIVE

The original 9-month timeframe for the Demonstration Sites initiative was extended by 3 months to allow maximum progress to be made. At around the 9-month point, conclusions were beginning to be reached by the parties about the value and success of the approach. In addition to the internal evaluation that was undertaken by the Unit, an independent evaluation was commissioned to examine the Demonstration Site initiative. Four key questions framed the evaluation:

1. What happened?
2. What qualitative and quantitative changes have resulted?
3. What has been learnt from this experience?
4. How might the learning be applied to facilitate the expansion of this initiative to other DHBs?21

SUMMARY OF THE OVERALL VALUE OF THE 3D INITIATIVE

“The overarching key message from the evaluation is that variance response management and building the “Base” to reduce the need for variance management constitute a qualitatively different approach to more efficiently matching care capacity resources to meet patient demand. There is significant promise in the results achieved to date, in the resources and processes that have been built up so far, and in understanding the critical internal DHB requirements and capabilities for making a breakthrough in this complex but vital area. In our view it is highly likely that these early gains can be built upon over time if the initiative is continued, given the resources and knowledge that have been built to date”.22

21 SSHWU Draft Summary of findings, p.4
22 SSHWU Draft Summary of findings, Supplementary document, p.9
SUMMARY OF THE MOST PROMISING OUTCOMES OF THE 3D INITIATIVE

The evaluation concluded that promising outcomes from the initiative included:

- The ability to identify structural ‘gaps’ in base staffing levels in a number of areas

- The production of timely and good quality information, delivered to the appropriate place, that enables operational managers to see what staff numbers and skills are needed in specific wards to meet a particular level of patient demand (Variance Response Management tool)

- The ability to redeploy staff to meet identified gaps accurately and seamlessly, including ensuring requests for bureau or call-in staff are met in full

- The ability to reengineer rosters at relatively low cost to meet longer-term fluctuations in demand for care capacity

- Confirmation that the cycle of: data in; appropriate and timely response; problem solved; is complete and working, at least at the level of variance response

- Progress in establishing whether the TrendCare data is now accurate and sufficiently acceptable to be used for staff budgeting

- The enthusiasm and promise of two of the 3D sites to push on to the next level and extend their system to establish a Base, involve Doctors (notable for their absence to date) and extend effective CCDM to other groups of staff and services. The fact that the system is working, infrastructure is in place, and management commitment is strong, gives them this confidence.\textsuperscript{23}

SUMMARY OF TOOL AND RESOURCE DEVELOPMENT

The evaluation confirmed the value of the tools and resources that had been developed in the course of the 3D Initiative.

"The conceptual frameworks, processes, tools, and other resources that have been developed, tested and implemented show potential for wider application and together constitute a significant asset for the DHB sector. This valuable and highly focused resource needs to be retained and progressively made available to other DHBs... This approach constitutes a workable and valuable way of making significant progress in achieving efficiency, safer work practices and enhancing patient safety that is likely to be sustainable, as well as applicable in other service improvement initiatives."\textsuperscript{24}

These tools and resources included:

(a) "A Discovery process that engages a cross-section of relevant personnel in identifying the strengths and weaknesses in existing care capacity systems and processes. The 3D sites we visited found that this resource established an essential launch pad for subsequent refinement of optimal staffing systems and a baseline from which to assess future progress.

\textsuperscript{23} SSHWU Draft Summary of findings, Supplementary document, p.23
\textsuperscript{24} SSHWU Draft Summary of findings, Supplementary document P.44
(b) A **conceptual Care Capacity System Model** to guide site specific Steering Groups in reforming the approach to make staffing safe and to sustain healthy workplaces. The model identifies four interdependent quadrants: patient forecasting; matching resource to forecast need; providing resources needed for the match and delivering the service. This has been a central guiding framework on one site, and a background influence on others.

(c) A **mapping tool** that is used to identify the “current state” of a DHB’s ability to match care capacity to demand.

(d) **Facilitation support** in interfacing with DHB specific IT systems and personnel in using data from one acuity tool – TrendCare – to improve variance management plans.

(e) A ‘**Mix and Match**’ method that enables staff to track actual activity in a ward at 15 minute intervals over a two week period. Then processes data through a Unit devised software package to produce a ‘map’ of where resource pressures are emerging within the weekly cycle of ward activity, how staff allocations can be fine-tuned to improve work flows, and where resources might be available for redeployment either in that ward, or for temporary reallocation to another ward. Decisions and actions stemming from it are generally accepted because the data, the process and the level of stakeholder involvement all have integrity in everybody’s eyes.

(f) A **‘traffic light’ system for highlighting variances** that can then be responded to effectively

(g) A **reservoir of relevant national and international literature**, and case studies on methods used to improve alignment of staff resource and patient need

(h) A **7-step method based on research and trialling**, that pulls all these elements together into a coherent, highly focused and rigorous approach to CCDM

(i) A **network** that can be accessed by teams in participating DHBs to share information and experiences and to maintain momentum and motivation.”

**SUMMARY OF THE VALUE OF THE JOINT DHB/NZNO (PARTNERSHIP) APPROACH**

The evaluation emphasised the role that the DHB/NZNO partnership had played in the progress that had been made”.

“**There is no doubt that the strength of union/management partnership has had a profound influence on the rate of progress in each 3D site. A strong partnership history within a 3D site has enabled:**

25 SSHOWU Draft Summary of Findings p.7
• People directly involved to trust the processes they have designed to the extent that even if senior leaders of each party are absent, work can still proceed without having to be relitigated
• Data produced by either party to be trusted and used as a basis for taking action – this is fundamentally important to being able to deliver CCDM
• Staff to feel more confident about participating even though it has involved extra effort from them
• An experimental and developmental approach to be adopted so that problems can be resolved and ‘positional’ stances avoided (rather than the more traditional DHB practice of management producing change proposals which are then subject to a prescribed, and often reactive, consultation process)
• A focus on the work at hand rather than diverting energy into building the relationship (relationships appear to have been strengthened simply by working together in this way)
• Consequential changes in rostering arrangements and staff reassignment (albeit temporarily) to be negotiated with relative ease.

THE ROLE OF ORGANISATIONAL LEADERSHIP AND SUPPORT

The evaluation identified the value of strong organisational leadership and support.

• “A strong partnership between managers and NZNO that was believed in by both parties and had already achieved significant results
• A commitment to clinical leadership backed by authority for them to make decisions (‘We gave people permission to get involved’- CEO)
• An improvement orientation that encouraged experimentation
• An openness to change backed by systems of accountability that helped ensure that ideas, proposals, and agreed changes were followed through and backed by management”

THE IMPORTANCE OF BUILDING TRUST AS A PRE-REQUISITE FOR CHANGE

The evaluators noted the importance of establishing and maintaining trust between the parties and between the organisations and staff as a major enabling feature for securing change.

“A level of mutual trust and confidence between managers and staff that the system can deliver change [and which] also begets further change. The presence of this capacity provides confidence that the DHB concerned will continue to press forward with further refinements as well as looking into how to strengthen the Base. Another aspect of this improvement orientation we observed was the willingness of all parties to work together to pay close attention to the details of what happens in wards.

26 SSHW Draft Summary of Findings, Supplementary Document, p.23
27 SSHW Draft Summary of Findings, Supplementary Document, p.26
Step by step data collection and analysis revealed insights into the reality of work processes that had previously not been known or believed by managers. Worker knowledge and experience could now be used to generate improvement in a fundamentally important area of matching resources to meet demand. In combination, this way of working throws up lots of opportunities for small but ongoing improvements and stands in contrast to traditional approaches to change which rely on proposals for big changes with sophisticated implementation strategies that almost invariably deliver sub-optimal results.\(^{28}\)

**IMPACT ON KEY TARGET AREAS**

The evaluation identified early examples of improvement relating to patient care, productivity, efficiency and the quality of the work environment.

**SUMMARY OF THE CONTRIBUTION OF THE SSHW UNIT**

“The Unit has created valuable intellectual property, and a methodology for realising value from that property. We did find, though, that the property is not readily replicable or transportable: deepening the process within existing sites and extending it to new sites will require a mix of demonstrating the gains to be had, and mentoring those attempting to copy them.”\(^{29}\)

The Unit has:

- “Provided an external challenge to the change processes that were being developed in DHBs in a somewhat introspective way
- Created a conceptual framework that allowed the 3D sites to start to think in a systematic way about how they were addressing the SSHW agenda
- Developed tools that could be applied in a structured and sequential way so that the agenda could be addressed through good project management process
- Created a forum for the sharing of experiences between DHBs
- Pioneered a work analysis methodology and the software to analyse it in a way that fundamentally changed opportunities for re-engineering rosters and skill set composition within them, to better match workforce with work need\(^{30}\)
- Facilitated partnership processes on sites, in conjunction with the Partnership Resource Centre
- Managed to lift the focus of the partners in the 3D sites to whole of organisation problem solving
- Supported local organisation with expert consultancy advice when it was needed and requested, but held back from intervening to do things ‘on behalf’ of the local teams.”\(^{31}\)

\(^{28}\) SSHW Draft Summary of Findings, Supplementary Document, p.27  
\(^{29}\) SSHW Draft Summary of Findings, Supplementary Document p.31  
\(^{30}\) Note: This methodology was developed by Cherrie Lowe, CE of TrendCare Ltd. The SSHW Unit was given open access to utilise and build on this with appropriate acknowledgment of source.
EVALUATOR’S RECOMMENDATIONS REGARDING THE FUTURE OF THE WORK

The evaluation recommends that the SSHW Unit receives funding “to enable it to continue, and expand its Care Capacity Management (CCDM) development work with DHBs (both current and new) throughout New Zealand”. There is a further recommendation that the level of funding “should be capable of supporting the activities referred to above as well as a gradual (and manageable) expansion in staffing to cope with increased demand for services as the process evolves, and results stimulate an increase in demand for its services. We recommend that a three year funding pathway be established to provide for continuity of support to DHBs developing their CCDM. This should be followed by a further review of effectiveness before deciding on an extension of the programme.”

SECTOR RECOMMITMENT

The Unit Governance Group considered the evidence of progress and outcomes from the Demonstration Site initiative, and agreed that sufficient progress had been made to recommend to their stakeholders that the CCDM approach be adopted and systematically rolled out to willing DHBs. A recommendation to retain the BOP DHB as an ongoing model site was agreed.

The SSHW Unit Governance Group was aware of the tension that existed between the desire for rapid implementation and change, and the need for thoroughness, development and consolidation.

The rate of future implementation of CCDM was also limited by the amount of funding available to support the work of the Unit and the participating DHBs. A business case for further funding to support a continued sector roll-out was submitted to the DHB CEO group in December 2010. Subsequently approval was given for a further two years of funding and activity.

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31 SSHW Draft Summary of Findings, Supplementary Document p.32
32 SSHWU Draft Summary of Findings, p.12
THE CONTEXT

The Demonstration Site Initiative during 2009-2010 resulted in the development of the Care Capacity Demand Management (CCDM) Programme, which includes tools, processes and a methodology to support the required organisational changes. CCDM had broadened the original scope for the work that was outlined in the SSCOI Report, and had also evolved to include relevant parts of the Healthy Workplaces Agreement (HWA) that had emerged during this period. The HWA required extending the collaborative partnership model between DHBs and the NZNO to other participating health unions, specifically the Public Service Association (PSA) and the Service and Food Workers Union (SFWU). The core of the work programme for the SSHW Unit became the progressive roll-out of the CCDM programme to DHBs, with planned extension to Allied Health. The recruitment of the second tranche of DHBs became known as the ‘second intake’.

FIRMING THE SCOPE

The 2009-2010 work had required that a large focus was put on developing resources and processes from theoretical to operational status. The 2010-2011 period was focused more on testing, validation and extension. As the Unit gained more experience working with the DHB sector, it became clearer where positive impacts could be expected. This resulted in revised projected outcomes for DHBs adopting the CCDM approach.

Projected outcomes following implementation of the programme (second intake)

- Improved patient outcomes through more responsive and consistent service delivery
- Increased productivity due to closer matching of demand and capacity
- Reduction in the incidence of patient care rationing (omitted, delayed or sub-optimal care), and nurse sensitive negative patient outcomes
- A strengthening of overall system resilience
- Staffing models that provide the most economic profile
- Accurate and responsive information to support decision making at all levels of the organisation
- Improved forecasting ability
- Identification of service improvements that will increase productivity

33 The Demonstration DHBs were Counties Manukau, Bay of Plenty and the West Coast.
34 Healthy Workplaces Agreement, Appendix 2, National Terms of Settlement.
• Ability to adjust staffing models more rapidly in response to changing demand patterns
• Increased flexibility of the labour force
• Improved constructive engagement between the organisation and health unions
• Improved staff satisfaction
• Improved ability to identify and smooth variance 3-6 months out
• Maximum return on investment from the patient acuity system
• An organisational ‘dashboard’ providing up to date accurate information on total demand and available capacity.

DHB INVOLVEMENT JUNE 2010-JUNE 2011

DEMONSTRATION SITE DHBS: COUNTIES MANUKAU, BAY OF PLENTY & WESTCOAST

From July 2009 to December 2010, Counties Manukau, Bay of Plenty, and Westcoast DHBs were involved in the developmental processes that enabled the development of the resources and the overarching CCDM Programme. Of these sites, Bay of Plenty implemented most but not all components of CCDM, and continued to develop their capability. Counties Manukau adopted many of the principles, but was limited by the absence of a valid patient acuity tool. Westcoast implemented some but not all aspects of the programme, and decided to review their ongoing involvement in the formal programme. Following this period, a memorandum of understanding was signed with Bay of Plenty DHB establishing them as a model site for CCDM, which included ongoing development of resources and providing a working example to the DHB sector. The offer of further assistance to the other two DHBs remained open.

SECOND INTAKE DHBS: NORTHLAND, MIDCENTRAL & NELSON MARLBOROUGH

Based on the learning from the Demonstration Sites, DHBs were required to have a validated acuity tool to be eligible to participate in the second intake. The rationale for this was that the staffing methodology and other parts of the programme relied on this data being available. A call for expressions of interest saw three further DHBs forming the second intake, commencing in March 2011. The three second intake sites were Northland DHB (January 2011), MidCentral DHB (March 2011) and Nelson Marlborough DHB (March 2011). It was envisaged that the sites would begin earlier, but a pattern emerged that was later repeated: it showed that the average time to bring a DHB from interest to commencement was 6-9 months, resulting in slower than desirable initiation of substantive work.
Each site was allocated a 0.5FTE Programme Consultant from the SSHW Unit, and was expected to provide a full-time on site coordinator (although this did not happen on all sites). A similar process to the Demonstration Site initiative was followed with the second intake sites, including a 6-8 week discovery period followed by action planning, implementation and continuous evaluation.

The approach for the second intake was more scripted, as the CCDM Programme had taken shape by this time. The Unit was fortunate to secure further support from the Partnership Resource Centre.

**RESOURCE DEVELOPMENT**

Working alongside the participating DHBs, the Unit continued to develop and evolve the tools, processes and resources necessary to support effective management of capacity and demand. This included:

- Mapping and discovery processes for DHBs to assess their current CCDM capability
- CCDM staff survey (providing baseline data and post implementation analysis)
- Acuity based methodology for identifying optimum base staffing establishment
- Dashboard approach for forecasting and on the day operational management of CCDM
- Multi-party governance structures to manage CCDM
- Support for DHBs using the TrendCare software to get maximum return on investment
- Methodology for developing key data sets to map and monitor CCDM
- Extensions to the staffing methodology.

**EXTENSION TO DISCIPLINES OTHER THAN NURSING AND MIDWIFERY**

The Unit engaged in early stage discussions during this period with the Public Service Association (PSA) and the Directors of Allied Health regarding widening participation. There was recognition by all parties that work specific to allied health groups would be necessary, but no commitments were made at this point.

**RESEARCH AND EVALUATION**

The Unit was involved in a range of research and evaluation activities:

1. Extension of the database of information relating to assessing, measuring and monitoring the health of the work environment, through the application of multidisciplinary surveys to participating DHBs

2. Entering into a contract with the Bay of Plenty DHB to formally assess the introduction of their variance management system
3. Commissioning and participating in an evaluation of the contribution of the SSHW Unit and PRC to the Demonstration Sites

4. A research project to scope the current utilisation of the Trendcare systems in DHBs licensed for this programme

5. A project aimed at decreasing the time taken managing the data generated by the Mix & Match process.

**CONCURRENT UNIT & SECTOR ACTIVITY**

**BROADENING OF THE GOVERNANCE STRUCTURE**

A process was initiated to broaden and extend the Unit’s governance structure to better represent the stakeholders.

**TRANSITION TO A NEW HOST ORGANISATION**

Following the disestablishment of DHBNZ, the hosting function for the Unit was transferred to the Central Technical Advisory Service.

**FUNDING**

The Unit secured funding from the 20 DHB CEs and the Ministry of Health to support a continued roll-out of the CCDM Programme through to 2013.

**SUPPORTING DHBS TO UTILISE ACUITY BASED SYSTEMS**

The Unit had assessed that the ability of DHBs to accurately assess the clinical demand generated by the patient (acuity) was a critical component for successful capacity demand matching. The Unit began a work stream aimed at supporting DHBs who own a validated patient acuity system to get maximum return from this investment, and it also met with the Chair of the national IT Board to make a case for the desirability of all DHBs acquiring acuity capability. At that time 10 DHBs had acuity capability, with 2 DHBs intending to trial and one DHB preparing a business case to acquire an acuity system.

**NATIONAL INTEGRATION AND WIDER SECTOR ENGAGEMENT**

By this time the CCDM work was now firmly (although not officially) placed within the national productivity agenda, with a major focus of the work on supporting the most productive match between organisational demand and resourcing.
SECTOR GROUPS

The Unit continued to collaborate with other sector groups who were involved in work that interfaced with the CCDM strategy, including the national ED Advisory Group, the MOH, and the Hospital productivity work being developed within DHBNZ. It was recognised that there was a need for the lead parties to make definitive decisions about how the work would be taken up in the sector. In particular, there was a need to look at how the processes could deliver robust, consistent and cross-referencable data between DHBs.

The Unit maintained close contact with the lead Directors of Nursing through the DoN on the Governance Group. The Directors of Nursing were actively engaged, but there were differences of opinion about the need for validated acuity systems. The Midwifery Leaders were involved in the joint processes with the Midwifery Employee Representation & Advisory Service (MERAS), the NZ College of Midwives (NZCOM), and the NZNO.

There was no active engagement with the Chief Medical Officers (CMOs), although a request was made for a CMO to be appointed to the new Governance Group. The Allied Health leaders were actively engaged with the Unit, and discussions were ongoing about how the Unit could support allied health and where the starting point would need to be. Local engagement with allied health began taking place on the CCDM sites. It was agreed that there would be a Director of Allied Health on the new Governance Group.

HEALTH UNION COLLABORATION

The NZNO remained a committed and active partner in the work. The PSA became increasingly engaged. MERAS was involved in a process with the Unit regarding developing an agreed multi-party process for midwifery. There was no significant engagement from the medical or technical unions.

KEY LEARNING FOR JUNE 2010-JUNE 2011

From its inception, the SSHW Unit had been on a steep learning trajectory. This continued in the 2010-2011 year, with a focus on testing, validation and extension of the programme and associated resources. Key insights from the 2010-2011 year included:

- The importance of being able to accurately assess the clinical demand generated by the patient
- The need to thoroughly brief DHBs intending to begin the CCDM programme regarding the whole of system approach, and widening the brief beyond nursing and midwifery
- The importance of spending sufficient time and resource to establish effective structures and relationships between the parties before technical changes are attempted
The inadvisability of applying the staffing tool (Mix & Match) outside of the wider CCDM programme without patient acuity data to inform the calculation

The importance of focusing sufficient attention on the base resourcing prior to implementing variance management strategies

The importance of having the onsite coordinator in place prior to beginning the programme

The importance of establishing the permanent multi-party oversight of CCDM within the DHB to ensure that maximum value is achieved

The potential value to the sector of the work of identification markers that indicate a trajectory to failure (but precede failure)

The degree to which DHBs are currently underutilising the capability of the TrendCare system.

JULY 2011-DECEMBER 2011 WIDENING PARTICIPATION

STATUS SUMMARY

The six-month period from July 2011 to December 2011 saw a large increase in logistical complexity for the Unit, brought about by the increasing number of participating DHBs. As planned, the second intake DHBs were now actively implementing and the third intake were being recruited. Other challenges included the induction of a new expanded Governance Group, extension of the programme to Allied Health, continuation of the BOP model site work, an expanding research and evaluation agenda, and the fact that the second intake DHBs were requiring a higher level of input than predicted.

The Safe Staffing Healthy Workplaces agenda had now progressed to the point where DHBs and health unions had available the tools, resources and support to make changes to organisational design and functions. The Unit was not claiming that the CCDM Programme was the only answer, nor the only activity that was going on; rather, it saw the work as a way of strengthening organisational resilience in areas where less attention was being invested. While each DHB had a unique profile, the work was showing that all DHBs could benefit from giving attention to:
1. Strengthening the way base resources are set, established and maintained

2. Strengthening the approach to managing mismatch between demand and capacity (variance management)

3. Strengthening the quality of information that the organisation collects about how effectively it is operating and about how clinical demand (acuity\textsuperscript{35}) is identified

4. Strengthening the way information is used to support decision making

5. Strengthening relationships and shared decision making within and across the organisation.

**MAXIMISING PARTICIPATION**

By now, three distinct DHB groups were driving the roll-out of the CCDM Programme. The first group was made up of those DHBs who had a validated patient acuity tool and a desire to participate. The second group comprised those who had a desire to participate but no acuity capability. The third group was made up of DHBs who had neither the desire to participate nor acuity capability. With Unit resources already stretched, a strategy was adopted aimed at securing maximum participation by:

1. Providing intensive support to DHBs with suitable system capability to enable them to get measurable gain for patients and staff, and to make best use of scarce resources

2. Supporting DHBs wishing to acquire the technical capability to implement the CCDM programme

3. Providing evidence to the sector and the non-participants of the value of the CCDM approaches.

This strategy meant that maximum resources would be allocated to participating sites and to making outcomes visible to the wider sector, which would in turn encourage future participation.

\textsuperscript{35} Acuity is a measure of the **total direct care requirement** of the patient.
FROM DIAGNOSIS TO CHANGE

During this period a significant shift was taking place around who was primarily responsible for progress or lack of progress. During the developmental stages of the work, the SSHW Unit carried the weight of responsibility for success or failure. With the CCDM Programme now defined and available for implementation, the responsibility for the success of the next steps was shifting to the parties. A trend was emerging among participating DHBs of doing well during the diagnostic phase of the programme, but then stalling when it came to actually making change to the design and operation of the organisation. This was particularly so with regard to the application of the staffing methodology, Mix & Match.

The Unit noted to the Governance Group that the only step which would result in a visible difference to the parties was when actual changes were made. The Unit was responsible for developing the mechanisms for change, and was largely delivering on this requirement, but was not in a position to require DHBs to act, and the mandate for change negotiated between the parties was not strong. A report from the Unit Director to the Governance Group summarised the challenge facing the parties:

“The parties to this work are the enablers of change; through collaboration, cooperation and at times by applying a degree of pressure and urgency. The greatest risk to progress at the current time is that the sector reaches a place of understanding but is unable or unwilling to shift the status quo. Change is never neutral in outcome and an agenda such as this will always require balancing off relative priorities. The next two years will be a test of the strength of the parties’ relationships and leadership. There is no question about the parties’ appetite to achieve the gains; the question is about the commitment to take the steps necessary to get there.”

DHB INVOLVEMENT JULY 2011-DECEMBER 2011

BAY OF PLENTY MODEL SITE

During this period, the BOP DHB continued to steadily progress, embedding the CCDM Programme into their organisation. Features of note included the DHB pioneering the implementation of a sophisticated variance response management system. This included both technical and social processes, and provided a proto-type for all subsequent DHB development in this area. The BOP DHB also continued to extend the Mix & Match methodology across the organisation, and to build the staffing calculation into their annual budgeting process. There were some exciting developments emerging, but it was also becoming clear how difficult it was to hold the gains, in the face of significant sector pressure with regard to tightly managing budgets and delivering increasing service volumes.

36 Summary of the Care Capacity Demand Management Approach, Gdrive/SSHW/2011/Updates and communications.
THE SECOND INTAKE SITES

All three sites moved into the early stages of the action phase of the CCDM Programme during these 6 months. Similarly to the experience on the Demonstration sites, the action plans varied according to the current status and wishes of each organisation. There was an expectation that all plans would include five work-streams to support the CCDM Programme with phased initiation and a connected web of interventions and outcomes:

- Communication
- TrendCare utilisation
- Base staffing (Mix & Match)
- Development of a Core Data Set
- Variance Response Management.

The progress made across the three DHBs varied widely due to a number of factors, including: the level of readiness of the DHB, both structurally and culturally; the level of resource and priority given to the CCDM Programme within the DHBs’ overall agenda of activity; the leadership commitment; the level of involvement of local NZNO staff; and the parties’ willingness to adopt the strategies.

RESOURCE DEVELOPMENT AND EXTENSION

The resources developed by the Unit in collaboration with DHBs continued to be tested and refined. Emphasis was placed on:

- Consolidating CCDM resources into a single resource
- Review and evolution of the CCDM staff survey
- Progress with the identification of key metrics for the core data sets to support CCDM
- Review of the VRM metrics and approach
- The development of software to support the Mix & Match process
- Support for DHBs using the TrendCare system to get maximum return on investment
- The development of a methodology suited to the NZ maternity model & NZ midwifery practice.

The staffing methodology was the most advanced of the resources, and was being applied in an increasing range of settings. Software development to support the Mix & Match methodology was in the testing phase. Pilots were initiated in a community health setting (MidCentral), and mental health for the older person (BOP). A planned staffing pilot for Emergency Departments (ED) was delayed, due to not having any DHBs currently using TrendCare in the ED setting. The formation of the Midwifery Staffing Advisory Group (MSAG) enabled a maternity services pilot to be initiated with Nelson Marlborough DHB, building on earlier work undertaken by the Bay of Plenty DHB. Other developments included progressing the establishment of core data sets and data councils, and refining and implementing the variance response screens and associated processes that were pioneered by the Bay of Plenty DHB.
Pilot work with allied health groups was slow to get off the ground, primarily due to the need to develop a unique work stream for allied health disciplines. The Governance Group agreed to the establishment of an Allied Health Advisory Group to give greater clarity to the direction of this work, and a dedicated 0.2 FTE was tagged to this work-stream. The medical profession continued to show little interest in becoming more than superficially involved in CCDM, and this was identified as an issue of significance when using a whole of system approach.

**CHALLENGES AND LEARNING**

The experience of the second intake sites reinforced previous learning and provided new insights, specifically that:

- Support must be strong amongst the executive leadership, and CCDM must be made a priority for organisational attention and resourcing
- The participating unions must have a strong and consistent presence on the site, including the involvement of the organiser, professional nurse advisor and delegates
- The current level of stress within an organisation, as measured by the SSHW Survey, was a predictor of how much progress would be made
- A full-time site coordinator was necessary to ensure progress
- All CCDM activity needed to be underpinned by good quality data and supported by permanent structures to work with the data
- Progress requires change (i.e. to move past the diagnostic phase)
- All parts of the programme need to be progressed (i.e. it is not a pick list)
- Attention to staff engagement and social process is critical.

**RESEARCH AND EVALUATION JULY 2011-DECEMBER 2011**

The Unit was aware of the stakeholder’s need to have firm evidence regarding the value of the CCDM approach, and the appointment of a Research and Evaluation Coordinator accelerated progress in this area. A planned external evaluation of the Variance Response Management processes at BOP DHB was slow to get off the ground, which meant continuing to rely on anecdotal evidence to assess the efficacy of this work. The Unit continued to conduct safe staffing healthy workplaces surveys with staff in participating DHBs, and the number of participants was now over 3000. This data set was emerging as a resource of great value. An appropriate funding grant stream was identified within the Health Research Council, and the Unit was preparing to submit an expression of interest in early 2012.
A research team was assembled comprised of national and international experts. Unfortunately this application, as well as subsequent applications, was unsuccessful, thus limiting the ability of the Unit to undertake in-depth quantitative enquiry.

GOVERNANCE OF THE SSHW UNIT

The Governance Group continued to provide strong support to the Unit, and the model of shared governance between the DHBs and the unions was working well. The transition to a broader group structure took place with additional representation provided by the PSA and the SFWU. In addition, dedicated allied health and medical members were appointed to the group to better reflect the emerging multi-disciplinary direction and impact of the work.

CONCURRENT UNIT ACTIVITY

STRENGTHENING THE IT PLATFORM TO SUPPORT THE CCDM PROGRAMME

As the CCDM Programme developed and became increasingly sophisticated, the need for valid and accurate data was highlighted. Effective CCDM processes required data from a range of systems, including the human resource database, the rostering system and the patient management system. The Unit was able to work with a range of existing DHB systems, which meant that little new investment was required for the participating DHBs. The exception was the requirement for patient acuity data. This was not the decision of the Unit; the COI recommendations had specified a patient acuity based approach.

TrendCare was identified as the only IT system present in the NZ DHB network with the critical functions required to support the execution of the Unit’s responsibility to assist DHBs and their union partners to improve capacity demand matching in DHBs, via a patient acuity based system. Therefore the SSHW Unit had an interest in working with TrendCare to maximise the functionality of the system as it related to the implementation of the CCDM Programme. DHBs were not precluded from investing in other systems, but because no suitable alternative had been identified, the Unit was restricted to working with DHBs who had the TrendCare software.

Up until this point, the relationship with TrendCare had been informal and based on a mutual commitment to knowledge sharing. Over time this led to some confusion amongst the stakeholders and the participating DHBs around where TrendCare fitted into the overall CCDM Programme. Education and information were offered to clarify that TrendCare was an important data vehicle for the CCDM Programme, but that the primary business relationship was between TrendCare and the licensed DHBs; no formal contractual agreement existed between the Unit and TrendCare Ltd.
The Unit was careful to be clear that the primary interest in the relationship and joint activities was in pursuit of DHBs getting the best return from the investment that they had made in TrendCare, and to ensure that quality data was being generated from the system to support the CCDM Programme.

Towards these goals, the Unit endeavoured to provide coordinating functions for the DHBs, intended to reduce duplication of effort and the current dependence on TrendCare for support with basic functions. At no time did the SSHW Unit solicit work on behalf of TrendCare; however, the Unit was recommending to DHBs the value of acquiring a validated patient acuity system and the advantages of having system consistency across the sector, if this could be achieved. A number of meetings took place between the Unit, the IT Board, and Health Benefits Ltd to discuss the importance of including patient acuity data capability in the emergent national health IT platform, and interfacing this with other system data such as rostering and patient volumes.

The potential for this data to inform a consistent national data set was outlined. As an example, the Unit had assessed that it would be entirely feasible within a year to produce valid cross-referenceable data for the 12 TrendCare licensed DHBs comparing Hours Per Patient Day/Length of stay/nursing cost weight.

It was unclear at this stage who should take responsibility for this and how it could be funded, but the potential was clear.

Having assessed that acuity data was a critical component for successful capacity demand matching, the Unit initiated a work-stream aimed at supporting all DHBs with a licence for TrendCare to get maximum return from this investment. At that time, 12 of 20 DHBs had acuity based capability, with a number of other DHBs showing an interest. An independent evaluation commissioned by the Unit looking at current utilisation of the TrendCare system in licensed DHBs had identified a number of issues with data availability, data integrity, incomplete system interfaces, support, training, and maintenance. These were generally user issues rather than problems with the system itself. It was considered that failure to address these issues posed a significant threat to the overall integrity of the CCDM Programme. In addition, the evaluation had identified that many of the licensed DHBs were using only a fraction of the system’s capability, meaning that productive potential was going unrealised.

Consequently, in August 2012, a dedicated position was created within the Unit to focus specifically on supporting DHBs to optimise their IT system capability to support key aspects of the CCDM Programme. In the interim, until the appointment of the new role, the Unit continued to maintain a close collaboration with TrendCare to support the embedding of the Part 1 and Part 2 Mix & Match methodology, and the initial stages of developing technical specifications and enhancements to support the expansion of the CCDM staffing methodology to midwifery, community health and allied health.
NATIONAL INTEGRATION AND ENGAGEMENT WITH LEAD GROUPS

The Unit continued to collaborate with other relevant sector groups, including the National DHBs Health Quality and Productivity Steering Group, the NZ Nursing Council, National Health Board, and the Emergency Department Shorter Stays Advisory Group. The Unit now had less direct involvement with lead groups, due to Governance Group members taking over the responsibility for keeping their stakeholder groups informed (CEs, GMs HR, Lead DoNs, and Directors of Allied Health). The Midwifery Leaders were involved in the Midwifery Staffing Advisory Group involving MERAS, the NZCOM and the NZNO. There was no active engagement with the CMOs.

HEALTH UNION COLLABORATION

Strong and direct engagement from the participating health unions continued. The concurrent multi employer/union negotiations did not appear to have negatively impacted the ability of the parties to work constructively on the agenda, although there was undoubtedly pressure from union members to see wider implementation and quicker progress.

JANUARY 2012-DECEMBER 2012

STATUS & DIRECTION

Following the establishment of the widened Governance Group in late 2011, the Unit began the 2012 year with a clear sense of direction about where the stakeholders wished activity to be concentrated. This focused on:

- Continuing to roll out the CCDM programme to willing DHBs, with a goal of 12 participating DHBs by the end of June 2013
- Bringing three new DHBs into the CCDM programme in early 2012, including Tairawhiti, who were in the engagement phase
- Recruiting into new positions to support the work programme, including a role dedicated to supporting the technical aspects of the programme, and specifically improving TrendCare utilisation amongst licensed DHBs
- Prioritising research and evaluation
Prioritising the extension work (particularly Allied Health, midwifery and CHS)

Supporting union partners to assess what resources would be required to secure member commitment and involvement

Continuing to strengthen relationships and involvement with other key sector groups

Balancing the quality of the outcomes of the work with the quantity of participation.

This list was distilled into four major priorities for the Unit work programme:

1. Continuing to work with DHBs wishing to implement the CCDM Programme, with a focus on consolidating the processes and extending the coverage to more services and professional groups

2. Initiating research to confirm the efficacy of the CCDM approach in meeting the expectations of the parties

3. Ensuring that the sector developed the system capability to support an acuity based approach

4. Building the profile and relevance of the work in the sector.

SSHW UNIT PRIORITY 1: CONTINUE TO IMPLEMENT THE CCDM PROGRAMME IN DHBS INCLUDING EXPANSION & EXTENSION ACROSS SERVICES AND DISCIPLINES

THE DEMONSTRATION SITES

The BOP DHB continued to embed the programme with a small amount of support from the Unit. This DHB generously hosted visits from a wide range of DHBs interested in their development to date, particularly around variance response management (VRM), and also their leading work with the Releasing Time to Care programme. An independent evaluation of the VRM implementation was commissioned. This resulted in valuable learning about how to initiate, embed and sustain this type of whole-scale change.
THE SECOND INTAKE DHBS

The second intake DHBs continued to receive a high level of direct support from the Unit as they moved through the programme and implemented their action plans. It was becoming increasingly clear to the Unit that notwithstanding the pressure on DHBs to secure rapid gains, a full first year was required as a development phase, in order to introduce the necessary infrastructure, capability, capacity and social structures to support the changes required in the second and subsequent years.

MidCentral DHB had come into the programme with above average data capability and a strong focus on demand forecasting. The DHB worked with the Unit to develop prototype software for the Mix & Match part one process, with the aim of reducing the labour input required to manage the data obtained during work analysis. This proved moderately successful, but ultimately it was decided that the requirements were beyond the capability of the Unit to develop ‘in-house’, and other options were considered.

Northland DHB provided an exemplar for other sites in three regards. The first was in the commitment made to implementing the CCDM Programme in its entirety across the whole organisation. This resulted in a fairly ‘pure’ and linear approach. The second was in the way the DHB and the union partners developed their social structures to support the work. The parties committed to and sustained robust and well-structured groups and used action-oriented approaches. The third exemplary outcome came about as the result of intensive work undertaken with one ward that was in crisis. Over the course of 9 months, the ward was supported to apply all of the CCDM tools and strategies, and was empowered to undertake changes to the staffing model, resourcing, and their ways of working. The resulting improvements were outstanding, and were seen as providing the parties with the first substantive evidence of the power of the approach if applied with rigour and commitment.

THE THIRD INTAKE DHBS – TAIRAWHITI, SOUTHERN AND TARANAKI

The third intake of DHBs benefited from what was now becoming a more streamlined approach to site initiation and individualised programme development.

TAIRAWHITI DHB AND THE ‘FIT’ APPROACH

January 2012 saw Tairawhiti DHB commencing a work programme with the Unit that incorporated an experimental element: the concurrent implementation of the CCDM programme and Releasing Time to Care (RTC) – The Productive Ward. This pilot approach, called the FIT Approach,37 came about as the result of observations made by the Unit that wards who were already involved in RTC when they applied the Mix & Match process appeared to get greater overall gain than those who implemented Mix & Match alone.

37 ‘FIT’ as in fit for purpose, and able and ready
Tairawhiti was one of only a few DHBs who had not had exposure to RTC or to one of its NZ variants (such as Whai Manaaki, or Making Time to Care). This provided the Unit with the opportunity to observe the impact of concurrently introducing the two approaches, one focused on the staffing model, and the other on optimising the environment in which care takes place.

The goals of the FIT Approach interventions were to positively influence the following:

- A well organised and appropriately resourced physical environment
- The best possible match of staff to demand (number, mix & schedule)
- A positive work environment for staff
- Cost effective use of resources
- A service that is well informed and is informing the wider organisation
- A service that is readily able to adapt to variation and change
- A service with a high level of self-efficacy.

The pilot began in January 2012 with facilitation and direction from the Unit. During the next 12 months, in common with year one progress seen on other sites, the Tairawhiti DHB embarked on a body of activity that positioned them structurally, technically and socially to be ready to implement positive change.

- A multi-disciplinary FIT Approach Council was commissioned (including union partners)
- Work was undertaken to strengthen the DHB/union relationship and partnership approach
- A focus was placed on improving utilisation of TrendCare and improving the quality of the data
- A communications plan was developed and implemented to support the activity
- Releasing Time to Care and the Mix & Match methodology were introduced into two volunteer wards
- Early work on the variance response management strategy was commenced in mid December
- The development of the core data sets and councils were not substantially progressed, although the basis for this was established in two volunteer wards, in conjunction with the RTC activity.
In December 2012, the Unit made recommendations to the DHB suggesting that much of the groundwork necessary for successful implementation of the FIT Approach was now in place, and needed to be followed by a commitment to making the organisational changes to policy, process and practice that would deliver the true value of the programme to the DHB.

**SOUTHERN DHB**

Southern DHB (an amalgamation of the previous Otago DHB and Southland DHB) commenced the CCDM Programme in mid 2012.

A decision to fund CCDM coordinators on both sites together with strong leadership from the CEO and Director of Nursing contributed to the rapid initial progress seen. In addition, the DHB had only recently acquired the TrendCare system. Although the system roll-out was not complete when CCDM began, the DHB had good quality data and high levels of compliance with data input.

**TARANAKI DHB**

In early May 2012, the Taranaki DHB submitted an expression of interest to the SSHW Unit’s Governance Group with a request to join the CCDM Programme. Following a short pre-engagement phase, the DHB began programme implementation in July 2012. It became obvious during the discovery phase of the programme that the concurrent rebuild of the inpatient facilities was going to challenge the ability of the DHB to give sufficient attention to both projects. In addition, questions arose around the advisability of applying the Mix & Match staffing methodology to wards that were going to have substantial changes to their service profile within the next year. Confusion also arose due to the DHB having made a prior commitment to using an alternative staffing methodology, and it was not clear whether this would be able to be reconciled. However, the DHB did manage to progress some of the foundational work during the year. This included:

- Establishment of a CCDM Council
- Progress with the development of the DHB/union partnership approach
- Increased attention to improving the utilisation and data integrity of TrendCare
- Initiation of the Mix & Match methodology in one ward
- Early steps towards the implementation of central operations management to support the variance response management strategies.

The timing for Taranaki DHB was less than ideal due to the rebuild, although there was a case to argue that the CCDM programme was potentially an ideal adjunct to support the processes of change that were taking place. There were two lessons for the Unit and the DHBs. The first was the importance of establishing whether an organisation was able to make the CCDM Programme a sufficiently high priority (amongst competing priorities); the second was the ongoing challenge of assisting DHBs to see CCDM as ‘business as usual’, rather than as an optional extra to other core activity.
THE FOURTH INTAKE: WAIITEMATA DHB

In the second half of the 2012 calendar year, the recruitment and initiation of the fourth intake sites was underway. Having acquired TrendCare, Waitemata was the first of this group of DHBs to implement the CCDM Programme. Active planning and discussions were also being undertaken with Hutt Valley, which was implementing the TrendCare system.

WAITEMATA DHB

Waitemata DHB officially began the programme in July 2012, but experienced some delays in the early stages. By the end of December 2012 the discovery process had been completed and reported on, the structural groups were established, and the first stages of ward recruitment and training to begin the Mix & Match process had begun. Planning was underway to initiate the VRM component of the programme in the New Year.

HUTT VALLEY DHB & WAIRARAPA DHB

The Hutt Valley DHB had been signalling interest for some time, and had taken steps to acquire TrendCare in order to make the DHB eligible to join the CCDM Programme. As there was a concurrent amalgamation of key functions between the Hutt Valley DHB and the Wairarapa DHB, it was agreed that as far as possible, both DHBs should be involved in the CCDM Programme, although it was recognised that this was likely to be a staged approach.

CCDM EXTENSION & EXPANSION PROGRAMME

The initial two years of the Unit’s work programme had focused primarily on the development of a staffing methodology suitable for use in general inpatient units. As the programme developed, it was agreed that the methodology needed to be extended to encompass community health, and also that expansion work for maternity services would be a priority.\(^{38}\) Additionally, with the formal inclusion of Allied Health, it was identified that a separate work-stream focusing on this broad group of professionals would be required. To support this work, three advisory groups were formed – Community Health, Allied Health, and Midwifery/Maternity – with membership from the relevant unions, the DHBs and the Unit. While this added to the complexity of the programme and to the workload of the Unit, it would not have been logical to try to separate off inpatient nursing from the multi-disciplinary team and the multi-service functioning of DHBs.

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\(^{38}\) Extension work was considered to be broadening the methodology to another service, but within the same profession, while expansion work was considered to be developing methodology for a different discipline.
MidCentral DHB was the lead DHB for the work to extend the Mix & Match methodology into community health. Nelson Marlborough DHB was the lead for the maternity expansion work. A number of DHBs were contributing to the expansion work for allied health.

**PRIORIT Y 2: CREATING EVIDENCE OF IMPACT**

Both the Unit and the Governance Group were aware of the need to deliver sound evidence around the impact of the activity being generated by the CCDM Programme. ‘Hard’ evidence was still elusive, however, and a checkpoint of what was known was undertaken at the beginning of 2012 in order to inform the next steps for evaluation and research activity.

The checkpoint determined that as the CCDM Programme had developed; all steps outlined in Chapter 5 of the SSCOI report had been addressed to some degree. However, the programme interventions were at varying stages of evolution in the various DHBs, and the DHBs had exercised their right to prioritise some activities over others. As a result, there was still no DHB which could be considered both to have implemented the Programme in its entirety, and to have sustained implementation for a sufficient period of time to enable comprehensive evaluation of the CCDM Programme as a whole-system intervention. Therefore an interim approach was taken, which involved considering the individual interventions of the Programme and investigating the progress that had been made.

**RESEARCH & EVALUATION APPROACH**

The main focus of validation up until this point had been provided by process and resource evaluation. There had been little enquiry linking actions to outcomes, although this was changing as the CCDM Programme (and its component parts) were being progressively embedded and sustained in an increasing number of DHBs. It was noted that observational investigation was occurring every day through the work of the Unit, and had been extensively utilised to develop the programme to this point. The next challenge was to examine whether the CCDM approach did indeed result in quantifiable and observable improvement in assuring patient safety and satisfaction, supporting staff health and well-being, and supporting organisational efficiency.

Three approaches to investigate the efficacy and value of the CCDM Programme going forward were proposed:

1. **Observational approach:** This approach was considered appropriate for elements of the programme that were in the development or testing stage. The purpose of an observational approach was to test the feasibility of the approach and to identify improvement. This type of evaluation was generally undertaken by the Programme Consultants in the context of their site work.
2. Formal evaluation: This approach was considered most suitable for investigating elements of the Programme that had been implemented and refined, and where early associations were able to be made between the intervention applied and the intended effect. Earlier examples of this included the independent review of the Demonstration Sites, and the VRM Evaluation being undertaken with the Bay of Plenty DHB.

3. Research: This approach was considered suitable for rigorously testing the relationship between specific programme interventions and specific outcomes relating to patient experience, staff experience, and performance and productivity measures. The ability to undertake this level of inquiry depended on having a testable change, and this was still proving to be problematic.

RESEARCH AND EVALUATION PLAN

A research and evaluation plan for 2012-2013 was submitted to the Governance Group and subsequently approved. The aim was to deepen the level of research and evaluation examining the CCDM programme and its effects on the sector. The limiting factor identified in the plan for undertaking the level of research required was the state of progress with the CCDM Programme and the rate of implementation in participating DHBs. As noted, there were no DHBs which had implemented the entire programme and had also completed a sufficient post implementation period to enable a large-scale study. A series of small scale, targeted studies were recommended to investigate aspects of the CCDM Programme. It was envisaged that these studies would provide evidence of impact and outcome within the services that had been involved, and would inform a future large-scale study that would commence when the sector had made sufficient progress.

The nature and timing of each proposed investigation was based on the following factors:

1. Identification of a suitable research question
2. Availability of appropriate data to investigate the question
3. Identification of a suitable methodology
4. Securing a willing service or site to undertake the study
5. Relative importance to the stakeholders in having this question answered
6. Resource availability to complete the study.

The Unit enlisted the help of external experts from the national and international research community to inform the development of specific research proposals.
RESEARCH AND EVALUATION OUTPUTS 2012

A range of research and evaluation activities were undertaken or progressed over the course of the year. The range and scope was limited by failure to secure external research funding.

- Northland DHB Ward 2 proof of concept: Evaluation of the actions and activities undertaken by the ward as an example of the potential gains when applying the full CCDM methodology
  **RESULTS:** Application of the full technical and social methodology resulted in significant measurable gain in all three target areas: quality patient care, a quality work environment for nurses, and making best use of health resources.

- Northland DHB evaluation of VRM implementation and metrics
  **RESULTS:** Provided confirmation of the results from the Bay of Plenty DHB evaluation that the introduction of the technical and structural processes associated with VRM must be accompanied by appropriate user education, support, encouragement and a closed feed-back loop.

- BOP & Nelson Marlborough DHBs: examining the relationship between the application of the Mix & Match methodology and staff and patient perceptions of care
  **RESULTS:** Shifts that met the recommended staffing design showed an association with greater staff satisfaction, satisfaction with the care delivered and patient satisfaction than did shifts with deficient staffing design.

- Waitemata DHB: preparatory work setting up a study examining patient churn and the time associated with this phenomenon
  **PURPOSE:** To identify how much nursing time is lost to no-value activity associated with patient displacement due to high service utilisation levels

- Care rationing: Preliminary work on understanding this emergent metric, beginning with a national seminar in May 2012, involving an international research collaboration
  **OUTCOME:** Preliminary enquiry highlighted the potential importance of this metric in assessing the standard and quality of patient care and the relationship with staffing design.

- Research to examine the relationship between staff perceptions of work effort and perceptions of patient care, service quality and staff wellbeing
  **RESULTS:** The study found strong associations between nurse reported work effort and perceptions of the quality of patient care, experience of work, satisfaction, employee engagement, absenteeism and the ability to provide complete patient care.
- Expansion work with Allied Health
- MidCentral DHB: Expansion work for community health services, including the development of a data specification for inclusion in the TrendCare tool and IT platform
- Midwifery: Continued development of the pathway for maternity services
- Preliminary work to evaluate the potential for HPPD data from TrendCare to be aggregated into a national data set around nursing productivity and quality markers
- Core data set: An analysis of the purpose and potential of the development of a core data set to monitor design and impact associated with CCDM activity

‘SOFT’ MARKERS OF PROGRESS

While the provision of ‘hard’ evidence of outcomes and impacts continued to provide challenges, a number of consistent and encouraging signals were emerging from the participating DHBs. The most compelling of these related to the activity being undertaken around managing capacity/demand variance on or close to the day.

The pioneers of this work had been the Bay of Plenty DHB, with the development and launch of their Variance Response Management (VRM) Strategy. This included establishing a Central Operations Centre, and shifting data relating to capacity and demand from a paper based system to a visually dynamic, electronically based system. This was accompanied by the development of social infrastructure to support communication and decision-making. The impact when this system went ‘live’ was almost immediate, as the organisation engaged in a profoundly different way of looking at and managing its resourcing. As well as having access to more real-time, accurate information, transformation was seen within and across disciplines as the organisation began to work increasingly collaboratively, and with a greater shared commitment to accountability for what was happening within services and with the organisation as a whole.

Each following DHB subsequently engaged with this area of development with equal enthusiasm, resulting in increasingly sophisticated systems emerging. DHB personnel, including IT, management, and clinical, proved capable of taking their variance response systems from a very low baseline to operational status in a remarkably short time frame, sometimes within weeks of conception. The best way to describe what was happening was that the CCDM processes were unlocking existing organisational potential and assisting latent capability to be harnessed and realised.
The Mix & Match process was also resulting in small ‘improvement revolutions’ in some of the services in which it had been administered. By and large these were ground-led, and resulted from the power of the data presented to staff, inspiring improvement processes. These improvements were seen to be most effective where line management endorsed them and actively removed bureaucratic obstacles to change. While not formally measured, the anecdotal feedback strongly indicated the value of these less formal change initiatives in improving work flow, productivity, service coherence, teamwork and patient care.

**PRIORITY 3: DEVELOPING SYSTEM CAPABILITY**

Having suitable interfaced IT systems in place in DHBs to collect, collate and produce quality information continued to be a priority for the Unit.

**SECURING PATIENT ACUITY DATA CAPABILITY WITHIN THE NATIONAL IT PLATFORM**

The Unit continued to work to ensure that the two bodies tasked with progressing a nationally consistent approach to IT systems in DHBs were aware of the need to include appropriate capability to support the CCDM programme. Health Benefits Ltd (HBL) was tasked with working on the ‘back room’ systems, such as HR and rostering, while the IT Board was considering the ‘front room’ involving patient information. The challenge this posed for the Unit was that the CCDM programme bridged both systems. To work effectively, data needed to be brought seamlessly together to match the patient requirement for care (demand) with the required staffing (capacity). Achieving this required rostering and HR systems that could interface with patient acuity data. For a time it looked as if this might fall between the two systems, but this was ultimately resolved, with HBL guaranteeing that there would be a requirement for all DHB systems to have the capacity to support patient acuity data.

**DHB PATIENT ACUITY SYSTEM COVERAGE**

By the end of 2012, 14 of the 20 DHBs held licences for TrendCare software, making TrendCare the most consistent DHB IT system. Site support for DHBs entering the CCDM Programme now included early work to assess current TrendCare utilisation within the DHB, education and advice to make improvements, and liaison with TrendCare for issues needing to be addressed by the vendor.

TrendCare continued to work with the Unit and the DHBs to identify what enhancements would be desirable to support the CCDM Programme in TrendCare’s next planned upgrade. Because TrendCare is a product utilised in a number of countries, this depended on external factors and timelines, meaning that some parts of the CCDM Programme development were delayed or put on hold.
TRIAL OF THE SSHW UNIT NATIONAL IT COORDINATOR ROLE

The dedicated IT coordinating position planned in the 2011 year was filled in August 2012. The purpose of the new role was to grow the capability of DHBs and their union partners to maximise effective utilisation of the TrendCare system and the IT systems which interfaced with it. The goal was to ensure that DHBs had intelligent information to inform good decision making around forecasting, planning, workforce management, resource investment, clinical decision making and evaluation. The role was initially set up as a pilot, with TrendCare and the Unit each providing 50% of the funding. While there was consultation with TrendCare on the focus of the role, the IT Coordinator reported only to the SSHW Director, and TrendCare did not seek to impose any requirements for specific outcomes. As a result of the success of this pilot role, the SSHW Unit extended the position for a further two years and internally funded it.

TWO-YEAR PLAN TO IMPROVE DHB SYSTEM CAPABILITY TO SUPPORT THE CCDM PROGRAMME

The 24 month goals for the work stream being led by the IT Coordinator were framed around improving system capability.

WITHIN TRENDCARE LICENSED DHBS:

- DHBs would be prioritising and systematically implementing the functions of TrendCare to gain maximum utility from the functionality of the system
- DHBs would at a minimum be using patient prediction and actualisation, and the Staff Allocate screen competently and consistently
- DHBs would be able to operate independently with the basic TrendCare functions
- Interfaces between systems would be in place and functional
- DHBs would be utilising the reporting functions of TrendCare to inform organisational decision making at all levels
- Critical TrendCare data would be integrated into the tools and processes of the CCDM Programme including the Mix & Match methodology, the VRM strategy and the core data set.
- DHBs would be able to show cost saving through efficiencies
- DHBs would be able to show improvement to patient care and outcomes

ACROSS DHBS

- DHBs would have consistent coding banks
- DHBs would be sharing data for the purpose of system improvement and audit
- DHBs would share resources to collaborate on innovation of mutual interest, e.g. clinical pathway development
- TrendCare upgrades would be responsive to the needs of the NZ DHB health sector
ACROSS THE SECTOR

- The TrendCare system and data would be used to provide a high quality integrated data picture to the health system
- The TrendCare system would be used as a vehicle to support national level innovation and improvement
- The TrendCare system would be being used in ways that resulted in system improvements and productivity gains
- The national health IT platform would include functionality to support patient acuity data and processes to match capacity and demand

INITIAL OUTPUTS: AUGUST 2012 - DECEMBER 2012

- National TrendCare super user group established.
- National TrendCare Audit tool developed and piloted
- Draft DRG report available (reviewed by vendor)
- Staged utilisation plan completed
- Software interfaces being systematically targeted
- National reporting template and data set identified.

PRIORITY 4: BUILDING RELEVANCE IN THE SECTOR

UNION PARTICIPATION AND ACTIVITY

The participating unions were in the position of being both invested partners and key sector stakeholders, with independent responsibilities to their members. There was a widely held perception that if the CCDM work failed to deliver as expected, there would be a renewed call for nurse to patient ratios. This was not used as a threat, but had always been a default position held by the NZNO.

Union participation from both the NZNO and the PSA remained high during this period, with the NZNO in particular investing new resource to support progress with the SSHW agenda, in the form of an enhanced internal work-stream and a position dedicated to the agenda. Both unions were coming under increasing pressure from members to see the expected widespread changes take place. There was also an awareness that the current industrial agreement was due to expire in late 2014, providing an opportunity for the unions to re-evaluate their commitment to the joint approach, which had by now been ongoing for 7 years.
NZNO ACTIVITY

As part of their commitment to the success of the agenda around safe staffing and healthy workplaces, NZNO launched the CarePoint strategy. There was initially some disquiet from the DHBs and the Unit with regard to how this fitted with the partnership approach and with the now well-established CCDM Programme.

The NZNO saw CarePoint both as part of a campaigning strategy around the Safe Staffing Healthy Workplaces agenda and also as a way of educating members about CCDM and encouraging active involvement. The NZNO also reiterated their right to campaign independently around the agenda. There were some indicators that the emergence of CarePoint could also be taken as a signal that the tolerance of the union on behalf of its members for the pace of change could be coming to an end. A joint statement was agreed between NZNO and the SSHW Unit regarding key messages around CarePoint:

- NZNO is a strong and committed partner to the joint union/DHB agenda around safe staffing and healthy workplaces
- NZNO is committed to its obligations as a partner and also to meeting its obligations to its members
- The Care Capacity Demand Management (CCDM) Programme is the principal vehicle that has been developed by the parties, to deliver on the recommendations of the 2006 Safe Staffing Healthy Workplaces Committee of Inquiry
- CarePoint is the NZNO campaign branding that is intended to successfully drive CCDM into the DHBs
- CarePoint is primarily directed at supporting NZNO delegates and members through increasing knowledge and understanding
- The CarePoint campaign provides a suite of tools that supports conversations that NZNO has with their members to increase understanding and engagement with the safe staffing agenda (broadly) and CCDM (specifically)
- The CarePoint campaign supports the work of the SSHW Unit by engaging its membership in CCDM so that it gets traction and is successful.

PSA & SFWU ACTIVITY

Along with the NZNO, the PSA and the SFWU had wording around safe staffing and healthy workplaces included in their industrial agreements with DHBs. They therefore had representation on the SSHW Unit Governance Group, enabling them to advocate in areas relating to their membership. PSA representatives were also included in the formal structures established on the CCDM sites and on the Allied Health Advisory Group.
MERAS & THE NZ COLLEGE OF MIDWIVES

The Midwifery Employee Representation & Advisory Service (MERAS) did not have a formal agreement with the DHBs around the Safe Staffing Healthy Workplace agenda. However, as the CCDM scope covered midwifery services, it was logical to include this union and the NZ College of Midwives (NZCOM) to whom they were affiliated. NZCOM and MERAS had developed a document advocating ratios-based staffing standards for maternity services, an approach not supported by the DHBs.

Discussions between the Unit, NZCOM, NZNO (who also had midwife members) and the Unit resulted in an agreement that these groups would collaborate to form an advisory group to lead the work-stream relating to midwives and maternity services. Through a series of meetings of the advisory group and two stakeholder forums, it was agreed to pursue the development of an acuity-based model for maternity services, with TrendCare as the preferred data management vehicle. This decision was based on the widespread licensing of TrendCare in DHBs. It was recognised that some upgrading of the system would be needed to support the specification envisaged by the advisory group.

TrendCare generously agreed to participate in these processes, and a two-year developmental work-stream was initiated. This work included the development of a specification for TrendCare which reflected the unique aspects of the NZ maternity model, and also DHBs undertaking timing studies led by TrendCare to validate the hours per patient day (HPPD) benchmarks in the TrendCare system.

SECTOR STAKEHOLDER ENGAGEMENT & ACTIVITY

During this period, a range of concurrent sector activity affecting the DHB sector had some degree of interface or overlap with the work of the SSHW Unit. Key groups with which the SSHW Unit sought to actively engage included the National Advisory Group for Emergency Departments, the Health Quality and Safety Commission, the Nursing and Midwifery Council, the National IT Board, Health Benefits Ltd, Health Workforce NZ, and the Ministry of Health. It would be fair to say that not all of these bodies fully appreciated the scale, scope and implications of the work that the SSHW Unit was facilitating in the DHB sector. The Unit was well aware that ultimate delivery of the agenda required by the DHBs and the participating unions would require integration of the work with other leading sector development.

The Unit continued to update the Minister of Health bi-annually on activity and progress, and received encouragement to continue to involve additional DHBs, on the basis of the feedback that was being received from participating DHBs and early evidence of progress.

39 The Chair of the ED Shorter Stays group became a member of the SSHW Unit Governance Group.
The SSHW Unit continued to expand the work programme in a challenging, fiscally constrained national environment. The overall goals of the work programme were substantially met, or were on track to be met, by the end of June 2013. These included securing the participation of a minimum of 12 DHBs by July 2013, more consistent use of patient acuity systems, the establishment of a position to support optimum TrendCare utilisation, documentation of the CCDM Programme, Mix & Match becoming adopted as the primary staffing methodology, the production of evidence of effectiveness, increasing sector uptake, and the national IT platform being compatible with CCDM.

Despite this generally encouraging profile, there were some indications of lack of adequate integration of the Programme in participating DHBs. Areas where progress was slower than desirable included the time it was taking for DHBs to make change generally and in response to the staffing methodology in particular. This resulted in the organisations moving quite quickly through the diagnostic phase, but then seeing progress stall.

The problem with making change appeared not to relate to doubts about the process or the findings, but rather to difficulties faced by the DHBs in mobilising new funding, or rearranging funding allocation within a fiscal year cycle. For example, some DHBs expressed a desire to wait until all services were assessed in order to know the scale of any staffing deficit, or to maximise their ability to ‘juggle resources. This was despite increasing evidence that the staffing ‘hole’ that Chief Executives thought might exist, and feared that they would not have the resourcing to fill, was not in fact the reality.

In addition, there were instances of planned staffing change processes being derailed by unexpected demands to take funds out of the existing budget, or requirements to increase service volumes within existing resourcing. The funding model was in effect stifling the ability to innovate.

That said, the participant DHBs continued to make change and improvement at varying rates, and were committed to retaining the approach.

A second area of concern was the time it was taking to recruit and start a DHB on the CCDM Programme. The three-month allowance in the Unit’s work programme projections could extend out to six or nine months, creating challenges in matching the Unit’s resources to the work. At the same time, an upswing in interest from DHBs wishing to participate in the CCDM Programme was observed.

The research and evaluation programme was progressing, but had to be scaled back, mainly due to a failure to secure external research funding. Based on progress and participation rates, the DHB Chief Executives agreed to continue funding the Unit through to the middle of 2015. A minority of DHBs continued to hold the position that the CCDM Programme had no value for them, but the majority were by now either involved in or planning to come into the programme.
The Unit’s strategy was to continue to work with the willing. In fact, the level of interest was so high that a full work programme was already projected for the next two years. A national CCDM forum held in late November 2012 marked a tipping point for the work, representing the first time that the DHBs were showcasing their work to their peers, rather than the Unit taking the lead. Increasingly, there was less reliance on the Unit to stimulate progress and change and more initiative on the part of the DHBs, which was seen as very encouraging in terms of the long-term future of the agenda.

### 2013-2014 TOWARDS ‘BUSINESS AS USUAL’

In early 2013, the SSHW Unit Director resigned and moved overseas. The outgoing Director’s final report to the Governance Group included a summary of the previous four years’ work:

> Thinking about the developmental journey we are on with the sector, the stages we have needed to go through are inspiration, instigation, implementation, and finally and most importantly, integration of this work into business as usual in our DHBs. We are well and truly into the implementation stage and this is the core work that the Unit delivers on behalf of the stakeholders. The final stage, integration, will be the true test of not only the strength and value of this approach, but also of the ability of the parties to commit to this and see it through in a context of hugely competing priorities and interests. I remain hugely optimistic about the chances of success, but this is tinged with pragmatism about the David and Goliath nature of what we have taken on. I hope that the sector can hold its confidence for just a little longer so they can reap the rewards.40

The parties entered this fourth year conscious that the ‘clock was ticking’ in terms of the need to either agree to adopt the CCDM approach as an integrated and permanent feature of DHB operations, ‘business as usual’, and to take the steps necessary to secure this outcome, or to start considering the future of the strategy.

Some spectacularly innovative and successful activity was being observed, particularly in the application of the Mix & Match methodology and the variance response management strategies. However, while all DHBs which had participated in CCDM Programme implementation had made gains, and the majority were continuing to embed the programme, the work was failing to deliver at scale on its fundamental purpose of improving the quality and consistency of the resource match between patient demand and care capacity.

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40 Director’s report to the Governance Group, March 2013.
Thus the issues experienced in the early years, where global progress was being made, but without a unifying approach, had effectively been reversed. By the beginning of 2013, a whole of system strategy had been delivered, but was not being implemented on the scale required.

On the plus side, evidence of the value of the approach was mounting, and was coming both from what was observable on the sites and from a growing body of international research, confirming that:

- Delivering the standard of healthcare that the sector demands (in terms of quantity, patient experience, and patient outcomes), is most likely to be achieved when the resources that are required are present at the time care is delivered.

- Maximum productivity is achieved when resourcing is neither greater than nor less than needed to achieve the required outcomes.

- The health workforce will perform best and is more likely to be retained when resourcing meets demand.

The Unit realised that one of the main barriers to whole-scale adoption of the CCDM approach by the parties was an unwillingness to commit to any new resources without having a reasonable guarantee of a return on the investment. The effect of this was leaving the organisations in a state of limbo: the willingness to act on the data was there, but the tight fiscal parameters meant that the flexibility to do this was severely constrained.

The basic problem being encountered was that spending money on additional resources was viewed as ‘new money’, without the added economic value of the up-front investment being considered. For example, the current accounting systems and the data to support them did not allow for a line to be drawn between an additional FTE and the economic value of better care, less avoidable error, and increased efficiency of process.

The Unit suggested that the sector try to find a way to enable one DHB to make all of the staffing and resourcing changes recommended by the methodology, and to indemnify the DHB from any potential negative cost consequences while the impact was observed. This strategy would have provided the evidence that the sector required to assure them of the value of the approach, while limiting the perceived fiscal risk associated with multiple DHB adoption. Ultimately, however, this was not pursued.
SSHW UNIT STRATEGY & RESOURCING

The Unit began the 2013-2014 year providing the parties with 5 pillars of support:

- The CCDM Programme including structure, tools, resources and social processes to improve the DHBs ability to match patient demand and care capacity
- Adherence to the industrial partnership model favoured by the DHBs and health unions to support the parties to work constructively and collaboratively on the agenda
- Active engagement with the wider health care sector to ensure that other systems, structures, strategy and policy would support the fundamental requirements that made the CCDM approach successful
- Facilitation of collaboration within and across DHBs to maximise learning and transfer of information
- Production of evidence of the impact of the changes that result from CCDM implementation.

The Unit had a range of resources and relationships to support the work:

- Funding of around $1.2 million for the 2013-2014 financial year (provided by the 20 DHBs)
- An existing staff of 5.8 FTE with a wide range of skills and expertise
- An experienced bipartite governance group
- Dedicated site coordinators plus governance and operational structures within active DHBs
- Staff in DHBs who were continuing to embed and extend CCDM and to share knowledge and expertise
- A national/international research group providing expert guidance
- Access to a standing group within NZNO dedicated to this agenda, including a position dedicated to consolidating the resources and knowledge transfer to members
- Three active Advisory Groups (Allied Health, Midwifery and District Nursing) to support programme expansion
- Funding support from TrendCare Ltd for the IT Coordinator role.
CHALLENGES & RISKS FOR THE 2013-2014 YEAR

A number of challenges and risks were identified at the beginning of the year, primarily:

- The tension between balancing the need to deliver widely and quickly, and the risk of going too fast, too thin and not paying attention to the basics

- The risk that holding back on widespread implementation until the processes and tools were optimised could result in the sector losing hope, because nothing would be seen to be changing

- The lack of a mandate to require change, combined with an extremely tight funding environment, could mean that change did not happen even in the face of sound evidence and rationale

- The possibility that the Ministry of Health (with the exception of the Chief Nurse) would not play an active part in supporting the approach to be successful

- The difficulties being encountered in extracting meaningful evidence of impact from within complex DHB systems with multiple other concurrent interventions

- The strong sector focus on volume based targets potentially working against good decision-making in daily capacity demand management

- How to bring DHBs into the programme in a steady stream to match Unit resources

- The difficulties working with a programme still under development in a sector where the parties were wanting the finished product

- The risk of the Unit resources being spread so thinly that progress would be fatally slowed, or conversely that DHB participation would lag behind Unit resourcing, leading to wasted capacity and extending the timeframes

- Upcoming changes to the Unit leadership and to the Governance Group

- The possibility that members of participant unions might demand a different strategy, due to the time taken to secure change.
APRIL 2013-DECEMBER 2013

STATUS & DIRECTION

The change of leadership of the Unit that took place at the beginning of April 2013 provided an effective checkpoint for the incoming Director and the Governance Group to evaluate progress and to consider the future direction of the work for the coming year, the remainder of the funding period and beyond. While the general direction of work did not change substantively as a result of the change in leadership, there was a shift from the rapid trajectory of development that had characterised the last four years to a focus on consolidation and ensuring the rigour of the processes that had been developed.

2013-2014 PRIORITY AREAS

1. Continue to offer the CCDM Programme to existing and new entrant DHBs
2. Continue to develop and improve the CCDM Programme
3. Expand the coverage of the CCDM Programme, with a priority on Allied Health, Community Health, Midwifery & Mental Health
4. Provide evidence of impact
5. Extend the reach of the CCDM work to wider parts of the sector.

KEY ACTIVITIES TO SUPPORT THE PRIORITIES: 2013-2014

Key activities for the period included:

➢ Establishment of the incoming Unit Director

➢ Entry of three new DHBs into the CCDM Programme: Lower Hutt, Whanganui and South Canterbury.

➢ Looping back and reengaging with earlier DHBs to support at least three to get 'across the line' in regard to CCDM implementation.\(^{41}\)

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\(^{41}\) Getting 'across the line' involved having completed implementation of all of the core elements of the CCDM Programme and having adopted the approach as core business practice.
Ensuring that the CCDM Programme was applied consistently to newly participating DHBs, including a full document review, the establishment of a document control process, and a plan to publish a CCDM orientation manual

Generating evidence of the effectiveness of the approach by contracting an independent evaluation of the CCDM programme

Ensuring that the national IT platform was fully compatible with CCDM and that validated patient acuity was recognised as a system metric of importance

CCDM work being increasingly being interfaced with other relevant sector activity, e.g. the work of the Health Quality and Safety Commission, the Nursing & Midwifery Council, and relevant MoH activity and priorities

Sector use of patient acuity systems being applied consistently

The Mix & Match staffing tool being adopted as the primary staffing methodology for nursing and midwifery in participating DHBs

Continuing to progress the methodology for other target groups (Midwifery, Allied Health, Community and Mental Health)

Setting up a Mid-Range Forecasting Advisory group to provide a guideline for best practice for the sector

Ensuring that the SSHW Unit was appropriately staffed and resourced for the work required.

**PRIORIT 1: CONTINUE TO OFFER THE CCDM PROGRAMME TO EXISTING AND NEW DHBS**

**THE DEMONSTRATION SITES**

Bay of Plenty DHB was identified as and agreed to be one of the DHBs to be supported by the Unit to fully implement the programme in their acute inpatient wards. This included the Unit supporting the development of Local Data Councils, finalisation of the latest Mix & Match reports, and running a Mix & Match work analysis in the Admission Planning Unit.

Westcoast DHB was offered a refresher of the CCDM Programme early in 2013; however, they decided not to take up this offer, due to the level of service reconfiguration that was about to occur. Currently this DHB is not actively implementing CCDM, although they have put in a full-time TrendCare Coordinator.
Counties Manakau DHB: The manager of the central operations centre, Middlemore Central, has become part of the Mid-Term Forecasting group, and the DHB continues to consider how they will acquire a validated patient acuity tool.

THE SECOND INTAKE: NORTHLAND, MIDCENTRAL & NELSON MARLBOROUGH DHBS

Northland DHB was greatly encouraged by the dramatic improvements secured in their initial showcase ward. As a result, the DHB elected to run the Part 1 Mix & Match methodology through as many wards and departments as possible. Part 1 focuses on identification of optimal skill mix and on process improvements. While it was accepted that this decision would delay the completion of the Part 2 analysis, which is concerned with staffing numbers and rostering, once both processes had been carried out, the DHB would have achieved a full implementation of the Programme.

MidCentral DHB: The Unit reengaged with MidCentral with a view to supporting the DHB to review the application of their Mix & Match Part 2 processes, to audit their TrendCare data and to provide TrendCare education.

Nelson Marlborough DHB approached the Unit to support a Mix & Match pilot in the ICU, due to identified staffing concerns in this area. This was completed through a collaborative process, which the Unit will look to developing into an action research case study.

THE THIRD INTAKE: TAIRAWHITI, SOUTHERN AND TARANAKI DHBS

Tairawhiti DHB, which pioneered the FIT Approach, was identified as one of the DHBs that would be supported to get ‘over the line’. The implementation of both Releasing Time to Care (RTC) and CCDM continued to progress at a reasonably steady rate. All four inpatient wards completed implementation of the foundation modules of RTC, completed the Mix & Match work analysis, and commenced work on the process modules of RTC. The Mix & Match Part 2s were expected to be used for all four wards in the 2013-2014 budget round. A commitment was made to progressing the efficacy of an organisational level service council, with local groups being maintained at ward level.

Southern DHB embarked on the full rollout of Mix & Match to 8 Wards. They committed to undertaking the Work Analysis process in each service, established an operations centre in the physical sense, developed the majority of the systems requirements for VRM, and developed their Local Data Set to a high standard. The DHB’s CCDM Programme Operations group continued to function at a high level and managed to establish 6 Local Data Councils. The CCDM Council established early in the Programme implementation function at a high level, and continue to be champions of the work.

Taranaki DHB: Due to the organisational focus on a major rebuild and moving into new premises, a decision was made by all parties to suspend the CCDM programme activity from June 2013 to October 2013. A CCDM council meeting held in October 2013 resulted in an agreement to appoint a dedicated 0.5 FTE Site Coordinator; and the work activity was scheduled to recommence in February 2014.
For various reasons the process stalled at that point, however the indications are that the DHB will recommence implementation in 2014.

**THE FOURTH INTAKE: WAIITEMATA DHB**

Waitemata DHB very quickly incorporated the CCDM work activity into business as usual. The DHB initially completed the Mix & Match work analysis in two wards and progressed to running the Part 2 FTE calculation, though there were some concerns regarding the quality of the TrendCare data. This resulted in a shift in focus to getting their TrendCare business rules standardised across the DHB, increasing data accuracy, and generally increasing the power and validity of their TrendCare data. Key to this has been the local council /quality group, who are championing improving data literacy generally and growing local adaptive governance. The VRM strategies became well established, with their Capacity at a Glance (CaaG) screen being one of the most technically advanced in the country.

**THE FIFTH INTAKE: HUTT VALLEY, WHANGANUI & SOUTH CANTERBURY DHBS**

Hutt Valley DHB’s commencement was delayed due to an organisational restructure, with their official first year not commencing until July 2013. Since then they have made good progress: the first Mix & Match work analysis has been completed, and plans to progress both the Mix & Match Part 2s and their VRM strategy are in place and developing well.

Whanganui DHB commenced the Programme in July 2013 and is progressing well, with their first Mix & Match work analysis complete.

South Canterbury DHB commenced the Programme in October 2013, but progress has been slower than expected. The LOA was not signed until the end of April 2014, and the required Site Coordinator role is not yet in place.

**THE SIXTH INTAKE: AUCKLAND DHB**

Auckland DHB submitted an EOI in November 2014 to implement the CCDM Programme, and implemented TrendCare in January 2014. A CCDM start up workshop for the key parties is planned for 28 May 2014, with full commencement of work expected in July 2014.

**OTHER DHBS**

Capital and Coast DHB continues to show interest in implementing the CCDM Programme; however, the absence of a validated patient acuity system means implementation can not progress. In anticipation of this being resolved, the DHB has been factored into the Unit’s work programme for 2015.

Hawkes Bay DHB continues to show interest; however, no EOI has been received.

Canterbury, Waikato & Lakes DHBs the absence of a validated patient acuity system in these DHBs means that implementation can not progress.
PRIORITY 2: CONTINUE TO DEVELOP AND IMPROVE THE CCDM PROGRAMME

The focus for this period was to consolidate the programme and the resources in order to improve the standardisation of implementation. This included:

- A full document review
- Establishing a document control process, including unique identifiers for each document
- An implementation pathway endorsed by all members of the SSHW Unit
- The development of a complete CCDM manual
- Agreement on the fundamental metrics to inform the monitoring and impact metrics, that is, the ‘Safe Six’:
  1. **Clinical hours required versus clinical hours provided** - are patients receiving all the care they need?
  2. **Health and Quality Standard markers** - are adverse events occurring?
  3. **Productivity** - is the budget being maintained?
  4. **Flow** - are flows and volumes being achieved?
  5. **Staff satisfaction** - are staff satisfied with what they are able to achieve?
  6. **Work effort** – is the work effort to maintain service levels reasonable?
- The development of a Business as Usual template for DHBs to assess compliance
- The completion of a Mix & Match pilot in Nelson Marlborough DHB ICU
- The establishment of a Mental Health Advisory group
- Publication of a quarterly newsletter.
PRIORITY 3: EXPAND COVERAGE OF THE CCDM PROGRAMME

MIDWIFERY STAFFING ADVISORY GROUP (MSAG)

The painstaking work required to arrive at a methodology that would satisfy the unique NZ maternity model has been achieved through the persistence and commitment of the Unit, TrendCare Ltd and the MSAG group, representing DHBs, NZNO and MERAS. Over the 2013-2014 period the agreed enhancements to the TrendCare system were completed and will be released in the upcoming TrendCare upgrade.

The group identified the need for a coordinated TrendCare strategy to ensure a nationally led approach to effective TrendCare utilisation. A training plan for midwifery and the upgrade timetable were time lined as the next steps for the MSAG to enhance effective stakeholder communication and engagement. The need for further socialisation of the acuity methodology and TrendCare linkages to the CCDM programme was identified, with plans in place for the SSHW Unit to present this material to key groups.

ALLIED HEALTH ADVISORY GROUP (AHAG)

In keeping with the ambition of the Allied Health group to ultimately achieve a capacity/demand system which reflects their client group and their professions, this work programme has proceeded in a disciplined and thorough manner.

Unlike inpatient nursing services and, to a lesser degree, maternity services, the existing systems in TrendCare were not able to fully support the required data, functions or specifications for Allied Health. Remedying this has required time and effort, and the willingness of TrendCare Ltd to undertake a major upgrade of this part of their product. Consequently a usable system has not been able to be delivered quickly; but the group’s determination not to compromise on the key principles should be rewarded when the TrendCare upgrade is released in early 2014. To support this work, a new role for an Allied Health Programme Consultant (0.5 FTE) within the SSHW Unit was approved by the Governance Group, and a July 14 start date is planned.

Key priorities for Allied Health include an implementation plan to follow the 2014 TrendCare upgrade. This will involve testing and refinement, as well as trialling the suitability of the core data set metrics.
COMMUNITY HEALTH ADVISORY GROUP (DISTRICT NURSING)

Following a period of steady progress for this group, TrendCare made a decision towards the end of 2013 to halt work on the upgrade to the community module until this was able to be web based. The timeframe for this upgrade is the end of 2014. This has meant project slippage, with the MidCentral district nursing pilot being the main casualty.

This is of concern, as the result is likely to be the adoption of “less than what TrendCare can offer” staffing tools, because DN stakeholders need staffing solutions and tools now. In the interim, the group will focus on developing a robust, appropriately resourced pilot project in anticipation of the module becoming available in the next 12 months.

MENTAL HEALTH ADVISORY GROUP

Following a number of ‘testing the waters’ pilots undertaken by the SSHW Unit, a formal advisory group was established for mental health to progress the methodological extension in a logical manner with the oversight of professional experts. The work of this group is in the early stages, with regular monthly teleconferences being held, terms of reference agreed and discussion under way about what recommendations the group wish to make to the Governance Group regarding the scope and content of the work.

MID-TERM FORECASTING ADVISORY GROUP

Early in the development of the CCDM Programme, discussions began and have been ongoing regarding a gap in organisational processes relating to the window of opportunity that exists between when a service’s budget and FTE are signed off, and when care is actually delivered.

It was recognised that best practice in this area would suggest that formal monitoring processes should be in place to detect any emergent variance between demand and capacity, so that remedies can be put in place. The ‘catch-22’ is that the further out the organisation is from the day of care, the greater the opportunity it has to make adjustments, but also the poorer the information it has available.

Conversely, as the day of care approaches, the information picture becomes clearer, but the options to act diminish significantly. Mid-range forecasting would enable variance to be detected sufficiently far out to allow capacity/demand adjustment, with the goal of arriving better prepared at the day of care delivery. It is envisaged that a work plan for the group will emerge over the next 6 months.
PRIORITY 4: PROVIDE EVIDENCE OF IMPACT

A range of research and evaluation activities were undertaken or progressed over the course of the year.

- An independently commissioned 15-month evaluation of the CCDM Programme by the New Zealand Institute of Community Health Care was initiated. Preliminary findings are expected in the first quarter of 2014.

- The results of a seminal ward case study, ‘Transforming the Environment of Care’, were published to the sector.

- The NZNO produced six case studies from various DHBs.

- The Mix & Match research study was released to the sector.

- A report looking at reported levels of work effort as a sentinel metric was completed and released to the DHBs. This report was noted by the Governance Group, and a recommendation was made to the DHBs that a question around work effort be included in DHB staff surveys.

- Three further case studies showing the benefits of the Mix & Match process are planned.

PRIORITY 5: EXTEND THE ‘REACH’ OF THE CCDM WORK TO WIDER PARTS OF THE SECTOR

SECTOR STAKEHOLDER ENGAGEMENT & ACTIVITY

Maintaining visibility and connectedness with the wider health sector remained a priority.

COLLABORATIVE WORK WITH NATIONAL & INTERNATIONAL BODIES

In addition to general sector liaison, several pieces of joint work were undertaken.

- **The Health Quality and Safety Commission** – the Unit worked with the Commission to progress the development of a Falls Assessment using TrendCare as the data vehicle.

- **The New Zealand Nursing Council** – Collaborative work was undertaken to facilitate the development of an interface between nursing annual practising certificates (APCs) and TrendCare. The purpose of this initiative was to reduce the workload on DHBs, and to protect public safety by ensuring that nurses without current APCs can be readily identified in the system.
The National Health IT Board confirmed to the SSHW Unit that patient acuity data will be included in the specifications for the national DHB IT framework, and that a national licence for TrendCare was considered to be a future possibility.

The International Consortium for the study of Institutional/ Environmental Determinants of Nursing Care - on behalf of the SSHW Unit, a staff member has joined this group of International researchers collaborating on a variety of studies evaluating staffing models, contextual factors in healthcare environments and rationed/missed nursing care. This keeps the Unit connected with the research, and has the potential to strengthen the validity of existing programme tools.

PARTICIPATING IN UNION ACTIVITY

The NZNO and the PSA continued to play a strong role in the agenda, in line with the commitments expressed in the industrial agreements and to their members. NZNO in particular has continued to invest resources in ensuring member participation and engagement. There are indications from the unions that the SSHW agenda will form an important part of the conversations between the parties, leading into the renewal of the industrial agreements in late 2014.

SUMMARY OF PROGRESS TO MARCH 2014

In March 2014, two thirds of NZ DHBs were involved with the CCDM Programme or are in the early stages of initiation. The level of interest remains high, with the exception of the Waikato DHB, Canterbury DHB and Lakes DHB. The Unit weathered a change of leadership without disruption to the roll-out of the CCDM Programme, or a loss of focus or momentum.

The focus over the 12 months to March 2014 was on consolidation, particularly with regard to the programme and its resources. This resulted in a full document review being undertaken and a document control process being put in place, with a CCDM manual in the process of being made available to all DHBs. This was seen as an important step in the transition of the CCDM Programme from a developmental and experimental activity to a well grounded and whole of system solution for capacity/demand management in NZ DHBs.

Providing evidence of impact continues to be challenging, as it has been for researchers worldwide with this agenda. The Unit has reported consistently since 2010 that until there is change ‘at scale’ in the DHBs, the ability to link changes to impact will remain limited. Despite this, pockets of success in individual services implementing the programme are being reported, and the indicators from these services are exciting.
Participating DHBs are managing to continue to implement what is a reforming agenda, despite needing to operate within tight fiscal boundaries and with increasing demand for services. While this meant that the pace of change over the last year was slower than desired and frequently uneven, the persistence of the DHBs signals a strong commitment to the CCDM approaches, and bodes well for the sustainability of the Programme.

**THE FUTURE: 2014 - 2015 & BEYOND**

While the parties debate and ponder the future of the work, the role of the Unit will be to continue to support DHBs to implement and consolidate their use of the methodology. The focuses for this period are likely to include:

- Recruitment and establishment of the next tranche of DHBs
- Supporting current DHBs to complete their implementation
- Progressing the expansion and extension elements of the methodology, including Allied Health, Midwifery, Community Health Services, Mental Health Services and Emergency Care
- Producing evidence of impact
- Facilitating knowledge transfer between DHBs to maximise learning and efficacy
- Being prepared to be responsive to the outcomes of any new agreements between the parties, particularly if this requires an acceleration of the rate of implementation
- Preparing for the future ‘tipping point’ when DHBs will take over driving and sustaining the changes
- Considering the potential to transition the considerable expertise that has been built up within the SSHW Unit to an entity that supports DHBs to maintain, audit, innovate and maximise benefit over time.
CONCLUSION

The Executive Summary of the 2006 Safe Staffing Healthy Workplaces Committee of Inquiry stated that:

*The Report of the SSCOI represents a shared commitment by the NZNO and DHBs to work together to agree on:*

- A mechanism for nurses, midwives and employers to respond immediately if workloads exceed determined levels
- Sustainable solutions to safe staffing issues, developed in a way that has the confidence of nurses and midwives.\(^{42}\)

2014 marks 10 years since the New Zealand Nurses Organisation tabled a proposal for nurse to patient ratios. The agreement that followed, between the NZNO and the DHBs to pursue a more sustainable and less blunt solution, committed the New Zealand DHB sector to a course that has resulted in the development of a sophisticated and multi-layered methodology. The methodology is encapsulated within the Care Capacity Demand Management Programme.

The Unit’s work has delivered on all but one of the major requirements that it was tasked with from the 2006 SSCOI recommendations. DHBs now have an evidence-based way to forecast, plan, resource and deliver nursing and midwifery services, which includes rostering, skill-mix, budgeting and process improvement. The Programme has led to marked improvements in the ability to manage variance between demand and capacity. Pockets of success are evident. Development of the Programme continues with the expectation that all types of nursing services will be covered, and that provision will be made to include a range of allied health disciplines.

What remains to be achieved is implementation of the Programme at scale, so that nurses and midwives, regardless of the service they work in, can be confident that the context of care will support them to be successful in their work every day and in every patient encounter. This is the ultimate measure of the success of this agenda for change. The achievement of this fundamental goal is in the hands of the parties who commissioned this work, and the 2014/2015 year is shaping up to be a watershed period for both the CCDM programme and the SSHW Unit.

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\(^{42}\) SSCOI, 2006, p.7