Implementation and Monitoring of Care Delivery Model Redesign (CDMR)

Monitoring and Lessons Learned Report

Excellent health and care for everyone, everywhere, every time.
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Key Messages for Decision Makers

Island Health began the process of Care Delivery Model Redesign in 2009. Our purpose with this initiative has been to transform the way we provide care in our hospitals to a more collaborative, patient-centred model. As we have implemented this initiative, we have learned:

- It takes a concerted and long-term effort by senior vision-holders to maintain focus on a change of this magnitude, and to support it over time;
- Multi-year changes such as this require vision holders to keep the intent of the change alive and embed it in the organization’s institutional memory;
- Changing an organization’s culture is a slow and incremental process. It is important to recognize and celebrate small changes when they occur;
- Resistance of cultural change will appear in various forms;
- Followers may be reluctant to participate in the change efforts when it is difficult for them to understand the change. Finding early adopters is difficult;
- Clinicians must be involved in designing and putting into context the way the change occurs;
- Clinicians often need support to unlearn ways of working, before they can learn a new way;
- Operations leaders need the support of change agents such as practice coaches and mentors to lead change and oversee day-to-day operations; and
- A range of performance measures is needed to assess progress toward the transformational goal. There is no single measure that effectively captures the causes and effects of change in a complex system such as ours.

Our advice for other organizations is to:

- Establish a team that can focus on the changes required;
- Develop a range of measures to monitor progress toward the project’s goal; and
- Establish joint accountability for the outputs and outcomes, between operations leaders and the project team.
Executive Summary

In 2008, Island Health undertook a series of observational studies on 15 inpatient units on Vancouver Island, and later with the other Health Authorities across British Columbia. The intent of these observational studies was to learn exactly how we were providing patient care, so that we could use quantitative evidence to inform the changes that were required in our current care models and processes. Our analysis of this data revealed that:

- We were not always meeting our patients’ basic needs;
- We were not optimizing the scope, role and function of all inter-professional team members; and
- Even when the physical environment of our hospitals had changed, care was being delivered as it had been in the past.

Island Health established the Care Delivery Model Redesign initiative in 2009, to respond directly to these observational studies, and in response to the experiences of one of our patients, Mrs. G:

Mrs. G. was an elderly woman who lived independently in her own home. She was admitted to one of our hospitals following a fall that broke her wrist, but during her time in hospital, she had acquired an infection, experienced adverse reactions to new medications, been transferred between units several times, and was no longer able to live independently.

Mrs. G’s story galvanized Island Health leaders, physicians and clinicians, opening our eyes to the fact that it was vital that we make improvements in the way we provided care. Our goal for the Care Delivery Model Redesign program was to make changes that would result in:

*Care delivery that is responsive to the care needs and experience of patients, reflects inter-professional practice, and is based on data and evidence.*

Our three core objectives for Care Delivery change were to:

- Improve patient care by responding better to the care needs and experiences of patients, residents, and clients;
- Optimize the scope, role, and functions of all care team members, to make the best use of health human resources; and
- Develop high-performing teams to provide a higher standard of inter-professional care.
Our Care Delivery Model Redesign program set out to achieve these objectives by introducing process, content, and structural changes – changes that together would enable our clinicians to adapt and work successfully in a Collaborative Care model.

Collaborative Care optimizes the scope, role, and functions of everyone on the inter-professional team. It requires teams to share accountability for providing patient-centred care each shift. In order for this to work well, patients need the inter-professional team to assess both their medical condition and functional abilities when they are admitted to hospital, and to work with each other to create individualized patient care plans. Care plans must include interventions and standardized care pathways specifically designed to protect and/or restore each patient’s functional ability.

Care Delivery Model Redesign is an organization-wide initiative, and from the beginning, we have involved clinicians in planning for and implementing changes in care units within Island Health and, with the collaboration of other health authorities, across British Columbia. Because it is so broad-based, and its changes are so fundamental, moving to collaborative care takes many years to complete.

We have developed, and are using, a range of monitoring activities to track our progress, primarily to assess whether we were realizing our vision of change and secondarily, to quickly identify unintended consequences that might have an impact on patients or clinicians. Over time we adjusted our monitoring activities based on our learnings and changing requirements. Our monitoring activities included:

- Team Vitality Surveys;
- Patient Experience Surveys;
- Chart Audit Findings;
- Reviewing Narrative Progress Notes and Manager Reports;
- Online Staff Survey;
- Readiness Assessments; and
- Key Performance Indicators from administrative data available within the health authority.

These indicators helped us identify the right time to support teams with additional coaching or performance support tools to help them integrate and consolidate changes into their everyday practice. Monitoring indicators also helped us see when we needed to alter the pace of change.
Executive Summary

From the outset, we recognized that transforming the way we care for our patients would be a significant change for our clinicians, and this has proven to be true. Despite the challenges we experienced while implementing the various phases of this program, we have seen no indication that the changes we have made have harmed our patients or the staff.
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Section 1: Purpose and Limitations

The purpose of this report is to share information and lessons we have learned as we developed and implemented a long-term transformational change initiative called Care Delivery Model Redesign (CDMR). This report and its appendices outline the approach and monitoring methods we used, and share some of the results of our monitoring activities.

The healthcare environment in which we undertook this initiative – which aims to move us to a more collaborative, patient-centred model of care – has been extremely fluid and complex. We implemented this program over many years as one component of a suite of System Wide Initiatives, at the same time as many other operational changes and improvements were ongoing. This has meant that there are many variables that are beyond our control, and it has been difficult to demonstrate strong, direct and measurable cause and effect relationships between any single component of Care Delivery Model Redesign and the changes we have experienced.
Background

Section 2: The Need for Care Delivery Model Redesign

In 2008, Island Health embarked on a series of observational studies on 15 inpatient units on Vancouver Island and later, in collaboration with other health authorities, on inpatient units across British Columbia. The intent of these observational studies was to learn exactly how we were providing patient care, so that we could use quantitative evidence to inform the changes that were required in our current care models and processes. Our analysis of this data revealed that:

- Patient needs had changed since we developed our models of care delivery. Because our population is aging, we now need models of care that address more complex, interrelated, and intense health issues, rather than models associated with a single medical diagnosis;
- We often failed to meet the fundamental care needs of patients, including the basic activities of daily living, such as bathing, dressing and personal hygiene;
- Many clinicians were not working to their profession’s intended scope, role and function, or optimizing the scope, role and function of others on the interprofessional team; and
- Clinicians faced many barriers to productivity. The press of day-to-day health care activities had created an environment where the need to complete tasks on time had become more influential on care than clinical knowledge.

2.1 Transforming Culture

We set up the Care Delivery Model Redesign program in 2009 in response to the things we had learned from our observational studies and in response to the experiences of one patient and her family who had been treated at one of our hospitals. We call this patient Mrs. G.:

Mrs. G. was a relatively healthy older adult living independently in her home in the community. During a fall, she fractured her wrist, and several days passed before Mrs. G’s family realized the extent of her injury, and she was admitted to hospital. The goal of Mrs. G.’s hospitalization was to provide better care for her wrist and to address her other complex health-care needs. While in hospital, Mrs. G. developed a urinary tract infection and was transferred to another unit. She had adverse reactions to new medications, which weren’t reconciled properly, and was transferred to yet
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another unit. At the end of Mrs. G.’s two-month stay in our hospital, she was no longer able to care for herself at home.

Mrs. G’s story galvanized the leaders, physicians and clinicians of Island Health. We recognized that we had failed to provide the kind of care Mrs. G. needed and deserved. Her health care team had not recognized who she was when she was at her best, or understood her wishes about care. We recognized that we needed to do much better, and that our current model of care would not allow us to make the changes we needed to do so. We set a goal about the care that we provide to inspire our work:

*Care delivery that is responsive to the care needs and experience of patients, reflects inter-professional practice, and is based on data and evidence.*

Our three core objectives for change were to:

- Improve patient care by better responding to the care needs and experiences of patients, residents, and clients;
- Optimize the scope, role, and functions of all care team members to make the best use of health human resources; and
- Develop high-performing teams, to provide a higher standard of inter-professional care.

See Appendix A for more information about the initial Care Delivery Model Redesign strategy and our North Star Goal. (North Star Goals are optimistic, aspirational objectives that tie personal and business goals to a higher purpose.)

### 2.2 Four Phases of Change

We divided the transformational work of Care Delivery Model Redesign into four phases:

- **Phase 1 - Process of Care Changes**: These included learning how to identify and communicate patient care needs in a Collaborative Care model, including inter-professional assessments, care planning, and discharge planning. We introduced the principles of an elder-friendly hospital and elder-friendly care during this phase;
- **Phase 2 - Content of Care Changes**: These included learning how to provide care that matched individual patient needs and discovering how best to include patients and their families as partners in setting goals for care. It was during this phase that we introduced the 48/6 framework to clinicians across Island Health. The 48/6 Model of Care for hospitalized seniors in BC is a clinical care management
Background

initiative which addresses 6 core areas of functioning through patient screening and assessment within the first 48 hours of hospital admission;

- **Phase 3 – Changes to the Structures of Care:** This phase included implementing staffing models that aligned roles more closely with the care needs of patients and optimizing the scope, role, and functions of all care team members so that we could have the right person, providing the right care, at the right time; and

- **Phase 4 - Renewed Leadership Framework:** This phase is currently underway. It aims to support quality care and enable us to sustain the changes we have made to date.

We recognized from the outset that transforming our care model in such a fundamental way would be a long, complex endeavour of many years’ duration – one that would require us to be flexible and open to shifting priorities and actions along the way. See Appendix B for more information about phases one, two and three of the process.

### 2.3 Implementing Change Efforts

We selected the Institute for Healthcare Improvement’s *Model for Improvement* to help clinical teams implement changes. We chose this evidence-informed model, which involves iterative Plan-Do-Study-Act cycles, because it offered a way for clinicians and their immediate leaders across the health authority to become actively and meaningfully engaged in the process.

We used Structured Learning Collaboratives to bring the teams together, disseminate what we learned and share results of Plan-Do-Study-Act cycles across the health authority. This combination of Structured Learning Collaboratives and focused Plan-Do-Study-Act cycles proved to be a successful and positive way to introduce, contextualize, and implement practice changes for our clinical teams.

The staffing model changes were implemented at some of our smaller sites first as those site leaders took advantage of opportunities that arose to make adjustments more in keeping with the objectives of CDMR. When it came time to implement the staffing models (patient care model or PCM) at the larger sites it was determined that NRGH would go first followed by RJH and VGH which would go together.
Section 3: Monitoring Activities

To measure our progress, Island Health developed a monitoring plan. A secondary intent of this plan was to alert us to unintended consequences of the changes we were making, for our patients or clinicians. We adapted and expanded the monitoring plan as work progressed.

We used several tools to assess the impact of Care Delivery Model Redesign, and to give us a broader and more complete picture than any single assessment could provide. These assessment tools included:

- Team Vitality Survey;
- Patient Experience Survey;
- Chart Audits;
- Narrative Progress Notes and Manager Reports;
- Staff Survey;
- Readiness Assessments; and
- Key Performance Indicators from administrative data.

Additionally the findings from two evaluations were used to inform the Care Delivery Model Redesign. These include the Strategic Initiative Evaluation Project and the Evaluation of the Structure Learning Collaborative.

Following is an overview of the methods we developed or adapted, to monitor Care Delivery Model Redesign activities and a description of the two evaluation projects referenced.

3.1 Team Vitality Survey

The Team Vitality Surveys gave unit leaders information about intended and unintended consequences that might arise in their teams, offering a quick way to assess the pulse of the team. Questions in the Team Vitality Survey aligned with those in the Gallup organizational climate surveys we conducted across the organization. See Appendix C: Team Vitality Survey.

3.2 Patient Experience Survey

Care Delivery Model Redesign teams conducted Patient Experience Surveys to ensure that patients had an opportunity to express their thoughts and describe their experiences. Unit leaders gave a paper survey to randomly selected patients on the day they were discharged. We changed the Patient Experience Survey slightly when we launched the 48/6 initiative so that
Monitoring

it aligned more closely with the questions in a patient survey conducted by NCR Picker. See Appendix D for the Patient Experience Survey now in use.

3.3 Chart Audits

Our original intent in auditing charts was to measure for improvement as we introduced the 48/6 program. Based on feedback from auditors, we revised the initial audit tool in January 2013 to better reflect the practice changes we were aiming for. In spring 2014, we revised the chart audit questions again to align with the 48/6 Clinical Care Management guideline from the British Columbia Ministry of Health. At this time we use the chart audits to measure for performance. See Appendix E for current 48/6 chart audit questions.

3.4 Staff Survey

As noted earlier, changes to the staffing model or Patient Care Model had been made at some of our smaller sites, however after we implemented the patient care model changes at Nanaimo Regional General Hospital we created an online staff survey. Its purposes were to:

- Provide a simple way for staff to provide regular feedback as we implemented Patient Care Model changes; and
- Provide a way to monitor team responses to Patient Care Model changes at the unit, program, and site level (e.g., Were people learning how to work successfully in a Collaborative Model of Care?).

Based on the lessons we learned when we implemented the Patient Care Model at Nanaimo Regional General Hospital, we decided to conduct the online staff surveys at Royal Jubilee Hospital and Victoria General Hospital six months after implementation of changes had begun. This settling in period allowed staff to become familiar and comfortable with the initiative. We will survey clinicians at Royal Jubilee Hospital and Victoria General Hospital early in 2015. See Appendix F for the Staff Survey now in use.

3.5 Readiness Assessment

After implementing the Patient Care Model at Nanaimo Regional General Hospital, we created a practice-change self-assessment template to help managers determine which, if any, of the process and content changes their teams were still working to consolidate. The change readiness assessment was based on input from Nanaimo Regional General Hospital leaders. See Appendix G for the Readiness Assessment now in use.
3.6 Key Performance Indicators from Administrative Data

We tracked key performance indicators associated with health outcomes, patient experience, and workforce sustainability throughout the implementation of Care Delivery Model Redesign. These came from a variety of sources, including:

- Discharge Abstract Database: This provides information about average length of stay, patient discharge disposition, and care-sensitive adverse events during hospitalization;
- Patient Safety Learning System: This gives us information about patient harm and errors. Clinicians use this system to voluntarily record actual and near miss events; and,
- Performance Monitoring and Reporting systems: Financial and productivity indicators.

We review key performance indicators monthly, and post them twice a year on our public website.

3.7 Evaluations Findings Used to Inform CDMR

3.7.1 Strategic Initiatives Evaluation Project (May 2013)

Island Health contracted a team of researchers to conduct a retrospective evaluation to explore the impact on health service delivery of the System Wide Initiatives (the first two phases of CDMR, Care Continuum Transformation, Staff Safety and Injury Prevention, and Infection Prevention and Control) as well as the new Learning and Performance Support model and the Patient Care Centre. Several qualitative and quantitative data sources were analyzed and observations made related to the impact of the Care Delivery Model Redesign activities occurring prior to 2013.

3.7.2 Evaluation of Structured Learning Collaborative (May 2011)

After our first Structured Learning Collaborative was complete, we conducted an internal review to assess the effectiveness of this methodology as a means to introducing Care Delivery Model Redesign changes. This review included both quantitative and qualitative data sources:

- Focus group interviews with program leaders and unit change coaches;
- Attendance records for learning sessions;
- Unit Storyboards and the Care Delivery Model Redesign Yearbook;
- Narrative progress reports for care units, written by the coaches; and
- Team Vitality Surveys and Patient Experience surveys.
Monitoring

Section 4: Monitoring Results

Following is an overview of results from our monitoring activities. Monitoring helped us understand when teams needed additional coaching or performance support to integrate and consolidate changes. Throughout the implementation of Care Delivery Model Redesign, we saw no indication from any of our monitoring activities that patients or staff members had been harmed by the changes that were introduced.

4.1 Team Vitality Survey Results

Team Vitality Survey results showed that a small proportion of staff strongly disagreed with the statement:

“My ideas really seem to count on this unit”

In general, 40% to 50% of people who responded to this survey agreed with the statement, and starting in the fall of 2012, the proportion of respondents who strongly agreed increased to between 30% and 40%, from a baseline of 20%, as shown in the graph below. See Appendix H: Team Vitality Surveys for additional responses.

![Team Vitality Survey Graph](image-url)
4.2 Patient Experience Survey Results

Initially, we conducted Patient Experience Surveys every month, as we did with Team Vitality Surveys. We did this to ensure that there was no negative impact on patients caused by the changes we were making. The graph below shows that patients who completed Patient Experience Surveys answered “yes, always” between 70% and 80% of the time to the question:

“When you had important questions to ask the hospital staff, did you get answers you could understand?”

Note: Excludes responses exclude “Did not have questions”.

See Appendix I for more information and results from Patient Experience Surveys.

4.3 Chart Audit Results

During 2011 and 2012, as we were introducing the 48/6 initiative (addressing 6 areas of patient care for the first 48 hours of admission) our audited patient charts demonstrated that:

- We were documenting patients’ pre-hospital level of function 70% of the time (up from 30% before the initiative). (Question 2);
- Contributions from the inter-professional team on each patient’s care plan rose from 60% to 80% of the time (question 6); and
- Written discharge plans were in place 70% of the time by December 2012 (question 8), as shown in the graph below:
The percentage of audited charts where every question was answered in the positive, increased from 2% at the start of the 48/6 structured learning collaborative, to 33%, as the graph above shows.

As we implemented the Patient Care Model at Nanaimo Regional General, Victoria General, and Royal Jubilee hospitals, the percentage of patient charts documenting function and risk to function and appropriate care declined. To address this trend, managers and program staff provided enhanced coaching and mentoring to clinicians, and our most recent results have improved. See the following table.
48/6 Chart Audit Results: PCM Units Only, % of Yes Answers, Period 8 2013/14

<table>
<thead>
<tr>
<th>Question</th>
<th>Nanaimo Regional General Hospital</th>
<th>Victoria General Hospital</th>
<th>Royal Jubilee Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1: Was a Pre-hospital Functional Screener completed?</td>
<td>80%</td>
<td>88%</td>
<td>70%</td>
</tr>
<tr>
<td>Question 3: Is there evidence in the medical record that an assessment of this risk (to function) occurred?</td>
<td>77%</td>
<td>74%</td>
<td>60%</td>
</tr>
</tbody>
</table>

### 4.4 Staff Survey Results

Our October 2013 Staff Survey results confirmed that the change to Collaborative Care was challenging for many of our clinicians. Although it is too early for survey data to provide conclusive outcomes, we have observed that staff perceptions have changed since the first survey was completed. At that time, 44% of respondents strongly disagreed, and 39% disagreed with the statement:

> “Every shift, the team I am working in is able to assign tasks and responsibilities to each other in a way that ensures we are responding to the ebb and flow of patient needs day to day”.

By June 2014, this had improved, with just 18% strongly disagreeing, and 26% disagreeing. Meanwhile, the percentage of respondents agreeing or strongly agreeing with this statement, increased from 9% to 36%, see below:

See Appendix J for more information from the CDMR Staff Survey.
4.5 Other Administrative Data Results

4.5.1 Care Sensitive Adverse Event Rates

At Nanaimo Regional General Hospital, current Care Sensitive Adverse Event rates for this fiscal year indicate that the average and the actual frequency of incidents have declined since we implemented the Patient Care Model. See table below:

| NRGH CSAE Rate, All Discharging Units, March 2013 to March 2014 (per 1000 discharges) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Dec 7, 2012 to Dec 5, 2013       | Period 1        | Period 2        | Period 3        | Period 4        | Period 5        | YTD 2013/14 Average |
| Avg 2013/14                      | 33              | 29              | 18              | 29              | 12              | 27              |

4.5.2 Utilization of Staff Resources

The Strategic Initiatives Evaluation Project showed that Care Delivery Model Redesign units experienced higher levels of staff turnover than other units, and that this effect was greater where units implemented more redesign activities.

In response to this, we began to implement Patient Care Model changes in conjunction with unit-based relief staffing as part of the staffing model. This change helped units keep experienced staff and ensured that clinicians were available to work when short-term vacancies or absences occurred. The graph below shows that the percentage of relief hours not found at Nanaimo Regional General Hospital did not increase when we implemented the Patient Care Model.

Percent of Relief Hours Not Found, Nanaimo Regional General Hospital, Patient Care Model Units Only, March 2013 to March 2014

Note: Blue dots indicate pre-implementation of the Patient Care Model and green dots represent points in time after implementation
In addition to the staff survey data we also looked at overtime rates. The overtime rate as a % of worked hours declined at NRGH following the implementation of the PCM as the graph above illustrates. This is an important indicator that we are staffing our units in a way that is sustainable for both our staff and the healthcare system.
Section 5: Preliminary Lessons Learned

Island Health began the transformational Care Delivery Model Redesign initiative knowing that it would be a long-term challenge. Although we did not know exactly how long it would take to transform our patient care culture, our advisors and the literature suggested we were on a journey of at least 10 years. We are only half-way through that time-span, and are continuing to implement Patient Care Model changes today. As we learn from our earlier work, we are able to improve current and future efforts.

In a large health care organization such as ours, it is impossible to implement a broad-based change such as Care Delivery Model Redesign in isolation. Many other projects, initiatives and improvement efforts are continuously and concurrently underway. This naturally makes it more difficult to determine which variables have more or less impact on clinicians. Despite this challenge, we have learned a lot:

- Early gains are more likely to be lost if units shift from one area of improvement to another before the first improvement is fully consolidated;
- A change like this takes a long time. It took between four and five years for units to move from process changes to content changes, and then to structural changes. During that time, many of the leaders who were involved at the outset of the project had moved to other roles. We found that changes in leadership made it more difficult to keep the vision of Care Delivery Model Redesign alive over the long term;
- While our program leaders saw the movement from process through content and structural changes as an evolution, with each phase building on the one before, clinicians and their immediate leaders did not recognize the same continuity. They experienced the process as a disconnected series of changes in focus, which made it more difficult for them to understand and support the changes;
- Unit staff and leaders are busy every day, meeting patient care needs and responding to the shifting demands of their busy care units. They have only limited capacity to engage in change and improvement efforts; and
- Staff appreciated being able to attend our learning sessions, but once they returned to their unit and peers, they found it more difficult to act as informal practice-change champions.

See Appendix K for evaluation findings that support these lessons.
Section 6: Recommendations for Other Health Systems

Island Health has implemented Care Delivery Model Redesign in a linear fashion both out of convenience and from necessity. Our organization is so large and complex that we cannot change the whole system at one time. It is important that other health systems see each of our initiatives as part of a whole, rather than as stand-alone projects. All are necessary to the overall transformation, but no one component is sufficient in and of itself, to explain our journey of cultural change.

Because the health care environment in which we have implemented Care Delivery Model Redesign is so complex and fluid, it is difficult to demonstrate that we have achieved all that we originally set out to do. However there is evidence that change has indeed occurred, and perhaps more importantly, that the care our hospitals provide, has not declined as a result of these substantial cultural changes.

It is important to note that our work is not yet finished, and that we will continue to plan and implement practice and staffing model changes into the foreseeable future. Through this project, we have developed stronger leadership, management and accountability frameworks that establish effective processes to help us spread and monitor current and future transformational change.
Appendix A: CDMR Strategy and North Star Goal

The Care Delivery Model Redesign strategy that we established in 2009 envisioned a transformational change in the culture of care across Island Health. The goal of this program was to ensure that we provide:

Care delivery that is responsive to the care needs and experiences of patients, reflects inter-professional practice and is based on data and evidence.

This goal was in response – and stark contrast to – the care that we observed occurring regularly during the observational studies we undertook in 2008, which was:

Care delivery that is based on completing a set of standard tasks by a set time, and that is informed by history, habit and tradition rather than by individual patient needs or wishes.

As shown in the graphic above, the project’s original three main objectives were to:

- Improve patient care and ensure quality and safety for all;
- Optimize the scope, role and function of inter-professional care teams; and
- Develop high performing teams on all units in all our hospitals.

We recognized in the beginning that a transformation of this magnitude would be a long term and complex endeavor that would likely require us to shift priorities and actions from time to time, as we responded to, and learned from, the challenges encountered. We created the following ‘North Star Document’ to guide us through this journey.
CDMR Structured Learning Collaborative
North Star Document

AIM: Care delivery that is responsive to the care needs and experiences of patients, reflects inter-professional practice, and is based on data and evidence.

4 CHANGE AREAS:

2. Providing Care: Providing care that is matched to the identified patient needs and involves the patient/family.
3. Documenting: Documentation that supports patient care, is streamlined, and enables point of care charting.
4. Staff Roles: Defining roles that align with the core needs of the patient population and optimize the roles/functions of team members.

3 FOUNDATIONS:

1. Elder Friendly/Patient Focused
2. Inter-Professional Team
3. Care-Related Communication

COMING TO HOSPITAL
Assessment and Early Transition Planning
ACTION PERIODS 1 & 2

BEING IN HOSPITAL
Core Care
ACTION PERIOD 3

LEAVING HOSPITAL
Transitions/Discharge
ACTION PERIOD 4

GOALS:
1. 90 days without a voluntary turnover on the unit.
2. 50% improvement in average team Vitality Survey scores over the next 12 months.
3. 50% increase in average Patient Satisfaction Survey scores over the next 12 months.
4. Minimum of 3 completed PCSA test cycles per month.
5. Evidence of inter-professional assessment and care planning on each patient chart.

RESULTS

These are the changes we'll be focusing on in the CDMR Collaborative:

Jan-Mar (Action Period 1)
- Huddles
- Communicating Priorities with Patients

Mar-June (Action Period 2)
- Initial Assessment Processes
- Plan of Care: Transition Planning
- Communicating Priorities

June-Sept (Action Period 3)
- 30 minute Care Rounds
- *Shift Report: Involving Patient
- *?

Sept-Dec (Action Period 4)
- Follow Up Physician Appointments
- *Teach Back
- *Standardized Report to Receiver
- *?
Appendix B: Four Phases of Change

Island Health’s approach was to divide the Care Delivery Model Redesign project into four phases that would build on each other and move teams towards the North Star goal (See Appendix A):

- Process of care changes;
- Content of care changes;
- Structures of care changes; and
- Renewed leadership framework

We realized that to make changes of the magnitude we envisioned, we would need to actively involve as many direct care clinicians and their immediate leaders as possible. We accomplished this by using Structured Learning Collaboratives specific to each of the first three phases of change.

a) Process of Care Changes

In September 2009, we began planning for the Care Delivery Model Redesign Provincial Structured Learning Collaborative. At that time, we introduced the initiative’s process of care changes to clinicians. This yearlong effort brought inter-professional teams from hospital units across BC together for five learning sessions. Throughout this Collaborative, we presented teams with content and asked them to create Plan-Do-Study-Act cycles that involved understanding:

- The difference between designing and delivering care;
- How to set daily goals for care with patients and families;
- Mission critical care activities for different roles and professions;
- How to use the teach-back technique for patient education; and
- The major categories of impairment for the elderly, and elder friendly care principles.
Action periods involved teams completing several Plan-Do-Study-Act cycles to test and refine new ideas and processes and ensure that local context was taken into account.

The following Logic Model outlines how we expected the activities of this Structured Learning Collaborative to contribute to achieving the goals of Care Delivery Model Redesign.

**Logic Model: Care Delivery Model Redesign Structured Learning Collaborative**

In total, 65 clinical teams from four different health authorities in BC participated in this Structured Learning Collaborative, and together 557 tests of change were completed. See the following chart for topics and frequency of each test of change:
These Plan-Do-Study-Act cycles resulted in the creation of a Toolkit for the Care Delivery Model Redesign program, which included six performance support tools that new and existing clinicians could use to integrate process of care changes into their everyday work:

- Acuity Intensity Template;
- Hourly Care Rounds Template;
- Huddle Template;
- SBAR (Situation Background Assessment Recommendation) Communication Template;
- Structured Team Report Template; and
- Whiteboard Template.

We assigned a Care Delivery Model Redesign team member to every unit participating in the Structured Learning Collaborative, to provide change management coaching, mentoring support, and to document each unit’s progress through monthly narrative reports. By the end of the Structured Learning Collaborative, Care Delivery Model Redesign team members were reporting that most teams had introduced some concrete practice changes.

CDMR team members also noted that many teams struggled to sustain and move forward with complete consolidation of all changes. In part they attributed this to the fact that the right team members were not always working on the shifts when specific tasks had to be completed.
Change fatigue among clinicians and multiple other competing priorities were additional reasons given for the slow pace of full scale adoption of all process changes.

**b) Content of Care Changes**

In September 2011, we began planning for 48/6. The 48/6 Model of Care for hospitalized seniors (aged 70 and older) in BC, is a clinical care management initiative which addresses 6 core areas of functioning through patient screening and assessment within the first 48 hours of hospital admission. We chose to adopt 48/6 because it fit with work we had already begun on elder friendly care, and because it provided a tangible way to prevent the occurrence of stories like that of Mrs. G. and her family. (See Mrs. G’s story, p. 10).

48/6 began as an EXTRA fellowship project called 48/5, led by Dr. McElhaney at Providence Health in Vancouver, British Columbia. The purpose of assessing and planning hospital care based on function for older adults is to:

- Ensure that we understand how people function at their best (not when they are ill); and
- Protect our patients from hospital induced functional decline.

We conducted the first 48/6 Structured Learning Collaborative in December 2011. Participants representing more than 60 inpatient units from across Island Health attended the session. In Learning Session 5, held on September 2012, participants completed and endorsed Island Health’s 48/6 processes.

Between December 2011 and September 2012, all 60+ Care Delivery Model Redesign teams (400 participants each session) created, tested, revised, and retested several documents and processes that would support 48/6 to become an everyday care process in Island Health.

Results included:

- *The Pre-hospital Functional Screener Tool*, designed by clinicians to be completed alongside the standard electronic *Adult Health History on Admission*;
- Flowcharts for each of the six functional areas that outline assessment tools and guidelines for clinicians, including when to refer to other members of the inter-professional team;
- A customized 48/6 process that meets the needs of our paediatric population (called the “24/7” Assessment and Care Planning Process);
- Establishing the family and social domain as foundational to all aspects of 48/6; and
A standardized patient care plan template (the Inter-professional Patient Care Plan) that enables an at-a-glance comparison between current and baseline functional abilities for each patient.

Our aim was to help clinicians become confident in using these concepts before the introduction of the Electronic Health Record, where the same concepts would be imbedded electronically in formats that clinicians had not used. The chart below summarizes the content explored in each of the 48/6 learning sessions.

48/6 Learning Session Topic Overview

- Incorporating the 48/6 Principles into the Admission Process
- Interprofessional Care Planning
- Interprofessional Goal Setting
- Transitions & Discharge Planning
- Putting it all Together for the "New Right Way"
- Focus on Medications, Pain & Mobility
- Focus on Social & Family
- Cognition, Elimination & Nutrition/Swallowing

We also developed several new performance support tools to help teams, including short video clips, awareness posters, how-to guides, and instruction sheets. In 2012, the BC Ministry of Health adopted the principles of 48/6 as a clinical care management guideline to be implemented in all BC Hospitals.

An unintended consequence of refocusing the majority of Island Health’s change efforts on the content of care (48/6) was that teams who had yet to consolidate the process of care changes into everyday actions lost the progress they had made, and some abandoned the new ways of communicating as they learned about and implemented 48/6.

c) Structure of Care Changes

Island Health’s initial approach to making structural changes was to encourage operations leaders to make small changes as unit vacancies, opportunities, and readiness for change, naturally occurred. In practice, very few managers where able to create opportunities to make
changes, and vacancies continued to be filled by people in the same role as previous incumbents.

Island Health’s Community Hospitals were the first to move forward with integrating Health Care Assistants into the inter-professional team. From 2009 to 2011, all of the medical units at each of our community hospitals (Cowichan District, Campbell River, Saanich Peninsula, and West Coast General Hospitals) adjusted their staffing models from various iterations of total patient care to a model that used triads of a Registered Nurse, Licensed Practical Nurse, and Health Care Assistant. This enabled the Health Care Assistant to become part of the day-to-day nursing team, and teams became comfortable differentiating the roles of Registered Nurses, Licensed Practical Nurses and Health Care Assistants.

We created internal resources to support the integration of Health Care Assistants into the team, including standardizing the HCA Acute Care Orientation process, to improve staff experience of working in this new way, and to promote quality care.

Island Health began regional work to define a generic Patient Care Model for medical-surgical-rehabilitation units in May 2012. We called the model of care we were moving towards Collaborative Care (instead of total patient or primary care) because we intended the model to be much more inter-professional than team-nursing models from the past.

We decided to implement the Patient Care Model one hospital at a time, starting with Nanaimo Regional General Hospital, followed by the Royal Jubilee Hospital, and the Victoria General Hospital. Patient Care Model methodology involved defining standard tasks that every patient needs when they are in hospital and then determining what roles have the competencies to complete these tasks. This was a fundamental change from how team assignments had been created in the past, which involved focusing first on who was working, and then assigning or dividing the work among these resources.

The daily care process illustrated below shows the standard tasks that patients require from clinicians while they are in hospital. It is the foundation on which we have built the Patient Care Model.
Determining the actual team composition and numbers of clinicians per role involved describing what tasks are typically completed for patients on the various days of the average length of stay, what roles were most appropriate to complete those tasks, and how long it took to complete the tasks. From this, we were able to build a generic staffing model for each unit.

Operations leaders then reviewed each unit’s generic model to ensure that it took into account unit-specific contextual factors such as average patient type (case mix groupings), the physical layout of the unit, the depth and breadth of experience of clinicians (e.g. are the majority novice or senior), and progress towards consolidating previous practice changes. We used all these factors to determine what each unit’s actual staffing model should be.

We encouraged each unit involved in Patient Care Model changes to engage in a variety of pre-change activities to help clinicians ready themselves for the change. These activities included:
• Learning sessions for managers, leaders, and clinical educators focused on leading change and understanding the Patient Care Model methodology;
• Learning sessions for clinicians that explored the scope, role and function of Registered Nurses, Licensed Practical Nurses and the job description of Health Care Assistants;
• Practice in assigning care to unregulated care providers, time in working groups to design a day in the life of the new care team on each unit, and learning sessions about previously introduced practice changes (e.g. huddling, care planning, intentional hourly rounding, determining acuity/intensity);
• Standardized orientation for new Health Care Assistants coming to work in acute care;
• Development of unit coaches (direct care champions) to provide peer-to-peer knowledge transfer regarding the role of the Health Care Assistant in acute care, and to learn how to assign tasks to unregulated care providers; and
• Trials of Collaborative Care, before master rotation and staffing changes.

Teams working towards implementing the Patient Care Model created additional performance support tools, tested them, and refined them. These included templates and short videos that are now posted on Island Health’s Collaborative Care: Acute Care web page, and are available to all staff. An example of a performance support tool created is the Communications Tools Pocket Card, shown below.
### Communication Tools Pocket Card: Care Delivery Model Redesign

#### Huddles
**Purpose:** Check in process required to ensure staff are working together to meet patient short/long term goals, address safety issues, and creates an opportunity to ask for support from other team members.

1. A quick check-in should take 5-10 minutes maximum.
2. "Just In Time" Huddles can be called by any interprofessional team member.
3. Provide an opportunity to connect, communicate team ability to meet patient care needs and/or ask for help.
4. Are called when new patient or staff safety risks are identified. Specific information or emerging issues needs to be communicated.
5. Re-evaluations of staff assignment.

#### Structured Team Report
**Purpose:** will help the interprofessional teams to focus communication relevant to Patient Care Plans, Safety, Priority, Goals, and Discharge.

1. Identify patient / diagnosis / code status / alerts and safety concerns.
2. Review medical plan / current problems / Acuity / Intensity changes.
3. Confirm baseline functional / social status.
4. Discuss anticipated client needs / challenges / barriers to discharge (medical, functional, social).
5. Review interprofessional referrals / consults required.

#### Acuity Intensity Board
**Purpose:** helps define and communicate the care needs of the patient population on a unit to the entire interprofessional team.

1. Use this information to determine the patient's care needs & identify the most appropriate care provider.
2. Determine the patient's acuity level by looking at their condition &/or situation.
3. Determine the patient's intensity level by looking at the degree of illness, complexity of nursing task, & time required to deliver direct or indirect care.
4. Update the Acuity Intensity Board (1-5 daily) as patient care needs change.
5. Use the unit status information to balance team assignments.

#### Hourly Care Rounds
**Purpose:** Hourly Care Rounds enable the team to proactively anticipate the patient’s care needs.

1. **Patient Safety**
   - Check that all labels are intact, medications are administered and redclines are working.
   - Ensure patient is comfortable and in pain management plan.
   - Monitor patient for any signs or symptoms of emergent changes.

2. **Position**
   - Ask if the patient is comfortable, assess patient for any positioning needs.
   - Check for patient comfort, adjust the patient to a safe position.
   - Ask the patient if they are experiencing any discomfort.

3. **Personal Needs**
   - Check the patient’s vital signs & needed medications.
   - Assess patient for personal hygiene needs.
   - Assess if patient is thirsty, offer a drink.

4. **Pain**
   - Ask the patient if they are having any pain.
   - Assess patient's pain level.

5. **Plan of Care**
   - Assess the patient's goals of care and if the care plan is up to date.
   - Ask the patient if they have any outstanding questions or concerns.
Appendices

Appendix C: Team Vitality Surveys

We introduced Team Vitality Surveys during the first Structured Learning Collaborative. We adapted these surveys from examples shared by the Institute of Healthcare Improvement. Team Vitality Survey results gave unit leaders information about intended and unintended consequences to the changes being introduced, as clinicians were being asked to work together in more inter-dependent ways than in the past. The questions in the Team Vitality Survey aligned with those from Gallup organizational climate surveys conducted across the organization. Teams uploaded their results to a shared electronic space, where units, sites and participating teams could all review the data.

**Team Vitality Survey Instrument**

<table>
<thead>
<tr>
<th>Response Scale</th>
<th>1 – Strongly Disagree</th>
<th>2 – Disagree</th>
<th>3 – Neutral</th>
<th>4 – Agree</th>
<th>5 – Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score each question according to the response scale above</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>I feel a sense of accomplishment when I collaborate with the interprofessional team.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2</td>
<td>Team members, including nursing, allied health, physicians and other support staff work as an effective team that continuously strives for excellence.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3</td>
<td>I know what to do if I have a patient safety concern.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4</td>
<td>I know what to do if I have a staff safety concern.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5</td>
<td>Important patient care information is communicated amongst the patient care team in a timely manner and documented effectively.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6</td>
<td>The physical environment where I work is well organized.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7</td>
<td>The workflow where I work supports my efforts to provide optimal patient care.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8</td>
<td>If I have an idea about how to make things better, the leaders and other team members are willing to try it.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9</td>
<td>Staff members on this team communicate and behave respectfully towards one another.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10</td>
<td>Island Health initiatives are communicated clearly in a way that I can understand.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

As the 48/6 Structured Learning Collaborative began, we reduced the frequency of Team Vitality Surveys from 10 a month, to five per action period, in response to reports of survey fatigue. Throughout the Care Delivery Model Redesign program, unit managers determined who would complete the survey, and we asked them to try to ensure there was interprofessional representation, and that respondents varied by action period. Because Team Vitality Surveys were anonymous, it is not possible to know whether or not these ideals were reached.
Appendix D: Patient Experience Surveys

Care Delivery Model Redesign teams began to conduct monthly Patient Experience Surveys during the first Structured Learning Collaborative as a way of ensuring that we included patient voices and experiences in all aspects of our improvement and change work.

When we launched the 48/6 Structured Learning Collaborative, we reduced the requirement for ongoing Patient Experience Surveys from once a month to once per action period. Sampling instructions to leaders included asking them to give a paper survey randomly to patients on their day of discharge, with completed surveys being left behind (in an envelope or box on each unit).

We uploaded the data, aggregated at the unit, hospital and team level, to a shared electronic workspace. We changed the original Patient Experience Survey slightly when we launched the 48/6 Structured Learning Collaborative so that it would align with questions in the NCR Picker Survey.

### Patient Experience Survey Instrument

<table>
<thead>
<tr>
<th>Please answer the following questions with the provided options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Select the age group you belong in:</td>
</tr>
<tr>
<td>- 70 years or older</td>
</tr>
<tr>
<td>- 69 years or younger</td>
</tr>
<tr>
<td>2. When you had important questions to ask the hospital staff, did you get answers you could understand?</td>
</tr>
<tr>
<td>- Yes, always</td>
</tr>
<tr>
<td>- Yes, somewhat</td>
</tr>
<tr>
<td>- No</td>
</tr>
<tr>
<td>- I did not have questions</td>
</tr>
<tr>
<td>3. If you had any anxiety or fears about your condition or treatment, did anyone on the hospital staff discuss them with you?</td>
</tr>
<tr>
<td>- Yes, completely</td>
</tr>
<tr>
<td>- Yes, somewhat</td>
</tr>
<tr>
<td>- No</td>
</tr>
<tr>
<td>- I did not have anxiety or fears</td>
</tr>
<tr>
<td>4. Sometimes in the hospital one doctor or nurse will say one thing and another will say something quite different. Did this happen to you?</td>
</tr>
<tr>
<td>- Yes, always</td>
</tr>
<tr>
<td>- Yes, sometimes</td>
</tr>
<tr>
<td>- No</td>
</tr>
<tr>
<td>5. Did you have enough say about your treatment?</td>
</tr>
<tr>
<td>- Yes, definitely</td>
</tr>
<tr>
<td>- Yes, somewhat</td>
</tr>
<tr>
<td>- No</td>
</tr>
<tr>
<td>6. In general, after you used the call button, was the time you waited for help reasonable?</td>
</tr>
<tr>
<td>- Yes, completely</td>
</tr>
<tr>
<td>- Yes, somewhat</td>
</tr>
<tr>
<td>- No</td>
</tr>
<tr>
<td>- I did not use the call button</td>
</tr>
<tr>
<td>7. Do you think the hospital staff did everything they could to help control your pain?</td>
</tr>
<tr>
<td>- Yes, definitely</td>
</tr>
<tr>
<td>- Yes, somewhat</td>
</tr>
<tr>
<td>- No</td>
</tr>
<tr>
<td>8. Do you feel that you received enough information from the hospital staff on how to manage your condition after discharge?</td>
</tr>
<tr>
<td>- Yes, completely</td>
</tr>
<tr>
<td>- Yes, somewhat</td>
</tr>
<tr>
<td>- No</td>
</tr>
<tr>
<td>9. Would you recommend this hospital to your friends and family?</td>
</tr>
<tr>
<td>- Yes, definitely</td>
</tr>
<tr>
<td>- Yes, probably</td>
</tr>
<tr>
<td>- No</td>
</tr>
</tbody>
</table>
Appendix E: Chart Audits

In December 2011, teams started measuring implementation of the 48/6 project by auditing patient charts. The original intent of these Chart Audits was to measure for improvement. Every month, each unit randomly audited 10 patient charts and posted the results on a shared electronic workspace.

We revised the chart audit questions in the spring of 2014, to align with 48/6 clinical care management auditing requirements. Audits were then only completed for patients over the age of 70, and our audit activities shifted to measuring for performance.

Chart Audit Instrument

<table>
<thead>
<tr>
<th>Site:</th>
<th>Team/Unit:</th>
<th>Fiscal Period:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewer Initials:</td>
<td>Date of Review:</td>
<td>Audit criteria: over 70 years / LOS &gt;= 48 hours</td>
</tr>
<tr>
<td>Patient Age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient LOS is more than 48 hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Q1a | Was a PHFST completed? | |
| --- | ------------------------ | |
| Yes | Yes | |
| Partially | No | |

| Q1b | Was the PHFST completed within 48 hours of decision to admit? | |
| --- | -------------------------- | |
| Yes | Yes | |
| No | No | |
| Unsure, no date provided | No PHFST | |

| Q2 | Was the information recorded in the PHFST transferred to the IPCP? | |
| --- | -------------------------- | |
| Yes, all | Yes, all | |
| Yes, some | Yes, some | |
| No, none | No, none | |
| No PHFST | No PHFST | |

| Q3 | Is there evidence in the medical record that an assessment of this risk occurred? | |
| --- | -------------------------- | |
| Yes, for all | referral initiated, not yet complete | |
| Yes, for some | No evidence of assessment | |
| No risk for decline | No | |

| Q4 | Are there individualized interventions to protect or restore function documented on the IPCP within 48 hours of decision to admit? | |
| --- | -------------------------- | |
| Yes, for all | Yes, for some | |
| Yes, for some | Partially, more info needed | |
| No interventions documented | No risk noted | |

| Q5 | Is the discharge/transition plan for this patient clearly documented on the IPCP? | |
| --- | -------------------------- | |
| Yes | Yes | |
| Partially | Partially | |
| No | No | |

| Q6 | To what extent does the IPCP reflect an ~at a glance summary of the patient care needs [e.g., collaborative team, goal, barriers to function, discharge needs]? | |
| --- | -------------------------- | |
| 0 to 25% | 0 to 25% | |
| 26% to 50% | 26% to 50% | |
| 51% to 75% | 51% to 75% | |
| 76% to 100% | 76% to 100% | |

Check once data entered
Appendices

Appendix F: Staff Survey

Following the implementation of the Patient Care Model at Nanaimo Regional General Hospital, we developed and administered an online staff survey to clinicians involved in Care Delivery Model Redesign changes. This online survey has been administered twice: first in October 2013 (n=144) and second in June 2014 (n=117). We prepared reports at the site and program levels, and shared survey data and action plans at staff meetings, when each unit was encouraged to develop more detailed priorities and action plans.

**Staff Survey Instrument**

<table>
<thead>
<tr>
<th>Background Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. At which site do you work the most hours?</td>
</tr>
<tr>
<td>□ Nanaimo Regional General Hospital</td>
</tr>
<tr>
<td>□ Royal Jubilee Hospital</td>
</tr>
<tr>
<td>□ Victoria General Hospital</td>
</tr>
<tr>
<td>Q2. In which program area do you work as part of your everyday work?</td>
</tr>
<tr>
<td>□ Medicine □ Rehabilitation</td>
</tr>
<tr>
<td>□ Surgery □ No Response</td>
</tr>
<tr>
<td>Q3. On which unit(s) do you work on regularly?</td>
</tr>
<tr>
<td>□ 1 □ 3 □ 5 □ 7 □ Rehabilitation □ Transitions □ No Response</td>
</tr>
<tr>
<td>Q4. What is your role?</td>
</tr>
<tr>
<td>□ RN □ Unit Clerk □ SLP □ Other</td>
</tr>
<tr>
<td>□ LPN □ OT □ Social Work □ No Response</td>
</tr>
<tr>
<td>□ HCA □ PT □ Rehab. Assistant</td>
</tr>
<tr>
<td>Q5. What is your employment status?</td>
</tr>
<tr>
<td>□ Full time □ Temporary full time</td>
</tr>
<tr>
<td>□ Part time □ Temporary part time</td>
</tr>
<tr>
<td>□ Casual □ No Response</td>
</tr>
<tr>
<td>Q6. How long have you been in your current position?</td>
</tr>
<tr>
<td>□ Less than six months □ 1 to 3 years □ 6 to 10 years □ More than 20 years</td>
</tr>
<tr>
<td>□ Six months to a year □ 4 to 5 years □ 11 to 20 years □ No Response</td>
</tr>
</tbody>
</table>
### Staffing Model

Based on your experiences working during the last month, to what extent would you agree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q7. Baseline staffing is adequate to address the average, or typical, workload on my unit.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8. Every shift, the team that I am working in is able to assign tasks and responsibilities to each other in a way that ensures we are responding to the ebb and flows of patient needs on a day-to-day basis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q9. The tasks that I perform as a member of the care team are within the scope of my role (e.g., should not be performed by another member of the team).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Patient Care

Based on your experiences working during the last month, to what extent would you agree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q10. When I start my shift, all the information I need on each patient has been previously documented in the care plan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q11. I have enough time to complete patient care tasks safely.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q12. The care team works together to ensure comprehensive patient assessment and care plans, including discharge plan, are completed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q13. The interprofessional care team is available in a timely way to support patient care on the unit.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Only ask Q13b if Q13 = Strongly Disagree or Disagree]

Q13b. Please describe the scenario(s) in which the interprofessional team was not available in a timely way to support patient care on the unit. [Open ended comment field]
Appendices

Overall

Based on your experiences working during the last month, to what extent would you agree with the following statements?

| Q14. I would feel comfortable having one of my family members cared for in my unit. |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                  | Strongly Agree  | Disagree        | Neither Disagree nor Agree | Agree          | Strongly Agree  |
|                                  | [open-ended comment field] |

<table>
<thead>
<tr>
<th>Q15. In my unit, the right type of care is provided to patients at the right time by the most appropriate health care provider.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[open-ended comment field]</td>
</tr>
</tbody>
</table>

Additional Feedback

Q16. Based on your experiences working during the last month, what one area or process in your unit could benefit from improvement? Please describe how it could benefit from improvement. [Open ended comment field]

Q17. Based on your experiences working during the last month, what one area or process in your unit has been working particularly well? Please describe what has been working particularly well in this area. [Open ended comment field]
Appendix G: Readiness Assessment Template

Following implementation of the Patient Care Model at Nanaimo Regional General Hospital, we created a practice-change self-assessment template to help unit managers pinpoint which, if any, of the process and content changes their teams still needed to consolidate into everyday practice. We asked Nanaimo Regional General Hospital leaders to define ‘readiness’ before implementing Collaborative Care. We used this information to revise the readiness assessment before we used it with leaders at Victoria General and Royal Jubilee Hospitals. The readiness assessment consists of six broad topic areas:

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Communications with Staff Operating</th>
<th>Staff Hired &amp; Orientation Activities Completed</th>
<th>Staff Participating in Consolidation Activities</th>
<th>Leadership Resiliency</th>
<th>Communicating and Identifying Care Priorities Among the Team is Occurring via Standard Communication Practices</th>
<th>Collaborative Care Elements in Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Staff meetings occurring monthly (yes/no)</td>
<td>HCA rotations filled (yes, all lines/yes, most lines/no)</td>
<td>Team assignment utilized on dayshift</td>
<td>Concerns being voiced from unit leadership (yes, some, none)</td>
<td>% of time, team huddles occurring (more than one per shift)</td>
<td>% of RNs who report they are spending the majority of their time on assessments, care planning and patient teaching</td>
</tr>
<tr>
<td>2.</td>
<td>Unit/Program newsletter utilized (yes/no)</td>
<td>HCA buddy shifts completed for over 75% new HCAs (yes/no)</td>
<td>Team assignment utilized on evening shifts</td>
<td>CNL backfill started</td>
<td>% of time, Structured Team Report utilized</td>
<td>% of RNs who report comfort with assigning tasks to others</td>
</tr>
<tr>
<td>3.</td>
<td>Staff education sessions being provided (# of)</td>
<td>LPN rotations filled (yes, all lines/yes, most lines/no/not applicable)</td>
<td>Team assignments utilized on nightshifts</td>
<td>CNL, CNE rotation adjustments made for required period (yes, in progress, no)</td>
<td>% of completed and updated Care Plans (on any given day)</td>
<td>% of LPNs who report spending the majority of their time in either direct patient care activities or documentation of such</td>
</tr>
<tr>
<td>4.</td>
<td>% of staff attending staff education sessions</td>
<td>LPN buddy shifts completed for over 75% new LPNs</td>
<td>Staff asking to start new rotations ASAP</td>
<td>Senior leadership rounding schedule coordinated for</td>
<td>% of time, PHFST completed for new admissions</td>
<td>% of HCAs who report they are spending the majority of their shifts in patient bedrooms</td>
</tr>
<tr>
<td>Appendix</td>
<td>Description</td>
<td>Communications with Staff Operating</td>
<td>Staff Hired &amp; Orientation Activities Completed</td>
<td>Staff Participating in Consolidation Activities</td>
<td>Leadership Resiliency</td>
<td>Communicating and Identifying Care Priorities Among the Team is Occurring via Standard Communication Practices</td>
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</tr>
<tr>
<td>5.</td>
<td>Sticky Question Boards up on unit</td>
<td>RN rotations filled (yes, all lines/yes, most lines/no)</td>
<td>Awareness of Collaborative Care learning hub exists among staff</td>
<td>Manager/CNL uses acuity/intensity to describe &quot;normal&quot; and knows when/what would require staffing above baseline (yes/no)</td>
<td></td>
<td>Discharge Board in daily use (yes/no)</td>
</tr>
<tr>
<td>6.</td>
<td>Unit metrics posted on Quality Boards</td>
<td>RN buddy shifts completed for over 75% new RNs (yes/no/not applicable)</td>
<td>Daily workflows/standard work is documented and staff use this to structure their shifts/prioritize their work</td>
<td></td>
<td>Safety Boards in daily use (yes/no)</td>
<td>% of providers who report they understand the scopes of practice or education/training of the other roles on their team</td>
</tr>
<tr>
<td>7.</td>
<td>Relief lines filled to anticipated need (yes, all disciplines/gaps remain in X discipline)</td>
<td>PDSA improvements continuing</td>
<td></td>
<td></td>
<td>% of time, Intentional Hourly Rounds occurring (all shifts)</td>
<td>% of providers who report trust and respect is present within the Team they work with</td>
</tr>
<tr>
<td>8.</td>
<td>Negative attitudes</td>
<td></td>
<td></td>
<td></td>
<td>% of time, general mobility needs of all</td>
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</tbody>
</table>
### Appendices

<table>
<thead>
<tr>
<th></th>
<th>Communications with Staff Operating</th>
<th>Staff Hired &amp; Orientation Activities Completed</th>
<th>Staff Participating in Consolidation Activities</th>
<th>Leadership Resiliency</th>
<th>Collaborative Care Elements in Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>Negative comments being expressed by staff (majority of/half of/pockets of/none)</td>
<td>patients being attended to</td>
<td>Walking boards in daily use (yes/no)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>% of staff reporting satisfaction with work environment</td>
<td>% of time, whiteboards are updated in patient bedrooms</td>
<td></td>
<td></td>
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<tr>
<td>11.</td>
<td>Students on the unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>New workload/staffing PRFs being received (yes, no)</td>
<td>% of time. acuity/intensity updated per shift on assignment whiteboard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>% of time. acuity/intensity updated per shift on assignment whiteboard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>% of time,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications with Staff Operating</td>
<td>Staff Hired &amp; Orientation Activities Completed</td>
<td>Staff Participating in Consolidation Activities</td>
<td>Leadership Resiliency</td>
<td>Communicating and Identifying Care Priorities Among the Team is Occurring via Standard Communication Practices</td>
<td>Collaborative Care Elements in Place</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>acuity/intensity directly Informing patient assignments</td>
<td></td>
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</tbody>
</table>
Appendix H: Additional Team Vitality Monitoring Results

The following graphs include Team Vitality Survey results for all teams in Island Health that participated in Care Delivery Model Redesign, from the following periods of time:

<table>
<thead>
<tr>
<th>Action Period</th>
<th>Data Collection Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP1</td>
<td>Dec 13, 2011 - Jan 27, 2012</td>
</tr>
<tr>
<td>AP2</td>
<td>Jan 28, 2012 - Mar 2, 2012</td>
</tr>
<tr>
<td>AP6</td>
<td>Nov 28, 2012 - Feb 19, 2013</td>
</tr>
<tr>
<td>AP7</td>
<td>Feb 20, 2013 - May 28, 2013</td>
</tr>
<tr>
<td>AP9</td>
<td>Oct 12, 2013 - TBD</td>
</tr>
</tbody>
</table>

When the Care Delivery Model Redesign began, about half of survey respondents agreed that “Nursing, allied health, physicians and other staff on the unit work as a high-functioning team”. This proportion stayed the same during Care Delivery Model Redesign implementation.

In the fall of 2012, during action period 5, there was shift, and the proportion of respondents who strongly agreed that the teams they worked in were high-functioning, increased from 24% to 50%, and has stayed at this rate since, as shown in the graph below:

```
Q3. Nursing, allied health, physicians, and other staff on this unit work as a high-functioning team.
```

Beginning in November 2012, we noted that survey respondents stopped strongly agreeing that their team was high-functioning, and fewer agreed with the statement “I am part of an effective work team which continually strives for excellence even when the conditions are less than optimal”. The proportion of respondents with neutral responses to this question also increased at this time, as noted in the graph below:
Despite, all the changes clinicians have experienced over the last few years, the proportion agreeing that “I feel a sense of accomplishment and pride after I have completed my work on this unit” has not consistently declined below baseline, as indicated by the graph below:
Appendix I: Additional Patient Experience Survey Results

The following graphs include Patient Experience Survey results for all teams in Island Health who participated in Care Delivery Model Redesign, from the following periods of time:

<table>
<thead>
<tr>
<th>Care Delivery Model Redesign, Action Period Data Collection Dates</th>
</tr>
</thead>
</table>

For the most part, patient experiences neither improved nor worsened while we were implementing Care Delivery Model Redesign. This may show that, while patients have not been harmed by the changes we have made, there are still improvements we can introduce, to change patient experiences for the better.

The proportion of patients who answered “yes, always” to the question, “If you had any anxiety or fears about your condition or treatment, did anyone on the hospital staff discuss them with you?” has trended between 60% and 70% since 2011, as shown on the graph below:

![Graph showing patient experience survey results for Care Delivery Model Redesign](image)

Note: Excludes “Did not have anxieties or fears” from responses

At Nanaimo Regional General Hospital, the first Island Health site to implement Patient Care Models, the proportion of patients who responded positivity to this question was slightly higher than the average of all hospital teams. The following graph shows that in December, January,
and February 2014 the proportion of patients who responded positively to this question ranged between 100% and 80%:

NRGH Patient Experience Survey Results, Question 2, April 2013 to February 2014 (blue dots pre PCM; green dots post PCM)

Many Care Delivery Model Redesign teams focused their change efforts on improving communication with patients and their families. The introduction of whiteboards in bedrooms, and the activity of creating a daily care goal with patients, were small changes designed to improve the quality of conversations between patients, families, and care teams.

The proportion of patients who answered “yes definitely” to the question, “Did you have enough say about your treatment?” has remained between 60% and 70% since 2011, as shown in the following graph:

In addition to improving communication with patients and families, we designed many of our efforts to enhance inter-professional communication.

During action period 5, 40% of patients answered “yes, sometimes” to the question, “Sometimes in the hospital, one doctor or nurse will say one thing and another will say something quite different. Did this happen to you?” This proportion has since remained
around 30%. Since 2011, the proportion of respondents reporting that this occurred to them “yes, always” has not increased above 10%, as noted in the graph below:

**CDMR Patient Experience Survey, All Teams, Question 3**

<table>
<thead>
<tr>
<th>AP1</th>
<th>AP2</th>
<th>AP3</th>
<th>AP4</th>
<th>AP5</th>
<th>AP6</th>
<th>AP7</th>
<th>AP8</th>
<th>AP9</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
<td>80%</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, always</td>
<td>Yes, sometimes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

Current Patient Experience Survey results indicate that we need to focus on improving discharge teaching and on helping patients to successfully plan for their self-care after leaving the hospital is an area that needs focus.

Since Action Period 6, the proportion of patients who answering “yes, definitely” to the question, **“Do you feel that you received enough information from the hospital on how to manage your condition after discharge?”** has changed from 80% to 70%, and the proportion of patients who reported they did not receive enough information to manage their condition after discharge has risen to 10%, as noted in the following graph:

**Patient Experience Survey: Care Delivery Model Redesign, All Teams, Question 7**

<table>
<thead>
<tr>
<th>AP1</th>
<th>AP2</th>
<th>AP3</th>
<th>AP4</th>
<th>AP5</th>
<th>AP6</th>
<th>AP7</th>
<th>AP8</th>
<th>AP9</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
<td>80%</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, definitely</td>
<td>Yes, somewhat</td>
<td>No</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tbody>
</table>
Appendix J: Additional Staff Survey Results

We offered our online Staff Survey to staff at Nanaimo Regional General Hospital - on units that had implemented the Patient Care Model - one month after the change (October 2013) and again in June 2014. The Royal Jubilee Hospital and Victoria General Hospital staff will participate in the staff survey in early 2015.

Changes to support clinicians have continued at Nanaimo Regional General Hospital after the initial implementation of the Patient Care Model. For example, one month after implementation in Nanaimo, 16% of survey respondents “strongly disagreed” and 14% “disagreed” with the statement, “The tasks that I perform as a member of the care team are within the scope of my role” (i.e. should not be performed by another member of the team). In June 2014, 26% of respondents “strongly agreed” with this statement and 47% “agreed”, while 17% “disagreed” and only 4% “strongly disagreed”, as shown in the following graph:

Care Delivery Model Redesign Survey, Nanaimo Regional General Hospital June Site Report (October 21, 2014)

In October 2013, 72% of respondents “strongly disagreed” with the statement “Baseline staffing is adequate to address the average or typical workload on my unit”. In June 2014, the proportion of respondents who “strongly disagreed” decreased to 32% and those who agreed was 27%, as noted in the following graph:

Staff Survey, NRGH June Site Report (October 21, 2014)
In October 2013, 63% of respondents “strongly disagreed” and 24% “disagreed” with the statement “I have enough time to complete patient care tasks safely”. In June 2014 the proportion of respondents that “strongly disagreed” was 22%, with an additional 24% responding that they “disagreed”. The proportion of staff in agreement increased 27% “Agreed” as highlighted in the graph below:

Staff Survey, Nanaimo Regional General Hospital June Site Report (October 21, 2014) (orange bars Sept 2013; blue bars June 2014)

In addition, in June 2014, 32% of respondents “agreed” and 5% of respondents “strongly agreed” with the statement “The care team works together to ensure comprehensive patient assessment and care plans, including discharge plans, are completed.” Refer to the following graph.

CDMR Staff Survey, NRGH June Site Report (October 21, 2014)
Appendix K: Additional Evaluation Observations

The following observations from the Strategic Initiative Evaluation Project (May 2013) and the internal Evaluation of the Care Delivery Model Redesign Structured Learning Collaborative (May 2011) have informed and supported many of the lessons Island Health has learned during implementation:

- The Strategic Initiative Evaluation Project highlighted the challenge we face in accomplishing culture change in an organization with a large and diverse workforce where there are multiple competing priorities. We recognize that staff working in complex systems often face conflicting demands while trying to participate in organizational change.

- Through the Strategic Initiative Evaluation Project, we found that Structured Learning Collaboratives represented a significant shift in Island Health’s approach to engaging staff in change and an innovative approach to leading transformation change. However, it was principally the front-line staff who had attended Structured Learning Collaborative sessions that understood and were able to spread Care Delivery Model Redesign. Other participants seemed to have neither the capacity, nor the local support they needed to pass on their newly acquired knowledge to their peers. There appeared to be little “spread” of the initiative from one unit to another within a larger facility.

- The Evaluation of the Structured Learning Collaborative found that staff resistance to change was a significant challenge. Factors that may contribute to this included:
  - Introducing multiple changes at one time,
  - Entrenched cultures specific to individual units,
  - Differences in care practices between units,
  - Challenges with documenting and reporting care tasks,
  - Rotating shift schedules; and
  - Lack of between front-line staff and leaders that may limit improvements.