

INTERIM EVALUATION REPORT

WINTER STRATEGY 2017

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1. EXECUTIVE SUMMARY

To respond to the heightened surge in healthcare demand in winter 2017 a strategy was devised to support general practices to keep their most vulnerable adult patients well and reduce their likelihood of being hospitalised. The Winter Strategy Program was a joint project initiated by Northern New South Wales Local Health District (NNSWLHD) and North Coast Primary Health Network (NCPHN) to develop a whole of system strategy to better respond to the healthcare demands over winter.

As a result of a co-design process with stakeholders from NNSWLHD, NCPHN, General Practice staff, Aboriginal Medical Services staff (AMSs), Ambulance services and consumers, three aims were identified as the means to respond to winter demand:

Aim 1: Improve respiratory hygiene and vaccine uptake, slowing the seasonal epidemic of infectious respiratory conditions using a population wide campaign;

Aim 2: Support general practices to keep their most vulnerable patients well and reduce their likelihood of being hospitalised in winter;

Aim 3: Establish an efficient and effective process for transfer of care from hospital to community during winter

Population level resources were developed and distributed to improve respiratory hygiene and use of vaccinations. General practices enrolled in the program were asked to identify their most at risk patients and provide them with additional support and monitoring to better manage their care in the winter months and alongside their patients identify what they could do if they got sicker. Improved connections between Chronic Disease Management teams were promoted and funding was made available to provide winter patients with access to increased allied health services when needed. Additionally, hospital systems were sought to be strengthened to increase communication between general practices serving winter patients, specifically in relation to their notification of the admission and discharge of patients.

General practices in return were remunerated for the additional time spent providing care for their winter patient and were provided with resources to increase care coordination or patients. Practices were asked to provide activity reporting data and participate in the evaluation process for the program including surveys for practice staff and patients.

Around 646 patients connected to 24 general practices participated in the full winter program. The average age of patients was 73 with a range of ages between 26 and 99. Patients had a number of conditions including Chronic Obstructive Pulmonary Disease (COPD), Ischemic Heart Disease (IHD) and Diabetes.

Evaluation of the program focused on feasibility, perceived impact, consumer and service provider experience and advice for subsequent iterations. The ability to evaluate the program was limited by a number of factors related to selection bias, lack of ethical approval and small sampling sizes. A key focus of evaluation then became process evaluation to understand how the program could be refined for subsequent iterations.

Patient surveys, although limited by the number of responses, showed an increase in the patient rating of overall health, quality of life, physical health and abilities to carry out social activities. Almost all patients reported finding extra contact with their GP teams valuable and an increase in the use and quality of Sick Day Action Plans. Patients also commented on indicators of improved connection and integration of health care professionals in the health system.

Clinician experience surveys showed high rates of professional satisfaction at the conclusion of the program as well as positive feedback in regards to an increased in care provided this flu seasons as opposed to other winter seasons. Clinicians expressed their experiences of better patient care, increased contact with patients and carers, improved self-management, increased uptake of Sick Day Action Plans, increased communication between general practice teams and Chronic Disease Management (CDM) Team.

Key refinements desired for future iterations of the program include increased lead in time before the program, improved orientation and engagement with internal stakeholders, more involvement of consumers in co-design and additional training for practice staff in program resources. Further reflection on use of funds for the remuneration of care coordination and ways in which cohort patients can be identified. Improvement of evaluation processes and the ability to measure impact of monitoring and improved self-management on preventing hospitalisation.

Winter 2018 provides the opportunity to build on the lessons learned by this first pioneer initiative and improve the potential for improving outcomes for risk patients during winter months.

2. BACKGROUND

Every winter, there is a surge in healthcare demand both in the community and hospitals. Older and frail patients are especially vulnerable during this time. To support general practices to keep their most vulnerable adult patients well and reduce their likelihood of being hospitalised during the 2017 winter, a joint project between Northern New South Wales Local Health District (NNSWLHD) and North Coast Primary Health Network (NCPHN) was initiated to develop a whole of system strategy to better respond to the healthcare demands over winter.

This strategy was conceived as a first iteration that will be replicated and refined in subsequent years. It was designed on the premise that not everything will be able to be accomplished the first time, nor will the approaches be perfect, however the best way to figure out how to do this well is to start somewhere. The first Winter Strategy program commenced on 1 July 2017 and ended on 29 October 2017.

A co-design strategy was used to develop the strategy. A series of inclusive workshops were held between February and May, which included more than 51 stakeholders from NNSWLHD, NCPHN, General Practice staff, Aboriginal Medical Services staff (AMSs), Ambulance services and consumers. From these workshops a list of interventions were identified and prioritised to constitute the bulk of the program. Three core aims of strategy were also defined at these co-design workshops. The details of these aims and details relating to each aspect of the strategy are as follows.

AIMS OF THE STRATEGY:

Aim 1: Improve respiratory hygiene and vaccine uptake, slowing the seasonal epidemic of infectious respiratory conditions using a population wide campaign.

Aim 2: Support general practice keep their most vulnerable patients well and reduce their likelihood of being hospitalised in winter.

Aim 3: Establish an efficient and effective process for transfer of care from hospital to community during winter.

2.1 AIMS OF THE STRATEGY

AIM 1: POPULATION WIDE CAMPAIGN

The objective of AIM 1 consisted of:

- An **advertising campaign** via social media, local radio and press, to educate community on the importance of flu vaccination and slowing the spread of infectious respiratory conditions. The following website was set up for dissemination of the advertising materials:

<http://healthynorthcoast.org.au/winter-well>

- **Posters** that were developed and made available for download, print and display in general practices
- **Fridge magnets** available for distribution for patients in participating general practices. The magnets promoted the flu vaccination, reducing the spread of respiratory conditions and key telephone contacts.

AIM 2: FUNDING AND SUPPORTS FOR GENERAL PRACTICE

Resources, support and funding were provided to practice that decided to enrol in the Winter Strategy program. Support for up to 1000 patients was offered to general practices. Further details about the types of support and payments can be found below. More information can be found in Appendix 1: Winter Strategy GP Flyer

General practices and AMSs enrolled in the program were asked to:

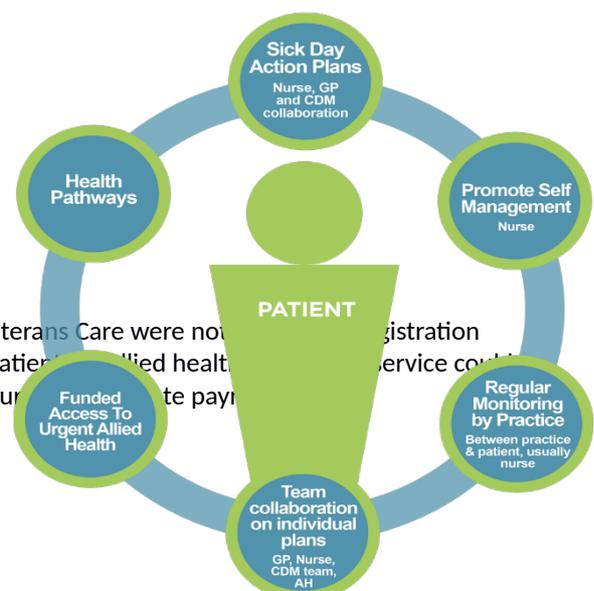
1. Create a winter watch list: consisting of adult patients >18 years with one or more condition who are likely to benefit from heightened care¹
2. Register patients using a simple process
3. Monitor watch list patients throughout winter and ensure:
 - a. Health conditions and care plans have been recently reviewed
 - b. Self-care is promoted and winter watch patients each have a sick day action plan (SDAP)
 - c. Patients are monitored regularly by their practice team
 - d. Specialist services are involved if needed
 - e. There is a contact person at the practice for each patient so they can discuss concerns and receive care in a timely way
4. Participate in evaluation
 - a. Short survey of registered patients, GPs and practice nurses (PNs)
 - b. Weekly data submission using a simple online process
 - c. Participating in forums at the conclusion of the program to share insights and challenge

General practises enrolled in the program were offered:

1. Payments to help practices meet additional costs
2. Additional funding was made available to allow practices to refer registered patients to allied health where needed to prevent hospitalisation²
3. Other supports and resources see below, need original file of diagram below from Samara Finlayson to change Promote Self Management to GP and Nurse to keep at risk patients winter well

Other supports and resources:

- Assistance identifying patients at risk of being hospitalised over winter
- Resources to support development of sick day action plans (SDAPs)



1 Palliative care patients and those enrolled in Co-ordinated Veterans Care were not included in registration

2 Funding was made available to practices to refer registered patients to allied health where needed to prevent hospitalisation. Allied health services could not be accessed via: Local Health District, EPC items, health insurance or private pay

- Links to chronic disease management nurses from the Local Health District³
- Electronic notification of admission to and discharge from hospital of registered patients
- Patient resources for us in general practice
- Dissemination of tools and tips among participating general practices

AIM 3: EFFICIENT AND EFFECTIVE PROCESS FOR TRANSFER OF CARE FROM HOSPITAL TO COMMUNITY DURING WINTER

The intended objectives of Aim 3 included:

- Improving Discharge Planning, involving patient, carer and general practitioners (GPs) in discharge planning
- Improved communication with GPs at time of admission

Attempts were made in the life of the strategy to ensure that Winter Strategy patients were including in an existing initiative to make appointments for patients >70 years, with their GP, prior to discharge from hospital.

2.2 PATIENT REGISTRATION

Shortly after practice enrolment, practices were asked to identify their “at risk” cohort and register patients through a website developed by the NNSWLHD. The patient was provided with a written description of the program and what was involved and consent to participate program was obtained verbally and recorded in the patient file.

Patient registrations were open between the middle of June to the first week of August. The majority of registrations occurred the last week of June until the first week of July. During patient registration, mostly administered by the practice nurses, practices were asked to share the following information about each patient:



- o Age
- o Gender
- o Existing chronic conditions:
 - o Congestive Heart Failure (CCF)
 - o Chronic Obstructive Pulmonary Disease (COPD)

³ Depending on availability of chronic disease management nurses within a given Local Health District

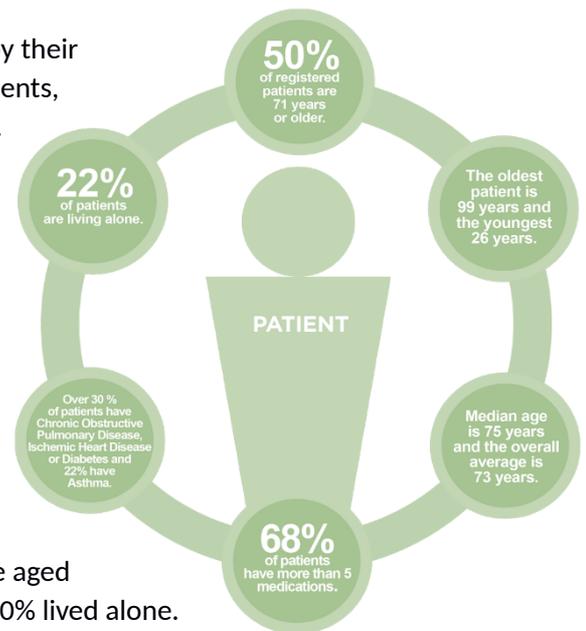
- o Ischemic Health Disease (IHD)
- o Diabetes
- o Chronic Kidney Disease
- o Asthma
- o Existing co-morbidities:
 - o Anxiety/Depression
 - o Other Mental Health Conditions
 - o Active Drug & Alcohol issues
 - o Smoking
 - o Currently holding a prescription for more than 5 medications
- o Social impact factors
 - o Living alone
 - o Having a carer
 - o Health care card holder
 - o DVA card holder
 - o Disability pensioner
 - o Aged pensioner

2.3 COHORT DESCRIPTION

At the time of patient enrolment, 709 patients were registered by their practices for participation in the Winter Strategy. Of the 709 patients, the average age was 73 with a range of ages between 26 and 99.

During the program, 55 patients withdrew from the program and 18 patients died the program, resulting in a total of 646⁴ patients that were enrolled for the length of the program.

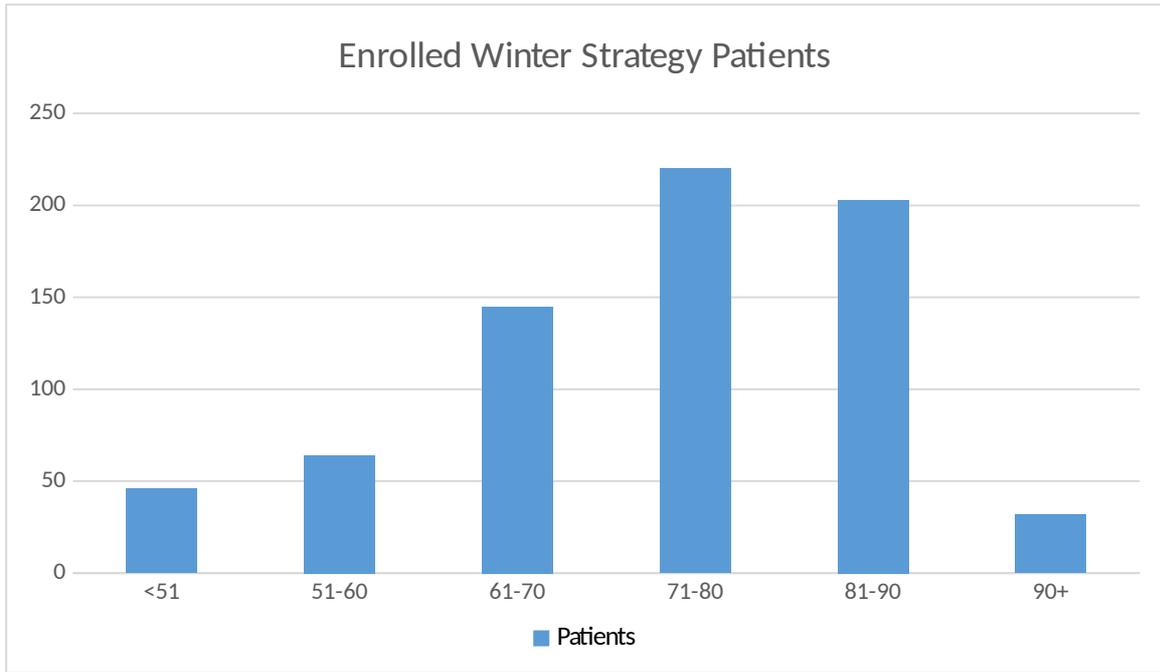
Of the 709 registered participants, over a third of the patients had one or more of the following conditions: Chronic Obstructive Pulmonary Disease (COPD), Ischemic Health Disease (IHD) and Diabetes. More than half of the patients were taking more than five medications. Almost a third of patients were reported having a mental health condition, only 58 were smokers and 16 were reported as having an active drug or alcohol problem. Almost 40% of registered patients were aged pensioners. Around 20% of patients had a carer, while another 20% lived alone.



The analysis of the cohort that follows is based on the data obtained at patient registration:

Age ranges:

⁴ According to LHD data 653 patients were enrolled in the full program. This small discrepancy in numbers shows the challenging of synchronising data between the NCPHN and LHD. It is likely that the additional numbers counted by the hospital data account for patients that withdrew from the program but were not updated on the LHD database.



Patients in the cohort were registered as having the following chronic conditions:

Chronic Condition ⁵	# Patients	Percentage
Chronic Obstructive Pulmonary Disease (COPD)	264	37%
Ischemic Heart Disease (IHD)	242	34%
Diabetes	236	33%
Asthma	156	22%
Congestive Cardiac Failure (CCF)	102	14%
Chronic Kidney Disease (CKD Stage 3B)	84	12%

Co-morbidities	# Patients	Percentage
Currently prescribed 5+ medications	438	62%
Anxiety/Depression	183	26%
Smoker	58	8%
Other mental health condition	44	6%
Active drug and alcohol condition	16	2%

Social factors	# Patients	Percentage
Aged Pension	278	39%
Has a carer	163	23%
Lives alone	156	22%
Health Care Card	66	9%
Disability Pension	54	8%
DVA Pension	9	1%

2.4 DESCRIPTION OF GENERAL PRACTICE COHORT

At the beginning of the program, 30 general practices and Aboriginal Medical Services registered to participate in the winter strategy. Six practices withdrew from the program as it progressed, resulting in a total of 24 practices that participated in the entire Winter period. The majority of practices that withdrew did so during the latter part of July (first month), the last practice to withdraw did so in August.

Based on feedback from withdrawing practices, reasons for withdrawing from the program included:

- Concerns over the patient consent process due to a misconception that PHN was holding patient data
- Not having established relationships with patients making it difficult to determine who is best to engage in the winter watch list
- Time pressures resulting from resources becoming available too late to allow sufficient time to plan and implement changes to practice systems, employ additional nursing staff and or engage with and register patients

⁵ Further details regarding the description of the cohort can be found in Appendix – Data based on initial cohort

2.5 FINANCIAL REMUNERATION FOR SERVICES

NCPHN provided payments to help practices meet additional costs incurred as a result of the time required by practice staff, (in most cases a Practice Nurse) to register and then provide additional support to the participating patients.

Payments were calculated on the basis of an hourly rate of \$37.00 and were made fortnightly, upon the submission of general practice of data⁶. The rate was determined after benchmarking practice nurse salary rates.

- 1 hour nursing payment was provided for every patient registration that was submitted⁷
- \$11.10 per week (20 minutes) for each registered patients, available from 1 July to 29 October 2017 (17 weeks). A patient registered by 1 July, who remained in the WS program for the full 17 weeks would attract a payment of \$225.70 (plus GST) per patient.

2.6 URGENT ALLIED HEALTH FUNDING

The Urgent Allied Health Funding was available in situations where:

- The service was needed to avoid hospitalisation or support timely discharge from hospital, and
- It was not otherwise available in a clinically accepted time frame i.e. through Medicare, private health insurance or other public services

To access Urgent Allied Health Funding the GP submitted a to NCPHN and upon approval NCPHN paid the provider directly.

⁶ Payment occurred so long as a practice submitted data regardless of the amount of service provided

⁷ This recognises the need for a long appointment, often undertaken by nurses to assess patient needs, develop a plan and complete registration activities.

3. EVALUATION METHODS

Without a control group, the evaluation aims of the Winter Strategy program were limited and were influenced by what it was possible to capture in the short timeframes and within the existing busy workflow of general practices. A number of proposed measures were unable to be gathered and used as planned. Proposed Practice Nurse Journals, for example, were excluded due to feedback that Practice staff were at capacity in terms of implementing the strategy and could not take on an additional task. Formal clinician interviews and video were proposed but were not prioritised due to the unexpected size and extent of the implementation effort. Finally, patients did not consent to be contacted by NCPHN so direct independent feedback from patients was not obtained. Evaluation of the program therefore focused on feasibility, perceived impact, consumer and service provider experience and advice for subsequent iterations. To determine the effectiveness on patients of the Winter Strategy program and to understand how it could be refined for subsequent iterations, a number of data capture points were identified.

Evaluation Aim	Evaluation Method / Data capture points
Feasibility for Practices	<ul style="list-style-type: none"> ✓ Weekly activity data submitted by practices ✓ Practice payments and cost analysis ✓ Practice feedback on time needed for increased coordination
Impact/Patient experience	<ul style="list-style-type: none"> ✓ Pre and post strategy patient experience surveys (PREMs) ✓ Pre and post strategy Patient reported outcome measure survey – Promis-10 (PROMs)
Service provider experience	<ul style="list-style-type: none"> ✓ Pre and post clinician experience surveys ✓ Notes from practice activity data submissions ✓ Feedback from Practice and CDM team forums post strategy ✓ Targeted clinician interviews (all with Practice Nurses) ✓ Aim 1 – Winter Magnet Evaluation
Implementation challenges and indicators for subsequent iterations	<ul style="list-style-type: none"> ✓ Collection of baseline data via patient registration ✓ Feedback from Practice and CDM forums post strategy ✓ Qualitative notes from Winter Strategy implementation group ✓ Hospital presentation and admission data

3.1 ACTIVITY REPORTING DATA

From 1 July, practices were asked to track their engagement with their registered patients through a provided template. Practices were asked to indicate the type of activity that took place with each

patient rather than the number of activities that took place. The types of activities specified included:

Face to face consult or visit with patient	<ul style="list-style-type: none"> ● GP consult ● PN consult ● Home visit ● Developing and reviewing care plan with patient and carer
Non face to face	<ul style="list-style-type: none"> ● Phone ● SMS ● Email
Sick day action plan or other self-management coaching	<ul style="list-style-type: none"> ● Developing a Sick Day Action Plan (SDAP) ● Explaining or reinforcing SDAP with patient or carer ● Providing other prompts and reminders to carer around SDAP or staying well
Non face to face care coordination	<ul style="list-style-type: none"> ● Referral to the Chronic Disease Management team at LHD ● Referral to Allied Health or other service ● Contacting possible support agencies to explore availability and appropriateness of service ● Case discussion with Practice team and/or external providers such as CDM and private Allied Health Providers
Submitting a baseline patient survey	in July and August only
Submitting a follow up patient survey	in October and November only
NIL this week	No activity took place with this patient that week

To trigger the weekly activity payment practices had to first submit their weekly activity data. This was done using an online portal 'Folio'. A Folio link and a set of for accessing and uploading activity sheets was provided to each practice by email. On the Thursday of every week, practices were sent an email advising them that their data sheet for that week was ready. The data sheet was refreshed each week based on up to date registration information, including all new registrations and deleting patients withdrawn from the program. Data was entered for each registered patient using a patient ID code.

The use of Folio proved to be more challenging and confusing for practices than expected therefore practices were also given the opportunity to submit their weekly activity data directly to the NCPHN as an alternative to submitting via Folio.

Completion of each patient registration triggered automatic payment of the first registration payment. No additional data was required.

3.2 PATIENT SURVEYS

Following registration of patients, practices were asked to gather information about their patient's current experience of care by asking them to complete two short surveys:

Winter Patient Reported Experience Survey (PREM)	A survey developed by NCPHN with questions about self reported ability to manage self care and access care in a timely way when required
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The purpose of using such surveys was to capture what was currently working for the patient and what could be improved. To administer the surveys, each practice was given one or two electronic tablets (depending on their number of registered patients) which had both surveys loaded on to them. Results from the surveys were then collated and analysed by a third party vendor and sent back to the NCPHN for distribution to the participating practices. Patients were given surveys before and after the program in an effort to measure any change to their experience as a result of their participating in the program. Practice payments were not conditional on completion of the patient surveys.

However due to the limited timeframe of the program and the low sensitivity embedded in the questions, it was deemed unlikely that the pre and post surveys could be used a good measure of improvement in patient experience.

Practices were provided with instructions and additional support to assist with using tablets in their practice. For those practices that did not wish to use a tablet device, a hard copy of the surveys were provided for their use.

The Winter Patient Reported Experience Survey (PREM) survey (administered in July and August) was completed by 379 patients (59%), while the post survey (administered in October and November) had a lower uptake with 154 (24%) patients completing the survey.

The PROMIS-10 survey (administered in July and August) was completed by 293 patients (45%) and the post survey was completed by 121 patients (19%).

Low survey completion rates as well as selection bias limited the possibility of patient survey results being used as a means for evaluation. Unexpectedly high patient engagement scores on pre-surveys indicate the potential of patient selection bias by the practices. Additionally, low completion rates ofvelovski post surveys did not allow for an adequately sized sample group for paired data analysis to be done.

Reasons for low survey responses by patients included inadequate training for practice staff in administering the surveys, slow feedback on the results to practices to encourage their further participation and short time frames allotted for numerous reporting and survey requirements.

3.3 CLINICIAN EXPERIENCE SURVEYS

In an effort to measure the potential impact of the Winter Strategy program, two surveys for clinicians within the registered practices were administered at the beginning (during July and August) and at end of the program (during October and November). The questions in the survey were based on feedback from the co-design workshops about what clinicians would like to see improved by the program. The survey asked about their experience of being notified about the admission and discharge of their patients in hospital, their access to external services for their patients, their sense of confidence that their patients were being appropriately monitored and how professionally satisfying their find their work.

3.4 USE OF TABLETS FOR PATIENT SURVEYS

Following the first patient surveys, feedback was sought by participating practices on the ease of use of tablets for staff and patients, assessing whether patients reporting needed hands on assistance to complete the surveys and the use and usefulness of survey reports provided back to practices. There were mixed responses from different practises. There was an overall sense that the tablets were challenging to use for patients and some staff. At a few practices 90% of patients used the tablets themselves. The majority of practices, reported that between 90-100% of surveys were done with the assistance of staff or paper versions were used. There was a mixed response to the question as to the how the PREM and PROM reports were being used or intended to be used in the future. Improvement ideas related to the use of tablets included:

- Progress reporting on the number of surveys completed (by patient) and the number still to be completed
- Simplified process for navigating between the two surveys on the tablet
- Additional training on the use of tablets.

3.5 HIGH RISK PATIENT ADMISSION NOTIFICATION

The NNSWLHD had developed an Admission and Discharge Notification (ADN) service. This automated service alerts GPs when patients have unexpected admissions to LHD facilities. It also provides an alert when the patient is discharged and in the event of a patient’s death. This service was initially provided as a trial to GPs participating in the 2016 Integrated Care Collaborative. Based on user feedback, the ADNs trial was expanded to include GPs managing patients enrolled in the Winter Strategy. It was intended that all patients enrolled in the Winter Strategy would be automatically enrolled (“flagged”) for the ADN service.

When a patient is admitted to hospital under certain circumstances, the ADN service notified practices of the admission (usually within 20 minutes). Notifying the practice when a patient is in hospital allows them to able to “reach in” to the hospital and discuss their patient’s care and any relevant history with the attending physician. Practices may also take other actions, such as call the patient’s family, fax in recent history to the hospital or other actions. Similarly, on discharge, practices receive a notification (including for deceased discharges). This notification provides a prompt for the practice to liaise with the patient to ensure appropriate primary care follow up and to request a discharge summary (DS) should it not yet have been completed. The aim of ADNs is to improve patient care and experience through better coordinated care in the hospital and during the transfer of care from acute to primary settings.

3.6 HOSPITAL UTILISATION

Patients registered in the program were given a unique identifier enabling them to be tracked with in NNSWLHD hospitals as part of the Winter Strategy cohort. Of the total number of patients registered, 188 (29%) presented to emergency, 308 (30%) were admitted into hospital, 97 (31.5%) were planned and 211 (68.5%) were unplanned admissions. The below provides data captured by the hospital about the presentation and admission of the Winter Strategy cohort. Based on data captures on the principal diagnoses for unplanned admissions, it can be noted that 13 patients had the principal diagnosis of a respiratory condition.

	No of Winter Patients	%	Total Presentations
Emergency Presentations	188	28.8%	300
Total Cohort	653		

	Planned	%	Unplanned	%	Total
Admissions	97	31.5%	211	68.5%	308
Bed days	466	30.6%	1055	69.4%	1521
Average length of stay (days)	4.8		5		4.9
Proportion of Admissions <2 days	18.5%		23.4%		41.9%
Readmissions			6.5%		
Deaths	1		8		9

Principal Diagnosis for Unplanned Admissions for LOS< 2 Days	Admissions
Chronic obstructive pulmonary disease with acute lower respiratory infection	7
Chest pain, unspecified	3
Unspecified injury of head	3
Nausea and vomiting	3
Atrial fibrillation and atrial flutter, unspecified	3
Syncope and collapse	3
Pain localised to upper abdomen	2
Superficial injury of other parts of head, contusion	2
Unstable angina	2
Supraventricular tachycardia	2
Acute subendocardial myocardial infarction	2
Chronic obstructive pulmonary disease with acute exacerbation, unspecified	2
Abnormal uterine and vaginal bleeding, unspecified	1
Other and unspecified abdominal pain	1
Precordial pain	1
Abdominal aortic aneurysm, without mention of rupture	1
Schizophrenia, unspecified	1
Orthostatic hypotension, unspecified	1
Cough	1
Influenza with pneumonia, other influenza virus identified	1
Angina pectoris, unspecified	1
Influenza with other respiratory manifestations, other influenza virus identified	1
Unspecified haematuria	1
Pneumonia, unspecified	1
Acute cystitis	1
Disorder of vestibular function, unspecified	1
Spontaneous abortion, incomplete, without complication	1
Other and unspecified convulsions	1

Dyspnoea	1
Haemorrhagic disorder due to circulating anticoagulants	1
Other chest pain	1
Other forms of angina pectoris	1
Acute transmural myocardial infarction of anterior wall	1
Contusion of hip	1
Volume depletion	1
Fracture of intertrochanteric section of femur	1
Dizziness and giddiness	1
Benzodiazepines	1
Localisation-related (focal)(partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, without mention of intractable epilepsy	1
Other acute osteomyelitis, ankle and foot	1
Open wound of scalp	1
Periapical abscess without sinus	1
Fracture of lower end of radius with dorsal angulation	1
Umbilical hernia with obstruction, without gangrene	1
Fracture of intracapsular section of femur	1
Gastrointestinal haemorrhage, unspecified	1
Open wound of knee	1
Cellulitis of foot	1
Gastroenteritis and colitis of unspecified origin	1
Other primary coxarthrosis	1
Grand Total	72

3.7 CHRONIC DISEASE MANAGEMENT (CDM) SERVICES

NNSWLHD has a free Chronic Disease Management service (CDM) for people with chronic disease providing assistance to manage their health care needs. It assists people who have illnesses such as Diabetes, heart, lung or other long term conditions to receive the care that they need, where and when they need it. Chronic Disease Management (CDM) provides care coordination and health coaching. It can also work with GPs, to develop a health plan that meets patient needs.

Referral to the Chronic Disease Management (CDM) team was encouraged to assist patients to:

- Learn more about their health problem
- Manage their health condition and medications more effectively
- Aid communication with the referring doctor and other health services
- Link with services to help manage health conditions and stay at home
- Understand written action plans for when they become unwell
- Receive support at home after they leave hospital

Easier access to this service was made available to practices in the Tweed, Byron and Richmond Valley areas through the Winter Strategy program. The CDM teams recorded 325 uses of their services by Winter Strategy patients during the program. The distribution of patients between Tweed and Richmond was 50/50. It is noted that Tweed had over three times more admissions than Richmond Valley but the contributing factors related to this variation is unclear.

4. RESULTS AND OUTCOMES

A. AIM 1 EVALUATION

To measure the effectiveness of the Population Wide Campaign, namely the use of the winter fridge, a survey was conducted on 16 individuals.

The results of this survey are as follows:

Ten (62.5%) of those surveyed remember receiving the fridge magnet, 9 of which mentioned they placed the magnet somewhere prominent, 7 of those 9 had information written on the magnet while 2 individuals did not have information written. Seven individuals (70%) reported that the information on the magnet made them feel more confident about what to do if they became unwell over winter. 100% of those surveyed found the information on the magnet very useful or a bit useful. With the most useful information listed on the magnet being:

- Name of their GP and personal contact number
- Reminder to go to the GP early
- Reminder to use their emergency puffer and to call an ambulance

Ten of those surveyed (100%) reported they had the flu shot this winter. The same 10 individual also had a type of Sick Day Action Plan, 6 of which used the plan while 2 did not, 2 individuals did not answer this question. In the case of becoming more unwell over winter, 6 (60%) surveyed responded that they visited their GP, 3 (30%) followed their Sick Day Action Plan, 3 (30%) presented at the hospital, 2 (20%) sought help from a family, carer or friend and 2 (20%) called an ambulance.

The majority of respondents did not have suggestions, however a few additional interventions that those who responded noted that would have made a difference for them this winter were:

- Being able to avoid the flu
- Having oxygen available when needed
- Keeping away from crowded places and staying warm

B. PATIENT EXPERIENCE SURVEYS

Of the 646 patients that participated in the full Winter Strategy Program, 59% completed at least one Patient Reported Experience Measure Survey (PREM) and 24% completed at least one Patient Reported Outcome Measure survey (PROM). Although the use of the responses from these surveys cannot be used to draw conclusive statements for the evaluation of the program, some insight can still be gained into how these patients are presently experiencing care in the general practice and their perception of their quality of life.

PREM Survey

The most notable outcomes of the PREM survey from before and after the Winter Strategy include:

- 66% of patients who responded felt the care they received from the GP practice was much better in winter than in previous months
- At the end of the program 71% of patients who responded reported they found managing their care easy
- 90% of patients who responded to the post survey had a Sick Day Action Plan
- 90% of patients also felt more confident looking after themselves after the three months the program took place during
- 98% of patients who responded found the extra contact with their GP staff over winter valuable
- 88% of patients who responded felt their health professionals were better connected in the health system over the winter months

Further details regarding the pre and post PREM surveys are as follows:

	Questions	Pre-program Survey (Jul & Aug) (n=379)	Post - Program Survey (Oct & Nov) (n=154)
1	Over the last 3 months, were you involved in decisions about your care and treatment, as much as you wanted to be?	95% Yes (completely or to some extent)	97% Yes (completely or to some extent)
2	Over the last 3 months, were your family or carer given the opportunity to be involved in decisions about your care and treatment, as much as you wanted them to be?	78% Yes (completely or to some extent)	76% Yes (completely or to some extent)
3	Over the last 3 months, how easy has it been for you to manage your health?	55% Yes (completely or to some extent)	Δ 71% Yes (completely or to some extent)
4	Over the last 3 months, did you have a Sick Day Action Plan?	76% Yes	Δ 90% Yes
5	Over the last 3 months, have you become more confident in how to look after yourself if your health gets worse?	87% patients responded as confident (at least to some extent to manage their care)	Δ 90% patients agreed they were more confident to self-manage their care
7	Over the last 3 months, how easy has it been for you to make appointments to see healthcare professionals when you needed to?	83% of patients who responded found making appointments easy	90% of patients who responded found making appointments easy
8	Over the last 3 months, have you received all the care you feel you needed for your health condition?	95% Yes (completely or to some extent)	98% Yes (completely or to some extent)
9	Over the last 3 months, how often did your healthcare professionals seem to know the important information about your medical history?	69% of patients responded "Every time I have seen a healthcare professional"	Δ 84% of patients responded "Every time I have seen a healthcare professional"

Additional Questions Asked Post Activity

Since July, the extra contact I had with my general practice team has been valuable	98% of patients who responded found the extra contact with their GP staff over winter valuable
Since July, the health care I have received from my general practice team has been better	66% of patients who responded felt the care they received was much better
Since July, do you feel your care plan has covered all aspects of care necessary for your health condition?	78% of patients who responded felt their care plan covered all or most of the aspects necessary
Since July, were you followed up by your doctor or nurse, as much as you wanted, to monitor your health condition?	91% of the patients responded "Yes, completely or to some extent"
Since July, I got the feeling that all the health professionals involved in my health care were better connected	88% of patients who responded felt their health professionals were better connected

PROMIS-10 Survey

Of the 646 patients that participated in the Winter Strategy, at least 19% completed the PROMIS-10 Survey. The same survey was administered at the beginning and at the seminar to see if any changes to the patient's reported quality of life could be identified. Although the number of patients that participated in the post survey is too small to provide any reliable evidence for evaluation, insights into the experience of a select number of patients from examining the results.

Some of the notable outcomes of the PROMIS-10 survey responses are as follows:

- In general, 69% of patients responded their health being excellent, very good or good.
- 80% of patients in the post survey rated their quality of life as excellent, very good or good. 67% of patients gave the same response in the pre survey
- 62% of patients reported their physical health at the end of the winter months as excellent, very good or good
- 60% of patients reported they were never or rarely bothered by emotional problems in the last week of the winter program as opposed to the 45% who reported the same at the end of the first week of beginning winter strategy.

Further details regarding the pre and post PROM surveys are as follows:

	Question	Pre-program Survey (Jul & Aug) (n=293)	Post - Program Survey (Oct & Nov) (n=121)
1	In general, would you say your health is:	50% responded Excellent, Very Good or Good	Δ 69% responded Excellent, Very Good or Good
2	In general, would you say your quality of life is:	67% responded Excellent, Very Good or Good	Δ 80% responded Excellent, Very Good or Good
3	In general, how would you rate your	46% responded	Δ 62% responded Excellent,

	physical health?	Excellent, Very Good or Good	Very Good or Good
4	In general, how would you rate your mental health, including your mood and your ability to think?	76% responded Excellent, Very Good or Good	74% responded Excellent, Very Good or Good
5	In general, how would you rate your satisfaction with your social activities and relationships?	75% responded Excellent, Very Good or Good	Δ 76% responded Excellent, Very Good or Good
6	In general, please rate how well you carry out your usual social activities and roles. (This includes activities at home, at work and in your community, and responsibilities as a parent, child, spouse, employee, friend, etc.	68% responded Excellent, Very Good or Good	Δ 74% responded Excellent, Very Good or Good
7	To what extent are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying groceries, or moving a chair?	45% responded Completely or Mostly	Δ 48% responded Completely or Mostly
8	In the past 7 days, how often have you been bothered by emotional problems such as feeling anxious, depressed or irritable?	45% responded Rarely or Never	Δ 60% responded Rarely or Never
9	In the past 7 days, how would you rate your fatigue on average?	41% responded None or Mild	Δ 43% responded None or Mild
10	In the past 7 days, how would you rate your pain on average?	Average rating of patients was 0.26	Average rating of patients was 0.30

C. SERVICE PROVIDER EXPERIENCE

Of the 96 clinicians involved in the Winter Strategy program, 68% submitted a pre-survey. There were 4 practices that didn't participate in the clinician surveys. The post survey was completed by 34% of the initial 96 clinicians. Although the number of respondents was lower in the post survey, the change differences in the responses still show some interesting findings. Approximately 25 clinicians completed both the pre and post surveys.

- The number of clinicians who felt confident that their high risk patients were being appropriately monitored increased from 55% to 91% of respondents.
- Ninety-one (91%) of clinicians surveyed compared to 42% in the pre-survey felt their patients were experiencing well-connected health services across the region.
- Additionally, 100% of clinicians surveyed found their caring for high risk patients professionally satisfying during the program, as compared to 69% in the months preceding the program.

Further details regarding the results of these surveys are as follows:

	Question	Pre-program Survey (Jul & Aug) (n=65)	Post - Program Survey (Oct & Nov) (n=33)
1	Over the last 3 months, were you notified, as much as you wanted to be, when your high risk chronic disease	57% YES (completely or to some extent)	73% YES (completely or to some extent)

	patients were admitted to hospital?		
2	Over the last 3 months, were you involved, as much as you wanted to be, in decisions about the care and treatment of your high risk chronic disease patients while admitted in hospital?	62% NO (Not enough or not at all)	42% NO (Not enough or not at all)
3	Over the last 3 months, were you involved, as much as you wanted to be, in planning for the discharge of your high risk chronic disease patients from hospital?	63% NO (Not enough or not at all)	56% NO (Not enough or not at all)
4	Over the last 3 months, has it been easy for you to access external services/resources needed to care for your high risk chronic disease patients (e.g. transport, education, care coordination, allied health etc)	51% NO (Not enough or not at all)	76% YES (completely or to some extent)
5	Over the last 3 months, I felt confident that my high risk chronic disease patients were regularly checked on or appropriately monitored to reduce risk of hospital admission	55% YES (completely or to some extent)	91% YES (completely or to some extent)
6	. Over the last 3 months, I felt my patients experienced well-connected health services across the region	42% YES (completely or to some extent) 30% UNDECIDED	91% YES (completely or to some extent)
7	. Over the last 3 months, I have found caring for my high risk patients professionally satisfying work	69% YES (completely or to some extent)	100% YES (completely or to some extent)

The pre and post surveys were identical except for the last four questions which asked about the clinician's perception on SDAPs, identifying at risk patients, whether or not they would recommend participating in the Winter Strategy program next winter and whether they felt their registered patients got better care this winter as compared to previous years. Around 82% of clinicians felt their registered patients got better care this winter as compared to previous years and 91% of clinicians would recommend their practice participate in a similar program next year.

8. My patients got better care this flu season than previous years	82% of clinicians who responded agreed
9. Sick Day Action Plans are a key tool for better patient self-care	85% of clinicians who responded agreed
10. Flagging and monitoring a high risk group of patients within the practice is a good strategy for improving patient outcomes	91% of clinicians who responded agreed
11. I would encourage my practice to do a similar winter program during flu season next year	91% of clinicians who responded agreed

A series of forums for service providers involved in the Winter Strategy were held at the conclusion of the program. Practice teams were given the opportunity to provide their insights and feedback on the following themes and questions: What worked really well? What should be do more or less of? What would make you participate or not participate next year?

As a result of these consultations the following outcomes and common themes emerged:

4.3 PROFESSIONAL SATISFACTION

Based on clinician survey results and forum feedback there was improved professional satisfaction as a result of participating in the program. This improved satisfaction was reported as being related to increased contact between practitioners and patients therefore strengthening relationships with patients, improved self-management and the increased uptake of SDAPs by patients. Clinicians also expressed some frustration with the burden of data reporting and some day to day pressure where additional Practice Nurse hours were not allocated.

4.4 IMPRESSIONS OF BETTER PATIENT CARE

Overall clinicians reported that patients had better health outcomes as a result of the program. Practices felt patient needs were met more quickly and that chronic and complex conditions were better managed. Clinicians also reported having stronger relationship developed between patients and carers, patients and practitioners, carers and practitioners. Practices felt more able to identify vulnerable patients to prevent them from becoming sicker, empower patients to contact their GP when needed and prevent unnecessary attendance at the practice. Additionally, many practices noted improved medication management as an outcome of the program.

Increased Contact

Practices felt that the increased contact with patients, assisted by one person coordinating the care was beneficial with regards to the increased social contact it gave patients (especially those who were older and/or more isolated). Based on feedback from practices, patients reported that they valued contact with practices and felt more supported and connected as result of it.

Practices also reported that they felt the practice and practice nurses became more approachable for patients and the practice team felt better able to identify and resolve barriers preventing patients from attending practice appointments. In one such case, the practice identified a patient who wasn't attending due to cost. To remove this they contacted her directly and arranged for her to bulk billed for her appointment. Some practices found home visits to patients were ideal and when they could not see the patients in person, then phone calls provided an alternative monitoring mechanism. Challenges related to increased contact included the increased time needed to speak to patients, noting that without a strong existing relationship with a patient, increased contact was at times awkward.

Improved Self-Management

Clinicians reported an improvement in self-management of care. In some cases this involved the use of fluid balancing charts or daily weight measuring. Practices emphasised the need for prevention and improving patient attitudes about taking care of managing their conditions. Challenges to improving self-management included patients feeling confident in their current abilities and not wanting the "obvious" to be explained to them. Without adequate time to counsel patients and build rapport, practice staff felt unable to influence patients to understand the benefits of monitoring. In

Practice forum feedback, the lack of financial means to engage in self-care was nominated as a barrier to self-management by patients.

4.5 IMPACT ON WORKLOAD

A significant amount of work was required to contact patients and coordinate care. The majority of practices noted time constraints around registering patients, monitoring them and providing care that was needed. Practice staff who had protected time to do the strategy commented in forums that this made their workload more manageable. Specifically in regards to increased contact, a patient was not always available at the time allocated for contacting them, therefore additional follow ups were almost always needed. In general, the time required was greater than initially expected and the incentive payment provided did not result in realignment of internal working arrangements to account for the additional requirements on practice nurses.

4.6 IMPACT ON INCOME AND BUSINESS

Some practice staff shared that the remuneration provided didn't seem adequate for the time spent. From a strictly bottom line perspective, they commented the program was challenging for some of their practices. However, some practices also noted that new patients came to the practice as a result of the program which was good for business. There has not been a determined effort on this evaluation to develop a deep understanding of the business case.

4.7 INTERNAL WORKLOAD ARRANGEMENTS FROM PRACTICES

For the majority of practices, a nurse led the implementation of the program and its coordination. This included overseeing patient surveys (in some cases manually entering them), monitoring/contact of patients, linking patients to other services, completing activity reporting and ensuring internal practice collaboration on patient care. Although an increased amount of work was being shouldered by nurses, very few practices adjusted their working hours to account for increased demand. In most cases, existing internal structures, such as practice meetings, and relationships between nurses and GPs had to be strengthened to incorporate the program or become overburdened. This resulted in an improved team approach within some practices and reinforcing a chronic disease model where the nurse serves as the primary contact for the patient. Feedback provided by one such practice sheds light on their internal working arrangements during the Winter Strategy:

“We did a re-prioritisation of existing resources for aspects of the strategy e.g. data entry as it was in addition to their existing work and as a result some aspects of other practice activities did suffer. We were not able to physically accommodate extra staff, but could have used an additional nurse for 2 days per week to do the amount of work it was to work with 50 patients. Our practice has an advanced chronic disease nurse led treatment model with GPs doing 10 min appointments so there is reduced wait time to see the GP, and PNs do all their care plans and follow up, gathering test results etc. When the GP sees a patient they can focus just on patient treatment and decisions. Our practice already has a meeting time

with doctors and nurses to plan and discuss issues and internal projects but extra meeting time was needed by the Practice to do Winter Strategy. Overall it was very rushed and a lot of work came down to the Practice Manager but she felt the care for patients was good."

4.8 UPTAKE AND USE OF SDAPS

A number of practices reported the increased usage and usefulness of Sick Day Action Plans (SDAPs), making the patient and practice team more proactive in their approach. Practices noted that the program gave patients control and autonomy over their health. One Practice Nurse noted "*this project formalised and gave permission to push SDAPs*", on the same topic another nurse commented that the strategy was a "*fantastic experience*" which formalised what they were already doing. "*Although 100% of patients already had SDAPs, we discovered that only 70% knew they did. The Winter Strategy gave us the opportunity to do more with the patients so the SDAPs could mean something, it was a focus and impetus to formalise what they already had going.*" Some barriers to the use of SDAPs for patients was the literacy and accessibility for patients. A few practices noted that patients had trust in their GP but not necessarily other staff members so arranging for nurses to do SDAPs was not effective. Practice staff also noted that further training in the use of SDAPs would be useful.

4.9 GENERAL PRACTICE AND CDM TEAM

The CDM team provided written feedback and discussed their experience of the Winter Strategy at a forum. Based on this feedback of the CDM team, the Winter Strategy enabled improved relationships and contact between the CDM team and the general practices to develop. The CDM team reported new contact with 12 Practices. It was also noted that some practices undertook chronic disease management themselves. There was a perception expressed by the CDM team at their feedback forum that there might have been capacity for more collaboration in some cases. The way in which patient information was shared was also discussed, noting that the process differed from place to place and was at times slow. The CDM team noted that some practices nurses connected more with the CDM team than others did and that connections between the CDM team and Practice Nurses revealed the proactive integrated approach to coordinating chronic disease occurring in some practices.

Ideas for improvement that the CDM teams provided were:

- Building on the connections that were made this year. Providing more opportunities for networking between CDM team and practice nurses
- Narrow the focus of the winter strategy for practices to be disease specific initially, e.g. focus on flu and have practices focus on one or two SDAPs and gain experience to then be able to take on more.
- Having the opportunity for Practice Nurses and CDM nurses to interface on SDAPs earlier in the process
- Increased chronic disease education for practice staff
- Creating systematic changes that are less based on individual person capability

4.10 ADMISSION AND DISCHARGE NOTIFICATIONS

Feedback in Practice forums indicated that some Practice became aware they had winter cohort patients in hospital but had not received an automated notification. Preliminary work in the life of the strategy shows that there may be a number of reasons of data errors that prevent notification including:

- Incorrect Clinician or Practice details in the database
- Incorrect GP details in ED database not updated on presentation

Practices reported that working notifications greatly assist an integrated approach to patient care and addressing problems with data accuracy in future iterations would be valued by participants.

4.10 PRACTICE SUPPORT BY NCPHN

Practice support staff in NCPHN were involved in the program genesis but did not have sufficient advance warning to include additional work into their overall work plan. In addition a number of Practice Support Officers left the organisation one month or less into the strategy. A senior project officer provided support to both Practices and Practice Support staff augmented by input and support from staff in the Patient Centred Medical Home program.

4.11 UTILISATION OF FLEXIBLE ALLIED HEALTH FUNDING

A total of \$10,760 was expended on allied health sessions in two disciplines (physiotherapy \$1080 and Exercise Physiology \$9680). The requests for allied health funding came from five practices despite a concerted marketing strategy reminding the practices that the funds were available. One practice made significant use of the system a group of patients, these patients were being seen weekly or sometimes more frequently.

Despite advice in the co-design process that Allied Health was much needed and inaccessible to those who needed, the forum feedback from Practice was that allied health did not figure prominently in care planning during winter.

4.12 PROGRAM COSTS

A total of \$158,760 was expended as follows:

- Registration payments \$27,565
- Weekly patient payments \$120, 435
- Flexible allied health funding \$1080 (Physiotherapy) and \$9680 (Exercise Physiology)

In terms of weekly payments for enhanced care, a Practice with 20 patients received approximately \$222 per week (equating to 6 hours of Practice Nurse time at \$37 per hour).

5 LESSONS LEARNED FOR FUTURE IMPLEMENTATION

The Winter Strategy program sought to be ambitious from its outset. Much was set out to be achieved in a limited amount of time. Based on the first program (Winter 2017) a key refinement for future iterations of the Winter Strategy is to ensure more lead time before the project launches. This increase in time could be used for additional planning for integration both within the NCPHN and in the external environment; the development and testing of tools and resources; increased involvement of patients and practice staff in co-design and increased orientation and training for all staff involved. Additional refinements that could be made possible by a longer lead time could include the gradual recruitment and gathering of baseline measures for patient rather than additional patient recalls for this work.

In addition to this overall refinement of increased lead time, consultations with internal and external stakeholders identified a number of other areas for improvement. These include:

- the starting time and duration of the program
- approaches to the selection of at risk patients by practices
- remuneration needs for increased care coordination
- additional funding for allied health services
- approaches to improve health care neighbourhood integration
- practice support needed from NCPHN - the use of tablets, activity reporting and the evaluation process.

Instead of starting the program in June or July, participants suggested that initiating the program earlier, in conjunction with the flu vaccination, would be more effective and seamless. Additionally, practices felt that the length of the program was challenging to manage and that by the end of the program a lot of energy for monitoring and supporting patients had dissipated. Therefore, it has been suggested that the duration of the program be reduced by a few weeks. Alternatively, engaging participating practices in a mid-program reflection could assist them to sustain their activity during the length of the program and refine their approaches in the latter part of the winter.

Practices gained insights into identifying which patients were at the greatest risk during the winter months to make up their winter watch list. Some of these insights included the benefits of having as many practice staff engaged in the patient selection process as possible; needing additional education on tools related to patient selection; using additional data to make selections (e.g. hospital admission data and generating lists of patients with complex conditions not frequently attending general practice) and the need for greater focus on those patients who really need increased support as opposed to those who are already being well supported. Selection bias is a key challenge identified to be overcome in future implementation of the program. It is easy for practices to identify those patients they are already engaging with as opposed to those who they are less aware of or individuals within the local population that are not being supported by any consistent general practice. Therefore a key challenge is to ensure that those with the greatest needs are being supported as opposed to whose needs are already being targeted.

Although the remuneration for increased care coordination by practice nurses was a welcomed aspect of the program, some practices felt that further consideration should be given to how it is provided and for what. The time taken for coordination exceeded the hours estimated in the

remuneration calculation. Allowing remuneration to take place for a range of milestones as opposed to hours spent on activities may assist practices reach goals in a way that is reflective of the amount of time needed to complete these tasks. Milestones could be related to cleansing data prior to the program; organising the practice team and developing a collective vision for the winter program; registering patients and providing for protected time for care planning and review. Further consideration is also needed on how to strengthen collaboration between patients, general practice staff and allied health practitioners and whether the additional funding provided for these services could be used by the practices in other ways.

Based on feedback from practice staff, forming connections and stronger networks has been a key outcome of the Winter Strategy program and numerous integration initiatives over the past decade. Future iterations of the program should build on these connections and provide more opportunities for networking and collaboration between practices and hospital staff. Documentation of lessons learned by the CDM staff for improved internal processing of winter patients will assist in the planning for the next program. A significant opportunity available is to promote the further uptake of the Admission and Discharge Notification (ADN) service. With the buy-in of general practices for use of this service established, an important next step would include systematic documentation of the present issues and barriers in the ADN service and a plan for overcoming these challenges to increase reliability. One specific barrier noted in the winter program was LHD staff not having correct contact details to send information to general practice. This would need to be remedied in the next winter program. Additional insights gained from clinicians include a need to improve the quality of discharge summaries and the connection of general practices with social services.

In addition to the need for increased connections between practitioners within the health system, general practices noted that they would benefit from increased support from NCPHN. Future winter programs should strive to include increased support by Quality Improvement Practice Supports Officers (QISOs) in practices at the beginning of the program to assist with registration and understanding reporting and evaluation requirements. Practices also noted a desire for more collaborative meetings between practices that were participating to allow for joint learning and problem solving; more training on SDAPs; provision of additional resources provided sooner in the lead up to the program and receiving data to help inform targets to the next winter program. Planning for the next program is recommended to be more mindful of the different quality improvement programs the practices are already engaging in so that practices that be supported to align and focus their efforts into one as opposed to numerous programs.

It was widely noted that Practices are time poor and that this created a range of implementation challenges. In future iterations, activity reporting needs to be simplified and less frequent. Practices also noted a desire to consolidate communication needed from the practice into one mechanism or channel in order to reduce the impact on their time. Determining how practices or individual staff can have more protected time for reporting will need to be an area of improvement for future winter programs. Additional work is needed to improve the user friendliness and functionality of tablets to capture patient surveys.

Meaningfully measuring the effectiveness of the winter program will be an ongoing area of learning. Insights gained from this winter program to assist with a higher quality evaluation process include the need for:

- ethical approval to formalise the research process and to enable engagement with patients about their outcomes and experiences
- increased resources to provide matching and analysis.

- further work to synchronise data collection about registered patients by both the LHD and the NCPHN.

6 SUMMARY OF IMPROVEMENT IDEAS FOR WINTER 2018

As noted previously, the Winter Strategy program provided an opportunity to test certain interventions that would be refined over time. As a result of this first program, rich insights were generated that can be applied in future similar program. The following summarises recommendations by general practices and the coordinators of the program for future implementation:

6.10 OVERALL PROGRAM IMPLEMENTATION AND COORDINATION

- o Increase lead in time
- o Increased orientation and education for all staff involved
- o Increased involvement between practices and opportunities for mentoring and collaboration
- o Greater integration with the Patient Centred Medical Home program and overall quality improvement in general practice, allowing for practices to have more choice around how they would like to engage
- o Increased consultation and training for internal staff operationalising the program with practices, e.g. Quality Improvement Support Officers (QISOs)
- o Greater patient involvement in co-design and implementation process, specifically in relation to testing out SDAPs and surveys

6.2 STARTING TIME/DURATION

- o Start program with flu vaccination perhaps around April
- o Shorten the program by a few weeks
- o Engage practices in a half way point reflection

6.3 PRACTICE SELECTION OF AT RISK PATIENTS

- o Increased education around tools for patient selection
- o Increased practice staff to be involved in patient selection
- o Use hospital admission data to select patient cohort
- o Enrol more patients and explore different types of patient groups
- o Improve registration processes to be less time consuming
- o Provide search criteria for practice software. This may include a search of patient databases for those with lung disease diagnosis or taking multiple medications
- o Focus more on patients who really need increased support and less on those who already have the skills and support.
- o More planning with the whole practice team to talk about the cohort
- o Identify patients who didn't often present to practice

6.4 REMUNERATION PAYMENTS

- o Reconsider what funding is provided to practices for and how much
- o Explore possibility of providing funding for different milestones a practice would need to reach related to:
 - o Cleansing data
 - o Organising practice teams and care planning together
 - o Registering patients
 - o Ensuring protected time

6.5 ADDITIONAL FUNDING FOR ALLIED HEALTH

- o Explore additional ways that connections within the health care neighbourhood can be made with the practices other than just providing funding
- o Potentially redirect these available funds so that more funding can be available for practice nurse time

6.6 INTEGRATION

- o More opportunities for networking between practices. The creation of a practice buddy system could assist with this
- o Continue and build on direct communication between CDM team and practice staff
- o Build on enthusiasm that exists in general practice for ADNs by documenting and solving issues existing for the smooth notification of admission and discharge of patients (ADNs)
- o Improve standard of discharge summaries
- o Improve connection of general practices with social services
- o CDM team articulate the improvements they made to internal processing and share this for future implementation

6.7 SUPPORT FROM NCPHN

- o Increased time spent by Quality Improvement Practice Support Officer in the practice at the beginning of the program. More specific assistance would be helpful with patient registration, use of tablets, using SDAPs and activity reporting.
- o More collaborative meetings between practices to help each other and answer questions. At the least an email group would be helpful.
- o Make online resources available earlier
- o More education on SDAPs
- o Provide practices with data from last year to set goals at a practice level from the program
- o Reduce the amount of programs carried out with general practice so that practices can focus on one program at a time
- o Encourage more team ownership over the program and internal delegation at the practice level
- o Chronic disease management training was also requested

6.8 REPORTING

- o Reduce to fortnightly reporting
- o Improve the process of streamlining reporting so that it is all through one mechanism. Could be through use of tablets or some other means
- o More protected time for reporting

6.9 USE OF TABLETS

- o Improve user friendliness of surveys by renaming survey and combining them into one.
- o As many struggled to use them, improve functionality, education or rely more on hard copies
- o Allow access to seeing which patients have completed and which haven't for follow up

6.10 EVALUATION PROCESS

- o Seek ethics approval to formalise research process and be able to engage with direct patient perspectives
- o Co-design evaluation strategies with practices involved to improve buy in by practices
- o Increase time and resources available for data matching and analysis
- o Improve resource availability for data matching and analysis
- o Overcome data capture challenges of keeping count of patients in two places i.e. NCPHN data and LHD database