Health Quality & Safety Commission New Zealand
Kupu Taurangi Hauora o Aotearoa

Ko Awatea
Health System Innovation and Improvement

Co-design Partners in Care case study

Patient scheduling (Capital & Coast District Health Board)

Context

Making progress towards greater independence through therapy is crucial for patients.

Rehabilitation is a process of adapting to impairments as a result of injury, illness or disease. This means relearning or finding new ways to manage one's life given the physical, sensory and mental capabilities lost as a result.

A team of health professionals work with the patient and their family/whānau using a process of goal setting; formal exercise; prevention, recognition and management of medical conditions that can complicate recovery; and psychological support to maximise independence.

The Kenepuru Inpatient Rehabilitation Unit uses 18 activities of daily living, where therapists and nurses evaluate each consumer's progress using an instrument called the Functional Independence Measure (FIM). These activities include eating; bathing; grooming; dressing the upper and lower body; toileting; bladder and bowel control; transfers from the bed, chair, tub and shower; walking and wheelchair propulsion; stairs; and cognition/language.

Times for individual therapy sessions have historically been set at the discretion of the therapist, rather than in partnership with the patient or family/whānau. Involving the patient or family/whānau in timing helps ensure therapy works in harmony with other activities such as family visiting, which is an important activity for patient rehabilitation. Sometimes the details of therapy sessions are not communicated on the unit whiteboard, so patients, family/whānau and other staff are not aware of therapy plans and timing.

There is opportunity to create a bedside schedule that is inclusive and beneficial to patient/whānau, therapists and nursing staff.

Aim

The aim of this work involves two parts:

- working with therapists, other clinical staff, patients and family/whānau to create a bedside schedule that meets everyone's needs
- improving clinical outcomes for patients by making sure the correct activities are provided to a high quality.

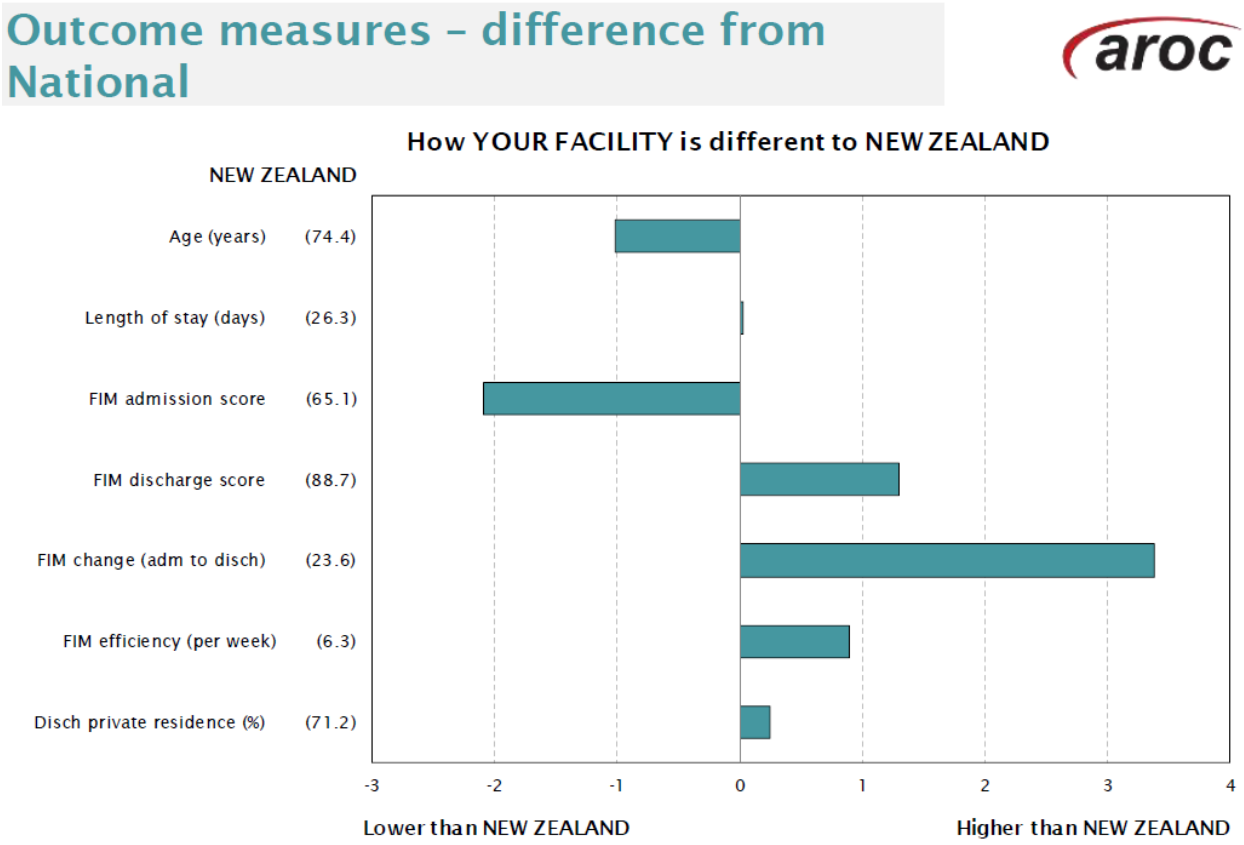
Start-up core project team formation

The initial team members were selected via expression of interest, then consumers were selected via the feedback given with was a face to face group meeting and invited both staff and patient to attend. From there, four admission staff were approached, and two accepted this request. They gave very clear reasons why being part of the project was important to them and others, such as family involvement, understanding of the process, and the messages to support the outcomes of recovery.

Baseline data

We explored the data available to help us understand how the Kenepuru Inpatient Rehabilitation Unit functioned. There is a stroke dashboard available across New Zealand which enables teams to review local progress. We could see we perform well in ensuring the correct levels of therapy and recovery are being delivered. In comparison to other stroke units in New Zealand, we admit patients with lower FIM scores (meaning they are less able when admitted) and discharge them with higher FIM scores (people have higher functional ability when discharged than others across New Zealand) (Figure 1).

Figure 1: Excerpt from the Australasian Rehabilitation Centre's stroke dashboard comparing national stroke outcomes with Kenepuru's inpatient rehabilitation unit



However, we noted there is a delay in the referral of patients to the rehabilitation unit in comparison to the rest of New Zealand. This means the patient experiences a longer length of stay, which negatively impacts overall therapy outcomes. The causes of the delay have been identified as:

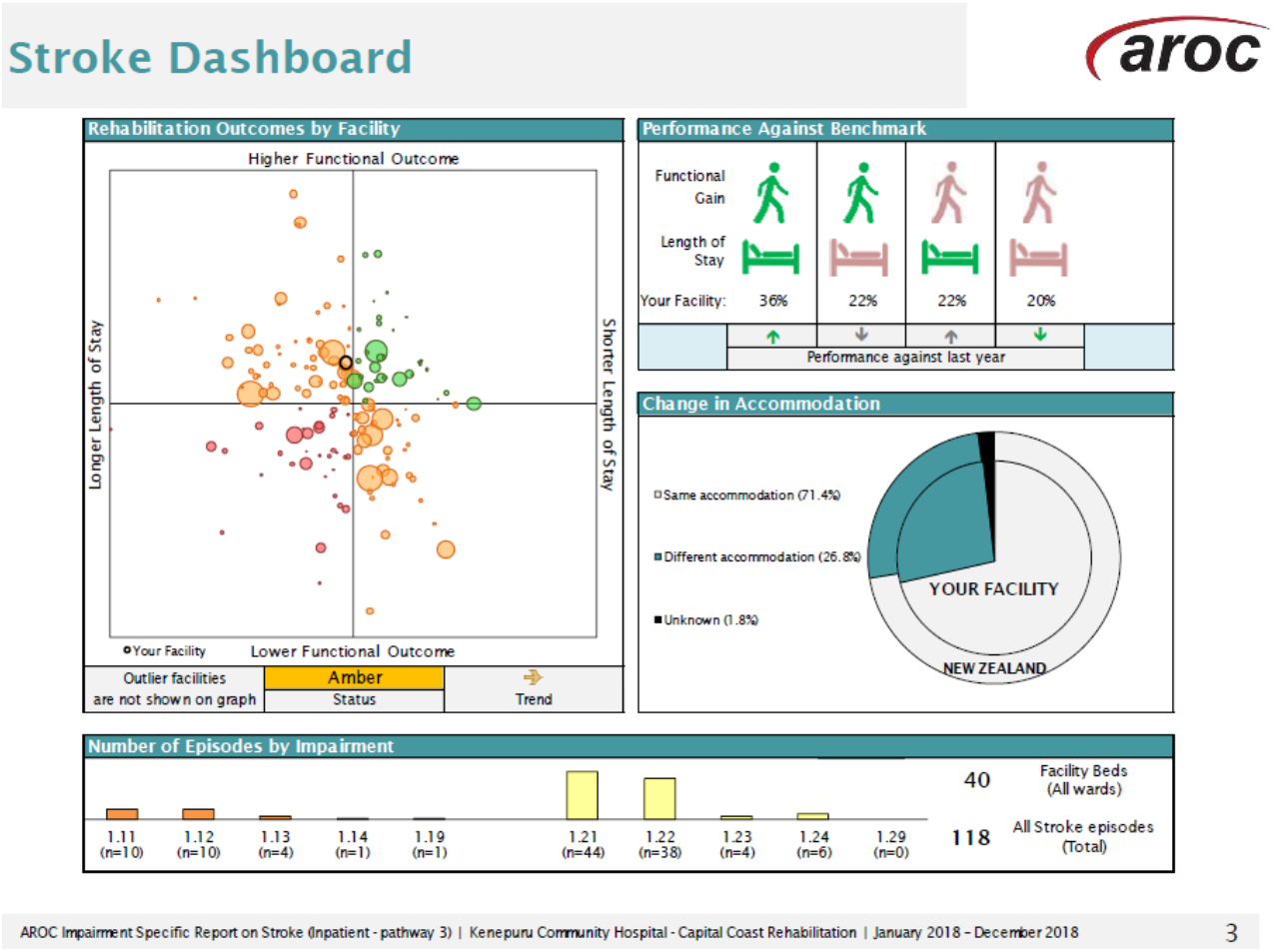
- the number of resourced beds
- inconsistency in communication between teams
- no supported discharge team.

In addition, feedback from patients highlighted a lack of understanding of their therapy and mixed messages from staff throughout their patient journey. The feedback highlighted the following challenges:

- Patients are unsure of the importance of rehabilitation therapy.
- Patients did not know they were going to have therapy.
- Patients are unaware of when therapy sessions had been planned.

- Therapy sessions clashed with visiting times. This has caused some upset for patients and visitors alike.

Figure 2: Excerpt from the stroke dashboard showing key indicators for stroke patients



Key Indicators*

YOUR FACILITY		NEW ZEALAND	
Average Age:	73.3	Average Age:	74.4
Mortality Rate:	1.7%	Mortality Rate:	0.9%
% with at least one comorbidity:	43%	% with at least one comorbidity:	33%
% with at least one complication:	36%	% with at least one complication:	23%
% episodes with start delays:	29%	% episodes with start delays:	18%
Days between onset and rehab episode:	9.7	Days between onset and rehab episode:	8.3
Days between clinically rehab ready & start date:	0.7	Days between clinically rehab ready & start date:	0.7

The challenge is developing a schedule that will involve the many disciplines working with the patient. It will be necessary to always put the patient at the centre of what we do, as this has not often been the case in the past.

To date, we have engaged with staff and used posters to gather feedback on what and how they feel scheduling is currently and how they think and feel it could be delivered in a better way to ensure understanding and participation.

From our initial review of the available data, including patient feedback and current measures of function, we recognised there were opportunities to improve the understanding of patients and staff of the benefits of engagement in the recovery journey, as well as to build trust and confidence over time.

Engage

To engage people in this project we developed an 'elevator pitch' which provided a short narrative about what we are aiming to achieve and how team members can contribute to it.

Staff elevator pitch

'We think the way rehabilitation is currently scheduled for patients may not meet their needs of recovery and participation, or the needs of the staff working with them regarding working collaboratively and enhancing the patient's journey. We would like to work with you to see what in the current process works well and any improvement you can suggest.'

Patients/whānau elevator pitch

'Hello, my name is Adelaide and I am part of the team from Ward 6. We want to understand what people's experiences are of the way rehabilitation sessions have been scheduled/booked. We are wondering if you would be prepared help us by answering 10 questions that we would like to ask you?

'Near the end of your stay on the ward a member of the project team will come and see you to discuss the questions. Our project team consists of nursing, physio, occupational therapy, allied health assistants and consumers who have been patients on the ward previously. Dr Maas Mollenhauer will be the clinical lead for this project.

'All of the information you share with us will specifically be used for this project. It will be anonymous, so no names will be used. All of the paperwork will be stored in a locked filing cabinet and shredded at the end of 2019. Once the project is completed, we will share some of the information that we have gathered by writing a paper so that others can also benefit from the learning, but this paper will not have any names or other personal details in it. If you choose to, you can stop being involved at any time.

'Thank you for taking time to read this and the questions provided.'

Engaging senior leadership

Amanda, a consumer from our project group, shared her thoughts and story with the hospital board in December 2018. This was an excellent way to help the board really understand the experience and the impact a stroke has on a person. Her story was very well received and ensured board members understood the value of the co-design work. See the patient story below:

WRH speech patient story.docx

Challenges of engagement include the changes to the project team and how to get the right cross-section of people informed and involved.

Capture

In order to capture experiences from patients, we specifically identified those who were discharged from Ward 6 Kenepuru Hospital rehab unit between 1 October 2018 and 1 February 2019. We used focus groups, meetings and technology such as WhatsApp and Skype which enabled clear communication and feedback from a variety of sources to ensure we could capture the data about what was happening, why it happened and what the experience felt like.

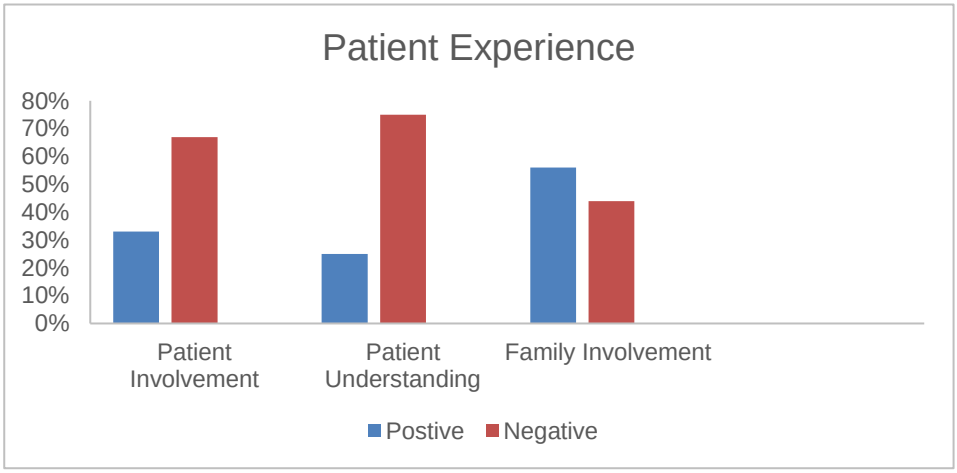
We conducted semi-structured interviews with 58 patients and one focus group (see 'Patient questions' below). Themes included:

- a need for therapy staff and patients to set goals and make action plans together
- inconsistency in scheduling, no involvement and lack of education
- variable and inconsistent communication.

Patient questions .pdf

This chart shows the percentage of positive and negative experiences (58 patients).

Figure 3: Patient experiences of their engagement in their scheduling of therapy



Capturing staff experiences and ideas

We used a mixed approach to gain staff feedback about the barriers to improving patient scheduling.

- Forty staff completed semi-structured interviews.
- Three focus groups – occupational therapist, senior nurse, medical team and allied health team leader, mixed interdisciplinary team approx 4–5 in each group.
- Message board – which was put on a wall with questions and feedback – the questions focused on both understanding and application in practice, which provided a depth of themes and discussion to assist with the direction of the improvements required.

Figure 4: Staff experiences and understanding regarding patient scheduling therapy

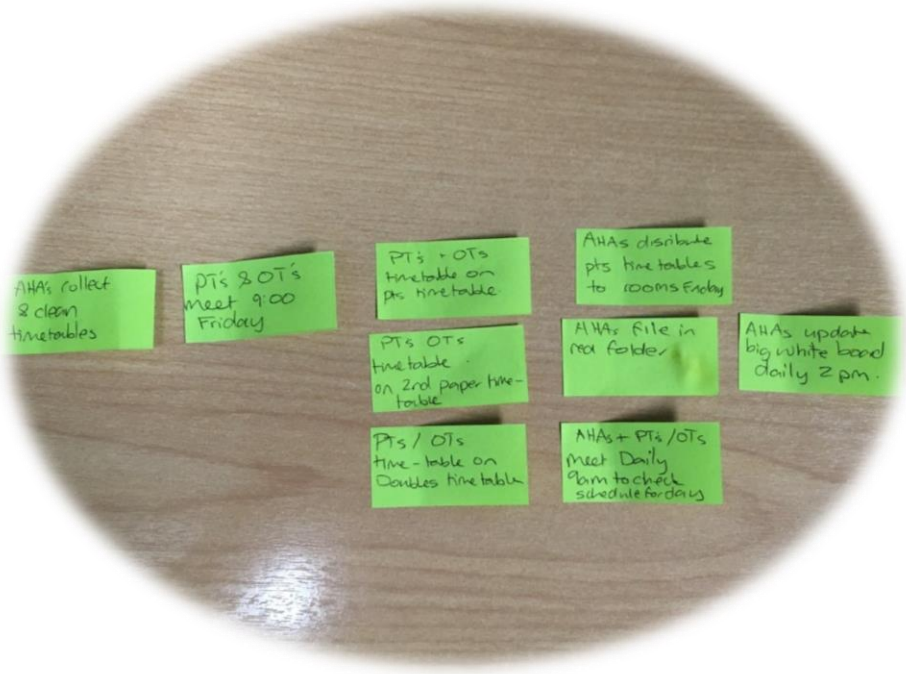
Newsletters and information were discussed with the broader team to ensure, during the capture phase, that key themes (emotions and experiences) were documented.

We also needed to gain a clear understanding of the patient journey (**Error! Reference source not found.**) and the current process of patient scheduling. We found that of the nine steps required to complete scheduling, four steps were duplications of information (Figure 6). This flow chart was developed from both staff and patients' experiences. Three sessions were needed to ensure the full process was documented.

Figure 5: The patient journey during scheduling

1. Patient selection for rehabilitation
2. Patient transfer to Kenepuru Hospital (KPH)
3. Preadmission to KPH ward 6 rehabilitation
4. Arrival on ward day one
5. Planning and assessment of progress against plan
   Planning for discharge
6. Transition to community

Figure 6: The third and the fourth step with duplicate sticky notes



Understand

We were able to gather a range of information, insights, learnings and new ideas from the capture phase and started to explore the points that were repeated to create themes. Figure 7 illustrates the main themes that emerged through the experiences of patients. While there were positive themes– for example, good, supported, happy – there were also a number which were less positive, such as worried, lonely, sad and pain.

Figure 7: Word cloud created from the main themes that emerged from patient experiences

Table 1: Questions and statements from patients that helped our understanding and provided ideas for improvement

Examples of some of the questions raised by patients	**Examples of some comments made by patients**
❖ *What do EDD and CCD mean? Feeling confused.* ❖ *Why do I need to see the social worker?* ❖ *What time is my next session in the gym?* ❖ *Who can walk me around the ward? Can I go outside (haven't felt the sun or breeze for months)?*	❖ *Went out to the hospital garden, was lovely to do something normal.* ❖ *I was confused and unsure of what an MDT meeting was and why I was not present*. ❖ *Often could not remember or recall times*. ❖ *I am always asleep for my family visits. This made me feel sad.* ❖ *It seems like I am not involved in my care.* ❖ *Why do I have everything in the morning?* ❖ *Great weekend activities made cards with my granddaughter.*

Patients describe confusion about the process, and lack of information to support them and their family.

Through patient stories of their experience with providers, the importance of excellent communication in influencing care and health outcomes was highlighted. However, some of the disparities in our service were also highlighted.

Table 2: Main themes from the staff capture phase

Staff Survey	Answers	Themes
Do you feel your work runs smoothly with the way scheduling is done at the moment?	• It's OK • No, because it's not always done and not always up to date – eg, when patients go for an appointment should that not be scheduled as well? • Could be better • It doesn't happen every day • Needs to be person-centred. Currently, it is staff centred • Patient time prioritised higher for therapy than nursing	Little feeling that the current system works well
What works well for you with the way we currently schedule?	• Feel people like a plan • Set a time to do it/expectations • The process is okay if people stick to it • Plan for the following week • If it's updated, we know where the patients should be • Not reactive • Timetable visible • It helps us to organise our time better	Having a timetable helps with planning care Works well when followed
What do you think will make scheduling better?	• Technology • All multidisciplinary team involvement • Needs to be updated for the week on a Friday • Communication • Flexibility, decrease rigidity • Would be good to help manage nursing time • Work smarter, not harder • Do we need a timetable for each discipline to write on and this is given to someone to schedule for the week? • Timetable that's a whole day, not just therapy time • Nursing staff on board • Increase details on timetables • Empowering rather than disabling • Review of goals • Generic timetable template with all ward 6 meetings etc scheduled on it • Improved efficacy • Decrease duplication	Full team involvement required, all activities included in the timetable Needs to be focused on patient goals Smart, flexible, efficient system

Is there anything else you would like to add individually about scheduling?	• Allied health and other people's input, not all disciplines are scheduled regarding nursing, dietician • Change layout to increase space to write self-directed time, aphasia-friendly • Complex patients' needs to be catered for by all disciplines • Goals for the week • Guidelines around if not being able to stick to it • Whole stay time • Trying to meet patient needs when they want a shower and can't because of therapy. Patient unhappy, nurse feels pressured. • Change layout/position where timetable is put	Full team input required Patient-focused Include the self-directed patient time

Findings and themes

There was a clear sense of frustration from the staff feedback during the capture process. There was a strong sense of needing to focus in order to achieve the best optimal outcome for the patient. However, the current process and resources restrict the ability to make the changes required.

> *Frustrated as times change and information not clear.*
>
> *My actions cause a negative response to therapy*
>
> *Motivation – love working as a team, feel we could make this better for the type of patient.*
>
> *I also check the patient's understanding and goal – this makes me feel happy as I am assisting the patient and family outcomes.*

Staff should make sure they:

- Assess the patient's strengths and areas of functional impairment.
- Establish appropriate goals and objectives.
- Provide therapeutic interventions that aim to either reverse impairments or help patients cope with deficits that cannot be changed.
- Recognise, prevent and manage medical conditions that can complicate recovery.
- Provide psychological support to maximise independence.

We had in place weekly meetings (focus groups) to review the data collection and start to work on the themes that have emerged. This gave patients and staff the opportunity to discuss what matters to them, and how to improve and remove barriers.

Improve

Using the knowledge gained from the capture and understanding phase, the team used tests of change (plan-do-study-act cycle) methodology. This consists of three activities which improved the patient and staff experience in patient scheduling.

Between February and April 2019, the team tested the following changes.

1. **The patient scheduling information was moved from the main reception area to the patient bedside**

The scheduling process has been streamlined to prevent previous duplication. The process steps have been reduced from nine to five (see Figure 8). There is still one duplicated process step – photocopying the timetable from the nursing station.

Figure 8: The new process of scheduling

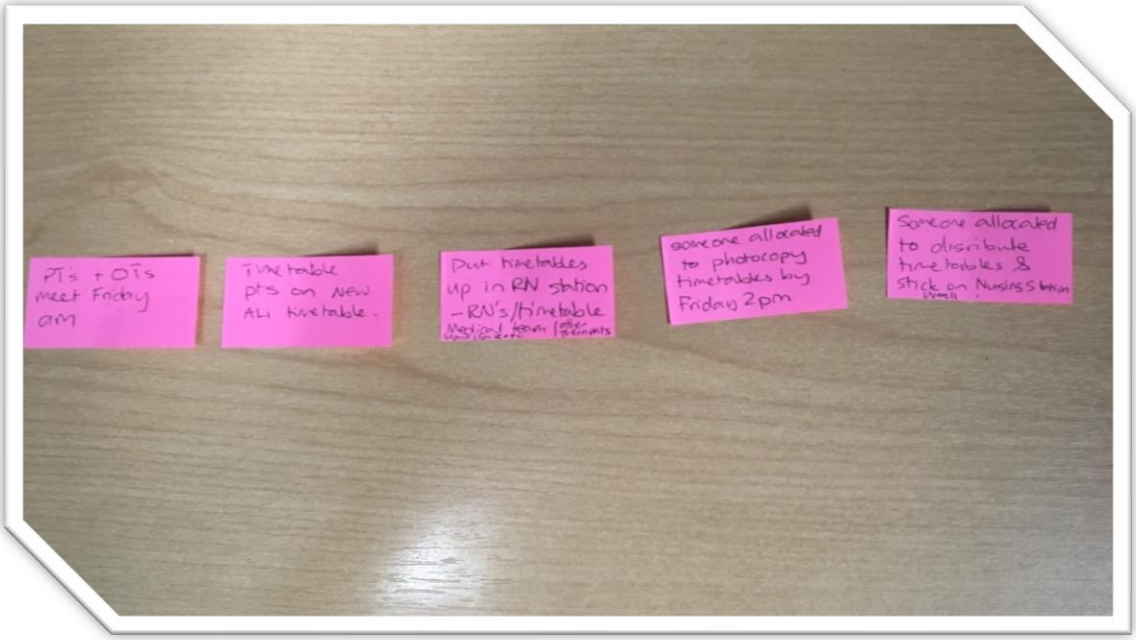


Figure 9 illustrates the previous scheduling display, and Figure 10 illustrates the changes so far. A long-term goal is to change to electronic terminals at the bedside to further prevent delays and increase accuracy of the information.

Figure 9: Start of changes to patient scheduling

Figure 10: Current vision of the patient scheduling

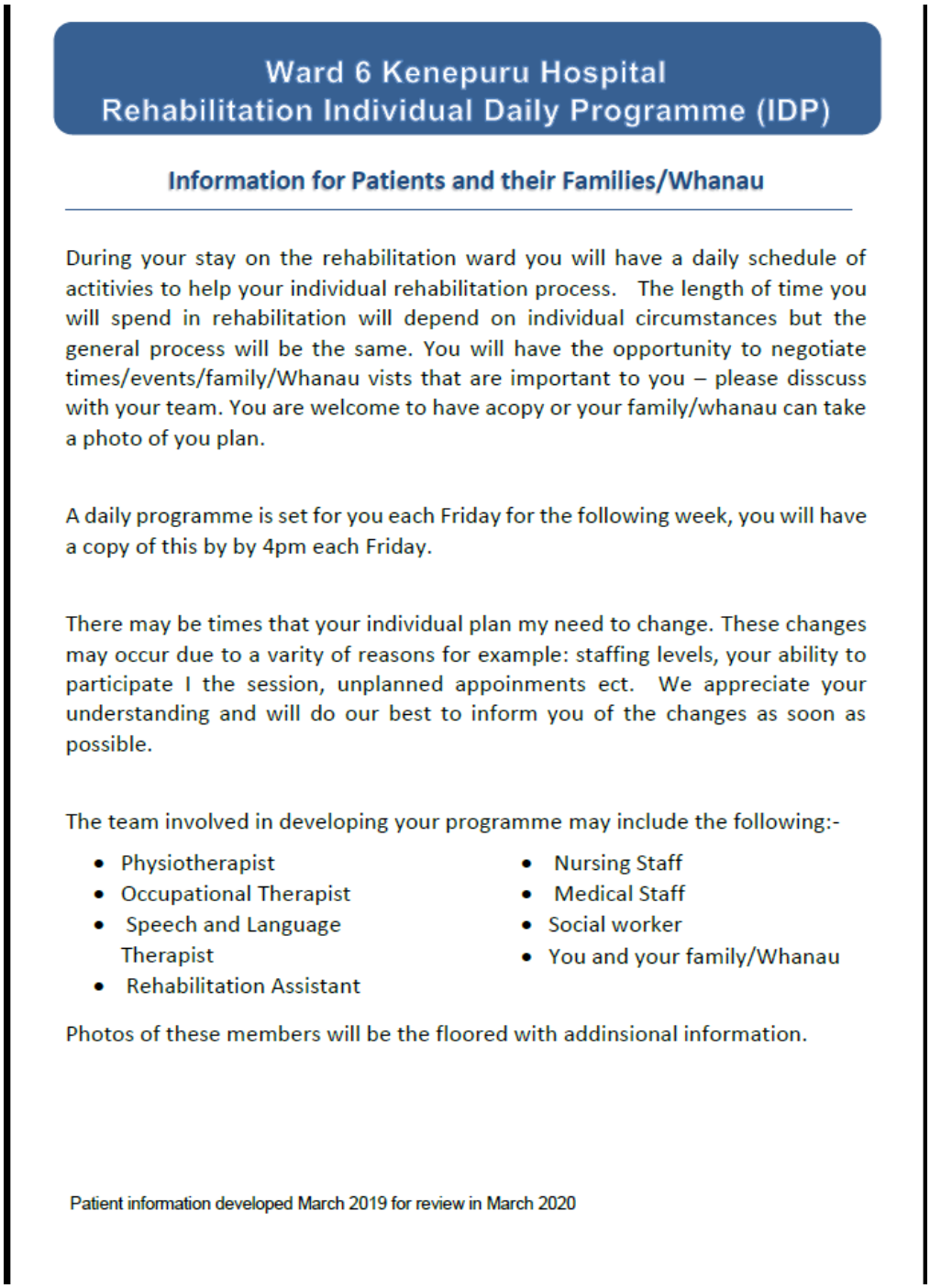
Information about rehabilitation has been developed for staff, patients and family/whānau.

Patient information and education

The patient information has enabled shared decision-making. The optimal decision considers evidence-based information about available options, the provider's knowledge and experience, and the patient's values and preferences.

This information is currently at the bedside with folders of the patient timetable.

Figure 11: Patient and family/whānau information about stay at rehabilitation unit



Ward 6 Kenepuru Hospital
Rehabilitation Individual Daily Programme (IDP)

Information for Patients and their Families/Whanau

During your stay on the rehabilitation ward you will have a daily schedule of actitivies to help your individual rehabilitation process. The length of time you will spend in rehabilitation will depend on individual circumstances but the general process will be the same. You will have the opportunity to negotiate times/events/family/Whanau vists that are important to you – please disscuss with your team. You are welcome to have acopy or your family/whanau can take a photo of you plan.

A daily programme is set for you each Friday for the following week, you will have a copy of this by by 4pm each Friday.

There may be times that your individual plan my need to change. These changes may occur due to a varity of reasons for example: staffing levels, your ability to participate I the session, unplanned appoinments ect. We appreciate your understanding and will do our best to inform you of the changes as soon as possible.

The team involved in developing your programme may include the following:-

- Physiotherapist
- Occupational Therapist
- Speech and Language Therapist
- Rehabilitation Assistant
- Nursing Staff
- Medical Staff
- Social worker
- You and your family/Whanau

Photos of these members will be the floored with addinsional information.

Patient information developed March 2019 for review in March 2020

Figure 12: Some of the team completing the co-design project

Amelia
Occupational Therapist

2. Staff education and information

Figure 13: Information for ward staff at the rehabilitation unit

Ward 6 Kenepuru Hospital
Rehabilitation Individual Daily Programme (IDP)

Information for Ward staff

What is happing and why ?

Having the patient's day scheduled daily At the bedside and Nursing Station this will be in the elarning Hub every Wensday from Midday and finislised Friday by 4.00pm for the following week.

- The patient individual plan will provide a visual indication of the various interventions people are experiencing at particular times of the day and will help us 'even these out' across the day e.g more rehab or showers may occur later in the afternoon.
- It will give MDT team better opportunities to advance plan when they will be working with patients. Ensuring all patients have a plan.

How is this going to work?

a. Allied Health will continue to plan rehab over the week on Monday mornings. This provides the opportunity to plan joint sessions, negotiate who may need to take priority on certain days etc. We will do this using one page per client.

b. Fiday AH scheduling needs to commence at 15.00pm and be complete by 16.00pm so the expectation is all AHPS will be there on time.

c. Using the AH plans as a starting point, Casey will update the board for Monday between 8.45 - 9.am with RNS and Doctors inserting their magnets immediately after the progress meeting.

d. The new sheets will be populated for the Wensday by 12.00 mid day and placed in the learning Hub for each patient.

e. Some times will be per populated like medications and Doctors ward rounds. NB: we need to see how this goes and ensure it still allows reasonable access by the medical team to patients.

f. Updates at the progress meetings each day may lead to a change in the daily schedule i.e patient unwell, unplanned appointments.

g. The Ward clark will have some blank weekly templates. So if someone is admitted on Monday and Tuesday pm, AHPS can immediately start noting on the template when they'd like to see this person and ensure a copy at the bedside and nursing station.

Staff information developed March 2019 for review in March 2020

Our goals are to:

- inform the patient and family/whānau of scheduled opportunities where they can interact with the health care team
- help the patient and family/whānau understand the roles of different members of the health care team
- remind the patient, family/whānau and clinicians of the importance of being partners and what they can do
- help the patient and family know how to interact with the health care team.

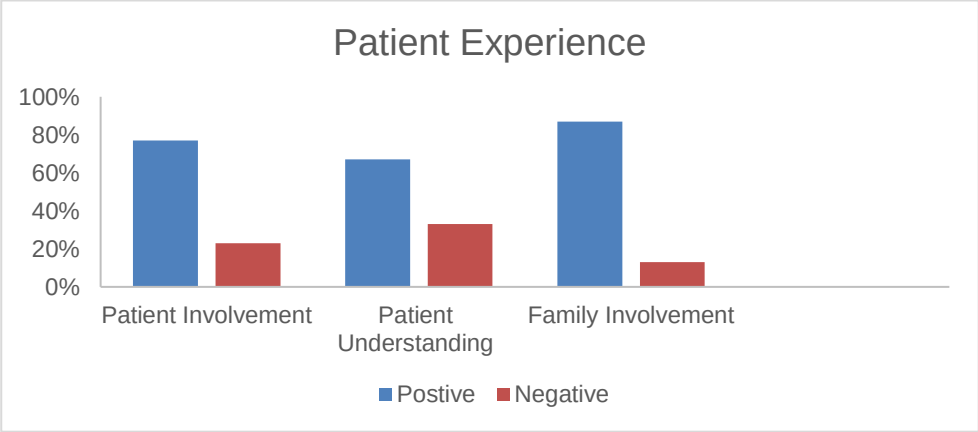
Measure

Although it is too early to fully assess the set measures of length of stay and progression to achieve goals, the co-design approach to engaging both patient and staff feedback has already given a measure of success for both input and observation of practice.

Examples of patients' feedback

This chart shows the percentage of positive and negative experiences – 28 patients were asked.

Figure 14: Patients feedback and the changes made to scheduling



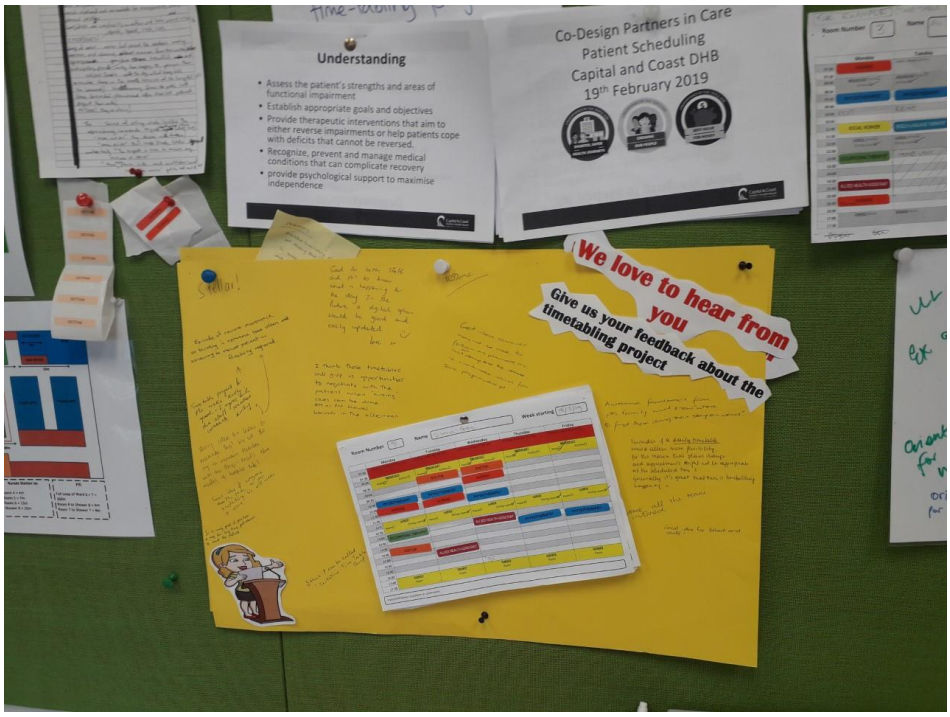
Comments from patients

> *Brilliant idea. As well as all the information/reasoning outlined in the document about why you'd provide this, having it by 4 pm on a Friday means all the weekend visitors can see what particular sessions they can make it to (or if they want to see the medical/nursing staff) – eg, my dad would've loved seeing some physio sessions, but he didn't know when they were precisely and always had meetings.*
>
> *I love the 'involvement' section – having to be in rehabilitation is terrifying but feeling like you're [the patient] an active part of your stay gives you extra incentive to get better and work hard.*
>
> *The photo really helped me to remember and I keep my daily plan on my table – it helps me to stay motivated.*

Examples of staff feedback

The notice board shows staff feedback (see Figure 15), which helps in the plan-do-study-act cycle for change.

Figure 15: Notice board showing staff feedback. Comments include: 'Saved so much time', 'Loved the colours', 'Can't wait until we use tables at the bedside'.



The results from the focus groups and questionnaires have been shared widely across the service. The current focus is on the continued engagement and approach to address other themes collected in the capture phase.

There have been a number of ideas for spread projects, including patient orientation to the ward, key worker role descriptions, joint initial assessments, goal setting, changing information posters, and a shared vision for rehabilitation prominently placed.

Overall recommendations from the focus groups from staff and patients

- Staff on the ward should work collectively and have a team culture with appropriate knowledge, skills and focus on supporting effective patient rehabilitation.
- Patients admitted to the ward will have been assessed before admission and have been identified as having the potential to make a functional gain.
- Patients are involved in their rehabilitation planning and should actively participate in therapies and other activities.
- Interventions will be evidence-based where the evidence exists and will be regularly reviewed to maximise the rehabilitation opportunities a patient has.
- Patients, whānau and other patient supports (groups or individuals) are an integral part of the team involved in the patient's rehabilitation.

The team members feel the following points need to be shared with staff and built into any future projects.

1. Engage with patients and their family/whānau in shared decision-making

Family members or caregivers can be a significant influence on decision-making. They lend support in clarifying values or preferences.

2. Use evidence-based research to support shared decision-making

Use materials that have reliable, unbiased summaries of evidence-based research.

The benefits of using evidence-based research to support shared decision-making include:

- improving patients' knowledge of their options
- patients having more accurate expectations of possible benefits and risks
- patients making decisions that are more consistent with their values
- increasing patients' participation in decision-making.

3. Seek your patient's participation.

Many patients are not aware that they can and should participate in decision-making about their health care. Communicate that a choice of treatments exist and invite your patient to participate in the decision-making process. For example:

> *Now that we have identified the problem, it's time to think about what to do next. I'd like us to make this decision together.*
>
> *There is good information about how these treatments differ that I'd like to discuss with you before we decide on an approach that is best for you.*

4. Assess your patient's values and preferences.

Encourage your patient to talk about what is important to him or her. Use open-ended questions. Avoid questions with yes and no answers. Listen actively to your patient. Show empathy and interest in the effect a problem is having on your patient's life. Acknowledge the values and preferences that matter to your patient. Come to agreement on what your patient prefers and feels is important.

As noted, the co-design experience has provided a positive impact on the ward and has proved to be very useful to a number of our team who have gone on to apply these to other areas of work. The team gained a lot from the co-design training and was able to regroup to assist with changes in delivery, and will provide continual review and recommend changes as required.

The project team

Name	Role	Email	Organisation
Mikaela Shannon	Project lead	Mikaela.shannon@ccdhb.org.nz	CCDHB
Rose Culy	Project member	Rose.Culy@ccdhb.org.nz	CCDHB
Wendell Sombreo	Project member	Wendell.sombreo@ccdhb.org.nz	CCDHB
Suzanne Goodwin	Project member	Suzanne.Goodwin@ccdhb.org.nz	CCDHB
Malia Bond	Project member	Maria.bond@ccdhb.org.nz	CCDHB
Karen Bantlin	Project member	Karen.bantlin@ccdhb.org.nz	CCDHB
Maas Mollenhauer	Clinical lead	Maas.mollenhauer@ccdhb.org.nz	CCDHB
Amanda Yong	Consumer	amandajaneyong@gmail.com	CCDHB
Pam Englert	Consumer	pamenglert@actrix.co.nz	CCDHB