News from Ko Awatea

Counties Manukau's Centre for Innovation and Improvement

FOREWORD MARCH 2023

The challenges facing the delivery of health services across the motu are not unique; they are nuanced but by and large they are similar. Finding sustainable solutions to system issues is a challenge, but it also creates an opportunity for innovation and improvement to improve health equity in access and outcomes for Maaori and other priority populations. This is Ko Awatea's purpose within Te Whatu Ora Counties Manukau.

The introduction of Te Whatu Ora in July 2022 presents an opportunity for collaboration and redistribution of resource to match demand more closely. In Ko Awatea, and across Te Whatu Ora, we have the experience, learnings and toolkits to create a platform to share knowledge, experiences and skills in quality improvement, portfolio management, and research and evaluation at a regional and national scale in order to bring about change – faster and more effectively.

Across Te Whatu Ora, people are working hard, with unprecedented challenges. The purpose of this newsletter is to share some of the mahi that Ko Awatea is supporting as we test and trial change ideas in Counties Manukau, in the hope that we can all learn from each other.

Are you making system improvements that we can learn from? Are you interested in learning with us as we test and trial change ideas across our system? We'd love to hear from you; ehara taku toa i te toa takitahi, he toa takitini – my strength is not as an individual, but as a collective. We are better together.

Dr. Mary Seddon
Director of Ko Awatea, Centre for Innovation and Improvement, Te Whatu Ora Counties Manukau and
Interim Region Director, Innovation & Improvement, Te Whatu Ora Northern Region

NEWS

Our CHOICE is to Optimise Flow

Making significant and sustainable improvements in acute flow means that every aspect of the system needs to recognise its interdependency - system issues are not always solved where they are experienced. For example, poor hospital flow is acutely felt by people in ED as it becomes overcrowded and unsafe, when bed blockage is the underlying cause.

At Counties Manukau, we are adopting new ways of working to optimise patient flow. **CHOICE: C**onsider **H**ospital **O**ver **I**npatient **C**are **E**very-time is an acute flow programme. It is multi-disciplinary, multi-divisional and spans acute, planned and community care.

The primary objective of CHOICE is to safely discharge patients from an acute bed when acute care is not required. Supported by our Acute Flow Portfolio team, six projects are currently in train:

1. ***Reduce unnecessary waiting*** for patients in General Surgery and Orthopaedics provided Charge Nurse Managers access to data on the reasons for any delays, which in turn created an ability to escalate.
2. ***Discharge to assess*** saw referrals to Hospital in The Home (HiTH) and Community Health Services directly from ED increase by 78%.
3. Development of a ***HiTH pathway for inpatients waiting for endoscopy***.
4. ***Flow into aged residential care (ARC)*** seeks to reduce delays in discharges to ARC facilities, including supporting patients in their own home while awaiting admission to an ARC facility of their choice.
5. ***Flow out of ARC*** seeks to reduce presentations from ARC to ED by providing treatment in the care home rather than transferring the patient to hospital.
6. Review ***PPPR*** (Protection of Personal and Property Rights Act) process and opportunities.

While some projects are in the Understand and Diagnose improvement phase, some are showing real promise: *Flow out of ARC* is testing a change idea to treat patients' with catheter problems in the care home instead of ED. We will update on the progress, learnings and results of this programme in future editions of *News from Ko Awatea*.

Is your locality also working on patient flow? If you are interested in discussing any of these projects, or you have learnings from projects like this that you believe could benefit our patients, please email our Acute Flow Portfolio Manager, bernadette.county@middlemore.co.nz.

Te Whatu Ora
Health New Zealand

Beyond Telehealth is Remote Patient Monitoring

Internationally, increasing numbers of clinicians and patients are moving from traditional face-to-face to virtual models of service delivery. Recently this has moved beyond telehealth to remote patient monitoring (RPM).

RPM is being used to improve the quality of care and efficient use of workforce resources across a range of patient groups. Supported by algorithms and smart reporting platforms, RPM is used to alert clinicians to early signs of patient deterioration and support triage of those patients that require attention.

Despite being used internationally, advanced RPM technology is new to Aotearoa New Zealand.

In collaboration with Healthy Together Technology (HTT), Ko Awatea partnered with the Hospital in the Home (HiTH) team and Whānau Ora Community Clinic to enrol patients isolating at home with COVID-19 into a new RPM service. This service used the BioIntelliSense BioSticker™ – a small medical-grade adhesive sticker applied to the chest wall – to capture continuous data, allowing clinicians to monitor skin temperature, respiratory rate, heart rate and activity levels.

Data from the BioSticker was wirelessly transferred via a smart phone to a reporting platform for analysis and monitoring. To ensure accessibility to all patients, smart phones were provided to all participants.

Patients were monitored 24 hours a day, seven days a week by HiTH Registered Nurses, who also made a welfare call to patients each day while they recovered from COVID-19. Patients were also provided with a pulse oximeter so oxygen saturation levels could be monitored remotely.

During the trial, 121 patients participated, of which 90 patients (40 Maaori, 16 Pasifika, 19 NZ/European, 15 Asian/other) took part in a telephone survey or in-depth interview. Results showed that the majority of patients and whaanau felt safe and reassured they were being monitored remotely, the Biosticker was comfortable to wear and the daily calls were helpful.

This study is unique in its focus on experiences shared by Maaori and Pacific patients within a local community and provided valuable insights into cultural acceptability of remote patient monitoring. The full Co-Design report is being reviewed and will be available in March 2023. For further information, email our Co-Design Improvement Advisor, lisa.blake@middlemore.co.nz.

Achieving Peace of Mind for Patients and Researchers

Are you involved in clinical research that requires the capture, analysis and management of personal and sensitive information?

In August 2022, Ko Awatea's Research & Evaluation Office introduced REDCap (Research Electronic Data Capture) is specifically designed *by* ***clinical researchers for clinical researchers*** to securely capture, store and analyse data.

With on-premises storage, an immutable audit trail, , accurate meta-data, guardianship, and security, effective use of REDCap will support Te Whatu Ora to fulfil its requirement to Maaori data sovereignty, while also achieving data governance objectives, privacy, sharing, multicenter collaborative research participation. REDCap also provides clinicians with an automated export procedure for seamless data downloads to Excel and common statistical packages (SPSS, SAS, Stata, R), together with a built-in project calendar, scheduling module and adhoc reporting tools.

Since implementation, over 100 researchers in Counties Manukau are actively using REDCap. Are you completing data collection for your research project? Email our Data Manager, juma.rahman@middlemore.co.nz to reserve your place on one of our weekly REDCap workshops.

A Vision to Increase Access

In 2019, access to cataract surgery for the Counties Manukau population was the worst in Auckland; CPAC[1] threshold scores of 55 for Counties Manukau vs 48 for Waitemataa and 45 for Te Toka Tumai. In addition, of the 2,940 patients referred to Counties Manukau's Cataract Clinical Pathway, 42% of first specialist appointments (FSA) and 58% of follow-ups were overdue; the average time from referral to surgery was 89 days.

Ko Awatea worked with the Ophthalmology service to identify change ideas to increase capacity and lower the CPAC score from 55 to 50 while also attempting to reduce waiting times for patients. Three key change ideas were identified: Reviewing the pathway to surgery, Reviewing post-operative care, Engaging patients.

In reviewing the pathway to surgery, an opportunity to combine the FSA and Pre-Admission Clinic (PAC) into one appointment was identified. This concept was backed by evidence from literature provided by Counties Manukau's Library team. The idea was tested in 2020 and has since been fully implemented. The results were impressive:

- Saved patients almost $47,000 in transport- and time-related costs; in turn reducing 2,705kg CO2 emissions,
- reduced the number of patients waiting for a FSA by 40%, decreased the average waiting days by 43% and reduced the number of overdue patients by 35%.

[1] Clinical Priority Assessment Criteria. Lower CPAC threshold means higher access

Other changes ideas, including replacing face-to-face post-op follow-up appointments[2] with phone calls by nurses or optometrists released 452 SMO hours, which could be used to see more FSA (see Figure 1[3]).

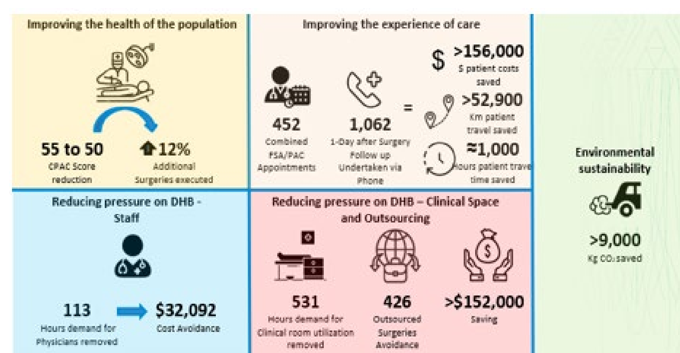

Figure 1: Cataract Pathway Overall Outcomes and Benefits

This mahi supports equity of access by lowering barriers clinically (reducing CPAC score from 55 to 50) and economically (saving two face-to-face appointments); enabling increased access for our most vulnerable patients.

An Ophthalmology SMO agreed this solution is potentially highly replicable in other districts and services. Importantly, **this solution requires no additional resource, nor adhoc investments.** It does however need support of a project team and change management to ensure smooth implementation. For more information, email Manlio, Senior Improvement Advisor Planned Care, manlio.chiesa.middlemore.co.nz.

Documentation Matters

Accurate documentation that details the services a clinical team provides to a patient is vital for patient safety, quality of care, and communication with other clinicians. But accurate documentation affects more than patient care.

Patient documentation is also used to demonstrate the complexity of our patient group, how this impacts their healthcare needs and, ultimately, what resource the hospital receives to provide services.

In 2019, Counties Manukau clinicians reported increased workload and patient complexity that was not demonstrated in our data. Several change ideas/ strategies were tested to understand this and enable data capture to inform business cases, service sizing and resource requirements, including workforce.

Supported by Ko Awatea, Finance, Coding and Health Intelligence & Informatics teams, Counties Manukau commissioned 3M to conduct a documentation and coding audit which showed significant increases in patient complexity when clinical documentation and coding was reviewed.

In late 2020 a Clinical Documentation Specialist pilot project commenced and in 12 months an additional 270 WIES[4] was generated for Counties Manukau, and we have been able to more accurately demonstrate the complexity of healthcare our population needs. As a result, the project's focus areas will expand in 2023.

We have gained valuable insights from this pilot that we would be happy to share with other services and districts.

For more information, email our Portfolio Manager, Service Improvement and System Optimisation, tracey.popham@middlemore.co.nz.

Lessons Learned

The role of the Strategic Programme Management Office (SPMO) is to provide guidance and advice around how business objectives are defined, measured and monitored, and to ensure that the organisation shares crucial learnings throughout a project's lifecycle to optimise success of future projects.

The SPMO recently supported Counties Manukau Infrastructure and Medical teams to conduct a Lessons Learned workshop for the recently completed Cardiac Catheter Laboratory (Cath Lab). This project was unique in that construction occurred while the original Cath Lab was in operation.

Key learnings included:

- Business Case development requires an **iterative approach with regular input from ALL stakeholders**. Clarity on risk escalation is required.
- Due to competing demands, **clinicians' time was limited** throughout the project lifecycle. The role of the Project Improvement Manager could support this.
- Completing construction while the Cath Lab remained operational was a double-edged sword. Time and financial constraints meant the existing Cath Lab needed to be operational, however, **more planning could have resulted in a short close-down**.
- Establish a communication plan at each phase of the project. It is important that clinical input is directed through **one point of contact with clear roles and responsibilities** for action required.

The SPMO have supported many Lessons Learned: from large infrastructure development to developing new models of care, and service improvements. If you are interested in learning more, click here or email Cindy, our SPMO Manager, cindy.tuitupou@middlemore.co.nz.

[2] For low-risk patients only
[3] Measured over 12-months based on figures/information provided by HI&I team
[4] Weighted Inlier Equivalent Separations - The New Zealand Casemix Framework for Publicly Funded Hospitals

DID YOU KNOW?

The Ko Awatea Centre has **25 fully air-conditioned meetings rooms**, including three large lecture theatres, a computer lab, and three busy pods for virtual meetings. Hosted in a modern environment at Middlemore Hospital, many rooms are Zoom-enabled for face-to-face and/or remote meetings.

If you need to hold a meeting at Middlemore, or are looking for a venue close to Auckland Airport that can cater for four people or over 200, or a symposium for several hundred people, we can help. Book online here, email or call the Ko Awatea Centre team on (09) 2760000, ext 59681.

The Ko Awatea Capability Building team are producing **bite-sized quality improvement (QI) learning videos** full of tips and tricks to support the learning and practice of Te Whatu Ora staff in all parts of the system. The first series, including representing data correctly, understanding variation, and run charts can be found here. More videos are in production covering control charts, system thinking and co-design. To receive early notification of their release, or to find out more about current QI training offerings, email the team at: grow.improvement@middlemore.co.nz.

COMING UP IN THE NEXT EDITION OF NEWS FROM KO AWATEA

Faster Cancer Treatment	Improving access to hysteroscopy through rapid access clinics.
Improving Equity of Outcome for Maaori and Pacific Youth	Co–designing youth appropriate services for patients with Rheumatic Fever / / Rheumatic Heart Disease
Equity-led Model of Care Design - Oral Health	Developing an end-to-end model of care to improve equity in access and outcome for whaanau Maaori and Pasifika
Reducing waiting lists	Reducing the Audiology outpatient hearing test waiting list through a capacity and demand analysis
… and much more	