System wide collaboration and leadership

CONTEXT

In 2008 a group including general practitioners, respiratory specialists, scientists, and senior management, came together to establish a programme to provide laboratory-quality spirometry in the community. Achieving this required the provision of web-based clinical information for referring clinicians, linkage with an electronic referral management system, standardised testing systems, processes, training and education, and web-based reporting.

A further significant change to managing Chronic Obstructive Pulmonary Disease (COPD) exacerbations in non-hospital settings was prompted by a reduction in available hospital beds as a result of the 2011 earthquake in Christchurch. Remaining hospital beds were needed for patients with highest acuity medical and surgical conditions, and a spotlight was placed on COPD to better understand the data and reduce admissions.

Analyses of several data sources demonstrated a disparity with international evidence and highlighted that more than 80% of presentations to the Emergency Department for COPD were as a result of an ambulance call. A taskforce was established to explore alternative service delivery models, that included a broad range of stakeholders from primary and secondary care, ambulance services, emergency department, community providers, planners and funders, and patients with COPD.

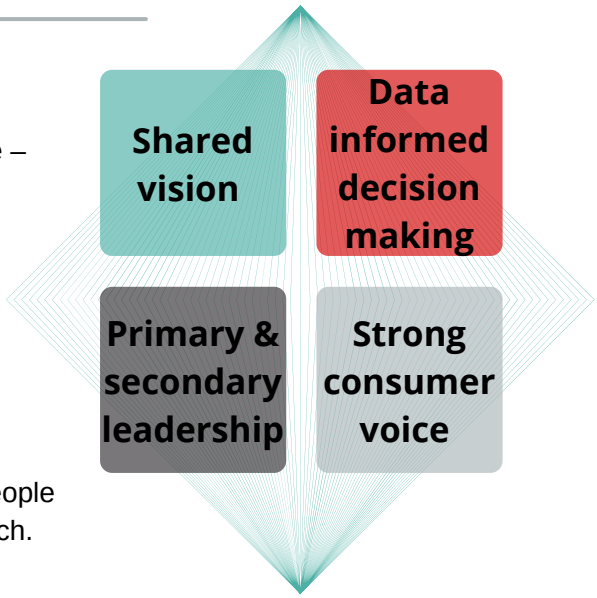
The proposed delivery model featured a number of changes across the patient journey for an exacerbation of COPD, with agreed responses and communication pathways established. These included an ambulance triage tool specific to COPD, a blue card for each patient that documented their steps to self-management and provided baseline patient information for responders, and training of hospital based nurses in community care.

In line with shifting COPD management to the community, Better Breathing Pulmonary Rehabilitation programmes were established. They provide evidence-based interventions that are available to people with COPD in the community and are delivered by a community respiratory team throughout the district. Consumer-led community-based support and exercise groups maintain exercise goals and help patients remain connected to other people with similar conditions.

PRINCIPLES

The guiding principles which support the Integrated Respiratory Service – Whakakotahitia a Mate Romahā – to succeed are:

- A **shared vision** with people and their whānau at the centre.
- **Clinical and system leadership** with strong interface between primary and secondary care.
- Using **data-driven decision making** to combine trends and trajectories to influence service design.
- Community engagement **involving consumers in the decision-making and service design process.**
- **Adapting** the way **services** were delivered to meet the needs of people with COPD **then applying a funding model** to support this approach.



APPLYING THE PRINCIPLES

Shared vision with people and whānau at the centre

- A common, shared purpose of keeping people with COPD out of hospital and closer to home in their own community.
- Clear scope and recognising available beds as a finite resource for the system as a whole.
- Driven by a unique event that brought people together (2011 earthquake).

Clinical and system leadership

- Cross-sectoral involvement particularly from primary and secondary care.
- Collaborating to design an agreed delivery model helped build trust across primary and secondary care that a perceived specialist service can be delivered by non-specialists.
- Provision of education and training of primary care in the delivery of advanced COPD services.

Data-driven decision making

- Local data on hospital admission, emergency department use and ambulance call outs was used to inform the discussions. This data was explored using a linked database tool and compared to national and international data and trends.
- The combined approach to data analyses allowed for a comprehensive understanding of the challenges and associated pathways in order to design a solution.
- Community-based service provision also required implementation of enhanced data-sharing tools and methods, and optimisation of electronic referral systems.
- This data was used to implement evidence-informed interventions in community settings.
- Supporting data literacy across stakeholder groups.

Community engagement involving consumers in the decision-making process

- Keeping people at the centre of all decision-making.
- Involving consumers in each stage of service redesign.
- Reviewing each patient's presentation as a unique case and documenting individual care requirements on the Blue Card.

Adapting the way services were delivered to meet the needs of people with COPD then applying a funding model that supported this approach

- The revised methods of service delivery required community and hospital settings to collaborate around several new ways of working. There was flexibility in the system to empower community services such as General Practices and ambulance providers with the ability to make decisions relating to patient care that differed from the previous model of care.
- Pathways of care were highlighted to facilitate consistency of response and provide guidelines for new ways of working.
- Funding models were adapted to support the pathway chosen for each patient and the delivery of procedures in the community.
- Taking a 'one system one budget' approach ensured funding was not a barrier to developing and delivering the right service for the person.

ACHIEVEMENTS AND OUTCOMES

By shifting respiratory services from secondary to primary and community, outcomes have been improved across all parts of the system.

More people with COPD are receiving care at home and in the community and remaining out of hospital. This has improved their access to services, and saved them time.

Changes in the management pathway of Chronic Obstructive Pulmonary Disease (COPD) exacerbations to non-hospital settings led to:

A reduction in bed-day occupancy of 48% (sustained over time)...

... which equates to a saving of approximately $6 million per year...

...and greater contact with GPs allowing other interventions to support wellbeing e.g., smoking cessation, influenza vaccination, social supports etc.

Patient stories also show the value of this way of working and impact for them as a person, an example of which can be viewed here.