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The Canterbury Initiative – implementation of integration

Graham McGeoch[A,*] FRNZCGP, Carolyn Gullery[B] BSc and Greg Hamilton[C] PhD

For full list of author affiliations and declarations see end of paper

*Correspondence to:
Graham McGeoch
Better Health Group, PO Box 33388, Barrington, Christchurch 8244, New Zealand
Email: mcgeochg@gmail.com

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The 'whole of system' approach adopted in Canterbury between 2006 and 2021 focused on doing more in the community, making best use of specialised and scarce resources, and doing the right thing for patients, regardless of historical health system silos.[1,2] The emphasis was on enabling clinical leadership, guided by shared access to data and information and an agile approach to change that optimised population outcomes. This improved productivity, reduced inequity, and enabled more people to live well in their own homes and communities. The system was designed to support general practice as the point of continuity for most people.

Several initiatives changed service delivery models towards out-of-hospital care. Some changes were facilitated by Canterbury Initiative (CI)[3] while others were led by clinicians and managers in an environment of positive relationships and empowered clinical leadership. This shift of appropriate services out of hospital-based settings was consistent with international research, evidence, and experience on improving patient outcomes by providing the right service, at the right time and in the right place.[3]

CI was a small group of contractors and Canterbury District Health Board (DHB) employees based in Planning and Funding tasked with making changes. Many initiatives established across the primary–secondary interface were led by CI by driving new patient pathways that support integrated service delivery. The model worked by fostering distributed clinical leadership, bringing together a range of clinical representatives from general practice, hospital specialities, and the community to identify and address challenges and design new pathways and models of care to improve patients' journeys.[4] General practice's holistic approach to patient wellbeing was critical to the success of the programme.

CI built credibility by delivering results within short timeframes and supporting change with extensive communication and education. Where possible, solutions were delivered through existing health system structures, keeping the system lean and with the Canterbury DHB ensuring that funding supported the clinical solutions developed. HealthPathways[5] is an initiative developed to document both new and existing services, irrespective of funder, and was combined with clinical guidance. The pathways describe available best practice considering the local context and provide a platform for feedback, debate, and continuous improvement. The focus on shared care structured around individual patients helped to minimise waiting times and unnecessary hospital visits for first specialist assessments, follow ups, and acute presentations.

The key feature of CI was that it engaged clinicians in decision-making and trusted them to balance benefits for patients with benefits for the health system. Most general practitioners (GPs) and specialists proved able to step out of their narrow field and take a broad view of the health system without unreasonable expectations of gain for their own service. The mantra was 'best for patient and best for system.' Clinicians knew that budgets were constrained and worked to recommend the best they thought was achievable as 'better on Monday.'

The leadership of CI was initially two GPs, a project manager, and the General Manager of Planning and Funding, Canterbury DHB. Several project management methods were used with the core being wide consultation with general practice, specialist services, community interest groups, and providers in a series of meetings. The most influential activities were clinical work groups involving GPs meeting with medical

specialists, nursing, and allied health. For GPs, the opportunity to discuss patient care with their specialist colleagues was hugely appreciated. Different GPs contributed to each CI clinical service. Many had ideas about what needed to improve but were previously stymied by structural inertia in health care delivery systems. After initial formality, lively discussions eventuated and a whiteboard of notes was produced. Many suggested improvements were small and implemented simply by inclusion in the pathways: for example, new scoring tools or management before referral. The notes were made openly available on a website and CI leadership then made plans for quick wins, pathways, and projects to address the issues identified. CI leadership implemented the changes and Planning and Funding re-arranged the funding to allow changes to happen. More major changes were reviewed by the Canterbury Clinical Network, an alliance of major provider groups.[2]

Clinicians were most surprised when change occurred promptly after work group meetings. Over time, it became clear that most issues could be addressed by a toolbox consisting of frequently updated, documented clinical guidance pathways (i.e. HealthPathways), telephone and written advice to referrers, improved access to investigations, better referral letters, and more efficient return handover to general practice. Multiple channels of communication and education were used to reinforce the continuously available advice on HealthPathways. Transparent access to data for clinicians, planning, and resource allocation allowed the consequences of change to be observed.

Issues in acute, elective, and follow-up hospital work were addressed service by service. Resolution of many issues did not require major projects, new services, or new staff. Rather than defaulting to publicly funded hospital specialist referral, care could be improved by clinicians simply working more collegially, encouraging and supporting general practice to do more themselves, and use allied health, nursing, non-governmental organisations, private specialists, and other community services. This use of alternative services and patient self-management was promoted by the mantra of 'every referral is a patient with a problem and a clinician who needs assistance to help them.'

There are some things that CI might have done differently or better. These include broader professional and patient participation in work groups, even at the risk of making the process less effective and more costly. There was a strong focus on equity and unmet need, but Māori could have been more involved, although the life expectancy gap for Māori closed in Canterbury more during the period of CI's existence than in the rest of New Zealand. Specialist follow-up might have been reduced further. A method for measuring unmet need by general practice was developed but not continued.[6]

CI developed a detailed system for managing demand for elective hospital services against capacity which was very successful when fully applied. It involved locally agreed access criteria published on HealthPathways, strict specialist oversight of referral triage against service capacity, and the provision of alternative services for excess demand. Application was patchy across services in Canterbury. HealthPathways provides a method to reduce geographical inequity by having the same access criteria across the country. This was partially applied to South Island urology services but not extended across the country or to other services.

CI succeeded in some upskilling of general practice in surgical[7] and medical dermatology, but Canterbury and New Zealand continue to have a severe shortage of public service specialist dermatologists. General practice has enthusiastically provided further investigations and management for their patients and is funded for both acute and some elective work. However, the development of pathways has meant some care has shifted to general practice in Canterbury without a corresponding funding stream and there is no regular funding review mechanism.

We have some evidence that the whole integration programme in Canterbury was effective but no research has been undertaken that allows changes to be specifically attributed to CI. General practice teams and hospital doctors in Canterbury use HealthPathways on a regular basis and presumably follow at least some of its advice.[8] The platform has spread across New Zealand and Australia and into the United Kingdom. Use is higher in Canterbury than most other regions, suggesting that Canterbury Initiative engagement is an enabler.[9]

CI has helped the Canterbury health system achieve several things that the participants regard as most useful:

1. The population's rate of acute hospital admissions has been stable since 2009 and has decreased for patients aged >75 years. Along with reductions in length of stay this has resulted in the average number of hospital beds falling from 1.0 in 2006–2007 to 0.7 in 2018–2019.[4] The Acute Demand Management System[10] pre-dated CI and has been augmented over the years and included in HealthPathways. It was developed and led by the same leaders from general practice and was initially less integrated with hospital services. It provided more care at home for acutely unwell patients before, or instead of, hospital attendance or admission.
2. The population's rate of emergency department attendance has shown low growth for the last 10 years until an increase at the end of 2020.[10] Notably, this also applies to people aged >75 years.
3. Survival of a series of earthquakes[11] and the Christchurch mosque killings[12] with limited disruption to usual medical and surgical health care. The integration of mental health services led by CI proved essential to managing massive increases in demand following these events by using primary care and community services.
4. Over 12 000 procedures per annum delivered in general practice and subsidised by the Canterbury DHB.

The changes attributable to CI and supported by research evidence are marked increase in appropriate access to general practice referred radiology,[13] respiratory investigations,[14–16] gynaecology procedures,[17] skin excisions[7] and the investigation of haematuria.[18,19] Other programmes with published evidence of health care benefits include advanced care planning,[20] management of tongue tie in babies,[21] and access to community physiotherapy.[22] An article on trans-gender care is published in this issue and another about a community infusion service is in review with this journal.

Harder to confirm with data is the impact of trusted clinical guidance from more than 700 HealthPathways on day-to-day care in both hospital and community. Iterative improvement in health care delivery has proved hard to measure. Even less measurable is the trust and respect that has developed in Canterbury between general practice, hospital clinicians, management, and funders. There were constant debates and never enough money, of course, but there was common purpose and a clear sense of direction.

The engagement culture in Canterbury could be duplicated in any health system with the right leadership. Health systems can be improved and integrated by clinicians empowered to do the right thing, teamed with managers and funders who enable them. Hospital demand can only be managed by community solutions while hospitals concentrate on boosting their supply of staff and structures. Supply and demand in New Zealand are out of balance with the expectations of the community. CI showed how to get the best out of our existing health services but has not removed the need for transparent and agreed decisions on what our public health system will and will not provide.[23]

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Author affiliations
[A]Better Health Group, PO Box 33388, Barrington, Christchurch 8244, New Zealand.
[B]Planning and Funding and Decision Support, Canterbury District Health Board, Christchurch, New Zealand.
[C]Specialist Mental Health Services, Canterbury District Health Board, New Zealand.