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HEALTH AND SOCIAL CARE

NATIONAL CARE SERVICE

Integrated care studies: The SCFNuka (Alaska) and Canterbury (New Zealand) models

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This paper summarises the key findings and learning from two case studies of integrated care models from different countries: the SCFNuka model from Alaska and the Canterbury model from New Zealand. These findings may provide some key learning to support the proposed National Care Service for Scotland[1].

The SCFNuka model has attracted considerable interest in Scotland and the UK over the years but is predominantly a primary care model with little or no social care interventions. However, the approach to integration across primary care has some key learning in terms of organisation, leadership, collaboration and vision.

In contrast, the Canterbury model in New Zealand is an example of an integrated care model between health and social care, which was rapidly developed following the New Zealand earthquakes in 2010/2011. How they developed and organised care between clinical settings and the community also has key learning in terms of integration of services and joint working across disciplines.

Methods

A comprehensive search was undertaken of the peer reviewed and grey[2] literature to identify evidence relating to the SCFNuka and Canterbury models. The aim was to identify the impact and learning from these examples in terms of the changes that were implemented during their development and the outcomes achieved from these, in providing an integrated care service to their respective populations.

[1] These two case studies are supplemental to the rapid evidence review looking at learning from social care systems in the Nordic and Scandinavian countries to support the development of a National Care Service for Scotland.

[2] The Fourth International Conference on Grey Literature (GL '99) in Washington, DC, in October 1999 defined grey literature as follows: "That which is produced on all levels of government, academics, business and industry in print and electronic formats, but which is not controlled by commercial publishers."

The SCFNuka system of care (South Central Foundation, Alaska)

Background

The SCFNuka system of care is predominantly a primary health care model introduced into Alaska in the late 1990s. It was developed following a consultation process with the Alaskan Indian community and Native leaders that found individual health care was not being met across the population (SCFNuka White Paper Medical Services 2017), resulting in separation from the existing care provided by the Indian Health Service (IHS).

Key aspects of integration in the SCFNuka system include: structural integration across all services, care staff and specialist care in hospitals; horizontal integration with hierarchies removed and team members regarded as peers; a patient-focused approach where customer-owners[3] are considered care team members, and all decision-making regarding how care is provided includes community members in each step of the process (Saskatchewan 2020).

Further detailed descriptions of the SCFNuka model and its implementation, along with the key findings, can be found in the following references: SCFNuka website (series of 4 key White Papers); Collins (Kings Fund) 2016; Gottleib (2013).

Although a comprehensive search strategy was carried out, we found no robust research studies: the references used are therefore mainly reports that are based on internal surveys, data analysis, visits and interviews with key personnel in SCFNuka.

Development of the SCFNuka model

Following a year-long engagement with community members, SCFNuka began developing a clear vision, mission and principles for new ways of working, which was supported by customer-owners and staff across all levels and responsibilities. Having such a vision and goals helped staff stay focused and engaged as well as providing clarity in their daily responsibilities and duties.

Change was mainly focused in two ways – firstly by engaging and listening to customer-owners in deciding what they wanted in terms of healthcare and how their healthcare needs could be met. This involved customer-owners sitting on joint operating boards, having continuous two way communication with the healthcare team through surveys and newsletters on their needs, and what the potential solutions could be and then working together to make these changes happen.

Secondly, through healthcare staff and teams adapting their roles and ways of working to meet customer-owner needs. Healthcare staff changed the ways they worked, sharing responsibilities and tasks rather than having a hierarchy of chores. This allowed each team member to spend most of their time on activities and patient involvement where it was of most value.

[3] The term “customer-owner” is used to describe “users” of the health system as they are seen as both a customer and an owner and not simply a user.

These changes took time to embed, and are constantly under review. There is continuous engagement to receive feedback from customer-owners on any changes that may be beneficial. Continuous quality improvement is also key – staff are trained in basic methodology to allow them to recognise where improvements could be made. This continual cycle of improvement is mainly customer-owner driven.

In terms of structural changes, four key areas were identified that were considered integral to the successful development of the SCFNuka care model:

Medical Services

Health care is delivered to a population of around 65,000 residents, and includes behavioural health, pharmacy, dental, obstetrics and gynaecology, optometry and a suite of programmes for the over 55s. Most residents live in and around the Cook Inlet region but care is also provided to communities in rural and isolated villages (SCFNuka White Paper Medical Services 2017).

Behavioural health services

A behavioural health professional is an integrated part of the health care team who are responsible for providing same day services to customer-owners such as a brief intervention or motivational interviewing where possible. For some health issues, such as mental health, they can be referred to other appropriate services locally (SCFNuka White Paper: Behavioural services 2016).

Strategic planning

To support the new reform and implementation of the SCFNuka model of care, careful attention was given to strategic planning that was transparent and accessible to all that required access (SCFNuka White Paper 2019 Strategic planning).

Data and information management strategies

One of the key priorities of redesign was to improve ways of data management and information sharing which would be accessible to all employees using standardised reports (SCFNuka White Paper 2020 Data and Information Management Strategies).

Key findings

The majority of findings outlined below come from internal evaluations and surveys rather than independent research. Key outcomes are described in the SCFNuka White Papers as well as Gottleib 2013 and Collins 2015.

- A reduction of 36% in both emergency department visits and hospital admissions for customer-owners between 2000 and 2015.

- SCFNuka has exceeded the 90th percentile in HEDIS[4] measures for: board certification, diabetes annual care testing, diabetes hba1c control, HPV vaccine for female adolescents; and has exceeded the 75th percentile in HEDIS measures in: breast cancer screenings, cervical cancer screenings, paediatric BMI screening.
- From a user perspective over 90 percent of customer-owners reported: satisfaction with the care provided by SCF; that they have input into their care decisions; and their culture and traditions are respected at SCFNuka.
- Ninety-three percent SCFNuka employee satisfaction.

Transfer of the SCFNuka model to Scotland/UK

There has already been considerable interest in studying the potential of the SCFNuka model for developing new ways of working in both Scotland and the UK. Most of these ways of working have involved small pilots within primary care (mostly GP practices) rather than an integrated health and social care model. However, very few reports or evaluations were identified from these initiatives.

SCFNuka pilots that have been identified in Scotland include Isle of Eigg (Baird, Kings Fund 2018) and Forfar (Baird, Kings Fund 2018; Audit Scotland 2016). Other reports which reference the SCFNuka model, include NHS Grampian Modernising Primary Care (NHS Grampian MPC 2014) and Midlothian Health and Social Care partnership plans (Midlothian H&SCP 2019).

In addition, the Scottish Government have highlighted that Health Boards should be aware of the SCFNuka model especially regarding modernising primary care (Scottish Government 2015).

The only evaluation of a Scottish pilot identified (although little detail of methodology is provided) is the Fife “Tayriver” pilot as described by Walsh (2018). However, this pilot was due to run for six months but was considered unsuccessful after a six-week internal evaluation and ended before it was completed. Its findings suggested that different models of community-led health care cannot easily be transferred to a different setting with different cultures, and that a high degree of acceptance and prior engagement by relevant stakeholders is required for it to be considered transferrable.

Conclusion

The SCFNuka model of health care provision is primarily a primary care model. Very little social care is involved except perhaps for the Eldercare programme for over 55s, which offers some social events. However, as with any form of integrated care, the intervention depends on the presence of key facilitators and the mitigation of barriers. The SCFNuka model was effective in Alaska due to the level of community-based care, patient engagement, indigenous approaches to care, care responsibility sharing amongst staff and person-centred care. This can create effective teams, which in the case of SCFNuka, resulted in improved quality of patient care as well as staff satisfaction (Saskatchewan

[4] Healthcare Effectiveness Data Information Set (HEDIS)’s benchmarks for primary care usage.

2020). The SCFNuka system was also successful as it overcame cultural and leadership challenges to adapt to working together to provide a customer-owner service which may provide learning for other countries looking to adopt similar care systems.

Canterbury (New Zealand) model of integrated health and social care

Background

Health and social care provision in Canterbury, New Zealand, has attracted considerable interest as an exemplar model of integrated care in terms of its vision, level of collaboration and reported impact on hospital admissions (Timmins and Ham 2013). The Canterbury model began integrating health and social care in the mid 2000's, which rapidly gained momentum in 2010/2011 following the earthquakes in New Zealand. Detailed descriptions of the Canterbury model and its implementation along with the key findings can be found in the following references: Timmins and Ham (Kings Fund) 2013; Charles (Kings Fund) 2017; McGeoch 2019.

Development of the Canterbury model

New Zealand (NZ) has around 20 District Health Boards (DHB), with Canterbury DHB the largest with a population of around half a million people. Each DHB is responsible for planning, organising, purchasing and providing health and care services (Charles 2017). As with other DHB regions in NZ, Canterbury had high levels of hospital admissions and care delivered in hospitals as well as increasing financial costs that were becoming non-sustainable. In the mid–2000s Canterbury began redesigning ways of working across health and social care. The development of the Canterbury care system has taken considerable time to develop new ways of working and is still evolving in terms of structure, services and how it performs.

Part of Canterbury's success has been attributed to developing three key approaches or enablers: a clear vision of a "one system, one budget" approach, investment in staff through training, skills development and innovation, and development of new models of service contracting and integrated working.

During development, Canterbury DHB set up mock models of healthcare in a large warehouse, which all levels of staff were invited to visit. Staff were encouraged to provide feedback on what they envisaged as potential barriers or facilitators in the mock models in providing person-centred care and effective care delivery with the aim of keeping service users in their own home or community setting where possible.

Staff were also encouraged to participate in a range of training programmes to develop skills and leadership. This included investment in training programmes and co-design workshops to empower and encourage staff to be innovative and suggest improved ways of working and to focus on continuous quality improvement across the system.

These approaches facilitated better integration across organisation and service boundaries, a focus on community (home) based services and strengthening primary care.

Some of the new ways of working in the Canterbury DHB are outlined below (Timmins 2013; Charles 2017).

Health Pathways

These are primary care management and referral pathways developed in partnership between GPs and hospital doctors. They outline best practice agreements for patient care between health and social care, the types of care available and where (hospital or community) and what tests are available to GPs locally and promptly.

Acute Demand Management Systems (ADMS)

The aim of this system is to both prevent patients going into hospital for care when they could be treated in the community, and to care for patients discharged into the community but who are still receiving specialist care. An integrated team led by GPs and supported by rapid-response community nursing, community observation beds, hospital-based specialist advice and rapid diagnostic tests are responsible for looking after patients with acute health needs in their homes or local community (McGeoch 2019).

Electronic shared care record view

This platform provides a summary of individual's GP records, hospital records, community pharmacy records and laboratory and imaging results. Clinicians across hospital, community and primary care services can access the record, improving information sharing between different parts of the system but without the risk of revealing confidential information.

Community Rehabilitation Enablement and Support Team (CREST)

The aim of this team is to reduce the length of stay once in hospital, the chances of readmission, and to delay admission to residential care or hospital by providing care at home or in a community. This service had been designed, but not implemented, prior to 2011 earthquake but was quickly rolled out due to damage and loss of facilities caused by the earthquake.

Alliance contracting

This involves multiple organisations working together to provide better quality of care and supports the "one system, one budget vision". The principle behind the alliance is that everyone wins or everyone loses. If one service provider partner is struggling, then other members of the alliance step in to help solve the problem. This form of alliance supports both the ADMS and CREST.

Leadership and improvement

This is supported through training programmes available to all levels of staff such as the Xceler8 programme, which can provide staff with the skills to think and act differently when dealing with patient care.

What are the impacts of the changes?

Few evaluations or robust findings were identified during the search phase for this study. Reports which highlight general findings tend to be from small local studies or data analysis, or the large Kings Fund reports (Charles 2017; Timmins and Ham 2013). Directly relating findings to specific changes undertaken in the Canterbury model needs to be treated with caution, as other factors and programmes were on going at the same time (Cumming 2021). However, findings would indicate:

- The Canterbury model has slowed the demand for acute care but it has not reversed it. Attendance in emergency departments and acute medical admission rates have been reported as “low growth” with some shorter lengths of hospital stay. This was mostly observed in older adult patients and those with ambulatory disorders (Schluter 2016; McGeoch 2019).
- Integrated falls prevention strategies contributed to a reduction in harm from falls in the older adult population (Cumming 2021).
- Leadership is an important enabler, including staff engagement, continuous quality improvement and technology to support a “one system, one budget” approach (Cumming 2021).
- The majority of clients who have been through the Community Rehabilitation programme (CREST) believed the service worked well with other health services in the home (Timmins and Ham 2013).
- There is still a demand for acute hospital beds. However, there is less demand by working with the alliance and primary care services to deliver health and social care in the community (Charles 2017).
- In terms of financial costs, although Canterbury reports lower spending on emergency hospital care compared to the rest of New Zealand, it has higher spending on community-based services (Cumming 2021).
- However, the Canterbury success may now be at risk, partly due to its financial position and significant changes of leadership, including the appointment of a Crown observer on the DHB Board (Cumming 2021).

Conclusion

The Canterbury model of integrated care has provided some evidence that redesigning and implementing different ways of providing health and social care can be beneficial. This is especially evident in terms of slowing the number of hospital admissions amongst older adults and delivering better care in the community. Having a single vision with one model where there is strong leadership, continuous staff development and systems in place to deliver care at a local level are strong enablers.

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St Andrew's House
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ISBN: 978-1-80435-490-2
Published by the Scottish Government, June 2022

Produced for the Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA
PPDAS1092962 (06/22)