Evaluation of the Geriatric Outreach Assessment Service pilot project

Brisbane North PHN and **Metro North Hospital and Health Service**

The Geriatric Outreach Assessment Service is an innovative model of care aimed at improving quality of care and reducing potentially preventable Emergency Department presentations and potentially prevented hospitalisations for acutely unwell older persons residing in residential aged care facilities.

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Evaluation of the Geriatric Outreach Assessment Service (GOAS) pilot project

The GOAS model consists of two components: an outreach geriatrician-led, 5-day service and the provision of training for RACFs on clinical pathways. It is a unique, person-centred, integrated, evidence-based, best practice care model designed to address the specific needs of the older person. The GOAS is based on the successes of other models developed for older persons in Residential Aged Care Facilities (RACFs), both internationally and nationally.

About the pilot project

Jointly funded by Brisbane North PHN and Metro North Hospital and Health Service (HHS), the 12-month pilot project commenced on 12 June 2017.

The initiative reflected the commitment of Brisbane North PHN and Metro North HHS to provide RACF residents with best practice person-centred care and efficient, quality support through a collaborative, outcome-based approach.

The stakeholders worked in consultation with the community to identify local health needs and co-design a solution to achieve the optimal outcomes for RACF residents.

While Brisbane North PHN managed the project, it was overseen by a 24-member Project Steering Committee which identified four objectives:

OBJECTIVE 1: To implement a 12-month pilot, a 5-day service outreach specialist geriatric assessment service for residents from 24 selected RACFs in The Prince Charles Hospital (TPCH) catchment

OBJECTIVE 2: To provide clinical support and training on clinical pathways to build clinical capacity of RACF staff

OBJECTIVE 3: To strengthen clinical networks and cross-sector collaboration between RACFs, Brisbane North PHN, Queensland Ambulance Service, GPs and TPCH clinicians for better provision of integrated and coordinated care for residents in RACFs

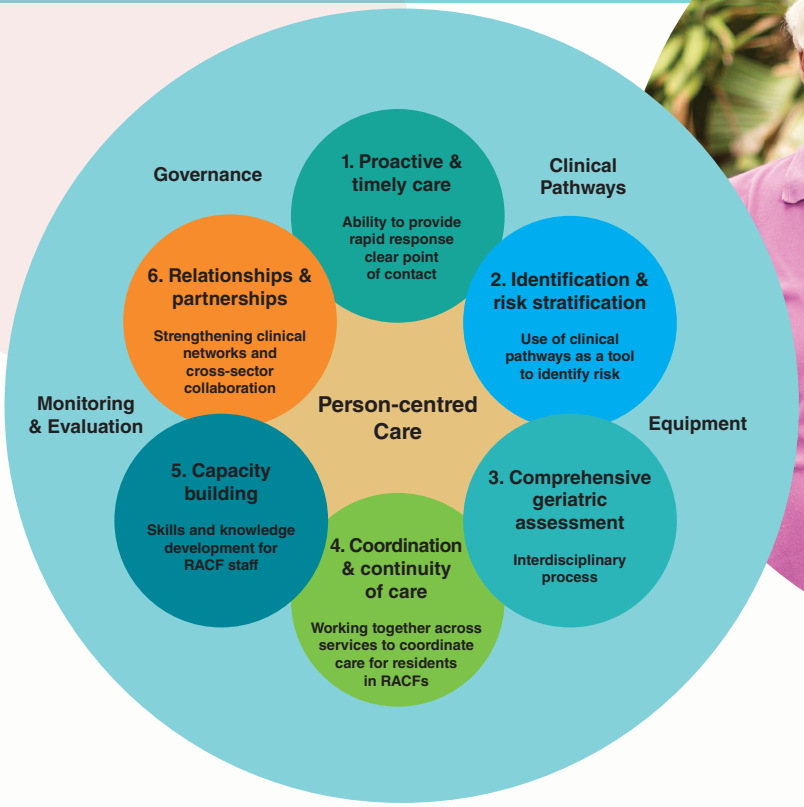
OBJECTIVE 4: To conduct a robust evaluation using an outcome measurement approach aimed at evidencing a cost-effective service model that is appropriate for implementation across Metro North.

Background

In 2015, there were 6,962 RACF places in the Brisbane North region and approximately 30 per cent of these places were within TPCH catchment.

In late 2016, Brisbane North PHN conducted broad consultation with RACFs, GPs and Metro North HHS stakeholders, identifying issues and barriers to current service delivery. It identified an emerging need for a medical outreach service to RACFs across the HHS region.

TPCH data showed the number of Emergency Department (ED) presentations from RACFs increased by 22 per cent between 2012 and 2016, compared to overall ED presentation growth at five per cent. Approximately 53 per cent of these were considered avoidable admissions.



Implications

Hospital transfers for RACF residents can have a significant impact on healthcare expenditure and ED staff workload. This also contributes to discontinuity of care in RACFs. Hospital admissions of frail elderly people can also result in complications and morbidity.

Studies have shown that a focus on improving quality of care for residents and reducing potentially preventable hospital admissions from RACFs could deliver the most cost-effective outcomes.

Evaluation findings

The GOAS evaluation, conducted internally, found the pilot project was successfully implemented and delivered on the desired outcomes.

From June 2017 to May 2018, the GOAS had improved access to specialist geriatric outreach care for 744 patients and delivered 960 episodes of care (an average of 4 episodes per day), of which 638 episodes (66 per cent) were considered to have been potentially prevented ED presentations.

The average length of stay for residents of in-scope RACFs was 1.68 days, compared to 2.3 days for out-of-scope RACFs, a reduction of 0.62 days.

The evaluation also found more time was needed to assess the long-term effects of the GOAS on acute care, especially in the reduction of potentially preventable ED presentations. Among its findings:

- 24 in-scope RACFs within the TPCH catchment showed a declining trend in inpatient hospital admissions compared to out-of-scope RACFs
- Emergency Department presentations by residents of in-scope RACFs remained stable, despite an increase in available RACF beds within the catchment area
- 71 per cent of GOAS episodes of care were same-day services and 91 per cent of episodes were seen by both a Registrar and a Clinical Nurse.

Qualitative findings obtained from more than 1,700 survey responses proved that the GOAS had achieved its aim improving quality of care for the residents by delivering a responsive, high quality and person-centred service at the right time and in the right place. The surveys found:

- consumer feedback was overwhelmingly positive with 98 per cent of survey respondents likely to recommend the GOAS to others
- 100 per cent of service provider respondents and 87 per cent of GP respondents would recommended the GOAS to others
- 98 per cent of all stakeholders would support an expansion of service
- 87 per cent of all stakeholders agreed the GOAS model would be suitable to be replicated at other hospitals or on a larger scale
- 60 per cent of GP respondents reported the GOAS fostered relationships with RACFs
- 96 per cent of all stakeholders agreed the GOAS supported and built trust, dependability and integrity between services.

By the end of May 2018, the GOAS had provided 417 training sessions on 22 clinical pathways to 3,019 participants at 24 in-scope RACFs. According to RACF training survey responses:

- 84 per cent of all stakeholders agreed the GOAS provided support to RACF staff through education and training.
- 98 per cent of 1,562 RACF survey respondents agreed the training was relevant, met their leaning needs, and increased their knowledge and confidence in managing an acutely unwell resident.

Further to the pilot project, Metro North HHS has established the regional Metro North Residential Aged Care Assessment and Referral (RADAR) Service, which will incorporate the GOAS. Training for RACF staff will not continue.

Cost analysis

A cost-analysis compared the current scenario (with the GOAS) with the status quo (without the GOAS). It demonstrates that the GOAS delivers a cost saving to the State Government.

The analysis assumed that without the GOAS, residents would continue to present to the ED and/or be admitted to hospital, at a cost of approximately $3,469,000 to $4,332,000 (allowing for a variation rate of 20 per cent).

With the GOAS (and including set-up costs), the first year would cost $745,598, dropping to $463,898 from the second year onwards. See table 1 below for more detail.

Lessons learned

Cross-sector collaboration, especially between Brisbane North PHN and Metro North HHS, was a key factor in the successful design, planning and implementation of the GOAS. The PHN's role in effectively facilitating this collaborative initiative, at the interface between acute and aged care, was critical to project success.

Recommendations

1. The GOAS should be expanded across Brisbane North to ensure a regionally-consistent approach to the provision of healthcare to unwell RACF residents and to prevent avoidable ED presentations. This service should operate as a hub and spoke model from the four hospitals across the region, with Metro North HHS providing a central intake.
2. Statewide expansion will allow RACF residents across Queensland to benefit from a locally-implemented service like the GOAS. The increased use of Telehealth could support viability in regional and rural areas and improve the integration with primary healthcare.
3. A population health approach should apply to the funding and provision of care of older people in all community and hospital settings to improve coordination and integration across the whole patient journey. To achieve this, the current focus of funding incentives on volumes must shift to a focus on the outcomes that matter most to older people and their quality of care. In this way, funding will more directly relate to population needs. This is often referred to as shifting from "Volumes" to "Value" and will require:
   - undertaking a three year intervention in the TPCH catchment focused on the whole health journey for people aged 75+ and Indigenous people aged 50+
   - implementing a comprehensive service for older persons across care settings to better coordinate and integrate their care. This service will deliver superior GP support, enhanced community-based programs, and improved communication and relationships between health services and community services. The PHN could facilitate this service because it already has effective relationships with GPs and community-based organisations.

Table 1: Cost-analysis summary

Cost-analysis				
Summary Year	**First year (2017-18)**		**Second year (2018-19)** *(assuming 4% increase in service demand)*	
Position	**Without the GOAS** *(20% variation)*	**With the GOAS**	**Without the GOAS**	**With the GOAS**
Service Provision	744 residents/960 episodes of care would require acute care services. 638 episodes would be considered as potentially preventable ED presentations. 498 episodes would be considered as potentially prevented hospitalisations.		774 residents/998 episodes of care would require acute care services. 664 episodes would be considered as potentially preventable ED presentations. 518 episodes would be considered as potentially prevented hospitalisations.	
Cost estimate	**$3,469,000 – $4,332,000**	**$745,598**	**$3,607,000 – $4,505,000**	**$463,898**

Mary's story*

Mary's experience with the GOAS showed how an effective, collaborative approach across the sectors towards person-centred care can result in better outcomes for older persons residing in RACFs.

It also demonstrates improved integrated and coordinated care between the tertiary hospital, primary care and RACFs.

Importantly, Mary's acute illness **was managed in the community** without requiring her admission to hospital because of the GOAS was able to provide **right care, in the right place, at the right time**.

In late 2017 and early 2018, Mary was seen by the GOAS over three episodes of care.

Mary is 93 years old who recently moved to a RACF in The Prince Charles Hospital (TPCH) catchment following many years of living in her home in the Brisbane North region.

Mary has multiple chronic diseases including ischaemic heart disease, a permanent pace maker, hypertension, chronic kidney disease, anaemia, hypercholesterolaemia, asthma, hypothyroidism, and non-tophacious gout.

Due to her comorbid conditions, Mary visited hospital frequently. Over the past two years, she had 13 hospital admissions whilst still living at home.

Episode 1:

In early November 2017, Mary developed fevers. The RACF Clinical Manager, with consent from Mary's GP, referred her to the TPCH GOAS team.

Within a day of referral, the GOAS Registrar and Clinical Nurse visited Mary at the RACF and completed a comprehensive geriatric assessment, which identified that she had a lower respiratory tract infection.

The team reviewed Mary and as per her cardiologist's recommendations, which she had from her outpatient appointment the day prior, adjusted her medications and administered intravenous antibiotics. **The GOAS team collaborated with Mary's GP and RACF staff** to develop and implement a management plan to monitor her acute and chronic conditions. This meant she **avoided a hospital admission** and recovered from her acute episode a couple of days later.

Mary said "I was treated with respect, couldn't be treated better and nothing could've been done better."

Episode 2:

When Mary became unwell with shortness of breath and racing heart rate, the RACF staff knew they could call GOAS to assist.

The GOAS team reviewed Mary and in liaison with her GP, discovered that she had rectal bleeding. Her blood tests revealed she had iron deficiency anaemia. The GOAS discussed with Mary the benefits and risks of blood and iron transfusions.

In early December 2017, the GOAS team completed an iron transfusion at the RACF. Mary's daughter was grateful her mum could receive treatment in **her home at the RACF**. The GOAS team spoke with Mary and her GP about options to investigate the cause of her anaemia. Mary was able to make **an informed decision** and decided not to proceed with further tests to identify the cause.

Episode 3:

In early 2018, Mary's haemoglobin levels fell and her GP referred her to the GOAS team.

Within a day, Mary, her GP and the GOAS team discussed the option of having further blood transfusions to control her symptoms. **She was able to avoid going to the Emergency Department** and instead began scheduled blood transfusions at the TPCH Day Unit.

While receiving transfusions, the GOAS team initiated end-of-life care discussions with Mary and her family. Given the symptom relief she was experiencing, she was open to continuing to receive this care, which would **prevent her from ending up in hospital unnecessarily**, however she acknowledged there would be a time when she could only receive comfort support.

In reflecting on Mary's care under this model, the Nurse Manager at Mary's RACF said:

'The GOAS' benefits to the patient are them not being hospitalised.'

Mary's story over three episodes of care shows how the GOAS model can improve quality of life for the older person by embracing person-centred care, fostering effective collaboration across sectors and improving continuity of care in an integrated and coordinated manner.

**Names and identifying details have been changed to protect patient confidentiality*

Above: Maxwell Treacy (seated, centre left) was the first patient to access the Geriatric Outreach Assessment Service. He is pictured at the launch of the pilot project on 29 June 2017, with medical professionals and staff from Brisbane North PHN, The Prince Charles Hospital and Wesley Mission Queensland.

For further information about the Geriatric Outreach Assessment Service, please contact Brisbane North PHN:

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