Timely, effective care for gastrointestinal disorders

For functional gastrointestinal disorders such as irritable bowel syndrome, medical intervention is not always necessary; sometimes evidence-based allied health interventions can be more effective and economical. To provide more timely, effective and person-centred care, Alfred Health implemented a nurse and allied health-led model of care to more effectively triage patients referred to its functional gastrointestinal disorders clinic.

## Background

Gastrointestinal symptoms suggestive of irritable bowel syndrome are one of the most frequent presenting complaints to Australian general practitioners and the most common reason for specialist referral to a gastroenterologist.

However, many of these patients do not require a gastroenterologist’s intervention as a variety of largely non-medical therapies have been proven to be effective in managing functional gastrointestinal disorders (FGIDs). These include dietary interventions, gut-directed hypnotherapy, psychological therapies and biofeedback.

Unnecessary referrals can result in an increased burden on public gastroenterology outpatient clinics, which can, in turn, delay timely and effective care for all patients.

In 2017, patients were experiencing a 9–12 month wait to access Alfred Health’s Functional Gut Clinic, a weekly, multidisciplinary clinic that provides dietetic therapy, hypnotherapy and psychological support. There was a further six-month wait to access allied health services after the initial medical consultation.

To address this, Alfred Health implemented a nurse and allied health-led triage program. This was designed to fast-track FGID patients towards effective allied health interventions and ensure medical reviews were targeted to complex cases. The health service also established group dietary education sessions to optimise clinic efficiency and a direct email ‘helpline’ to improve patient access to clinicians outside of clinic hours.

By optimising the clinic’s efficiency, enhancing support and providing better patient education, Alfred Health aimed to achieve better patient health outcomes faster, provide timelier access to care, and improve the overall patient journey.

Novel models of care for patients with functional gastrointestinal disorders

**Lead** Alfred Health

**Partner** Monash University Department of Translational Nutrition

**Duration** November 2017 – November 2018

**Key outcomes**

* Saw 2.75 times more new patients under the new model of care and increased the total number of patients seen by almost 50 per cent
* Achieved an almost three-fold reduction in wait times and decreased time to first clinic appointment from 345 to 120 days
* Decreased symptom severity for patients seen in the nurse and allied health-led clinic by 21.6 per cent
* Reduced the number of patients requiring medical review by 36 per cent
* Almost halved the cost per new patient from $887 to $484
* Received high patient satisfaction scores and reduced ‘did not attend’ rates from 13.5 per cent to 3 per cent

## Key activity

Alfred Health developed and implemented a new model of care to operate alongside its standard medical service where a clinical nurse specialist reviewed and triaged all referrals to the Functional Gut Clinic. This process was overseen by a gastroenterology consultant.

Patients were sent a comprehensive symptom and risk-factor questionnaire and pathology request slip, and based on their responses, the specialist nurse would triage them as into the following categories:

* **high-risk –** examples of patients in this category included those who had weight loss, atypical features, and abnormal test results. These patients received an urgent appointment with an FGID specialist in the medical service within 30 days
* **low-risk with complex clinical needs –** low-riskpatients determined to require tertiary assessment received the next available appointment with an FGID specialist. These individuals typically had organic disorders excluded by their referring gastroenterologist and had no high-risk features
* **low-risk –** these patients would receive an appointment with a nurse specialist who would confirm their FGID diagnosis and discuss suitable treatment options. Patients confirmed to have FGID would receive a direct referral for one of the following evidence-based allied health interventions of their choosing: group dietary intervention, one-on-one dietary intervention, gut-directed hypnotherapy, psychological intervention, or pelvic floor physiotherapy/biofeedback.

Patients were reviewed post-intervention and if they were well, would be discharged. If symptoms persisted and/or if medical therapy was proposed, they would be referred to see an FGID specialist.

Other components of the project included:

* **group dietary education sessions –** an experienced dietician delivered a low ‘FODMAP’ diet education program to groups of up to 10 patients per week to give more patients timelier access to this information
* **multidisciplinary meetings for complex patients –** virtual multidisciplinary meetings were held on a monthly basis for complex patients with high healthcare utilisation
* **creation of a support line –** an email ‘helpline’ was established to provide patients with access to clinicians outside of clinic hours, such as when their symptoms deteriorated. This was monitored by the nurse specialist.

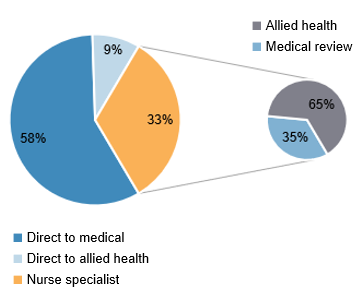
## Outcomes

Table 1. Comparison of clinical activity under old (2017) and new (2018) models of care

|  |  |  |  |
| --- | --- | --- | --- |
|  | 2017 | 2018 | % change |
| **Number of new patients seen** | 216 | 594 | 175.0% |
| **Total number of patients seen** | 628 | 926 | 47.5% |
| **Total number of patient occasions of care** | 1,358 | 2,482 | 82.8% |

* Almost triple the number of new patients accessed Alfred Health’s Functional Gut Clinic in 2018 under the new model of care than in 2017 (see Table 1). The total number of patients seen by the clinic also increased by almost 50 per cent.
* Wait times were significantly reduced. Time to first clinic appointment decreased 65.2 per cent from 345 to 120 days, and time to first therapeutic intervention decreased 64.9 per cent from 387 to 136 days.
* Patients had better health outcomes under the new model of care, showing a 21.6 per cent decrease in symptom severity compared with a 9 per cent increase under the old model of care. Therapeutic response rates also rose from 20.2 per cent to 34.3 per cent.
* Overall, 36 per cent fewer patients required medical review on first clinic presentation compared to 100 per cent under the old model of care. Under the new model of care, 58 per cent were first seen via the medical team, 9 per cent were referred directly to allied health and 33 per cent were seen by the nurse specialist. Of the latter subset, only 35 per cent required medical review, with the rest successfully managed through allied health (see Figure 1).

Figure 1. Initial patient care destination under new model of care



* The cost per new patient almost halved under the new model of care, decreasing 45 per cent from $887 to $484.
* Patients were extremely happy with the education, information and treatment plan provided to them by the nurse specialist, with a median satisfaction score of 97/100.

This high level of patient satisfaction likely contributed to the reduction in the ‘did not attend’ rate, which decreased from 12.5 per cent to 3 per cent of all appointments.

The group dietary education sessions were also well received, with an overall median patient satisfaction score of 87/100.

‘I was very impressed with the thoroughness of the examination.’

**– Patient**

‘Lots of [treatment] options offered.’

**– Patient**

## Key learnings

* The nurse specialist role in this model of care requires a high level of experience in the clinical assessment of patients, particularly in clinical examination and history taking.

They must be able to detect clinical alarm features while also being able to appreciate the limits of their skills and knowledge to ensure appropriate referral of patients.

* Paper triage questionnaires were poorly returned, which impacted timely access to the clinic. To address this, Alfred Health developed an electronic triage tool, which improved tracking of completion and minimised administrative work. A paper option continued to be available for those who preferred it.

Despite positive patient ratings for the first group dietary education session, many patients did not attend the second. Patients with FGID are often young and work full-time, and many patients said they were unable to take time off work to attend.

Post-project, Alfred Health changed the format to a single group education session with a second follow-up appointment held at the patient’s convenience.

* The helpline proved useful for patient and clinician communication and was a valuable source of feedback. Of the 180 emails received, only 30 per cent required clinical expertise, with the rest resolved by the administrative team.

After the project, Alfred Health transferred monitoring of the helpline to an administrative assistant, with all administrative queries actioned prior to involving the clinical team.

* The new model of care, particularly the triage and booking of patients, involved a significant increase in administrative workload. It is important to plan for this early in the project.