



Improving Care for Coeliac Disease Patients by developing a triage-based annual review system during the Covid-19 Pandemic.

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Problem

- Coeliac disease is a gastrointestinal autoimmune disorder caused by ingestion of gluten found in wheat, rye, and barley. Inadequate monitoring and failure to identify symptomatic cases is often associated with chronic GI symptoms, weight loss, osteoporosis, anaemia, and general weakness ⁽¹⁾.
- A key mission statement of NHS Dumfries and Galloway (D&G) is to deliver excellent patient care and work with communities to reduce health inequalities across the region. Following discussions at a local GP practice in D&G, there was a will to act upon this by improving the care of patients with Coeliac disease, where inadequate monitoring disproportionately affects those from lower socioeconomic backgrounds ⁽²⁾.

Aim: By May 3rd 2021, 100% of patients with Coeliac disease at Thornhill Medical Practice will have adherence to a gluten-free diet assessed, and knowledge and support felt regarding their condition improved, as recommended by NICE Quality Standard QS134.

Methods

- The QI team consisted of a medical student, two supervising GP partners, practice nurse, and the practice manager.
- A stakeholder analysis was used to gain early alignment among all stakeholders on plans and goals and to help address forces against change.
- To understand what an annual review should encompass, Coeliac UK, NICE and BMJ guidelines were consulted.
- A system search was conducted for patients with Coeliac disease attending the primary care practice. This brought a total of 24 patients. Following application of these criteria, nine patients (2 males, 7 females) were eligible for participation in the project.

Change Theory

- The strategy for implementation of change ideas was based on the plan-do-study-act (PDSA) cycle.
- A driver diagram was used to develop the aim and articulate changes that will show the greatest impact on the system, and thus help to identify outcome and process measures for the project.

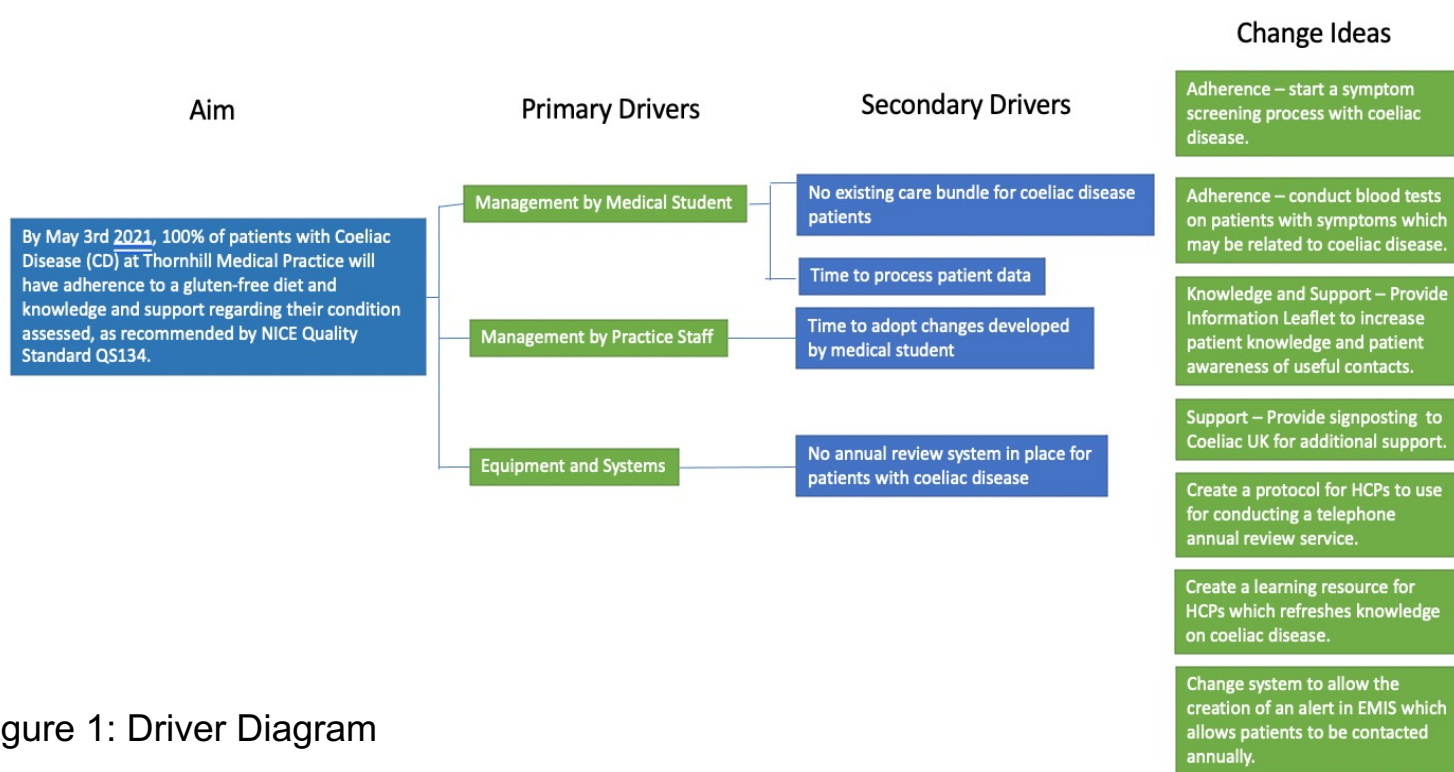


Figure 1: Driver Diagram

The tests of change are summarised below and were grouped based on improving patient knowledge and support, assessing adherence, and system-based changes.

Changes – Knowledge and Support: To improve patient knowledge of Coeliac Disease and increase levels of support felt by patients in relation to the disease, an information leaflet will be created, and verbal information in the form of signposting to Coeliac Disease UK website and helpline would be given.

Changes – Assessing Adherence: To assess adherence, patients will be contacted by telephone and symptom screening will be conducted. This will be followed by an appointment for blood tests if indicated (FBC, TTG, Ferritin, TFTs, LFTs, Folate, B12, Vitamin D, Serum Calcium) ⁽¹⁵⁾.

Changes – Administration and System: To create a protocol for the use of practice staff which highlights what to assess during a Coeliac review consultation and create an alert in the practice system for when the surgery needs to contact patients to book a telephone consultation for an annual review.

References: 1. Haines M. Anderson R. Gibson P. Systematic review: the evidence base for long-term management of coeliac disease. *Aliment Pharmacol Ther.* 2008;28. 2. NHS D&G. Core Values. Dumfries and Galloway: 2013.

Results

It was found there was an increase in patient knowledge from 7.8/10 at baseline measurement to 8.5/10 following 3 PDSA cycles at fortnightly intervals. Similarly, support felt by patients increased from 6/10 at baseline measurement to 9/10 (Figure 2).

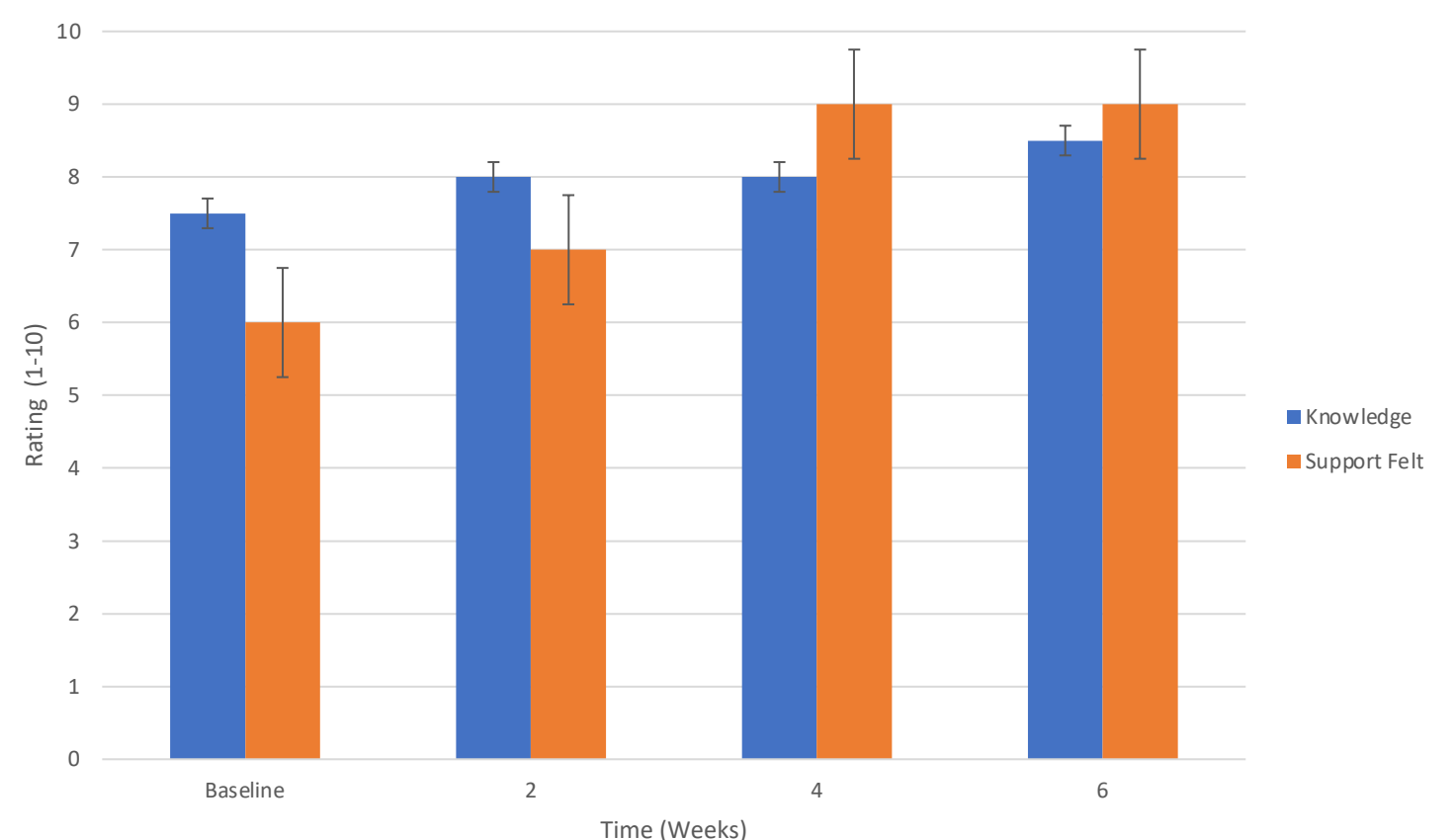


Figure 2: Bar graph showing changes in patient knowledge and support felt at fortnightly PDSA cycles.

In total, 100% of patients who were eligible for participation in this project were screened for symptoms which may be related to Coeliac disease (Figure 2). Consequently, 3 additional blood samples were taken from patients (Figure 3). One patient was found to have raised tissue transglutaminase (TTG) antibodies indicating low adherence.

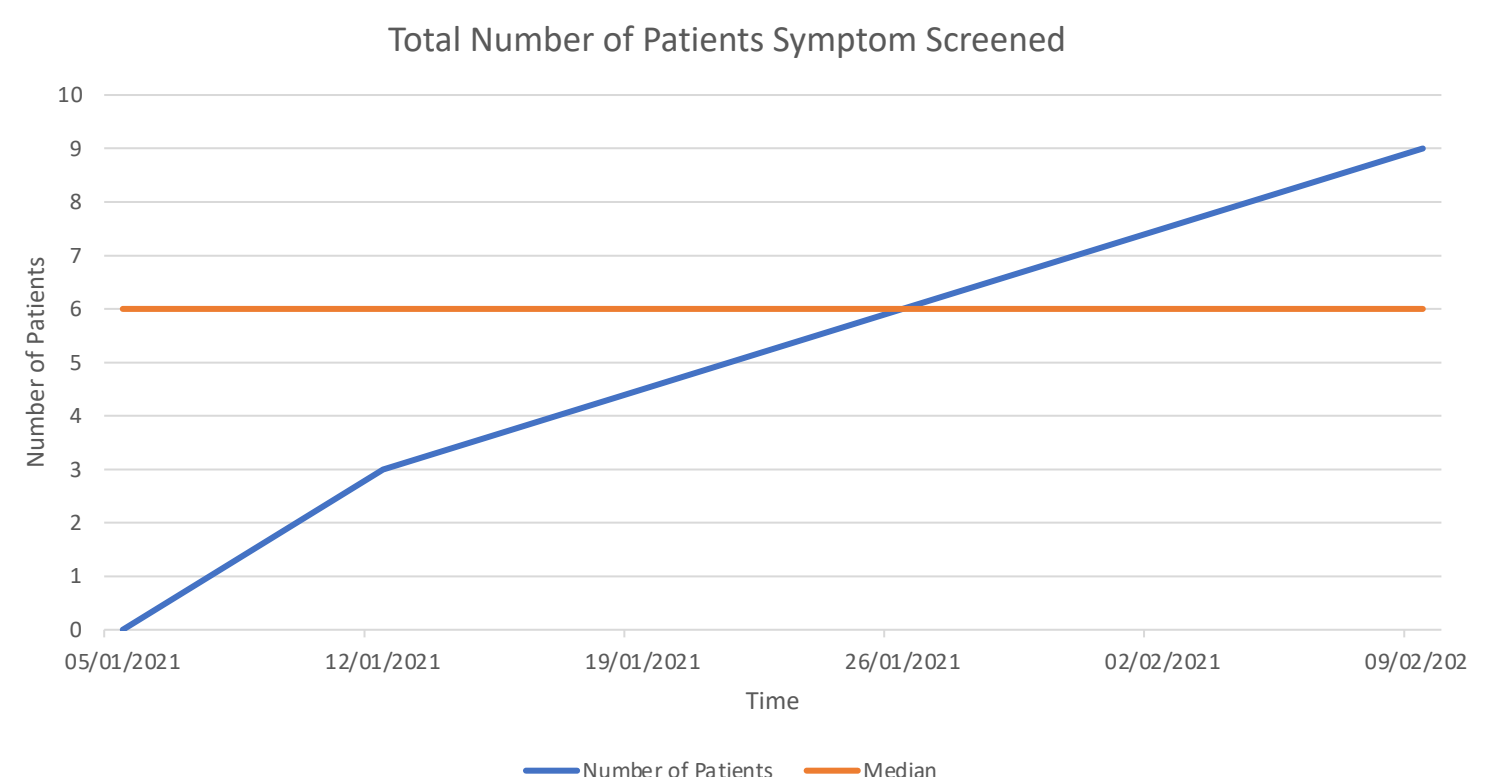


Figure 3: Run chart showing number of patients having symptom screening over time.

Conclusions

- This project utilised a more novel, triage-based telephone annual review of patients and demonstrated that increases in patient knowledge and support felt could be achieved whilst producing an agreeable amount of extra workload on practice staff.
- The findings of this project suggest that this could be taken forward into other areas of chronic disease management for stable outpatients. As this research was conducted over a relatively short period of time of data collection, further study could investigate the long-term impact of knowledge and support outcomes for patients.