NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Health and social care directorate

Quality standards and indicators

Briefing paper

Quality standard topic: Irritable bowel syndrome

Output: Prioritised quality improvement areas for development.

Date of Quality Standards Advisory Committee meeting: 25 June 2015

Contents

1 Introduction

This briefing paper presents a structured overview of potential quality improvement areas for irritable bowel syndrome. It provides the Committee with a basis for discussing and prioritising quality improvement areas for development into draft quality statements and measures for public consultation.

1.1 Structure

This briefing paper includes a brief description of the topic, a summary of each of the suggested quality improvement areas and supporting information.

If relevant, recommendations selected from the key development source below are included to help the Committee in considering potential statements and measures.

1.2 Development sources

The key development sources referenced in this briefing paper are:

Irritable bowel syndrome in adults: diagnosis and management of irritable bowel syndrome in primary care. NICE clinical guideline 61 (2015).

Reviewed in December 2013 and decision made to update. Update published February 2015. Next review scheduled for March 2016.

Faecal calprotectin diagnostic tests for inflammatory diseases of the bowel. NICE diagnostics guidance 11 (2013).

2 Overview

2.1 Focus of quality standard

This quality standard will cover the diagnosis and management of irritable bowel syndrome (IBS) in children, young people and adults.

It does not cover other gastrointestinal disorders such as non-ulcer dyspepsia, coeliac disease and inflammatory bowel disease.

2.2 Definition

Irritable bowel syndrome (IBS) is a chronic, relapsing and often life‑long disorder. It is characterised by the presence of abdominal pain or discomfort, which may be associated with defaecation and/or accompanied by a change in bowel habit. Symptoms may include disordered defaecation (constipation or diarrhoea or both) and abdominal distension, usually referred to as bloating. People present with

varying IBS symptom profiles, most commonly 'diarrhoea predominant', 'constipation predominant' or alternating symptom profiles. Symptoms sometimes overlap with other gastrointestinal disorders such as non‑ulcer dyspepsia or coeliac disease.

Causes of IBS have not been adequately defined, although gut hypersensitivity, disturbed colonic motility, post-infective bowel dysfunction or a defective antinociceptive (anti-pain) system are possible causes. Stress commonly aggravates the disorder. Lactose, gluten or other food intolerance is also identified as a precursor to IBS.

IBS may cause dehydration, lack of sleep, anxiety and lethargy which may lead to time off work, avoidance of stressful or social situations and significant reduction in quality of life.

2.3 Prevalence

The onset of IBS is most often between the ages of 20 and 30 years and IBS is twice as common in women as in men. Prevalence in the general population is estimated to be between 10% and 20% though the true prevalence may be higher as it is thought that many people with IBS symptoms do not seek medical advice. Recent trends indicate that there is also a significant prevalence of IBS in older people.

Each year, typically approximately 10% of the population will experience IBS symptoms, with up to half of these presenting to primary care clinicians. In England and Wales, the number of people consulting for IBS is estimated to be between 1.6 and 3.9 million.

2.4 Management

Many people with IBS rely on self-care and do not seek medical advice. People with IBS tend to alter their diet to alleviate its symptoms. Often this is self-directed or guidance is sought from inadequately trained nutritionists. Excluding specific foods or complete food groups without appropriate supervision can lead to inadequate nutrient intakes and ultimately malnutrition.

Diagnosis of IBS has been predominantly by exclusion of organic disease which has led to patients being subjected to investigations and tests which are not required to confirm IBS. A wide variety of tests are performed in primary care and others in secondary care.

People who may have IBS are likely to be referred to a secondary care specialist if symptoms are atypical (for example, patients over 40 years with a change in bowel habit and/or rectal bleeding), if GI or ovarian cancer is suspected, or if there is a family history of GI or ovarian cancer.

As the aetiology of IBS has not yet been established, management is focused on the relief of symptoms. A combination of interventions may be required and will vary depending on the symptom profile, including diet and lifestyle, patient education and self-help, pharmacological, behavioural and psychological therapies, complementary and alternative therapies.

See appendix A for the associated algorithm from NICE clinical guideline 61.

2.5 National Outcome Frameworks

Tables 1 and 2 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

Table 1 NHS Outcomes Framework 2015–16

Domain	Overarching indicators and improvement areas
2 Enhancing quality of life for people with long-term conditions	***Overarching indicator*** 2 Health-related quality of life for people with long-term conditions** ***Improvement areas*** **Ensuring people feel supported to manage their condition** 2.1 Proportion of people feeling supported to manage their condition **Improving functional ability in people with long-term conditions** 2.2 Employment of people with long-term conditions*, **
4 Ensuring that people have a positive experience of care	***Overarching indicators*** 4a Patient experience of primary care i GP services *4d Patient experience characterised as poor or worse* *I Primary care* ***Improvement areas*** **Improving people's experience of outpatient care** 4.1 Patient experience of outpatient services **Improving access to primary care services** 4.4 Access to i GP services **Improving people's experience of integrated care** *4.9 People's experience of integrated care***
Alignment with Adult Social Care Outcomes Framework and/or Public Health Outcomes Framework * Indicator is shared ** Indicator is complementary Indicators in italics in development	

Table 2 Public health outcomes framework for England, 2013–2016

Domain	Objectives and indicators
1 Improving the wider determinants of health	***Objective*** Improvements against wider factors that affect health and wellbeing and health inequalities ***Indicators*** 1.8 Employment for those with long-term health conditions including adults with a learning disability or who are in contact with secondary mental health services*,** 1.9 Sickness absence rate
2 Health improvement	***Objective*** People are helped to live healthy lifestyles, make healthy choices and reduce health inequalities ***Indicators*** 2.11 Diet 2.23 Self-reported well-being
4 Healthcare public health and preventing premature mortality	***Objective*** Reduced numbers of people living with preventable ill health and people dying prematurely, whilst reducing the gap between communities ***Indicators*** 4.13 Health-related quality of life for older people
Alignment with Adult Social Care Outcomes Framework and/or NHS Outcomes Framework * Indicator is shared ** Indicator is complementary	

3 Summary of suggestions

3.1 Responses

Fifteen stakeholders responded to the 2-week engagement exercise (29 April to 14 May 2015). NHS England's patient safety division did not submit any data for this topic.

Stakeholders were asked to suggest up to 5 areas for quality improvement. Specialist committee members were also invited to provide suggestions. The responses have been merged and summarised in table 1 for further consideration by the Committee. Full details of all the suggestions provided are given in appendix 3 for information.

Table 1 Summary of suggested quality improvement areas

Suggested area for improvement	Stakeholders
Initial assessment	• BSG, SCMs, ALMUK, NHSE, RCP
Diagnostic tests • Tests to exclude other diagnoses • Avoid unnecessary investigations	 • CLUK, SCMs, BSG, ALMUK • BDA, SCMs, ALMUK, RCP
Dietary and lifestyle advice • Advice to support self-management • Access to community dietitians • Dietary management in children and young people	 • SCMs, NDR, BSG, BING, BDA • NDR, BDA, BSG, ALMUK, SCM • BDA
Pharmacological therapy • Antispasmodics • Review of medication	 • BING • SCM
Psychological interventions • Assessment of psychosocial impact • Early access to psychological interventions • Psychological interventions for ongoing symptoms	 • SCM • BSG • SCM
Follow-up	• ALMUK, SCMs, BSG
Other areas • Skills and training • Multi-disciplinary approach • Vitamin D and fatty acids	 • NDR, ALMUK, SCM • BSG, ALMUK, RCP • HQT
ALMUK, Almirrall UK Ltd BING, Boehringer Ingelheim BDA, British Dietetic Association BSG, British Society of Gastroenterology CLUK, Coeliac UK HQT, HQT Diagnostics NDR, NDR-UK NHSE, NHS England RCP, Royal College of Physicians SCM, Specialist Committee Member	

4 Suggested improvement areas

4.1 Initial assessment

4.1.1 Summary of suggestions

Stakeholders suggested that it is important for people with relevant symptoms to be assessed for IBS. This is important because IBS is under-diagnosed in the UK and therefore people may not be receiving effective treatment. This is also important to ensure the condition is resourced appropriately.

4.1.2 Selected recommendations from development source

Table 2 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 2 to help inform the Committee's discussion.

Table 2 Specific areas for quality improvement

Suggested quality improvement area	Suggested source guidance recommendations
Initial assessment	**Initial assessment** NICE CG61 Recommendation 1.1.1.1, 1.1.1.2, 1.1.1.3 and 1.1.1.4 (KPIs)

Initial assessment

NICE CG61 – Recommendation 1.1.1.1 (key priority for implementation)

Healthcare professionals should consider assessment for IBS if the person reports having had any of the following symptoms for at least 6 months:

- Abdominal pain or discomfort
- Bloating
- Change in bowel habit.

NICE CG61 – Recommendation 1.1.1.2 (key priority for implementation)

All people presenting with possible IBS symptoms should be asked if they have any of the following 'red flag' indicators and should be referred to secondary care for further investigation if any are present:

- unintentional and unexplained weight loss

- rectal bleeding
- a family history of bowel or ovarian cancer
- a change in bowel habit to looser and/or more frequent stools persisting for more than 6 weeks in a person aged over 60 years.

NICE CG61 – Recommendation 1.1.1.3 (key priority for implementation)

All people presenting with possible IBS symptoms should be assessed and clinically examined for the following 'red flag' indicators and should be referred to secondary care for further investigation if any are present:

- anaemia
- abdominal masses
- rectal masses
- inflammatory markers for inflammatory bowel disease.

NICE CG61 – Recommendation 1.1.1.4 (key priority for implementation)

A diagnosis of IBS should be considered only if the person has abdominal pain or discomfort that is either relieved by defaecation or associated with altered bowel frequency or stool form. This should be accompanied by at least two of the following four symptoms:

- altered stool passage (straining, urgency, incomplete evacuation)
- abdominal bloating (more common in women than men), distension, tension or hardness
- symptoms made worse by eating
- passage of mucus.

Other features such as lethargy, nausea, backache and bladder symptoms are common in people with IBS, and may be used to support the diagnosis.

4.1.3 Current UK practice

A qualitative study based on semi-structured interviews with GPs in north west England[1] found that many GPs felt uncomfortable with the positive approach to

[1] GP perspectives of irritable bowel syndrome – an accepted illness, but management deviates from guidelines: a qualitative study. Harkness et al BMC Family Practice 2013 14:92

diagnosis suggested by the NICE guideline, describing IBS as a diagnosis of exclusion, and the diagnostic process as tentative and iterative. GPs reported that they did not initially add a read code for IBS to the patient record, but delayed until they were more confident with the diagnosis.

A survey of primary care physicians in Leeds[2] found that over two thirds (69%) agreed or strongly agreed that IBS was a diagnosis of exclusion and only 5% strongly disagreed with this statement.

An analysis of health data from 2012-13[3] found that only 0.2% of outpatient attendances to gastroenterology and colorectal surgery specialities were recorded with IBS specific codes although a larger proportion were recorded with IBS-related symptom codes. The study concluded that better diagnosing, through improved clinical coding and standardisation of diagnostic criteria is required to more accurately assess the true cost of IBS and support optimal management of the condition.

[2] Beliefs about management of irritable bowel syndrome in primary care: cross-sectional survey. Shivaji and Ford Gut 2014 63: A207.
[3] Burden of irritable bowel syndrome in an increasingly cost-aware National Health Service. Soubieres et al Frontline Gastroenterology 2015 0:1-6.

4.2 Diagnostic tests

4.2.1 Summary of suggestions

Tests to exclude other diagnoses

Stakeholders highlighted the importance of carrying out specific tests to exclude other possible diagnoses. It was felt to be important to test for coeliac disease before a diagnosis of IBS is confirmed and for faecal calprotectin testing to be used to screen IBS patients for inflammatory bowel disease. There was also a suggestion that IBS patients that are concerned about cancer but are below the age for bowel cancer screening should be offered occult blood testing because their symptoms may mask warning signs. These tests will prevent people being given treatment for IBS inappropriately.

Avoid unnecessary investigations

Stakeholders suggested it should be a priority to reduce the number of unnecessary diagnostic tests carried out for people who are thought to have IBS who do not have red flag indicators. It was felt that younger people aged 16-45 years tend to be over-investigated while older people presenting for the first time may be under-investigated. It was suggested that tests are currently often repeated several times with people referred repeatedly between primary and secondary care. Reducing the number of unnecessary tests will reduce costs and improve patient care.

4.2.2 Selected recommendations from development source

Table 3 below highlights recommendations that have been provisionally selected from the development sources that may support potential statement development. These are presented in full after table 3 to help inform the Committee's discussion.

Table 3 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Tests to exclude other diagnoses	**Diagnostic tests** NICE CG61 Recommendation 1.1.2.1 (KPI) **Faecal calprotectin diagnostic tests for inflammatory diseases of the bowel** NICE DG11 Recommendations 1.1 and 1.2
Avoid unnecessary investigations	**Diagnostic tests** NICE CG61 Recommendation 1.1.2.2 (KPI)

Tests to exclude other diagnoses
Diagnostic tests

NICE CG61 Recommendation 1.1.2.1 (key priority for implementation)

In people who meet the IBS diagnostic criteria, the following tests should be undertaken to exclude other diagnoses:

- full blood count (FBC)
- erythrocyte sedimentation rate (ESR) or plasma viscosity
- c‑reactive protein (CRP)
- antibody testing for coeliac disease (endomysial antibodies [EMA] or tissue transglutaminase [TTG]).

Faecal calprotectin diagnostic tests for inflammatory diseases of the bowel

NICE DG11 Recommendation 1.1

Faecal calprotectin testing is recommended as an option to support clinicians with the differential diagnosis of inflammatory bowel disease (IBD) or irritable bowel syndrome (IBS) in adults with recent onset lower gastrointestinal symptoms for whom specialist assessment is being considered, if:

- cancer is not suspected, having considered the risk factors (for example, age) described in Referral guidelines for suspected cancer, and
- appropriate quality assurance processes and locally agreed care pathways are in place for the testing.

NICE DG11 Recommendation 1.2

Faecal calprotectin testing is recommended as an option to support clinicians with the differential diagnosis of IBD or non‑IBD (including IBS) in children with suspected IBD who have been referred for specialist assessment, if:

- appropriate quality assurance processes and locally agreed care pathways are in place for the testing.

Avoid unnecessary investigations

Diagnostic tests

NICE CG61 Recommendation 1.1.2.2 (key priority for implementation)

The following tests are not necessary to confirm diagnosis in people who meet the IBS diagnostic criteria:

- ultrasound
- rigid/flexible sigmoidoscopy
- colonoscopy; barium enema
- thyroid function test
- faecal ova and parasite test
- faecal occult blood
- hydrogen breath test (for lactose intolerance and bacterial overgrowth).

4.2.3 Current UK practice

Tests to exclude other diagnoses

A case control study based on the General Practice Research Database[4] found that 28% of coeliac patients had undergone treatment for IBS before the diagnosis of coeliac disease.

A survey of primary care physicians in Leeds[5] found that 80% checked coeliac serology often or always in suspected IBS.

An audit of primary care faecal calprotectin tests carried out by Lancashire Teaching Hospitals[6] found that 29% of results collected in 2012-13 were consistent with intestinal inflammation. The audit concluded that there was potential for an up to 71% reduction in patients referred to gastroenterology with IBS/IBD symptoms if GPs used the calprotectin service as part of a locally agreed care pathway.

An assessment of faecal calprotectin tests at a hospital in Nottingham[7] found that patients with suspected IBS with a normal test result were still having other investigations - 51% had a colonoscopy, 20% had a CT or MRI and 9% had a flexible sigmoidoscopy. The study concluded that consideration of the test result before further investigations are ordered could reduce costs.

[4] An excess of prior irritable bowel syndrome or treatments in Celiac disease: evidence of diagnostic delay. Card et al Scandinavian Journal of Gastroenterology 2013
[5] Beliefs about management of irritable bowel syndrome in primary care: cross-sectional survey. Shivaji and Ford Gut 2014 63: A207.
[6] Diagnostic performance of faecal calprotectin in primary care. Hunt et al Clinical Chemistry and Laboratory Medicine Conference 2014.
[7] Under-utilisation Of Faecal Calprotectin To Exclude Ibd In Patients With Functional Bowel Disorders. Astle and Lewis Gut 2014 63: A207-A208

Avoid unnecessary investigations

The British Society for Gastroenterology Commissioning report for IBS[8] indicates that up to 50% of patients who are diagnosed with IBS by their GP, are referred to hospital for endoscopy and other tests to eliminate more serious illness.

An unpublished clinical audit carried out by a GP in Somerset in 2011 indicated that 14.3% of secondary care gastroenterology referrals were for IBS patients aged 16 to 45 years who did not have red flag indicators.

An analysis of cost data for IBS[9] found that 49% of patients seen for lower GI endoscopies in 2012-13 had no further activity provided by the hospital provider trust as an inpatient or outpatient over the subsequent 12 months, implying functional symptoms. The study concluded that better diagnosis and subsequent management of IBS within a primary care setting may provide direct savings in the cost of IBS management.

Contrary to the other studies, a study of patients meeting Rome 11 criteria for diarrhoea predominant IBS at a university hospital in Sheffield[10] showed a high frequency of investigations and although the majority of results negative, 22% of patients were, however, identified as having an alternative diagnosis with pancreatic insufficiency and coeliac disease being the most common.

[8] BSG Commissioning Report for IBS 2009
[9] The cost of irritable bowel syndrome (IBS) in England. Soubieres et al, Value in Health Conference 2014.
[10] Prospective evaluation of 403 patients with diarrhoea predominant irritable bowel syndrome fulfilling Rome 11 criteria. Lin et al Digestive Disorders Federation Meeting 2012.

4.3 Dietary and lifestyle advice

4.3.1 Summary of suggestions

Advice to support self-management

Stakeholders suggested that people diagnosed with IBS should receive information about the nature and management of the condition to support self-management, at diagnosis and throughout treatment. It was felt that advice should be tailored to the individual's symptoms and include dietary advice, stress reduction and over the counter medications. It was suggested that there should be more emphasis on the role of community pharmacists in providing this information. The information available currently was felt to be conflicting and confusing.

Access to community dietitians

Stakeholders suggested that it is important that people with IBS who need second-line dietary advice can access the expertise of a registered dietitian to assist them in managing their condition. It was suggested that this may be particularly important for those with diarrhoea predominant symptoms. It is important because food exclusion diets can lead to inadequate nutrient intake if they are not supervised appropriately. Stakeholders indicated there is a need for more low FODMAP diet (fermentable oligosaccharides, disaccharides, monosaccharides and polyolst) trained dietitians in primary care with a clear GP referral pathway.

Dietary management in children and young people

A suggestion was made to develop guidance on the dietary management of IBS in children and young people because some paediatric health professionals are trialling the low FODMAP diet but as there is no guidance there are inconsistencies in patient care.

4.3.2 Selected recommendations from development source

Table 4 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 4 to help inform the Committee's discussion.

Table 4 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Advice to support self-management	**Dietary and lifestyle advice** NICE CG61 Recommendation 1.2.1.1 (KPI), 1.2.1.2, 1.2.1.4, 1.2.1.5 (KPI)
Access to community dietitians	**Dietary and lifestyle advice** NICE CG61 Recommendation 1.2.1.8
Dietary management in children and young people	Not directly covered in NICE CG61 and no recommendations are presented.

Advice to support self-management
Dietary and lifestyle advice

NICE CG61 Recommendation 1.2.1.1(key priority for implementation)

People with IBS should be given information that explains the importance of self‐help in effectively managing their IBS. This should include information on general lifestyle, physical activity, diet and symptom‐targeted medication.

NICE CG61 Recommendation 1.2.1.2

Healthcare professionals should encourage people with IBS to identify and make the most of their available leisure time and to create relaxation time.

NICE CG61 Recommendation 1.2.1.4

Diet and nutrition should be assessed for people with IBS and the following general advice given.

- Have regular meals and take time to eat.
- Avoid missing meals or leaving long gaps between eating.
- Drink at least 8 cups of fluid per day, especially water or other non‐caffeinated drinks, for example herbal teas.
- Restrict tea and coffee to 3 cups per day.
- Reduce intake of alcohol and fizzy drinks.
- It may be helpful to limit intake of high‐fibre food (such as wholemeal or high‐fibre flour and breads, cereals high in bran, and whole grains such as brown rice).

- Reduce intake of 'resistant starch' (starch that resists digestion in the small intestine and reaches the colon intact), which is often found in processed or re‑cooked foods.
- Limit fresh fruit to 3 portions per day (a portion should be approximately 80 g).
- People with diarrhoea should avoid sorbitol, an artificial sweetener found in sugar‑free sweets (including chewing gum) and drinks, and in some diabetic and slimming products.
- People with wind and bloating may find it helpful to eat oats (such as oat‑based breakfast cereal or porridge) and linseeds (up to 1 tablespoon per day).

NICE CG61 Recommendation 1.2.1.5 (key priority for implementation)

Healthcare professionals should review the fibre intake of people with IBS, adjusting (usually reducing) it while monitoring the effect on symptoms. People with IBS should be discouraged from eating insoluble fibre (for example, bran). If an increase in dietary fibre is advised, it should be soluble fibre such as ispaghula powder or foods high in soluble fibre (for example, oats).

Access to community dieticians

NICE CG61 Recommendation 1.2.1.8

If a person's IBS symptoms persist while following general lifestyle and dietary advice, offer advice on further dietary management. Such advice should:

- include single food avoidance and exclusion diets (for example, a low FODMAP [fermentable oligosaccharides, disaccharides, monosaccharides and polyols] diet)
- only be given by a healthcare professional with expertise in dietary management.

4.3.3 Current UK practice

Advice to support self-management

A small study of GPs in north west England[11] found that giving lifestyle advice, predominantly about diet, to help patients self-manage their condition was the first step in management for all GPs that participated in the study.

A survey of UK gastroenterologists' practice regarding dietary advice in IBS[12] found that 84% reported giving specific dietary advice and 61% reported giving advice

[11] GP perspectives of irritable bowel syndrome – an accepted illness, but management deviates from guidelines: a qualitative study. Harkness et al BMC Family Practice 2013 14:92

about dietary exclusion to more than 25% of their IBS patients. The survey data was collected during 2007-8 and may not reflect current practice.

Access to community dietitians

Stakeholders suggested there is currently wide variation across the UK in outpatient waiting times to see a dietitian for management of IBS.

A survey of UK gastroenterologists[12] found that the majority referred less than 25% of their IBS patients to see a dietitian.

Dietary management in children and young people

No published studies on current practice were highlighted for this suggested area for quality improvement.

[12] Survey of UK and New Zealand gastroenterologists' practice regarding dietary advice and food exclusion in irritable bowel syndrome and inflammatory bowel disease. Inns and Emmanuel Frontline Gastroenterology 2013 4, 44-50

4.4 Pharmacological therapy

4.4.1 Summary of suggestions

Antispasmodics

It was suggested that it is important to advise people with IBS to use antispasmodics for symptom relief. Stakeholders indicated this can reduce the inappropriate use of analgesics for abdominal cramping and spasm pain associated with IBS.

Review of medication

A stakeholder highlighted the importance of ensuring that people with IBS who start drug therapy are followed up within a specified time to prevent suboptimal or inappropriate treatment.

4.4.2 Selected recommendations from development source

Table 5 below highlights recommendations that have been provisionally selected from the development sources that may support potential statement development. These are presented in full after table 5 to help inform the Committee's discussion.

Table 5 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Antispasmodics	**Pharmacological therapy** NICE CG61 Recommendation 1.2.2.1
Review of medication	**Pharmacological therapy** NICE CG61 Recommendation 1.2.2.3, 1.2.2.6 (KPI) and 1.2.2.8

Antispasmodics

Pharmacological therapy

NICE CG61 Recommendation 1.2.2.1

Healthcare professionals should consider prescribing antispasmodic agents for people with IBS. These should be taken as required, alongside dietary and lifestyle advice.

Review of medication

NICE CG61 Recommendation 1.2.2.3

Consider linaclotide for people with IBS only if:

- optimal or maximum tolerated doses of previous laxatives from different classes have not helped and
- they have had constipation for at least 12 months.

Follow up people taking linaclotide after 3 months.

NICE CG61 Recommendation 1.2.2.6 (key priority for implementation)

Consider tricyclic antidepressants (TCAs) as second‑line treatment for people with IBS if laxatives, loperamide or antispasmodics have not helped. Start treatment at a low dose (5–10 mg equivalent of amitriptyline), taken once at night, and review regularly. Increase the dose if needed, but not usually beyond 30 mg.

NICE CG61 Recommendation 1.2.2.8

Take into account the possible side effects when offering TCAs or SSRIs to people with IBS. Follow up people taking either of these drugs for the first time at low doses for the treatment of pain or discomfort in IBS after 4 weeks and then every 6–12 months.

4.4.3 Current UK practice

Antispasmodics

A survey of primary care physicians in Leeds[13] found that 76% agreed that antispasmodics were an effective therapy for IBS although less than 50% reported using them.

Review of medication

No published studies on current practice were highlighted for this suggested area for quality improvement.

[13] Beliefs about management of irritable bowel syndrome in primary care: cross-sectional survey. Shivaji and Ford Gut 2014 63: A207.

4.5 Psychological interventions

4.5.1 Summary of suggestions

Assessment of psychosocial impact

It was suggested that when a person with IBS is assessed it should incorporate both clinical severity and the psychosocial impact of the condition to inform treatment planning.

Early access to psychological interventions

There was a suggestion that it may be useful to consider earlier psychological therapy for IBS patients rather than just offering it to those whose condition is resistant to treatment.

Psychological interventions for ongoing symptoms

Stakeholders suggested it is important to ensure that patients with IBS who do not respond to lifestyle advice and drug treatments are offered psychological interventions.

4.5.2 Selected recommendations from development source

Table 6 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 6 to help inform the Committee's discussion.

Table 6 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Assessment of psychosocial impact	Not directly covered in NICE CG61 and no recommendations are presented.
Early access to psychological interventions	Not directly covered in NICE CG61 and no recommendations are presented. Note this area is relevant to CG61 research recommendation 2.2 Psychological interventions
Psychological interventions for ongoing symptoms	**Psychological interventions** NICE CG61 Recommendation 1.2.3.1

Psychological interventions for ongoing symptoms

Psychological interventions

NICE CG61 Recommendation 1.2.3.1

Referral for psychological interventions (cognitive behavioural therapy [CBT], hypnotherapy and/or psychological therapy) should be considered for people with IBS who do not respond to pharmacological treatments after 12 months and who develop a continuing symptom profile (described as refractory IBS).

4.5.3 Current UK practice

Assessment of psychosocial impact

No published studies on current practice were highlighted for this suggested area for quality improvement.

Early access to psychological interventions

No published studies on current practice were highlighted for this suggested area for quality improvement.

Psychological interventions for ongoing symptoms

A small qualitative study of GPs in north west England[14] found that all GPs who participated in the study were reluctant to refer patients with IBS for psychological therapies because primary care mental health services are scarce and need to be reserved for those patients with overt mental health symptoms.

A survey of primary care physicians in Leeds[15] found that 59% agreed that psychological therapies were an effective therapy for IBS although 80% stated that they were not easily available.

[14] GP perspectives of irritable bowel syndrome – an accepted illness, but management deviates from guidelines: a qualitative study. Harkness et al BMC Family Practice 2013 14:92
[15] Beliefs about management of irritable bowel syndrome in primary care: cross-sectional survey. Shivaji and Ford Gut 2014 63: A207.

4.6 Follow-up

4.6.1 Summary of suggestions

It was suggested that, as for other chronic conditions, people with IBS should be followed up annually to check for red flag symptoms, support self-management and make any necessary referrals for dietary advice or psychological intervention. It was also felt to be important to check for co-morbidities and ensure medication for IBS is not aggravating other conditions.

4.6.2 Selected recommendations from development source

Table 7 below highlights recommendations that have been provisionally selected from the development source that may support potential statement development. These are presented in full after table 7 to help inform the Committee's discussion.

Table 7 Specific areas for quality improvement

Suggested quality improvement area	Selected source guidance recommendations
Follow-up	**Follow-up** NICE CG61 Recommendation 1.2.5.1

Follow-up

NICE CG61 Recommendation 1.2.5.1

Follow‑up should be agreed between the healthcare professional and the person with IBS, based on the response of the person's symptoms to interventions. This should form part of the annual patient review. The emergence of any 'red flag' symptoms during management and follow‑up should prompt further investigation and/or referral to secondary care.

4.6.3 Current UK practice

No published studies on current practice were highlighted for this suggested area for quality improvement.

4.7 Additional areas

Summary of suggestions

The improvement areas below were suggested as part of the stakeholder engagement exercise. However they were felt to be either unsuitable for development as quality statements, outside the remit of this particular quality standard referral or require further discussion by the Committee to establish potential for statement development.

There will be an opportunity for the QSAC to discuss these areas at the end of the session on 25 June 2015.

Skills and training

Stakeholders highlighted that improving staff training, knowledge and competency in diagnosing and managing IBS will improve patient care. Quality standards do not contain broad statements specifically on training and competency.

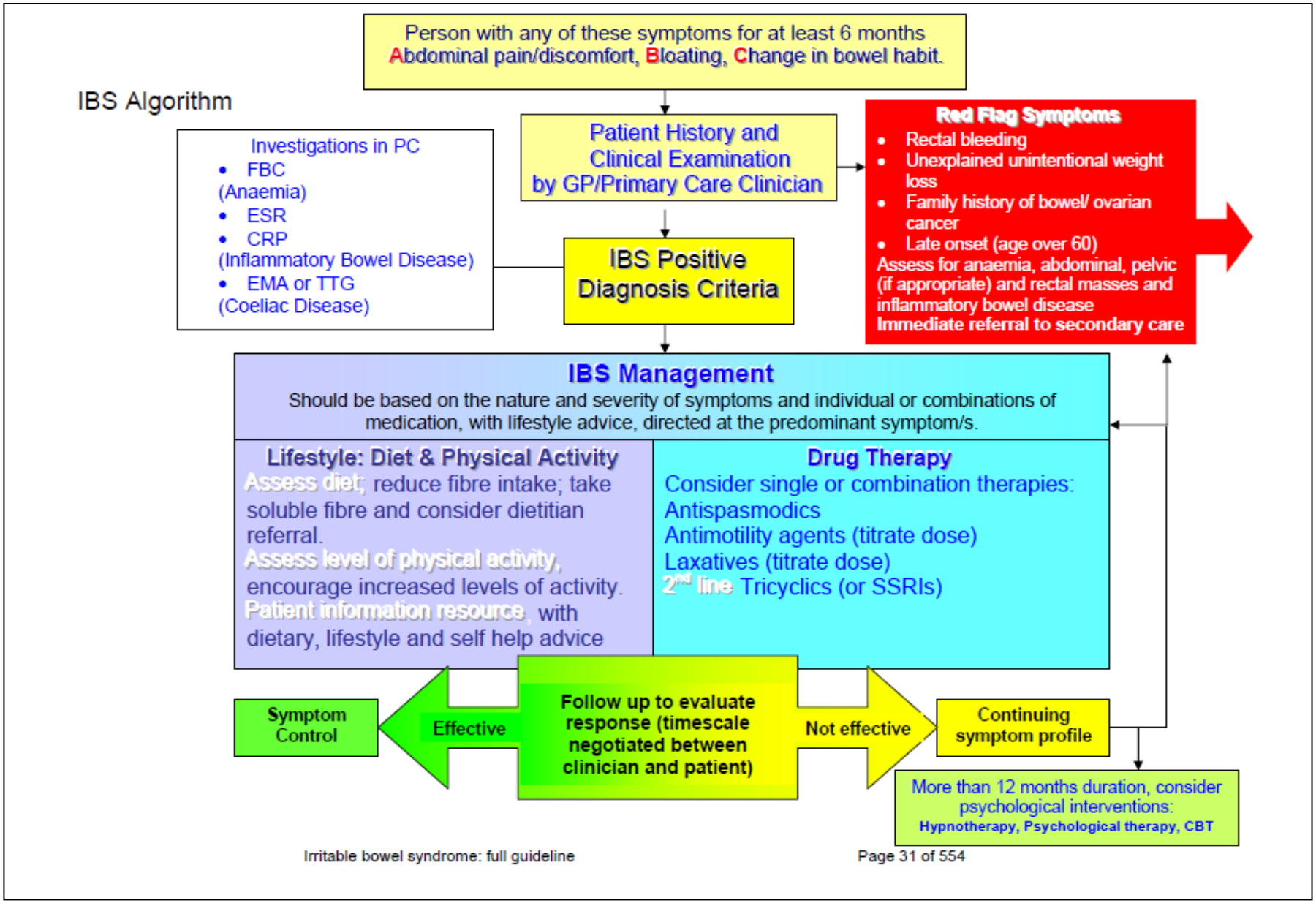
Multi-disciplinary approach

The need for an improved interdisciplinary approach to the management of IBS across primary and secondary care was highlighted as a priority by stakeholders. This could be addressed within the audience descriptors for particular statements.

Vitamin D and fatty acids

A stakeholder felt that an increase in Omega-3 fatty acids and vitamin D can help to treat IBS. Testing for these levels may help to identify those people whose levels need to be adjusted. The primary development source (NICE CG61) does not contain recommendations relating to this suggestion.

Appendix 1: IBS Algorithm



Appendix 2: Key priorities for implementation (CG61)

Recommendations that are key priorities for implementation in the source guideline and that have been referred to in the main body of this report are highlighted in grey.

Initial assessment

Healthcare professionals should consider assessment for IBS if the person reports having had any of the following symptoms for at least 6 months:

- Abdominal pain or discomfort
- Bloating
- Change in bowel habit. [Recommendation 1.1.1.1]

All people presenting with possible IBS symptoms should be asked if they have any of the following 'red flag' indicators and should be referred to secondary care for further investigation if any are present:

- unintentional and unexplained weight loss
- rectal bleeding
- a family history of bowel or ovarian cancer
- a change in bowel habit to looser and/or more frequent stools persisting for more than 6 weeks in a person aged over 60 years. [Recommendation 1.1.1.2]

All people presenting with possible IBS symptoms should be assessed and clinically examined for the following 'red flag' indicators and should be referred to secondary care for further investigation if any are present:

- anaemia
- abdominal masses
- rectal masses
- inflammatory markers for inflammatory bowel disease.

Measure serum CA125 in primary care in women with symptoms that suggest ovarian cancer in line with the NICE guideline on ovarian cancer. [Recommendation 1.1.1.3]

A diagnosis of IBS should be considered only if the person has abdominal pain or discomfort that is either relieved by defaecation or associated with altered bowel frequency or stool form. This should be accompanied by at least two of the following four symptoms:

- altered stool passage (straining, urgency, incomplete evacuation)
- abdominal bloating (more common in women than men), distension, tension or hardness
- symptoms made worse by eating
- passage of mucus.

Other features such as lethargy, nausea, backache and bladder symptoms are common in people with IBS, and may be used to support the diagnosis. [Recommendation 1.1.1.4]

Diagnostic tests

In people who meet the IBS diagnostic criteria, the following tests should be undertaken to exclude other diagnoses:

- full blood count (FBC)
- erythrocyte sedimentation rate (ESR) or plasma viscosity
- c‑ reactive protein (CRP)
- antibody testing for coeliac disease (endomysial antibodies [EMA] or tissue transglutaminase [TTG]). [Recommendation 1.1.2.1]

The following tests are not necessary to confirm diagnosis in people who meet the IBS diagnostic criteria:

- ultrasound
- rigid/flexible sigmoidoscopy
- colonoscopy; barium enema
- thyroid function test
- faecal ova and parasite test
- faecal occult blood

- hydrogen breath test (for lactose intolerance and bacterial overgrowth). [Recommendation 1.1.2.2]

Dietary and lifestyle advice

People with IBS should be given information that explains the importance of self-help in effectively managing their IBS. This should include information on general lifestyle, physical activity, diet and symptom-targeted medication. [Recommendation 1.2.1.1]

Healthcare professionals should review the fibre intake of people with IBS, adjusting (usually reducing) it while monitoring the effect on symptoms. People with IBS should be discouraged from eating insoluble fibre (for example, bran). If an increase in dietary fibre is advised, it should be soluble fibre such as ispaghula powder or foods high in soluble fibre (for example, oats). [Recommendation 1.2.1.5]

Pharmacological therapy

People with IBS should be advised how to adjust their doses of laxative or antimotility agent according to the clinical response. The dose should be titrated according to stool consistency, with the aim of achieving a soft, well‑formed stool (corresponding to Bristol Stool Form Scale type 4). [Recommendation 1.2.2.5]

Consider tricyclic antidepressants (TCAs) as second-line treatment for people with IBS if laxatives, loperamide or antispasmodics have not helped. Start treatment at a low dose (5–10 mg equivalent of amitriptyline), taken once at night, and review regularly. Increase the dose if needed, but not usually beyond 30 mg. [Recommendation 1.2.2.6]

Appendix 3: Suggestions from stakeholder engagement exercise – registered stakeholders

ID	Report Section	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?	Supporting information
	4.1	SCM1	Key area for quality improvement 1	Patients with symptoms that meet the criteria for IBS should receive a formal diagnosis, after red flag causes are excluded	There is evidence that IBS is under-diagnosed in the UK and this could be a barrier to providing effective treatment.	Spiller et al. Guidelines on the irritable bowel syndrome: mechanisms and practical management (Gut 2007)
	4.1	Royal College of Physicians	Low rates of missed organic disease in those diagnosed (especially IBD, colorectal cancer).			*No additional information provided by stakeholder*
	4.1	Almirall UK Ltd	People with IBS should feel that that their condition is important and legitimate when seeking the help of their healthcare professional	GPs should be capturing data around IBS more accurately and timely fashion, for example when a positive clinical diagnosis is reached, that this is being recorded in the medical notes and that the clinical coding also reflects this	To ensure appropriate levels of reimbursement, commissioning decisions rely upon definitive clinical coding of IBS and its subtypes, which will then allow people with IBS to be fully quantified within the system and resources allocated proportionately (Soubieres et al 2015)	Soubieres et al Burden of IBS in an increasingly cost aware NHS. Frontline Gastroenterology 2015
	4.1	NHS England	Data is always important	Data sources for activity in the area of Irritable Bowel (IBS) will be few and far between. Very few patients are admitted to hospital or attend Emergency Departments with IBS as the recorded diagnosis, even if IBS did underlie their problems		Data sources

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	4.2	SCM2	Key area for quality improvement **1 Awareness and Screening.** Everybody attending their GP should be asked specifically about symptoms of Irritable Bowel Syndrome - long term recurrent abdominal discomfort and bowel disturbance. People who have had symptoms of Irritable Bowel Syndrome for more than six months should be screened for coeliac disease, inflammatory bowel disease and bowel cancer (also ovarian cancer).	Symptoms of IBS may mimic other serious and treatable abdominal disease. It is important that all patients are screened for the most prevalent of these conditions.	Abdominal discomfort and irregularities in bowel function are common in the community and may be caused by treatable conditions. 4% of people diagnosed with IBS have coeliac disease and about 1 in a 100 have inflammatory bowel disease. Screening people with IBS for IBD and diagnosing IBD earlier will facilitate meeting the IBD Standards [QS81]. The development of a chronic bowel disturbance in a middle aged or elderly person may be the first sign of colonic cancer. Ovarian cancer may present with bloating. All of these conditions may be detected by simple non-invasive screening tests carried out in the community. This improvement would increase health practitioners confidence in diagnosing IBS and facilitate earlier treatment.	Coeliac disease: Recognition and assessment of coeliac disease NICE Guidelines [CG86] Faecal calprotectin diagnostic tests for inflammatory diseases of the bowel NICE diagnostics guidance [DG11] Ovarian cancer NICE quality standard [QS18] Standard. Women aged 50 years or over reporting one or more symptoms occurring persistently or frequently that suggest ovarian cancer are offered a CA125 test. NICE Guidelines [QS18] clinical audit tool [CG122] Ovarian Cancer Clinical Audit tool Referral guidelines for suspected cancer NICE Guidelines [CG27]. BSG Commissioning

ID	Report Section	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?	Supporting information
						Report - Diagnosis Chronic abdominal discomfort, diarrhoea and constipation The use of screening in primary care would mean early diagnosis of pathological disease while IBS could be diagnosed with confidence and managed in primary care offering continuity of care. Inflammatory Bowel Disease: NICE quality standard [QS81] Standard 1 People with suspected inflammatory bowel disease have a specialist assessment within 4 weeks of referral.

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	4.2	Coeliac UK	Testing for coeliac disease before a diagnosis of irritable bowel syndrome is confirmed	1 in 100 people in the UK have coeliac disease [1], however only 24% of people in the UK are diagnosed [2]. Testing for coeliac disease before diagnosis with irritable bowel syndrome could help to increase rates of coeliac disease diagnosis. On average it takes 13 years from the onset of symptoms to diagnosis of coeliac disease [3] and a delayed diagnosis of coeliac disease can result in continued ill health, osteoporosis, unfavourable pregnancy outcomes, and increased risk of intestinal malignancy [4].	Research shows that 1 in 4 people with coeliac disease have previously received treatment for irritable bowel syndrome [5]. It is important that healthcare professionals responsible for diagnosing irritable bowel syndrome are aware that patients should first be serologically tested for coeliac disease. This is in line with recommendations from NICE for recognition and assessment of coeliac disease (2009) [4] and also NICE guideline for diagnosis and management of IBS in adults [6].	[1] Bingley PJ, Williams AJ, Norcross AJ et al (2004) Undiagnosed coeliac disease at age seven: population based prospective birth cohort study. BMJ 328(7435): 322–3. doi:http://dx.doi.org/10.1136/bmj.328.7435.322 [2] West J, Fleming KM, Tata LJ et al (2013) Incidence and Prevalence of Celiac Disease and Dermatitis Herpetiformis in the UK Over Two Decades: Population-Based Study. Am J Gastroenterol 2014;109:757-768 [3] Gray AM & Papanicolas IN (2010) Impact of symptoms on quality of life before and after diagnosis of coeliac disease: results from a UK population survey. BMC Health Serv Res 10: 105. doi:10.1186/1472-6963-

ID	Report Section	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?	Supporting information
						10-105 [4] National Institute for Health and Clinical Excellence (2009) Coeliac disease: recognition and assessment of coeliac disease. http://www.nice.org.uk/guidance/cg86 (accessed 30 April 2015) [5] Card TR, Siffledeen J, West J et al (2013) An excess of prior irritable bowel syndrome diagnoses or treatments in Celiac disease: evidence of diagnostic delay. Scand J Gastroenterol 48(7): 801–7. doi: 10.3109/00365521.2013.786130 [6] National Institute for Health and Clinical Excellence (2015) Irritable bowel syndrome in adults: diagnosis and management of irritable

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						bowel syndrome in primary care http://www.nice.org.uk/guidance/cg81 (accessed 30 April 2015)

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	4.2	British Society of Gastroenterology	Key area for quality improvement	PRIMARY CARE MANAGEMENT AND CARE PROVISION: Is there a role for faecal calprotectin and IBS questionnaires to establish a diagnosis without colonoscopy, and then move on to tailored treatment?		*No additional information provided by stakeholder*
	4.2	Almirall UK Ltd	People with IBS should be offered faecal calprotectin testing in primary care nationally	Positive diagnosis of IBS is critical to optimising management in primary care Faecal calprotectin has been deemed cost-effective by NICE and is less invasive than colonoscopy	Healthcare professionals should be encouraged to avoid the stereotypical “last diagnosis of exclusion” label that is reserved for people with IBS, thereby encouraging a formal positive clinical diagnosis and better communication with the patient, at the earliest stage possible and more widespread faecal calprotectin testing may help with this	NICE DG11 Faecal calprotectin
	4.2	SCM3	Key area for quality improvement 4 Introduce faecal calprotectin screening for IBS patients.	In diarrhoea predominant IBS especially, faecal calprotectin testing is a good screening tool for inflammatory bowel disease which significantly reduces the need for colonoscopy.	Would be an effective way of reducing colonoscopy rates	There is now good evidence on this.
	4.2	SCM3	Key area for quality improvement 3 Re-introduce occult blood testing	As patients with IBS grow older, they worry that the possible development of bowel cancer, as their continuing bowel symptoms mask one of	The availability of occult blood testing would allow us to re-assure patients and save money by reducing colonoscopy rates.	*No additional information provided by stakeholder*

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				the primary warning signs of this disease, which is a change of bowel habit. Unfortunately occult blood testing can now only be undertaken by the national bowel cancer screening programme, which has a lower age limit. Consequently, if an IBS patient below this age needs to be re-assured, they have to have a colonoscopy, which is a complete waste of resource.		

ID	Report Section	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?	Supporting information
	4.2	SCM3	Key area for quality improvement 5 Combined faecal calprotectin and occult blood testing	See above.	GPs refer IBS patients to secondary care mainly because od symptom severity or diagnostic uncertainty. The latter problem could be significantly reduced if they could perform combined faecal calprotectin and occult blood testing.	*No additional information provided by stakeholder*
	4.2	British Dietetic Association	Key area for quality improvement 1 QS1: on diagnosis **avoidance of unnecessary investigations through GP training in IBS diagnosis and evidence-based management**	Only with effective GP training can we meet the resource impact recommendations set out in the 2008 NICE document of reducing the number of unnecessary diagnostic tests and encourage a move away from 'diagnosis via exclusion'. NICE IBS guidance 2008 stated, *"Clinical experts felt that the need for appropriate training in the IBS diagnosis criteria could delay implementation of this guidance*".	To significantly reduce the referrals to secondary care gastroenterology services for patients between 16 and 45 with a no red flags. To improve cost effectiveness. So that patients do not undergo unnecessary invasive investigations that can be distressing and painful to the individual e.g. colonoscopy. To improve patient quality of care: reduction in waiting times to provide IBS management/gain a solution to their IBS symptoms Lack of appropriate tools being used in primary care to improve confidence in IBS diagnosis? e.g. use of faecal calprotectin	NICE IBS Costing Report 2008: *"Healthcare professionals may need training in the diagnostic criteria and management of IBS. As they gain confidence in their ability to diagnose and treat IBS in primary care, the full costs and savings of implementation will be realized."* NICE guidance DG11 Faecal calprotectin diagnostic tests for inflammatory diseases of the bowel: guidance Faecal calprotectin for differentiating between irritable bowel syndrome and inflammatory bowel disease: a useful screen in

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						daily gastroenterology practice. Banerjee A et al. Frontline Gastroenterology GPs could be empowered to make a positive diagnosis of IBS via training given through national GP education trusts and e.g. the use of a GP desktop app on "Diagnosis of IBS'. An IBS pathway can direct GP referrals to primary care based specialist dietetic services instead of secondary care. Somerset Primary Care Trust have developed a GP desktop App for both the 'Diagnosis of IBS' and the 'Management of IBS' Greig E 2011 Somerset Clinical Audit (unpublished) showing 14.3% of secondary care gastroenterology referrals were for non red flag IBS patients between the age of 16 and 45. Emma Grieg is a GP.

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	4.2	Royal College of Physicians	The proportion of patients with IBS being diagnosed in primary care without referral to secondary care			*No additional information provided by stakeholder*
	4.2	Almirall UK Ltd	People with Irritable Bowel Syndrome (IBS) should have an individual management plan that is optimised according to their symptom profile and predominant bowel habit, in primary care in partnership with their healthcare professional in order to improve their quality of life as early as possible and also help reduce the number of potentially avoidable referrals to secondary care	Given the two reasons why people with IBS are referred to secondary care (help with symptom control and/or diagnostic uncertainty), improving the quality of GI referrals is imperative for successful implementation of CG61. This will also reduce the unsustainable burden that is being put on secondary care GI resources, which currently is having an impact across gastroenterology services nationwide GPs should be incentivised to improve the quality of their GI referrals and to have their performance measured by this metric more formally and linked to reimbursement	Currently within the NHS there are significant numbers of people with IBS being referred into secondary care, where they are being over-investigated, often by colonoscopy for example, which is a valuable and costly resource. There is also evidence to suggest that for certain subtypes of IBS, investigation in secondary care yields no further diagnostic value, yet they are still being referred currently (Lin et al 2014). HES data allows CCGs to search for and monitor reductions in rates of "lower GI colonoscopies where no further follow up is seen in the clinical record" (Soubieres et al 2015). This measureable, reproducible method could be used to help compare the quality of referrals across regions, help standardise and improve patient experience, whilst also giving more space for prioritised secondary care	Soubieres et al 2015 Burden of IBS in an increasingly cost aware NHS*. Frontline Gastroenterology* Lin et al 2014 Prevalence, investigational pathways and diagnostic outcomes in differing irritable bowel syndrome subtypes *EJGH* Power, Ford et al 2013 Meta-analysis of constipation symptoms in Colorectal Cancer *AJG* Wolverhampton CCG recently set up a Gastroenterology Referral Clinical Assessment Service (CAS) following growing demand for hospital services and recognition that 30% of their referrals were

ID	Report Section	Stakeholder	Suggested key area for quality improvement	Why is this important?	Why is this a key area for quality improvement?	Supporting information
					patients (eg 2WW/16WW) in addition to reducing costs at CCG level	potentially avoidable. This service 'triages' referrals to request investigations or refer back to primary care beforehand. So far this has led to a 20% reduction in outpatient referrals and this could form the basis of a quality indicator nationally

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	4.2	Almirall UK Ltd	People with IBS should be managed in primary care in accordance with NICE CG61 guidelines. Only when these options have been exhausted should referral take place	Improving the quality of GI referrals is imperative for successful implementation of CG61 as well as helping to alleviate the unsustainable burden that is being put on secondary care GI resources, which currently is having an impact on patient quality of care across gastroenterology CCGs need to be incentivised to improve the quality of their GI referrals and to have their performance measured by this metric more formally and linked to reimbursement	Currently within the NHS there are significant numbers of people with IBS being referred into secondary care, where they are being over investigated, often by colonoscopy for example, which is a valuable and costly resource. There is also evidence to suggest that for certain subtypes of IBS, investigation in secondary care yields no further diagnostic value, yet they are still being referred currently (Lin et al 2014). HES data allows CCGs to search for and monitor reductions in rates of "lower GI colonoscopies where no further follow up is seen in the clinical record" (Soubieres et al 2015) This measurable, objective way to compare the quality of referrals across regions, will help standardise and improve patient experience, whilst also giving more space for prioritised secondary care patients (eg 2WW/16WW) in addition to reducing costs at CCG level Existing diagnostic criteria (eg	Soubieres et al 2015 Burden of IBS in an increasingly cost aware NHS*. Frontline Gastroenterology* Lin et al 2014 Prevalence, investigational pathways and diagnostic outcomes in differing irritable bowel syndrome subtypes *EJGH* Power, Ford et al 2013 Meta-analysis of constipation symptoms in Colorectal Cancer *AJG* Wolverhampton CCG recently set up their Gastroenterology Referral Clinical Assessment Service (CAS) following growing demand for hospital services and recognition that 30% of their referrals were potentially avoidable. This service 'triages' referrals to request investigations or refer back to primary care beforehand. So far this

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					Rome, Manning) perform modestly in distinguishing IBS from organic disease. There appears to be little difference in terms of accuracy. More accurate ways of diagnosing IBS, avoiding the need for investigation, are required (Ford et al 2013) but in the meantime, upskilling GPs and allied healthcare professionals in functional GI disease should be the first priority as they manage the vast majority of people with IBS in the early stages of their condition	has led to a 20% reduction in outpatient referrals and this could form the basis of a quality indicator nationally Ford et al 2013 Validation of Rome III criteria in secondary care *Gastroenterology*

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	4.2	SCM3	Key area for quality improvement 2 Reduce unnecessary investigation	Once serious disease has been excluded, patients with IBS are usually discharged from secondary care back to their GP. If they relapse and are referred back to secondary care, the default response is to repeat all the tests, which remain negative and they are discharged again. This cycle can be repeated many times especially if they are referred to different clinics. As a result, patients can be subjected to multiple colonoscopies, ultrasound scans, CT scans, MR scans to name but a few. In most cases it is questionable whether any of these needed to be undertaken.	Reduction in repetitive investigation would save the health service considerable sums of money as well as reducing the risks of these tests (although negligible) to the patient. The patient also needs to be educated that repetitive investigation is a fruitless exercise, as they often feel that if they have enough tests 'they will finally find out what is wrong with me".	*No additional information provided by stakeholder*
	4.3	SCM1	Key area for quality improvement 5	Patients diagnosed with IBS should receive education about the nature and management of their condition at the point of diagnosis and throughout the treatment journey	This will empower patients in the management of their condition and allow for a more holistic approach to patient care, including self-management.	IBS network – top 10 requests for those newly diagnosed included more information about the nature of the condition and its management/prognosis http://www.theibsnetwork.org/ Spiller et al. Guidelines on

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						the irritable bowel syndrome: mechanisms and practical management (Gut 2007)

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	4.3	SCM2	Key area for quality improvement **2 Access.** After screening, people diagnosed with IBS should be given appropriate information which explains the nature of IBS and offers advice on first line self-management with diet, stress reduction/mindfulness and over the counter medications.	Patients are often confused about what IBS is and how to manage it and may be misled and exploited by commercial organisations offering spurious diagnostic tests and cures. Self care depends on reliable information, accessible to patients who do not have a medical background.	IBS affects about 15% of people in the UK. Only those with the most severe symptoms can have the intensive one to one medical attention that many patients need. Logistics suggest that the solution must reside in self care, yet self care must be underpinned by good reliable practical information and advice. The information available for patients diagnosed with IBS is often conflicting and confusing.	Patient experience in adult NHS services NICE quality standard [QS15] Statement 5. Patients are supported by healthcare professionals to understand relevant treatment options, including benefits, risks and potential consequences. Improving care for people with long term conditions (2011) what motivates people to self-care Supporting self-care – It is important that healthcare professionals act appropriately to support self-care and do not just discharge the individual ("There's nothing more we can do for you") BSG Commissioning Evidence Based Care Self-care IBS - Common failings in management include: • often no enquiry into

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						stressful circumstances, • little dietary advice, • No collaboration with the charitable sector. BSG Commissioning Evidenced Based Care report - Most patients with potentially long term gastrointestinal conditions such as irritable bowel syndrome (IBS) should be managed in primary care. Commissioners should involve patients in designing locally agreed pathways of care and service provision. There are well established patients charities that can facilitate this process including The IBS Network. S. D. Dorn, O. S. Palsoon,M. Woldeghebriel, B. Fowler, R. McCoy, M. Weinberger & D. A. Drossman (2015) Development and pilot testing of an integrated,

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						web-based self-management program for irritable bowel syndrome (IBS) Neurogastroenterol Motil (2015) 27, 128–134 The IAPT document 'Positive Practice Guide to MUS' states that anxiety and depression symptomatology should be systematically checked and treated in IBS patients, as psychological factors are important moderators of symptom severity, symptom persistence, decisions to seek treatment, and response to treatment (Fond et al., 2014).

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	4.3	Boehringer Ingelheim	Key area for quality improvement 2	Educate regarding community pharmacy based access to symptom relief medications and healthcare advice	Pharmacy is an integral part of our NHS and provides support to GPs on a daily basis. It would be helpful for patients and healthcare professionals to be further made aware of the ability of the pharmacy to provide support in the forms of lifestyle and dietary advice as per 1.2.1 of the NCE guideline[1b] It is also important to reinforce that access to appropriate IBS spasm related medication is available both in the pharmacy and also in the GSL environment.[2] This will help guide the patient to other appropriate avenues of obtaining symptom relief with ease of access being key and will also help reduce the burden on the NHS. **THE NHS IS UNDER PRESSURE:** In the last five years there has been an estimated 285 million GP consultations and more than 10 million visits to Accident &Emergency departments for minor ailments such as coughs and colds or muscular pain – costing the NHS over £10 billion. [3,4] The incidence of IBS is 14% of the total UK population[5]	1b.NICE guideline CG61 1.2.1 2.SPC Buscopan IBS relief 3. IMS Health, Minor ailment workload in general practice, 2007. 4 Self Care Forum, Over 2 million unnecessary A&E visits “wasted”, 2012. 5 Global BPT Dec 14 6 CSD Mar15 MAT 7 Royal College of General Practitioners, New league table reveals GP shortages across England, as patients set to wait week or more to see family doctor on 67m occasions. 2015.

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					There are 5.2m scripts written for antispasmodics per year[6] And at least 1.6m of those are written against IBS diagnosis[,6] There has been a 50% increase in the number of people using A&E services within the past decade, while GPs are managing 370m consultations a year, 150,000 more per day than five years ago[.7] This additional pressure on already overstretched GPs and A&E departments is having a negative impact on patient outcomes, increasing waiting times and creating workforce problems. With an ageing population, growing numbers of people with long-term conditions and an increase in lifestyle-related diseases, this pressure on the health system will only become more intense. Pharmacists have the ability to provide a solution to this problem – if it were not for their reluctance for fear of litigation, in taking a more proactive approach in making both diagnoses and treatment decisions.	

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	4.3	NDR-UK	Key area for quality improvement 1 Dietary advice for people diagnosed with IBS	Dietary advice forms an essential part of the care and treatment of IBS. Lack of dietary control will render other treatments less effective.	If the aim of treatment is to minimise symptoms and improve quality of life, then dietary intervention is core. It is important that people suffering with IBS can access both general and specific advice on the right diet to consume to enable them to make informed choices. This is an important strategy in self management.	McKenzie Y. Alder A. Anderson W.et al (2012) British Dietetic Association evidence based guidelines for the dietetic management of irritable bowel syndrome in adults. Journal Human Nutrition and Dietetics 25;260-274
	4.3	NDR-UK	Key area for quality improvement 3	People with IBS should be given information that explains the importance of self-help in effectively managing their condition. Patients with IBS should have access to expert DT advice. Excluding individual foods or complete food groups without appropriate dietetic supervision can lead to inadequate nutrient intake and ultimately malnutrition,	There are several dietary interventions suitable for use in IBS. To obtain the most favourable outcome, it is important that people can access the expertise of a registered dietitian to assist them in managing their condition. This should include the provision of evidence based, high quality information to support the advice, such as that produced by NDR-UK.	Burden S (2001) Dietary treatment of irritable bowel syndrome: Current evidence and guidelines for future practice, Journal of Human Nutrition & Dietetics, 14(3):231-41. http://www.ndr-uk.org/about-us.html
	4.3	British Society of Gastroenterology	Key area for quality improvement 3	Improving on strategies to enhance wellbeing in IBS which are non-pharmacologically based.		*No additional information provided by stakeholder*
	4.3	British Society of	Key area for quality improvement	DIET: Which IBS subtypes respond to diet (both low		

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		Gastroenterology		FODMAPs, as well as exclusion diets)? In addition, which symptoms improve in particular?		

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	4.3	British Dietetic Association	Key area for quality improvement 2 QS2: on dietary management **Dietetic training:** The availability of more FODMAP trained dietitians in primary care, through better/more widespread availability of accredited training - ? distance learning /elearning opportunities**,** delivered as one-to-one and as group education. *QS: Primary care services to provide IBS symptom profile - appropriate management from a multidisciplinary team for people with IBS (GPs, dietitians, gastroenterologists, psychologists)* *Within primary care: pharmacological/dietary /lifestyle.*	Only with sufficient availability of suitably trained primary care based dietitians will it be possible to meet the NICE IBS 2008 resource impact recommendation of increasing the use of dietitian referrals for people where diet is considered to be a major factor in their IBS symptoms. The low FODMAP approach to managing IBS has been proven as a successful, clinically effective and cost effective management strategy for those with complex IBS where first line advice and medications may not have been. It should therefore be available as a standard treatment option to patients across the country. In order for this to happen many more dietitans will require the specialist training to allow accurate implementation of the advice.	In NICE CG61.1 update, the low FODMAP diet offers second-line dietary treatment. This 4-8 week intervention requires delivery by an appropriately experienced healthcare professional, such as a dietitian. Efficacy of the low FODMAP diet is based on delivery by appropriately trained/experienced dietitians. Other education resources are unexplored. There is wide variation across the UK in outpatient waiting times to see a dietitian for management of IBS. Demand to see a dietitian is greater than supply. Provision of more training locations for face to face training or the possibility of development of a distance learning/ elearning package with support from trained dietitans would help overcome the barriers outlined above and allow the low FODMAP approach to become a standard management option for any patient requiring it. Likely financial cost savings to be	NICE CG61.1 update NICE IBS Costing Report 2008: *"Early referral (to a dietitian) may lead to a reduction in future costs of care for people with IBS."* A primary care pathway can be established with dietitians nationally delivering both one to one and group patient education as appropriate. Whigham L., Joyce T., Harper G., Irving P.M., Staudacher H.M., Whelan K., Lomer M.C.E. (2015) Clinical effectiveness and economic costs of group versus one-to-one education for short-chain fermentable carbohydrate restriction (low FODMAP diet) in the management of irritable bowel syndrome. J Hum Nutr Diet. Article first published online: 14 APR

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					made in the longer and long-term. Initial investment needed in training provision and establishment of standardised care pathway.	2015 Halmos - RCT 2014 Staudacher - RCT 2012 Staudacher - non-RCT 2011

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	4.3	British Society of Gastroenterology	Key area for quality improvement 1	Extra-intestinal symptoms in IBS are very common, and how best to manage those is also challenging.	Dietary modulation, using gluten-free or low FODMAP diet, is becoming increasingly popular, but we don't have any evidence that it is best placed as a first-line strategy, or that it is superior to current standard approaches that GPs use. If this could be demonstrated then we would need more community dietitians trained in these diets and most patients could be referred to them as the first step in their management with only those who fail these diets needing to move on to medical therapies.	*No additional information provided by stakeholder*
	4.3	Almirall UK Ltd	Implementation/ adoption of dietary advice around low FODMAPs needs to be more widely available to patients with IBS, particularly those with diarrhoea predominant symptoms Dietary and lifestyle advice should be offered to all people with IBS and tailored to their symptoms	In line with updated NICE guidance CG61, appropriate dietary advice around low FODMAPs should be offered to IBS patients, “by those with appropriate knowledge and expertise” in their use (NICE CGU61 2015)	In reality, expertise in dietary advice with low FODMAPs is currently hard to find in the UK and therefore priority should be given to the creation of defined quality indicators around dietary advice and management in IBS and accreditation for those involved in training	NICE CGU61 (2015)

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	4.3	SCM2	Key area for quality improvement **4 Diet**. People wishing to manage their IBS by a formal dietary exclusion and reintroduction protocol should be monitored by a trained dietitian to ensure nutritional adequacy and to encourage dietary reintroduction.	A low FODMAP diet has been well publicised and many people are trying it. While first line reduction of low FODMAP foods can prove effective for many patients, those with severe IBS symptoms may eliminate too many foods from their diet risking nutritional deficiency. While many patients may be able to reduce their symptoms by identification and reduction of the foods most implicated, those with most severe symptoms may need to undergo a formal protocol of exclusion, reintroduction, which should be monitored by a trained dietitian to avoid nutritional deficiency.	Many different foods contain FODMAPs. Also patients with IBS may have additional dietary needs due to medical diagnosis for example, obesity or diabetes or lifestyle choice that requires consideration such as vegetarian or vegan diets. There are now training courses for dietitians on managing IBS with a low FODMAP diet involving a rigorous eliminination/reintroduction protocol. Patients undergoing such diets risk nutritional deficiency and need careful monitoring by a FODMAP trained dietitian. The low Fodmap diet can modify the gut microbiota in the bowel and the long term effects of this remains unknown, re-introduction should be encouraged to increase the variety of the diet and provide knowledge of individual tolerance levels of fermentable carbohydrates.	McKenzie et al (2012) UK evidence-based practice guidelines for the dietetic management of irritable bowel syndrome (IBS) in adults *J Hum Nutr Diet*. Staudacher et al (2011) Comparison of symptom response following advice for a diet low in fermentable carbohydrates (FODMAPs) versus standard dietary advice in patients with irritable bowel syndrome *J Hum Nutr Diet*. 2011 Oct;24(5):487-95 Staudacher et al (2012) Fermentable carbohydrate restriction reduces luminal bifidobacteria and gastrointestinal symptoms in patients with irritable bowel syndrome *J Nutr*. 2012 Aug;142(8):1510-8 Halmos et al. (2014) Diets that differ in their FODMAP content alter the

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						colonic luminal microenvironment *Gut*. 2015 Jan;64(1):93-100

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	4.3	British Dietetic Association	Key area for quality improvement 3 QS3: on primary care management pathway **To establish primary care management pathway using primary care based specialist dietetic-led gastroenterology clinics nationally, to provide first- and second-line dietary management service.**	Provision of a clear primary care pathway for GP referrals supports meeting NICE IBS 2008 resource impact recommendations. NICE 2008 recommended: *"increasing the use of dietitian referrals for people where diet is considered to be a major factor in their IBS symptoms".* As a significant resource impact recommendation, dietary intervention was seen as one of the areas requiring the most additional resource to implement and could generate significant savings.	Moving away from secondary care referrals by using first-line dietary and lifestyle intervention and second-line dietary intervention will help de-medicalise IBS and empower patients to manage their own condition in the long term. Having this pathway would supply the specialist/experienced dietitians who can be directly involved at a local level in GP training via the GP Education Trusts. Efficacy of dietary intervention has improved only recently (through low FODMAP dietary approach). There are UK dietitians trained in the low FODMAP dietary approach but are unable to provide this service within the NHS because the care pathway from GP to experienced dietitian has not yet been set up. Patients often prefer to explore dietary change in preference to taking medication. Many patients have suffered with	Böhn L, Storsrud S, Tornblom H, et al. Self-reported food-related gastrointestinal symptoms in IBS are common and associated with more severe symptoms and reduced quality of life. Am J Gastroenterol 2013; 108:634–641. Halmos - RCT 2014 Staudacher - RCT 2012 Staudacher - non-RCT 2011 In CG61.1 update Await publication by Greig, 2015: Somerset NHS financial savings from a primary care based IBS pathway and patient outcomes using the low FODMAP diet.

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					their condition for many years/decades, repeatedly return to their GP for support due to ineffective management/lack of understanding of their condition, so management time line would be helpful.	New research indicates that the low FODMAP diet is effective in the longer-term. Follow up was for up to 18 months. Awaiting publication, 2015: 'Long term outcomes of the Low FODMAP Diet', authors include academia, Kings College London. The UK has evidence-based dietetic guidelines for the dietary management of IBS in adults: MCKENZIE, Y. A., ALDER, A., ANDERSON, W., WILLS, A., GODDARD, L., GULIA, P., JANKOVICH, E., MUTCH, P., REEVES, L. B., SINGER, A. & LOMER, M. C. 2012. British Dietetic Association evidence-based guidelines for the dietary management of irritable bowel syndrome in adults. *J Hum Nutr Diet,* 25**,** 260-74.

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						Systematic review and guidelines update to this is in final draft format, for publication in late summer 2015: Y McKenzie is lead author.

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	4.3	British Dietetic Association	Additional developmental areas of emergent practice **To develop guidance on management of IBS for young people and children.**	Clear guidelines on management, and in particular dietary management, of IBS in young people and children is lacking.	Dietary measures for management of adult IBS, in particular the use of a low FODMAP diet, have a good evidence base and are widely used. An increasing awareness of this diet has lead to paediatric patients being trialed on this diet without clear published evidence or guidelines as to its use. However, a clinical pathway for the appropriate use of dietary measures is lacking, thus allowing for inconsistencies in patient care. Paediatric health professionals require concise guidance to ensure evidence-based, nutritionally safe practice.	CHUMPITAZI, B. P., TSAI, C. M., MCMEANS, A. R. & SHULMAN, R. J. 2014. 823 A Low FODMAP Diet Ameliorates Symptoms in Children With Irritable Bowel Syndrome: A Double Blind, Randomized Crossover Trial. *Gastroenterology,* 146**,** S-144. MCKENZIE, Y. A., ALDER, A., ANDERSON, W., WILLS, A., GODDARD, L., GULIA, P., JANKOVICH, E., MUTCH, P., REEVES, L. B., SINGER, A. & LOMER, M. C. 2012. British Dietetic Association evidence-based guidelines for the dietary management of irritable bowel syndrome in adults. *J Hum Nutr Diet,* 25**,** 260-74.

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						De Koker – post-graduate dissertation completed, study data collection completed and publication in writing* *Academic in confidence material – Research dissertation

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	4.4	Boehringer Ingelheim	Key area for quality improvement 1	Clinical management-Treatment. Encourage use of appropriate symptomatic relief medication for IBS symptoms	The NICE guidelines CG61 advice use of antispasmodics for first line use for relief of abdominal spasm symptoms associated with IBS (1.2.2.1) [1a,] This should be part of the quality indicators so that individuals are further informed of the availability of appropriate antispasmodic medications to provide symptom relief and also to help reduce the inappropriate use of analgesics for abdominal cramping and spasm pain associated with IBS	1a.NICE guideline CG61 1.2.2.1
	4.4	SCM 1	Key area for quality improvement 3	Patients initiated on drug therapy should be followed up within an agreed specified time frame in order to determine efficacy	This prevents patients remaining on suboptimal or inappropriate treatment and facilitates more effective care.	*No additional information provided by stakeholder*
	4.5	SCM1	Key area for quality improvement 2	All patients with IBS should receive an assessment that incorporates both clinical severity and the psychosocial impact of the condition	As with all chronic conditions, it is imperative to determine the impact of psychosocial factors, in particular in relation to planning treatment, as it is relevant to on-going management and for those who do not respond to drug therapy.	*No additional information provided by stakeholder*
	4.5	British Society of Gastroenterology		PSYCHOLOGICAL THERAPY: Is there a place for early psychological therapy in selected IBS patients, rather		*No additional information provided by stakeholder*

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				than it being an option only for those with refractory IBS?		

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	4.5	SCM1	Key area for quality improvement 4	Patients with IBS who do not respond to lifestyle and drug treatments should be considered for psychological interventions	There is evidence that up to half of patients with IBS have an associated mental health condition – i.e. depression or anxiety. Psychological interventions have been to show some benefit in those with IBS.	Spiller et al. Guidelines on the irritable bowel syndrome: mechanisms and practical management (Gut 2007)
	4.6	SCM2	Key area for quality improvement **5 Follow up and referral**. All patients with IBS should be followed up annually to check for appearance of new symptoms, advise on self-management and if necessary refer for specialist dietetic or psychological assessment.	IBS is a common long term condition. Follow up is important to ensure that symptoms that may indicate life threatening disease are investigated promptly and that those experiencing deterioration or severe symptoms in IBS are referred for specialist management.	IBS is a life-long condition that can fluctuate according to what is happening in a patient's life. Patients require support to recognise the causes of exacerbations and manage them effectively with professional support if necessary. Also the doctor needs to be aware of the development of red flag symptoms which might indicate serious treatable conditions. Some patients have lived with IBS for many years and it may not be evident to them that newer treatments and therapies have been developed follow up is important to enable new treatments to be considered. GPs have an important role in ensuring people experiencing IBS engage with IAPT services. GPs are usually the first point of contact for people with IBS and they may need to prepare patients who present with IBS for psychological therapies by	BSG Commissioning Evidence Based Care Self-care IBS - Common failings in management include: • Inadequate follow up. BSG clinical commissioning guidelines Patients with chronic conditions, whether managed in primary or secondary care, should have ready access to psychological and dietetic treatment or intervention. Patient experience in adult NHS services NICE quality standard [QS15] Statement 6. Patients are actively involved in shared decision making and supported by healthcare professionals to make fully

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					explaining the biopsychosocial model of IBS Commissioners need to ensure that GPs are engaged in the IAPT service and understand the benefits of referring their patients to IAPT services." IAPT 'MUS positive practice guide' (2004)	informed choices about investigations, treatment and care that reflect what is important to them. Therefore if patients request referral to specialist treatment in diet and psychological therapy this should be facilitated. IAPT 'MUS positive practice guide' (2004) access to treatment services is discussed. They comment on the barriers which currently block people with functional symptoms (FS) (such as IBS) gaining access to treatments recommended in NICE guidance: GPs and other healthcare professionals may also prevent people who are experiencing functional symptoms from accessing services providing psychological therapies. GPs and other health

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						professionals may: - Have time constrains in their surgeries which may not be sufficient for them to diagnose FS effectively; - Recognise the FS but fail to recognise that they can be effectively treated by psychological therapies or other treatments; - Believe that identifying, investigating and treating any physical health problems are a higher priority than offering CBT based treatment for managing symptoms and disability. Drossman et al (2003) Cognitive-behavioural therapy versus education and desipramine versus placebo for moderate to severe functional bowel disorders *Gastroenterology* Jul; 125(1):19-31. Roberts et al (2006) Systematic review: the

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						effectiveness of hypnotherapy in the management of irritable bowel syndrome *Aliment Pharmacol Ther*. 2006 1;24(5):769-80 See references under quality improvement 4 Diet.

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	4.6	SCM3	Key area for quality improvement 1 Follow up	At present, IBS is often dismissed as a trivial disorder, which should not be taken too seriously. In addition, the treatment of the condition often has to follow a 'trial and error' approach, which can be a time consuming process. Despite treatment, patients often remain symptomatic but are frequently told nothing more can be done and are encouraged not to consult any more.	Most patients are well aware of the limitations of treatment, but don't understand why doctors do not want to take an interest in their problem and keep an eye on them. IBS is a chronic disease and just like any other chronic disease, monitoring of progress is invaluable. Patients would really appreciate the opportunity of having an occasional 'chat' with a doctor, even if it did not lead to any new treatment options being introduced. This would help to stop them frequently searching the internet for advice or asking for further referrals to secondary care.	*No additional information provided by stakeholder*
	4.6	British Society of Gastroenterology	Key area for quality improvement 5	Recognition that GERD and FD can be present in a third of IBS pts and therefore to ensure that treatment of IBS doesn't make FD worse for instance could be considered e.g. Anti spasmodics		*No additional information provided by stakeholder*
	4.6	Almirall UK Ltd	People with IBS should have their symptoms recorded and monitored using validated PRO measures	Patient Reported Outcomes are not routinely captured in IBS patients, therefore objective evidence in patient experience is lacking in this disease area In order for the true impact of	In order to objectively assess patient experience, diagnostic thresholds/clinical response, success/failure of management, it is important that PROs in functional GI diseases are not left behind other treatment areas where more objective measurements of patient	Ford et al 2013 Validation of ROME III criteria in secondary care *Gastroenterology*

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				an IBS sufferers condition to be understood and acknowledged by their primary care healthcare professional, validated Patient Reported Outcomes in IBS need to be urgently developed, validated and implemented in routine primary care practice	outcomes exist and are therefore reimbursed more readily.	

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	4.7	NDR-UK	Key area for quality improvement 2	People who have IBS should be cared for by personnel who have undergone appropriate training and who know how to initiate and maintain appropriate management of IBS. Staffing levels and skill mix should reflect the needs of patients.		National Institute for Health and Care Excellence (2008) irritable bowel syndrome in Adults: diagnosis and management of irritable bowel syndrome CG61
	4.7	SCM2	Key area for quality improvement **3 Training** to facilitate self-management. Health care professionals working in the community should receive training on how to facilitate self-management of IBS using an integrated model of care.	Patients with IBS are often upset and confused by their symptoms and do not always see the same doctor and receive the same advice. Consistency and reliable information is essential and likely to be more effective if supported by a trained health care professional they can identify with.	To be effective, self management needs to be facilitated by health care professionals, trained to understand IBS, listen and work with patients to facilitate appropriate, evidence based, self management, underpinned by appropriate information.	A Robinson, V Lee, A Kennedy, L Middleton, A Rogers, D G Thompson, and D Reeves (2006) A randomised controlled trial of self-help interventions in patients with a primary care diagnosis of irritable bowel syndrome. *Gut*. May; 55(5): 643–648 BSG Commissioning Evidence Based Care Self-care: Commissioning should include training of primary care staff (e.g. using secondary care staff as trainers) so that they can facilitate self-care for long term functional conditions such as irritable bowel syndrome.

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						The outcome of psychological therapies is improved when delivered by a trained professional (physician, occupational therapist, nurse) (Tries et al, 2006). A study by Guthrie (1991) showed that psychological therapy is feasible and effective in two thirds of patients with IBS who do not respond to standard medical treatment.

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	4.7	Almirall UK Ltd	People with IBS should expect their primary healthcare professional to be experienced, up to date and knowledgeable in diagnosing and managing their IBS	Currently GP and undergraduate knowledge and education in functional GI disease is lacking. This is leading to a disproportionate number of people with IBS being underdiagnosed and sub-optimally managed in primary care, whilst being over-investigated and over-referred to secondary care. Better healthcare professional knowledge and expertise in diagnosing and managing people with functional GI problems like IBS and how to communicate with them effectively (Hungin et al 2015) is critical to the successful implementation of NICE CG61	Early positive clinical diagnosis for IBS patients will improve outcomes and also improve the service provided across primary and secondary care. Up to 50% of people who are diagnosed with IBS by their GP, are referred to hospital for endoscopy and other tests to eliminate more serious illness. Currently there is a tendency for younger people with IBS to be over-investigated, whereas patients presenting with IBS for the first time over the age of 40 may be under-investigated (BSG 2009).	BSG commissioning report (2009) http://www.bsg.org.uk/clinical/commissioning-report/ibs/functional-symptoms.html Hungin et al 2015 Irritable Bowel Syndrome: An integrated explanatory model for clinical practice *NGMJ*
	4.7	British Society of Gastroenterology	Key area for quality improvement 2	Consideration of better interdisciplinary approaches to IBS management in secondary care (beyond the gastroenterologist) – involving psychology and other HCP – e.g. dietetics, GI physiologists		*No additional information provided by stakeholder*
	4.7	British Society of Gastroenterolo	Key area for quality improvement 4	Documentation of comorbidities in IBS and develop a MDT approach in		*No additional information provided by stakeholder*

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		gy		those with these present.		

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	4.7	Almirall UK Ltd	IBS patients should have uniformity in the way their symptoms are recognised and managed appropriately across community pharmacy and primary/secondary care and in the language/terminology used to explain their condition to them	Currently across England there is discordance in the way diagnosed/self-diagnosed IBS sufferers are managed (or manage themselves) in the community and also in primary care and this may lead to poor patient experience, lack of trust in healthcare professionals and suboptimal treatment regimes	A coordinated approach across community pharmacy to triage patients with IBS type symptoms, that a) warrant further investigation by their GP b) can be effectively managed in the community c) Require further treatment optimisation through their GP, in line with CGU61	*No additional information provided by stakeholder*
	4.7	Royal college of Physicians	The presence of a multi-disciplinary team approach (dietician, psychologist) for those difficult to treat cases			*No additional information provided by stakeholder*
	4.7	HQT Diagnostics	GP to test Vitamin D and adjust level so that 25(OH)D is between 100-150 nmol/L Review condition after 3 months	There is good RCT evidence that boosting 25(OH)D to between 100-150nmol/L helps to treat Irritable Bowel Syndrome	Increasing 25(OH)D has anti-inflammatory, anti-oxidative and antimicrobial functions.	http://www.vitamindwiki.com/tiki-download_wiki_attachment.php?attId=5231 http://www.vitamindwiki.com/Inflammation www.grassrootshealth.net/media/download/scientists_call_to_daction_020113.pdf www.efsa.europa.eu/en/ef

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						sajournal/doc/2813.pdf

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	4.7	HQT Diagnostics	GP to test Fatty Acids and supplement to achieve: **Omega-3 Index >8%** **Omega-6/3 Ratio <3:1** GP to refer patient to Dietitian or Nutritional Therapist to provide dietary advice Review condition after 3 months	There is good RCT evidence that adjusting Fatty Acids to achieve target levels helps to treat Irritable Bowel Syndrome	Major improvements in Irritable Bowel Syndrome have been seen within 1-3 months of adjusting levels of Fatty Acids to achieve: • **Omega-3 Index >8%** • **Omega-6/3 Ratio <3:1** The Omega-3 Index is designed to provide a more reliable indicator of the levels of specific Fatty Acids than any other test. Omega-3 levels can be increased by eating more oily fish or taking Fish Oil supplements. The Omega-6/3 Ratio shows the level of Omega-6 compared to Omega-3. High levels of specific Omega-6 Fatty Acids contribute to high Inflammation. This can be reduced by eating less Sunflower oil (Omega-6=64%), less Corn oil (52%) and less Soybean oil (51%). Typical Omega-6/3 Ratio in UK people before advice & supplementation range between 15:1 and 35:1. Inflammation is reduced when the ratio is <3:1 The HQT Diagnostics Fatty Acid	http://www.expertomega3.com/omega-3-study.asp?id=2 (15 references about IBS) http://omega3care.com/wp-content/uploads/2013/11/Omega-3LiteratureListJuly2013.pdf (18 references about IBS) www.omegaquant.com www.omegametrix.eu/?lang=EN www.hqt-diagnostics.com

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					Test shows an average of all Fatty Acids eaten over the previous 60-90 days	