



The Burden of Constipation in our Ageing Population

Working Towards Better Solutions

A report developed by the
International Longevity Centre-UK
(ILC-UK) and Norgine in consultation
with a European expert working group.

Commissioned and funded by:





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Overview

On 12th February 2013 a multi-disciplinary, pan-European group of representatives, identified by the International Longevity Centre-UK (ILC-UK) and Norgine, met in Brussels to discuss and consider an evidence and policy review of the scale of the problem of functional constipation (not associated with irritable bowel syndrome) amongst older adults living in care homes and the community. The group also examined the impact of current policies and management approaches on these individuals and our healthcare systems and their work resulted in the development of this report.

The report outlines and summarises the current guidelines and guidance from across the world. Treatment pathways (where available) and existing policy on managing constipation in older adults across Europe, with specific inclusion of guidance and policy for care homes are also included. The main focus is on care planning and the management of constipation as opposed to clinical guidance around use of different types of medication.

The research included in this report clearly highlights how the absence of preventative strategies for constipation has a significant impact on quality of life of older people. It also illustrates the unnecessary ill-health caused through sub-optimal management of this condition.

By sharing insights across countries and generating awareness and evidence-based discussion around the issue of chronic functional constipation in older adults, we hope to provide a powerful vehicle to improve the management of this condition and help mobilise key stakeholders into taking action and improving care. A number of recommendations for change are included within

sections III and IV of the report, which we hope will stimulate discussions for improvement.

Contributors to this report included:

International Longevity Centre-UK (ILC-UK): the leading independent, non-partisan think-tank dedicated to addressing issues of longevity, ageing and population change. The ILC-UK develops ideas, undertakes research and creates a forum for debate, often working with key partner organisations, to inform important decision-making processes. This work is aided by Chief Executive, Baroness Sally Greengross, former director-general of Age Concern UK and now a cross-bench peer in the House of Lords.

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Norgine: Founded in 1906, Norgine is a specialty pharmaceutical company with an extensive pan-European presence. Throughout its long history, the company has sought to develop and market high quality, innovative products for the benefit of both patients and physicians. Norgine markets a number of medicines in the area of gastroenterology and for the treatment of constipation. This report was commissioned and funded by the company, which also made some editorial contribution and helped identify potential members of the expert panel. Packer Forbes Communications, Norgine's appointed communications agency for this project, coordinated the development and authoring of the report.

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Definitions used in this report

Constipation is difficult to define as there is a lack of consensus between patients and doctors of what constitutes abnormal bowel movements. Generally, constipation is typified as a reduction in the number of bowel movements to fewer than three per week. However, the experience of constipation is extremely subjective. Patients sometimes underestimate frequency and can be more focused on difficulties with bowel movements such as straining.¹ The most widely used definition (Rome III) suggests constipation can be described as a combination of:²

- a reduction in the frequency of bowel movements (two or fewer per week)
- two or more symptoms such as straining, hard stools or feeling of incomplete evacuation in one out of four occasions.

In this report we refer essentially to chronic constipation, irrespective of whether it is secondary to identifiable causes or functional in absence of any identifiable causes.

Faecal impaction is defined as the retention of solid faeces that prevents spontaneous evacuation. Faecal impaction is common in care homes and can lead to faecal incontinence.³ This is a costly consequence of untreated constipation. A related term is faecal loading, which describes the retention of faeces of any consistency.

Older adults are defined by the World Health Organisation (WHO) as those over the age of 65 years (in-line with retirement age in most developed countries). However, most geriatricians define older adults as those over the age of 75 years.

Care homes are usually defined as either residential homes where inhabitants require support with personal care, meals and general housekeeping or nursing homes where residents require a higher level of assistance and in particular, specialist nursing and medical care.



SECTION I:

Introduction: what is constipation, how many people are affected and who does it affect?

Constipation is common amongst adults

Constipation is a common digestive complaint that affects people of all ages.^{4,5} Approximately 16-17% of the adult population in Europe and the US suffer with constipation.^{6,7} The condition is more than two times more common in women than men, which may be due to hormonal factors or damage to the pelvic floor during pregnancy/gynaecological surgery.^{6,7}

Constipation is more common in older adults

Constipation is often the result of physical, psychological and socio-environmental changes that occur more frequently with advancing age. However, it is not necessarily regarded as a consequence of ageing.^{8,9} Nevertheless, constipation is more common in people over the age of 65^{10,11} and has been estimated to affect one in five older adults living in the community.¹² Figures from the US suggest that the number of adults aged between 60 and 101 affected by constipation may be as high as one in three.⁷ Recent studies from the UK, Spain and the US have shown that the prevalence of constipation is higher in those who are institutionalised than those living in the community and report that 80% of adult care home residents over the age of 65 are chronically constipated.^{7,11}

Why does the risk of constipation increase with age?

For older adults in the community and in care settings, the risk of developing constipation may be increased by:

- Muscular weakness that limits general movement and the possibility of physical exercise as well as the ability to visit shops and carry shopping¹³
- Less mobile patients who experience a loss of sensation, or those who ignore the signal to empty their bowels to avoid inconveniencing a carer or because the toilets are inaccessible. In care settings, they may be offered a bed pan or commode and be unable to empty their bowels due to poor positioning or lack of privacy⁸
- Changes in the diet, including patients reducing fluid and fibre intake for fear of incontinence
- Difficulty swallowing, which results in requirement for thickened fluids and modified consistency diets. This can restrict consumption of adequate fibre and fluid¹⁴
- Poor dentition, which can impact on dietary intake, including fibre-containing foods¹
- Limited care assistance available at mealtimes for dependent individuals, to ensure appropriate diet and fluid provision¹⁵
- Development of co-morbid medical conditions and resulting poly-pharmacy including, in particular, analgesics and psychotropic drugs¹
- Mental health disorders such as depression, anxiety, dementia and cognitive impairment¹³
- Use of a number of medicines that induce constipation, including antacids, calcium and iron supplements, as well as radiotherapy and opioid pain relief for cancer treatment^{1,9}
- Socio-environmental factors including hospitalisation and institutionalisation.^{16,17}

Constipation: the scale of the problem

Accurate figures for the number of people affected by constipation are difficult to obtain due to different perceptions and the lack of consistent definition criteria.^{1,5,18} Figures vary widely between studies depending on whether constipation is self-reported or assessed by a healthcare professional. Constipation is often under-recognised as an important health issue. However, the impact of constipation can vary from slight to severe, affecting older adults' physical, psychological and social wellbeing. It should, therefore, be considered as a condition in its own right, rather than seen as a symptom or set of symptoms.¹⁸

However, constipation can be associated with significant ill health. If left untreated, it can lead to or exacerbate the symptoms of other conditions seen in an ageing population, such as faecal impaction and anal fissures; this is often overlooked.^{1,19} Constipation, especially problems associated with evacuation such as prolonged or delayed emptying of bowels, is the most common cause of faecal incontinence.^{18,20} This can increase agitation or aggression in patients with mental conditions such as dementia^{21,22} (see page 12 for more details).

Symptoms of constipation can be induced or exacerbated by stress and can be associated with psychological disorders such as depression and anxiety.¹³

Symptoms of untreated constipation also include:^{14,23-25}

- Considerable discomfort/pain
- Abdominal bloating
- Loss of appetite
- Nausea/vomiting
- Fatigue
- Urinary incontinence and risk of urinary

tract infection

- Excessive straining leading to faecal impaction, haemorrhoids, anal fissures and rectal prolapse
- Social isolation.

Interventions in older adults are on the increase

An audit was conducted across England, Wales, Scotland and Northern Ireland with 923 older people living either at home or in care homes and all with a history of chronic constipation. Results showed the incidence of faecal impaction was 30%; 42% required one or more rectal interventions (suppositories, phosphate enemas, micro-enemas or manual evacuation); 38% had faecal incontinence, anal fissures or haemorrhoids; 18% were referred to a specialist and a further 4% were hospitalised during the baseline assessment period.²⁶ During 2011, in England alone, 261 manual evacuations were required for adults aged 65 or over as a result of constipation.²⁷

Admissions for constipation are often for emergency treatment

In England during 2011, 61,162 hospital admissions were as a result of a primary diagnosis of constipation (fig1). More than 40% (25,107) of these were reported in patients aged 65 years and over: 80% of these were emergency admissions.²⁷

Hospital Episode Statistics (HES) data from the NHS across England between 2005 and 2011 also show that both scheduled and emergency hospital admissions coded with a primary diagnosis of constipation have increased across the older adult population (aged more than 65 years old) (fig 2).

Figure 1

Hospital admissions due to constipation in England in 2011

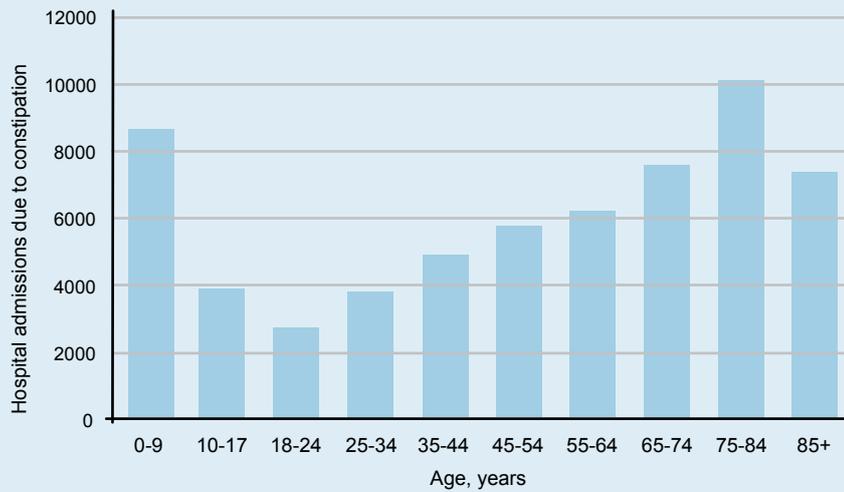


Figure 2

Scheduled vs. emergency admissions for constipation in adults aged 65 years and over

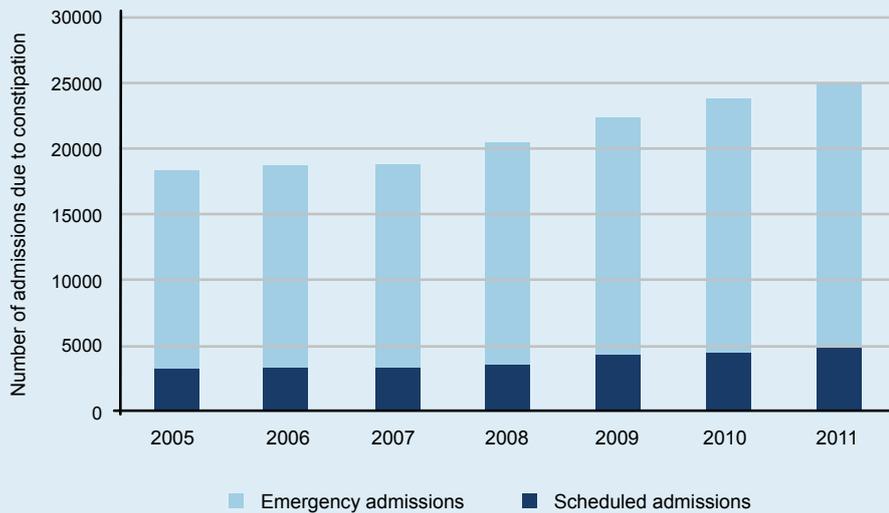
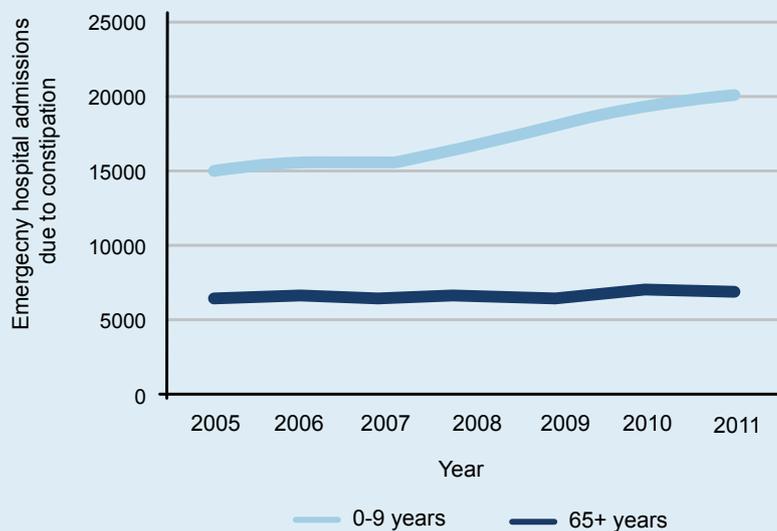


Figure 3

Emergency admissions due to constipation between 2005 and 2011 in children (aged 0-9 years) and older adults (65 years and over)



When compared to admissions amongst children (0-9 years old), for whom there is guidance in the UK available to support the management of constipation,²⁸ the same HES data show a significant increase in admissions due to constipation in the over 65s. There is also a continuously widening gap between children and older adults in the number of emergency admissions due to constipation (fig 3).²⁷

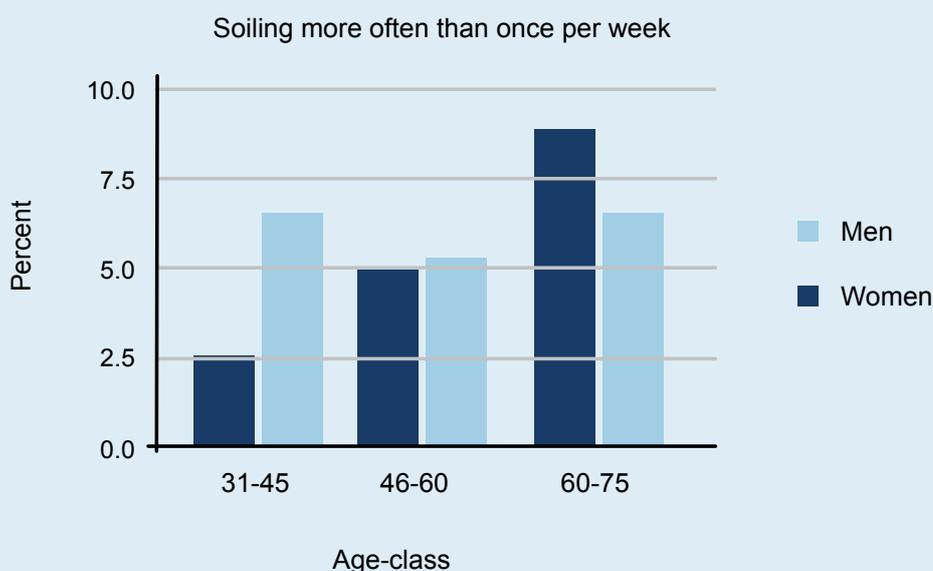
Studies show that up to 50% of older patients in geriatric hospital wards or care homes are affected by faecal impaction.^{29,30} Left untreated, faecal impaction can lead to serious impaction of the hard faecal mass onto the colonic wall, which may cause ulceration, lower gastrointestinal bleeding or even perforation.^{1,31,32} If not already in hospital or a care home, a diagnosis of faecal impaction may require hospital admission and an intervention such as manual evacuation, which is a common procedure following diagnosis.²⁶ As well as having serious implications for the patient's health, this procedure creates a considerable loss of dignity and distress for the older patient and is delivered at considerable economic cost.²⁶

Left undiagnosed, faecal impaction can lead to faecal incontinence, sometimes wrongly considered as diarrhoea, with frequent leakage of loose stool around the impacted faeces. Approximately 2-7% of older adults are reported to be affected by faecal incontinence. However, faecal incontinence can develop gradually and is therefore not always recognised and treated adequately. Incidence can therefore increase dramatically (to 40-50%) in care homes.^{30,33} A Swedish community study reported that 9% of women and 6.5% of men aged 60 to 75 years (n=1589) with constipation experienced soiling due to faecal incontinence more often than once per week (fig 4).³⁴

Prevalence of incontinence more often than once per week, as a result of constipation, can be classified by specific type including: gas, loose stool, solid stool and soiling. Incontinence occurs more often in adults aged 60-75 years and is more common in women than men.³⁴

Figure 4

Incontinence more often than once per week³⁴



Case study

Misdiagnosed chronic constipation can lead to faecal impaction and faecal incontinence. Symptoms of this can be mistaken for diarrhoea, as shown in the case study below from a care home community where residents were suffering misdiagnosed chronic constipation. This case study is provided by PromoCon, part of UK charity Disabled Living, which works to improve the lives of older people with bladder or bowel problems by offering product information, advice and practical solutions to both professionals and the general public.

A small care home was reported as having an outbreak of *Clostridium difficile* (*C. difficile*), as several residents had developed diarrhoea. Infection control measures were immediately implemented and faecal samples were sent for analysis for *C. difficile* and toxins. *C. difficile* was not found so further assessment of the residents was initiated. Per-rectal examinations of the residents discovered that some were suffering from faecal impaction and what was originally thought to be diarrhoea was in fact constipation with overflow.

Constipation is multi-factorial and, when left untreated or not properly treated, may result in complications such as impaction, colon perforation and, in extreme cases even death (although this is extremely rare).³² The next case study details a particular situation in which constipation was not

noticed in a patient with mental health problems, eventually leading to death.

This highlights the importance of conducting a thorough assessment of patients and monitoring those who are experiencing constipation.

Case study

In very rare cases, ignored and untreated constipation can lead to death. This case study was published in 'From Death We Learn', developed by the Government of Western Australia Department of Health, to help raise awareness of the shortfalls in the management of various conditions including constipation, which can lead to death.³⁵

A female patient was admitted to a mental health unit in Western Australia, suffering from schizoaffective disorder with prior history of constipation. During admission, the patient's constipation worsened and after 11 days, she complained of abdominal discomfort and was found to have acute bowel obstruction. She was transferred to a general ward where she had chest and abdominal x-rays. However, soon after, the patient collapsed and died.

Post-mortem examination found the patient died as a result of aspiration of vomitus with bowel obstruction, caused by constipation. She was taking a cocktail of medications, which may have caused her constipation. The constipation was so severe that, despite no records being found, she must have complained about her symptoms.

Recommendations from the coroner included: physical examination of patients on arrival and bowel charts to monitor patients receiving multiple medications.

What is the impact of constipation on a patient's quality of life?

In addition to the physical consequences, the impact of constipation on quality of life should not be underestimated.³⁶ Patients with constipation generally have impaired quality of life, compared with the general population.⁴ The physical and mental impact of constipation on quality of life is significant and can be compared to more recognised conditions, such as osteo-arthritis, osteoporosis and chronic allergies.⁴ Even in long-term survivors of potentially life-limiting bowel cancer, constipation is one of the factors that has the most negative impact on quality of life.²³

General health survey data from the UK show that people with chronic constipation report reduced role functioning (that is, the ability to carry out everyday activities) and increased pain scores compared to those without constipation.³⁷ Studies assessing quality of life in patients with constipation in Italy, Sweden and France show significant life impairment and consistently high levels of anxiety and depression.²³ Once admitted

to hospital, patients are often subjected to invasive procedures (enemas, manual evacuation or investigative procedures), which increase anxiety and discomfort. Additionally, treatment of this preventable condition adds significantly to avoidable healthcare costs.³⁸

Older adults with bowel problems emphasise the importance of privacy and dignity in their care.²⁰ The involuntary soiling often associated with faecal impaction causes a great deal of embarrassment and loss of dignity for patients.²⁰ Patients are also at risk of urinary incontinence caused by pressure on the bladder due to faecal impaction.³⁹

Strategies for the prevention and management of constipation could substantially improve quality of life in older adults.⁴ It is recommended that, in order to develop an accurate diagnosis and a tailored treatment approach for each individual patient, effective questioning techniques and careful physical examination of patients is necessary when taking a clinical history.⁴⁰



Case study

Urinary and faecal incontinence can be the result of mistreated constipation, specifically in patients who experience a delay in bowel evacuation (rectal outlet delay) and the lack of a tailored approach. This case study, provided by PromoCon, is of a care home resident who is experiencing incontinence due to an inappropriate treatment regimen. It highlights the importance of adequate training of care home staff, to ensure patients are being diagnosed accurately and their condition managed appropriately.

A 78 year old female with a history of falls was no longer able to look after herself, particularly in terms of shopping and meal preparation. She gave up her home to live in a care home.

She presented with some urinary and faecal incontinence, so was referred to the local continence service for assessment. During the continence assessment, the patient questioned the need to take laxatives (senna and lactulose) as she was now experiencing diarrhoea.

Looking into her medical history, the nurse discovered that it was 'routine practice' in the care home to put all new residents who were 'constipated' on this medication regimen within the first few days of admission. Detailed discussion with the lady discovered that she had not been eating or drinking well when living at home and was only a 'little constipated' when she was admitted. Rather than leave her to settle into a routine of a well-balanced diet and plenty of drinks before making any changes, the home had used laxatives within a few days. The result of a balanced diet, appropriate drinks and laxatives led her to experience diarrhoea.

The laxatives were immediately stopped and the diarrhoea was resolved within a couple of days. She no longer experienced any faecal incontinence and her urinary leakage is much improved.

Impact of constipation on other conditions commonly experienced by older patients

Constipation and patients with cognitive impairment, such as dementia

The relationship between constipation and cognitive impairment, such as dementia, is complex. Chronic constipation in patients with cognitive or neurological illness can be aggravated by their treatment regimen, for example antipsychotics or antiepileptic medicines.⁴¹ Management of constipation can be difficult to evaluate. Cognitive impairment itself, such as dementia, can increase the risk of developing constipation, as increased confusion leads to lack of awareness of the need to empty the bowels or inability to ask for the help needed to visit the toilet.²²

The link between constipation and cognitive impairment is a particular issue since a high percentage of people living in care homes have dementia. The Alzheimer's Society in the UK estimates that at least 80% of care home residents will have some form of dementia or severe memory impairment.⁴²

Untreated chronic constipation in people with dementia could be associated with irritability or aggression.²² This can be incorrectly attributed to the dementia and may lead to either a lack of appropriate treatment for constipation or inappropriate provision of antipsychotics,²² which have the potential to lead to increased healthcare costs.⁴³

Constipation and Parkinson's disease

Constipation is a common complication of Parkinson's disease. Approximately two thirds of older adults with Parkinson's disease suffer from

disorders of the intestine, particularly constipation, and this increases with age.⁴⁴ This has been reported as less than three bowel evacuations per week, as well as faecal incontinence in some patients.⁴⁵ The nerve degeneration that is integral to this disease results in the reduction of dopamine (a neurotransmitter) levels, which affects the control of muscle movement throughout the body, including bowel muscles. Medications used in the treatment of Parkinson's disease (for example anticholinergic drugs) may slow bowel movements or cause a decrease in appetite.²³

Constipation and stroke

Constipation is one of the most common complications of acute stroke, with a prevalence of 30-60%.^{46,47} The development of constipation can be a predictor of poor outcome in moderately severe stroke sufferers at 12 weeks.⁴⁷

Results from an Italian study showed that out of 55 patients who had suffered from a stroke, up to a third reported experiencing:⁴⁸

- Decreased weekly bowel movement frequency
- Straining or pain during defecation
- Hard stools
- Incomplete evacuation
- Continuous laxative use.

In addition, a small number of these patients who had suffered a stroke experienced faecal incontinence (5.6%), loss of the urge to defecate (4.4%) or required digital manoeuvres to evacuate (3.3%).⁴⁸

Counting the cost of constipation

Constipation places a significant burden on healthcare systems. In the UK alone, it prompts 500,000 GP consultations each year;²³ accounts for an estimated 10% of district nursing time²⁶ and 80% of community nurses spend up to half a day each week treating constipation.⁴⁹ In the US, direct medical costs for constipation account for \$230million per year.⁷

Constipation associated with faecal incontinence can cause premature admission to care homes

For older people not already in residential care, incontinence due to untreated constipation can lead to the breakdown of care at home. This can cause premature admission to a residential facility.⁹ An Australian study on behalf of the National Continence Strategy conducted a questionnaire with Aged Care Assessment Team members. In this study, 87% rated incontinence as a significant or very significant factor in decisions to approve residential care and 76% reported the presence of faecal incontinence in patients as influential to their decision.⁵⁰

Within care settings, residents are encouraged by staff to use the toilet, in preference to commodes, however, frequent visits to the toilet can be time-intensive for staff who look after a number of patients.²⁰ In addition to the cost of manpower

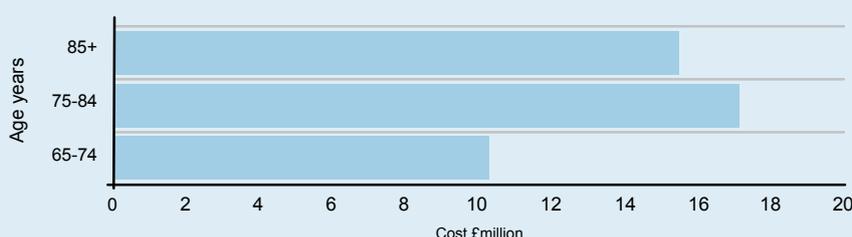
required to ensure residents are able to visit the toilet as and when required, there is also the additional cost of constipation medication and any containment products. A US study of patients in long-term residential care revealed that the administration of medication by nursing staff represented 70% of the total drug cost; the remaining 30% represented the actual cost of the pharmaceutical products used to treat patients.⁵¹

Financial burden of constipation on healthcare services across Europe

Constipation represents a significant burden on healthcare resources across Europe in terms of nursing time, investigation, intervention, medication and on-going management.^{23,52} HES data from England in 2011 show that in people aged over 65 years, admissions due to constipation as a primary diagnosis accounted for more than 120,000 bed days with an average duration for a hospital-stay of 4.9 days.²⁷ This is a similar length of stay for asthma admissions. Admissions due to constipation in England in 2011 equated to a total cost of £42million to the National Health Service. As would be expected, based on prevalence, a great proportion of this cost is a result of admission of the oldest age groups (fig 5).

Figure 5

Cost of hospital admissions due to constipation in England during 2011²⁷



SECTION II:

What policies are in place across Europe to support good management of constipation?

Introduction

This section of the report outlines the current guidelines and guidance from across the world. Treatment pathways (where available) and existing policy to manage constipation in older adults across Europe, with specific inclusion of guidance and policy for care homes, are also included. The main focus is on care planning and management of constipation, as opposed to clinical guidance around use of different types of medication.

Throughout this review process, a general lack of European information and guidance related directly to constipation was identified. This review is therefore an opportunistic view of current guidance.

The absence of significant policy and guidance on constipation across Europe demonstrates the low profile that this issue represents. Evidence-based guidance is particularly rare; examples exist from The Netherlands and Great Britain but these only cover children and young people.⁵³ Where guidelines exist for older people in care homes, such as in Italy, recommendations do not come from government or national quality standard monitoring. Instead they are proposed by representative organisations⁵⁴ or through academic journals (for example *Reproducido del Best Practice*, 2008). Whilst in Italy and elsewhere in Europe there are some examples of good practice from non-governmental bodies on chronic constipation that reflect a commitment to improvement,^{54,55} these do not address the specific issues and high risk factors faced by older people living in residential care homes.

For some EU countries, a lack of guidance stems from policies on the quality of institutional care still being in their relative infancy. Even in countries with established quality assurance systems,

constipation management does not appear as an indicator for care quality standards. Given the high prevalence of constipation and the associated distress and poor quality of life, this is cause for some concern.²³

In this policy overview, attention is drawn to gaps in the policy framework and examples of good practice are highlighted to demonstrate how this issue might be improved.

National guidance across Europe

Care standards exist across Europe, however, the focus is usually on incontinence, not constipation

- **Germany:** while there are expert standards of care and clinical guidelines for urinary incontinence in care homes, there is no equivalent for chronic constipation or problems with defecation such as faecal impaction in severe cases. However, a working group established in 2007 aimed to address this need. In 2010, a new consensus statement was published detailing a suggested best approach to management of constipation in the care home setting⁵⁶
- **The Netherlands:** the Dutch care guideline includes the requirement for 'physical well-being' and the provision of adequate support to go to the toilet.⁵⁷ An additional constipation guideline for GPs exists, outlining best practice diagnosis and management. However, there is no individual focus on older adults and, consequently, their specific needs are overlooked⁵⁸
- **Czech Republic:** there is no mention of bowel care of any kind, although the Health Ministry acknowledges that the creation of the quality standards themselves is seen as a 'first step'⁵⁹
- **Italy:** there are no official guidelines developed by the Italian Ministry of Health for the diagnosis or management of constipation or faecal incontinence. Information is available through the Federazione Nazionale Collegi Infermieri (IPASVI) national nurse organisation; however, this focuses on causes of constipation, such as poor diet, lack of fluid intake, poor toileting habits and overuse of medications. Prevention and treatment is mainly focused on diet, hydration and physical activity⁶⁰
- **France:** using recommendations from the Haute Autorité de Santé (HAS), first developed in 1999, the National Society of French Gastroenterology (SNFGE), in collaboration with partner organisations, has taken the initiative to develop some practical, evidence-based recommendations. The guidelines outline the current situation and provide clinical practice support for a range of healthcare professionals involved in the care of older people including: gastroenterologists; gynaecologists; psychiatrists; digestive surgeons and physiotherapists. The recommendations focus on the importance of confirming the diagnosis of constipation and its nature (that is acute or chronic) in order to appreciate the potential impact on quality of life. They also state the importance of eliminating an organic cause: examining potential risk factors and taking a history of any surgery; gastrointestinal and neurological treatments; level of physical activity; eating habits; functional digestive and urinary gynaecology; obstetrics; and potential lifestyle changes⁶¹
- **UK:** policy and guidance from the UK provides a clear example of the fragmented position that constipation holds within current frameworks, treatment and care pathways. While there is no specific national-level guidance for the management of constipation in adults, there are references to constipation elsewhere, such as in guidelines on faecal incontinence and nutritional health. There is also guidance on related issues, notably faecal incontinence.

o **National Institute for Health and Care Excellence (NICE), previously National Institute for Health and Clinical Excellence**

*Faecal incontinence - Faecal incontinence: the management of faecal incontinence in adults (2007)*⁶²

The definition of faecal incontinence includes faecal loading, which can be a complication of constipation. It also identifies groups who are at particular risk, which includes frail older people

*Constipation in children and young people - Diagnosis and management of idiopathic childhood constipation in primary and secondary care (2010)*²⁸

This guidance recommends taking full histories and establishing potential causes of the constipation (as recommended in guidelines for adults, such as those of the World Gastroenterological Organisation 2007)⁶³

o **Social Care Institute for Excellence (SCIE)**

*Adults' services SCIE guide 15 – Dignity in care (2009)*⁶⁴

The guide includes chapters on 'Nutritional Care' and 'Hydration', with brief details of the impact on constipation from these factors.

Constipation and long term care

A review of European member state assessments of quality standards in long term care does not mention constipation as an indicator that is either measured or monitored.⁵⁹ However, it should be noted that poly-pharmacy and (mal)nutrition are included as indicators, suggesting that while constipation itself may not be monitored, details of these related factors are collected, which should aid health and social care professionals in identifying constipation by association. It can be concluded that quality management across long term care in Europe is in its infancy.⁶⁵

Constipation and palliative care

The Swiss Association for Palliative Medicine, known locally as 'palliative ch', published a comprehensive best practice guideline in 2007 for palliative care in Switzerland. The Integraal Kankercentrum Nederland (IKNL) (Comprehensive Cancer Centre Netherlands) also updated their Dutch palliative care guidelines in 2009.

Both resources include a devoted section on constipation, suggesting that over 50% of patients in palliative care are constipated. This rises to 90% in those patients on opiates. Significantly, the Swiss guidelines address the social stigma attached to constipation, highlighting that patients may not spontaneously explain their symptoms so careful questioning is an essential part of assessment. Example questions are provided to guide care professionals in this task. The importance of prevention is underlined and treatment options outlined in both.^{66,67} It is important that guidelines such as these are shared beyond traditional disciplinary boundaries to ensure more uniform care for older adults from community to end of life services.

Call for improved quality care standards

Formal standards of care do not exist for the care of older people across Europe but there are calls on current service providers to adhere to aspirational quality standards. The European Quality Framework (2012) laid out by the Wellbeing and Dignity of Older people project (WeDO)⁶⁸ sets out principles (rather than specific guidelines) of good quality care. While the lack of specific indicators means that constipation is not explicitly mentioned, this European framework does provide an aspirational quality standard for elements of care, such as preservation of dignity.

National guidance and information from around the world

World Gastroenterology Organisation (WGO) guidelines

The WGO has produced practice guidelines on constipation.⁶³ These guidelines provide a clinical outline, including pathogenesis, risk factors, diagnosis and treatment of constipation. The guidelines list “older adults” as a specific risk group, noting that the key issues within this group are lack of mobility and poly-pharmacy (taking multiple medications).

World Health Organisation (WHO) report

A report from the WHO on nutritional care of older people focuses on the scientific evidence supporting the impact of dietary factors and exercise on the health and well-being of the older adult population. Within the report, constipation is identified as a key (and often the sole) symptom of poor hydration in older adults.⁶⁹

American Gastroenterological Association (AGA) technical review on constipation

Published in 2013, the AGA provides a comprehensive review, which acknowledges the impact, cost and challenges associated with diagnosing and managing constipation in both children and adults. It suggests a 28% prevalence rate across the community with only a minority seeking advice from physicians. This still accounts for 8 million annual ambulatory visits to a healthcare professional per year in the US. The

review compares the evidence of pharmacological agents, using a Grading of Recommendations, Assessments, Development and Evaluation (GRADE) system, based on the quality of evidence.⁷

A Canadian review of the treatment of constipation in older people

A review of treatments published by the Canadian Medical Association provides advice around diagnosing and treating constipation in older patients. It suggests that evidence-based recommendations for diagnosing chronic constipation in older patients are not possible due to the lack of evidence. The experts suggest a thorough clinical history and physical examination should always take place in order to elicit potential symptoms. The review acknowledges the lack of evidence to support the promotion of fluid intake or increase in physical activity. Clinical data around medical interventions are also examined and the review uncovered deficiencies in research into constipation in older people.⁴⁰

IMPACT – Bowel Care for the Older Person, Australia 2010. A guide to the management of constipation and faecal impaction in older people.

A scientific faculty comprising general practitioner, pharmacy, nurse, nutrition and secondary care experts worked with Norgine Australia to develop guidelines for the management of constipation in older people. These comprehensive guidelines

include a management pathway covering assessment and treatment steps for both constipation and faecal impaction. A detailed approach to an assessment of the patient covering patient history as well as current symptoms is outlined. The guidelines also provide an algorithm for the pharmacological and non-pharmacological management of both conditions. Lastly, it offers practical advice and recommendations around improving communication and on-going surveillance.⁷⁰

Information for healthcare providers aims to improve professional practice in constipation

Across the world, a range of information resources aimed at different groups of health and social care professionals have been published by representative organisations such as local health organisations. These all take a practice-based approach to the management of constipation. Examples of these include the IMPACT guidelines mentioned above and Prevention of Constipation in the Older Adult Population (2000 revised 2005 and 2011)⁷¹ (a nursing best practice guideline from the Registered Nurses' Association of Ontario, Canada), which focuses on prevention of constipation in terms of nutritional health and hydration and adequate exercise. While there are some differences between these resources, most offer information on diagnosing constipation.

Examples of resources to aid diagnosis include:

- the Rome III diagnostic tool for identifying chronic constipation
- the Bristol Stool Form Scale, which can be used as a measure for healthy and unhealthy stool appearance
- template forms for monitoring food and fluid intake
- lists of diagnostic questions to ask residents
- flow chart of the care pathway for that particular health setting once constipation has been identified.

Treatment pathways

A broad range of treatments are available for chronic constipation. However, robust supporting clinical evidence is often lacking. Although comprehensive advice exists, such as in Italy, a European consensus on first- and second-line treatments is yet to be developed.⁷² Dietary and lifestyle changes are typically recommended as the first course of action but there is a lack of evidence to support the efficacy of this approach.^{73,74} Results from a French study carried out in more than 200 institutionalised older adults with daily faecal incontinence showed that when long-term, complete rectal emptying is achieved through appropriate laxative use, the number of episodes of faecal incontinence reduced. This then impacted positively on the workload of care home staff.⁷⁵

Careful questioning of older adults living in care homes and an understanding of their history could enable healthcare professionals to effectively diagnose constipation or faecal impaction, where it exists. Care pathways and simple diagnostic tools, such as stool charts or calendars, can facilitate this questioning and help to ensure that treatment is adequate and appropriate.⁴⁰

The Australian IMPACT group's management pathways around diagnosis, assessment and treatment provide excellent examples of step-wise guidance for healthcare workers.⁷⁰

Effectiveness of standards and guidance

Even the most comprehensive policy and guidance must be supported by robust implementation. If guidance is available but not carried through to patient care, it will have little impact on outcomes for the individual.

Overview and conclusions

Due to the lack of evidence-based guidance on effective management of constipation in older adults across Europe, specifically those living in care homes, inappropriate use of laxatives and emergency management are often observed. There is little focus on effective treatments when symptoms first present. There is even less guidance available on the prevention of constipation through hydration, good diet and other lifestyle factors.⁷⁴

This report highlights the current unmet need for appropriate prevention, diagnosis and management, as well as appropriate guidance and policy around constipation. There is still a considerable way to go to achieve consistent best practice across Europe and improve quality of life for older people at risk of constipation.

Inconsistencies in definition between healthcare professionals and patients as to what constitutes constipation

A truly quantifiable definition of constipation can be difficult to apply in everyday practice¹ and the perception of what constitutes a problem amongst patients and healthcare professionals can be ill-matched. Only between 12% and 20% of primary care physicians are known to be aware of recommended criteria and even fewer (3-4%) actually use them,³⁷ which can lead to under-diagnosis of constipation.

Conflicting priorities for support staff working within care home settings

Dealing with the issue of constipation or its

prevention is widely recognised as being time-intensive for staff that look after a number of patients and have a number of conflicting priorities.²⁰

A growing situation that needs our immediate attention

The over-65s will account for 29.5% of the population in the European Union by 2060, a rise of 12% from 2010.⁷⁶ The growing older population naturally creates a considerable healthcare burden. The growth in the number of people aged over 65 years within the next few decades will only serve to exacerbate the impact of any health and social care problems and associated costs amongst this patient population.⁷⁷ Health and social care costs represent a significant challenge to fiscal sustainability across the EU in light of ageing populations.

Lack of training and education

Research has shown that appropriate education, for example sharing of best practice, for care home staff can improve their knowledge and therefore the management of patients with constipation.²⁰

Anecdotal feedback from French physicians suggests that during a medical student's training, only one and a half hours is dedicated to constipation, including its prevention, diagnosis and treatment. On the contrary, psychological conditions, such as dementia, receive up to ten and a half hours of dedicated training time.

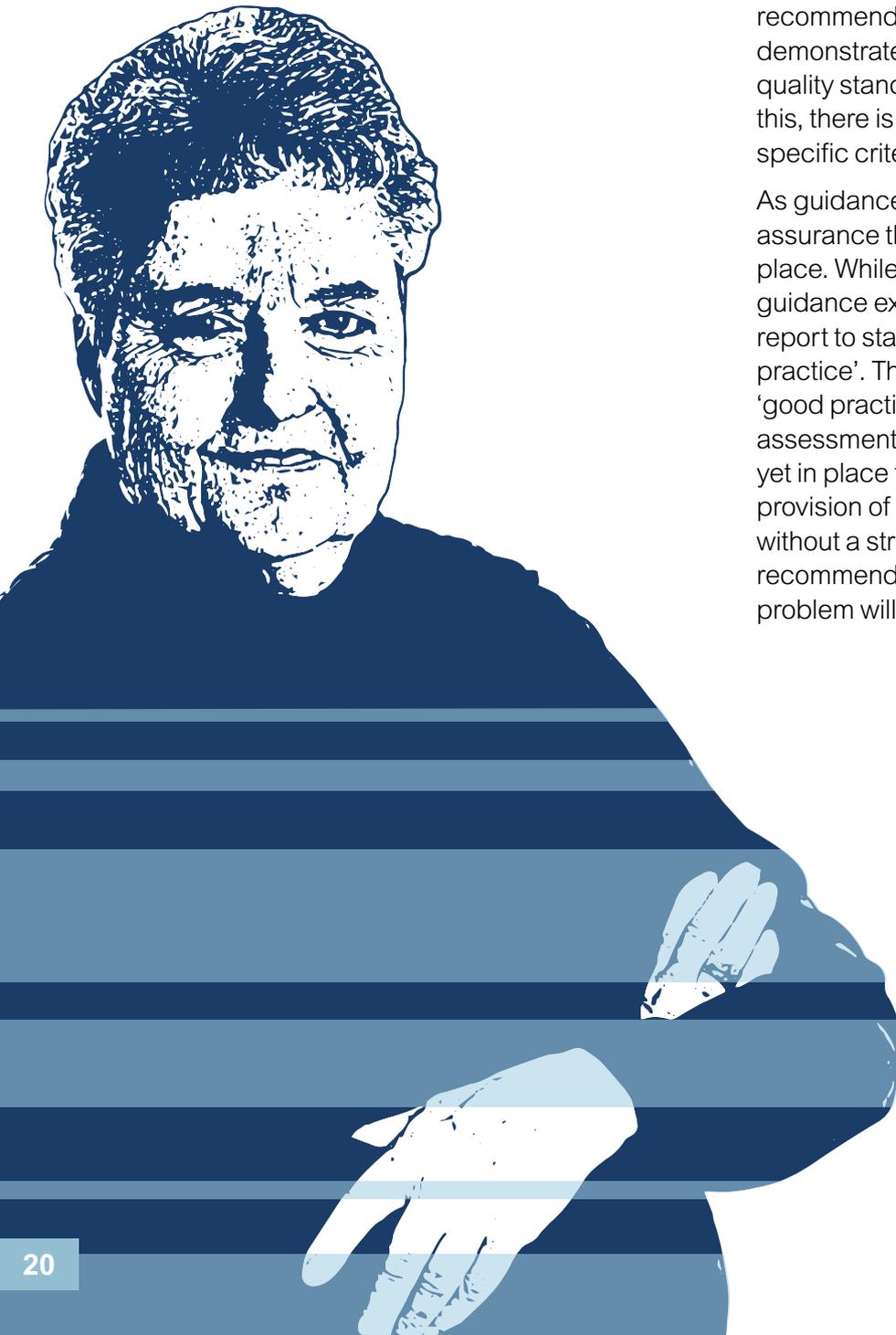
Guidance without policy

As this overview demonstrates, there are some examples of high quality guidance on managing

constipation, although the same cannot be said for policy frameworks, as constipation is often not included. The evaluation of guidance documents is lacking and may be a result of the need for more evidence around effective treatment pathways for constipation.⁷⁸

On a sub-national level, there are some examples of good resources developed as a reference point for staff working with older people living in care homes. For example, the document on minor illnesses developed for care homes in Sheffield, UK includes constipation (amongst a number of other health problems) and is an excellent reference resource for social care professionals and has the additional benefit of referencing related issues such as hydration in the same document.⁷⁹ Additionally, the creation of broad, good practice recommendations such as the WeDO principles⁶⁸ demonstrates a positive move towards generic quality standard-setting across Europe. Despite this, there is some way to go in order to establish specific criteria for constipation.

As guidance is not mandatory, there is no assurance that these practices are taking place. While this review can assess whether guidance exists, it is outside the scope of the report to state whether it is effective or 'good practice'. The evaluation of actions as being 'good practice' requires the development of assessment criteria and monitoring, which is not yet in place for constipation. Additionally, while provision of guidance may be of excellent quality, without a structural framework to integrate these recommendations into day-to-day care, this problem will continue.



Priorities

The Steering Group of external advisers discussed the findings from this report and reached consensus on the following priorities and recommendations.

- 1.** Functional constipation should not be underestimated or trivialised and should not simply be considered as an inevitable consequence of ageing or frailty.
- 2.** Chronic constipation should be classified and recognised as a condition in its own right, not just a set of symptoms associated with other disorders.
- 3.** Recognition and awareness of the typical symptoms and causes of constipation, as well as understanding how to effectively prevent and treat it, should be a training priority across the whole multi-disciplinary team and social care professionals working with older people.
- 4.** Constipation needs to be better diagnosed so it can be promptly treated and managed more effectively in-line with agreed best practice and recognised standards.
- 5.** The taboo nature of constipation needs to be addressed amongst the general public such that older people start to feel more comfortable and less embarrassed about self-reporting suspected constipation, knowing that they will be taken seriously and always treated with respect.
- 6.** Highlight the true cost of failing to effectively manage constipation in older people, in terms of economic and societal burden to health services, as well as the cost in terms of individual suffering and reduction in quality of life.

SECTION IV:

Recommendations

Priority #1

Functional constipation should not be underestimated or trivialised and should not simply be considered as an inevitable consequence of ageing or frailty.

Recommendations

- Raise awareness of the key messages and issues raised within the report amongst all healthcare professionals and other healthcare providers, as well as at a policy level.
 - Support the development of policy and guidelines to support appropriate prevention, diagnosis and management of constipation as a separate condition to continence.
-

Priority #2

Chronic constipation should be classified and recognised as a condition in its own right, not just a set of symptoms associated with other disorders.

Recommendations

- Develop an internationally-agreed, clear and simple definition for constipation.
 - Highlight constipation within established continence guidance as a separate but related issue.
 - Develop clear and simple guidance for older people in care homes to help prevent, report and promptly manage constipation in older adults.
-

Priority #3

Recognition and awareness of the typical symptoms and causes of constipation, as well as understanding how to effectively prevent and treat it, should be a training priority across the whole multi-disciplinary team and social care professionals working with older people.

Recommendations

- Increase information about constipation as an issue across training materials and resources to improve attitudes of the whole multi-disciplinary care team towards the condition. Specific focus on nursing staff who have more frequent patient contact.
- Develop on- and off-line resources, for example e-learning modules, risk assessment tools, template training packs, care home resources, to offer easy access to practical resources.
- Support measures to encourage the review of medicines to avoid unnecessary poly-pharmacy.

- Include evidence-based preventative measures into globally accepted best practice care pathways and ensure endorsement by key multi-disciplinary professional bodies and dissemination throughout membership.
-

Priority #4

Constipation needs to be better diagnosed so it can be promptly treated and managed more effectively in line with agreed best practice and recognised standards.

Recommendations

- Increase proactive case-finding of constipation in care homes through monitoring and screening programmes.
 - Encourage prompt treatment to avoid complications, including faecal impaction and worsening of symptoms of neurological disease such as dementia.
 - Develop clear guidelines and care pathways for constipation.
 - Implement strategies for guidance to ensure this is accepted in daily practice.
 - Evaluate existing diagnostic tools and promote best practice in using them.
-

Priority #5

The taboo nature of constipation needs to be addressed amongst the general public so older people begin to feel more comfortable and less embarrassed about self-reporting suspected constipation, knowing that they will be taken seriously and always treated with respect.

Recommendations

- Encourage greater open discussion about constipation as a common health issue through campaigning and information provision.
 - Develop information resources for patients/carers.
 - Support better self-reporting through sensitive questioning techniques.
-

Priority #6

Uncover the true cost of failing to effectively manage constipation, in terms of economic burden to health services as well as the cost in terms of individual suffering and reduction in quality of life.

Recommendations

- Gather economic data to target health service providers and commissioners/payers to highlight the cost of complicated constipation, in terms of hospitalisations etc.
- Develop communication tools to highlight the impact on quality of life.
- Encourage routine prevention and treatment of constipation in a hospital and care setting.
- Challenge inaction amongst healthcare providers – how can they afford NOT to deal with this preventable condition?

SECTION V:

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Methodology notes

The evidence review was informed by a review of the literature using the following keywords and parameters:

- *Constipation/di, dh [Diagnosis, Diet Therapy]
 - *Constipation/
 - *Constipation/and palliative care.sh.
 - *Constipation/and (quality of life or stress, psychological or morbidity).sh.
 - *Constipation/and (economics, medical or health care costs or hospitalization or mortality).sh.
 - *Fecal Impaction/
 - *Constipation and fecal incontinence.sh.
 - (polyethylene glycols and constipation).sh. OR (macrogol or movicol or osmotic laxative).mp. OR *Constipation/di, dh [Diagnosis, Diet Therapy] OR *Constipation/and palliative care.sh. OR *Constipation/and (quality of life or stress, psychological or morbidity).sh. OR *Constipation/and (economics, medical or health care costs or hospitalization or mortality).sh. OR *Constipation and fecal incontinence.sh.
 - *Constipation/ OR *Fecal Impaction/
 - (polyethylene glycols and constipation).sh. OR (macrogol or movicol or osmotic laxative).mp. OR *Constipation/di, dh [Diagnosis, Diet Therapy] OR *Constipation/ and palliative care.sh. OR *Constipation/ and (quality of life or stress, psychological or morbidity).sh. OR *Constipation/ and (economics, medical or health care costs or hospitalization or mortality).sh. OR *Constipation and fecal incontinence.sh.
 - *Constipation/ OR *Fecal Impaction/NOT ((usa or united states or brazil or japan or china or taiwan or hong kong or singapore or australia or new zealand or india or pakistan or south africa or nigeria or indonesia or turkey or korea or Canada or campinas or argentina or mexico or chile or Thailand or Egypt or Israel or iran or Saudi).in. or (Japanese or Chinese or Russian).la. or case reports.pt.)
- taiwan or hong kong or singapore or australia or new zealand or india or pakistan or south africa or nigeria or indonesia or turkey or korea or Canada or campinas or argentina or mexico or chile or Thailand or Egypt or Israel or iran or Saudi).in. or (Japanese or Chinese or Russian).la. or case reports.pt.)
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 - *Constipation/ OR *Fecal Impaction/ NOT ((usa or united states or brazil or japan or china or taiwan or hong kong or singapore or australia or new zealand or india or pakistan or south africa or nigeria or indonesia or turkey or korea or Canada or campinas or argentina or mexico or chile or Thailand or Egypt or Israel or iran or Saudi).in. or (Japanese or Chinese or Russian).la. or case reports.pt.)
 - *Constipation/ OR *Fecal Impaction/ NOT ((usa or united states or brazil or japan or china or taiwan or hong kong or singapore or australia or new zealand or india or pakistan or south africa or nigeria or indonesia or turkey or korea or Canada or campinas or argentina or mexico or chile or Thailand or Egypt or Israel or iran or Saudi).in. or (Japanese or Chinese or Russian).la. or case reports.pt.) LIMIT TO (“all aged (65 and over)” and humans and last 5 years)
- The policy review was conducted by undertaking systematic searches of academic, policy and grey

literature with an additional focus on guidance provided to health and social care professionals.

Keywords included:

- Constipation
- Faecal incontinence
- Bowel management
- Europe
- Care
- Residential care
- Long term care
- Older people
- Older adults

While constipation in residential care was the chief focus of this review, this was extended to more general policy and guidance on constipation in all older adult groups, including care for those outside of residential/care homes.



Recommendations (by target audience)

Target audience	Recommendations
General practitioners (GPs)	<ul style="list-style-type: none">• Support development of guidelines to support prevention, diagnosis and management of constipation in older adults and those living in care homes• Support development of a universal definition of constipation, to be used across all disciplines• Routine use of Bristol Stool Form Scale and rectal examination• Review patient medication to avoid poly-pharmacy• Ensure prompt treatment uptake to avoid complications caused by untreated constipation• Monitor diet, hydration and mobility in older adults to ensure preventative measures are in place• Develop and disseminate training materials to colleagues/peers• Adopt trigger questioning techniques to achieve accurate diagnoses of patients and encourage self-reporting• Develop/seek multi-disciplinary education and training materials to support best practice constipation management and share with colleagues/peers• Employ appropriate and timely referral of patients to incontinence care providers, where they exist.
Gastroenterologists and gerontologists	<ul style="list-style-type: none">• Support development of guidelines to support prevention, diagnosis and management of constipation in older adults and those living in care homes• Support development of a universal definition of constipation, to be used across all disciplines• Routine use of the Bristol Stool Form Scale and rectal examination• Ensure prompt treatment uptake to avoid complications caused by untreated constipation• Evaluate existing constipation assessment tools, for example Bristol Stool Form Scale and ensure uptake, where appropriate

- Develop/seek multi-disciplinary education and training materials to support best practice constipation management and share with colleagues/peers
 - Employ appropriate and timely referral of patients to incontinence care providers, where they exist
-

Neurologists

- In patients with neurological conditions, such as dementia and Alzheimer's, ensure prompt treatment following a diagnosis.
-

Nurses

- Support development of guidelines to support prevention, diagnosis and management of constipation in older adults and those living in care homes
 - Support development of a universal definition of constipation, to be used across all disciplines
 - Routine use of the Bristol Stool Form Scale and rectal examination
 - Ensure prompt treatment uptake to avoid complications caused by untreated constipation
 - Monitor diet, hydration and mobility in older adults to ensure preventative measures in place
 - Develop/seek multi-disciplinary education and training materials to support best practice constipation management and share with colleagues/peers
 - Employ appropriate and timely referral of patients to incontinence care providers, where they exist.
-

Pharmacists

- Support development of guidelines to support prevention, diagnosis and management of constipation in older adults and those living in care homes
- Support development of a universal definition of constipation, to be used across all disciplines
- Review patient medication to avoid poly-pharmacy
- Ensure prompt treatment uptake to avoid complications caused by untreated constipation
- Monitor diet, hydration and mobility in older adults to ensure preventative measures in place
- Develop/seek multi-disciplinary education and training materials to support best practice constipation management and share with colleagues/peers
- Employ appropriate and timely referral of patients to incontinence care providers, where they exist.

Care home staff

- Routine use of the Bristol Stool Form Scale and rectal examination
 - Encourage proactive case finding and suspect and assess constipation in all older adults in care homes
 - Follow step-by-step treatment guidance, if available, to ensure patients are adhering to their treatment regimen
 - Adopt questioning techniques to achieve accurate diagnoses of patients and encourage self-reporting
 - Provide adequate toileting support for care home residents, particularly those with communication difficulties
 - Employ appropriate and timely referral of patients to incontinence care providers, where they exist.
-

Commissioners and Policy makers

- Evaluate available economic data to highlight financial burden of constipation in terms of hospitalisations, complications, loss of independence and need for social care
 - Consider constipation as an indicator of best practice care quality measures within existing frameworks
 - Manage optimal care provision for patients, where services exist on a local level.
-

Patient organisations

- Encourage greater open discussion about constipation as a common health issue through campaigning and information provision
- Develop information resources for patients/carers
- Support better self-reporting through questioning techniques.



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