

# High Impact Actions for Stoma Care



# Background:

## to the High Impact Actions for Stoma Care

There are approximately 102,000 people with a stoma in the United Kingdom and about 21,000 new stomas are formed every year, approximately 50% of which are permanent. The cost to the NHS for appliances and accessories to effectively manage a stoma ranges from £780 - £2,300 per patient per year. It can therefore be estimated that the NHS spends in excess of £200 million per year on stoma care appliances and accessories.

The evolution of Specialist Nurses began with stoma care almost 40 years ago and the art and ethos of nurse specialism has developed and grown ever since. Stoma care is now a recognised, established nursing speciality world wide with nationally and internationally developed practice guidelines and its own body of knowledge. There are over 600 Stoma Care Nurses (SCNs) in the UK and several thousand worldwide. Research has demonstrated that patients who have access to a Stoma Care Specialist Nursing Service show greater satisfaction, better stoma knowledge and have fewer problems with their appliances. It is also clear from the literature that expert nurses deliver effective and timely care which is essential for patients, to enable adaptation and acceptance to life changing events. This has been achieved as a result of Registered Nurses who are educated to a higher level, coordinating research projects, publishing and presenting papers at national and international level.

Competencies for Specialist Nurses include research, education, consultancy as well as expert clinical skills. Single nurse led services have prospered to become team practices with expertise in many areas including cancer, inflammatory bowel disease, colorectal nursing and wound management. Debate continues to surround the issue of advanced practice with the Nursing and Midwifery Council (NMC) issuing guidance and linking competence to the Knowledge and Skills Framework and the Prime Minister's Commission for Nursing and Midwifery "Front Line Care" recommending the regulation of Advanced Practice.

SCNs care passionately about the care they provide for their patients and the skills and knowledge that they share with other healthcare professionals. When SCNs became aware of the High Impact Actions (HIAs) for Nursing and Midwifery, launched by the Chief Nurse for England in November 2009, they immediately recognised the contribution that they could make to this important agenda. SCNs have seized the opportunity to lead the way in demonstrating how as nursing practitioners and clinical leaders they can meet the challenge of improving the quality of patient experience, whilst saving money for the NHS.

At a national symposium, sponsored by Coloplast Ltd., in December 2009, there was overwhelming support to identify the ways in which SCNs could work together to support the implementation of these HIAs and develop a small number of additional actions specific to the specialty of Stoma Care Nursing.

A steering group of 12 experienced, SCNs was established, supported by Coloplast Ltd. This steering group determined how the work would be taken forward to build on the national work already undertaken. The steering group decided that there were three streams to this work and an evidence section was required.

This document is therefore presented in these sections:

- to determine how clinical nurse specialists in stoma care can support and contribute to the implementation of 8 nationally identified HIAs for Nursing and Midwifery (these are depicted in the section edged in pale blue)
- to identify specific HIA relating to stoma care that fall under a broader definition of the existing headings (these are depicted in the section edged in mid blue)
- to determine if any new HIA need to be identified relating specifically to the specialty of Stoma Care Nursing (these are depicted in the section edged in dark blue)
- The evidence sources are listed in the final section of the document (edged in purple).

The methodology adopted for this work was similar to that used nationally to identify High Impact Actions for Nursing and Midwifery. All SCNs across the United Kingdom were invited to contribute their ideas and suggestions, with particular emphasis on improving the quality of patient experience and reducing costs. The proportion of SCNs that responded to this invitation exceeded the response rate in the national identification exercise. The ideas and suggestions generated were considered by the steering group and a priority list was identified. A review of the relevant literature was then undertaken to identify evidence to support the prioritised suggestions. Initial analysis provides an insight into the possible economic gain from these HIAs. More detailed work will now take place to robustly quantify the potential impact SCNs across the NHS can make.

Sharing new and innovative ideas is a key element of 'Front Line Care' which identifies Nurses and Midwives as effective leaders and champions of care. New ideas that make a difference and dynamic actions supported by industry can be encompassed into clinical practice which significantly changes and improves the patient's experience.

We are delighted that the DH and RCN have endorsed this document along with the ACPGBI and WCET, Colostomy Association, Ileostomy Association and the Urostomy Association.

As the first Nursing Specialty it is fitting that SCNs are again leading the way in identifying how, as practitioners and clinical leaders they can support the implementation of, and develop additional, relevant HIAs, which not only improve patient experience but represent a reduction in economic costs to the health system.

This document also highlights some examples of best practice which illustrate the important contribution made by SCNs.

**Professor Dame Catherine Elcoat DBE**

Chair of the Steering Committee

**Sue Frost MPhil RGN**

Clinical Education Manager,  
Coloplast Ltd

On behalf of the SCNs High Impact Action Steering Group

Supported by  **Coloplast**, May 2010

Endorsed by:



# Chair

Professor Dame Catherine Elcoat DBE

## Steering group members

Carol Katté	Senior Specialist Nurse Stoma Care	Ashford & St Peters NHS Trust
Julie Morrisroe	Senior Nurse, Stoma Care	Guisborough Primary Care Hospital
Dr Helen Moss	Associate Director of Nursing	NHS East Midlands
Yvette Perston	Lead Colorectal CNS	Cardiff & Vale LHB
Terri Porrett	Nurse Consultant	Homerton NHS Foundation Trust
Allison Sharpe	Colorectal Nurse Specialist	Newcastle-Upon-Tyne Hospitals NHS Foundation Trust
Amanda Smith	Stoma Nurse Specialist	Salford Royal NHS Foundation Trust
Elaine Swan	Advanced Nurse Practitioner-Colorectal	Walsall Hospitals NHS Trust
Tracey Virgin-Elliston	Lead Nurse Specialist-Stoma Care	West Middlesex University Hospital NHS Trust
Maddie White	Colorectal Nursing Team Leader	University Hospital Birmingham NHS Foundation Trust
Jill Dean	Professional Services Manager	Coloplast Ltd
Sue Frost	Clinical Education Manager	Coloplast Ltd



# Your Skin Matters

## Action

No avoidable pressure ulcers in NHS provided care.

## Extent of the problem

Pressure ulcers represent a major burden of sickness, they are painful, create significant difficulties for patients, their carers and families, and reduce their quality of life.

New pressure ulcers are estimated to occur in 4 -10% of patients admitted to acute hospitals. One study put the incidence as high as 20%. The incidence in the community and residential homes is not known, but is estimated to be between 20% and 30%.

Pressure ulcers can occur in any patient, but are more likely in high risk groups such as the elderly, malnourished and those with certain underlying conditions for example those with a perineal wound or faecal leakage.

## The Stoma Care Nursing contribution

SCNs play a significant role in the management of patients with perineal wounds, recognising that perineal leakage compromises skin integrity which contributes to the development of pressure ulcers. They have specific expertise in the management of these difficult wounds which are frequently associated with colo-rectal surgery.

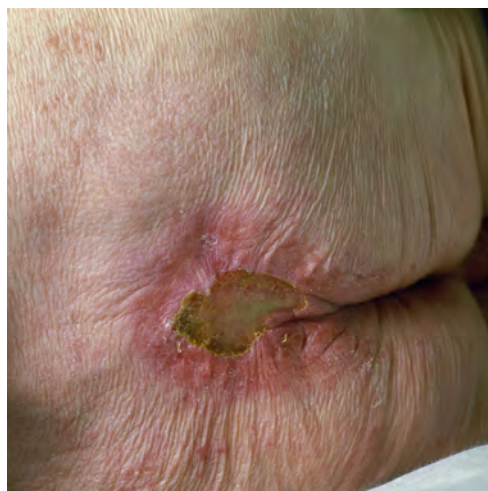
SCNs have specific expertise in ensuring that faecal or urinary output from the stoma is securely contained and does not contaminate the skin. They also play a key role in managing the output from intestinal fistulae, open wounds and rectal discharge, preventing skin contamination. The complex nature of the care required for successful management requires a multidisciplinary team (MDT) approach.

SCNs have a specific role in the care of obese or emaciated patients who require stoma surgery, as such patients present considerable challenges for the MDT, particularly when identifying an optimal site to position the stoma.

## Benefits for patients and the NHS

The impact of pressure ulcers is psychologically, physically and clinically challenging for patients and NHS staff.

The cost of treating pressure ulcers varies dependant on the grade of the ulcer, from £1,064 for a grade 1 ulcer to £24,214 for a grade 4. In an average 600 bed hospital the cost of treating pressure ulcers is estimated to be between £600,000 and £3 million per year. Across the UK the cost is estimated to be £1.4 - £2.1 Billion; representing 4% of all NHS expenditure.



# Staying safe – preventing falls

## Action

Demonstrate a year on year reduction in the number of falls sustained by older people in NHS provided care.

## Extent of the problem

Falls affect approximately 60,000 people per year in the UK and result in up to 14,000 deaths. Every day 2,300 people in the UK fall. 23-28% of the population over 65 years, and 32-42% of the population over 75 years will fall each year.

The National Patient Safety Agency found that in an average 800 bed acute hospital, about 24 falls will happen every week. That is over 1,245 falls every year and is the highest category of patient incidents reported. 28,000 falls were reported in Community Hospitals.

Falls are a major cause of disability and mortality for older people in the UK and with the population ageing the problem is likely to increase. 10% of all people who fall will die within the following year. Research estimates that 30% of falls can be prevented.

## The Stoma Care Nursing contribution

SCNs help to prevent falls by undertaking an assessment of the patient and their home circumstances, before admission, either in the patients own home or in the out patient clinic. In this way patients with a high risk of falling can be identified by the SCN who will then liaise with the ward nursing staff to ensure that a management plan is developed and can alert them if a patient requires extra support and vigilance whilst they are in hospital. This allows an earlier referral to be made to a physiotherapist or occupational therapist, if required, so that the patient's discharge is not delayed.

SCNs provide patients and their relatives with information about falls prevention and advice for when they are in hospital and when they return home, allowing time for appropriate preparations to be made. This will include early liaison with Social Services and Primary Care colleagues if required.

SCNs role in pre-admission preparation has become even more important as patients spend much less time in hospital, especially when an Enhanced Recovery Program is in place. This enables patients to leave hospital more quickly, but curtails the time available to ward nurses for assessment and education.

## Benefits for patients and the NHS

Falls present a huge problem for the health and independence of older people. The associated mortality and morbidity from falls is high with the consequences including, distress, pain, physical injury and loss of confidence through to a complete loss of independence which severely impacts on patients, their relatives and carers and the NHS.

Financial costs can include extra healthcare, social care or residential care. Even a fall that results in a minor injury can extend a hospital stay by 1-2 days. Overall, direct healthcare costs to the NHS is estimated at £15 million every year, representing a cost of £92,000 a year for an average acute hospital which has 800 beds.



# Keeping nourished – getting better

## Action

Stop inappropriate weight loss and dehydration in NHS provided care.

## Extent of the problem

Three million people are at risk of malnutrition in the UK; of these, 3% are in hospitals or other NHS settings. In 2006, it was found that around 10–40% of patients in the community (at home and in care homes) and in hospital have malnutrition. Currently, 40% of patients admitted to hospital are undernourished.

Malnutrition is associated with poor recovery from illness and surgery. Yet the National Institute for Clinical Excellence (NICE) found that only about one third patients were screened for malnutrition on admission to hospital. Subsequently, patients at risk of malnutrition are not recognised and referred for treatment. Patients admitted to hospital to undergo colo-rectal surgery are no exception, some will have an increased risk of malnutrition due to their predisposing condition which may cause, poor appetite; compromised intestinal function or diminished absorption.

Lack of adequate hydration has been cited as a common problem in hospitals. If a patient becomes dehydrated this may increase length of hospital stay and is linked to a number of serious conditions. Dehydration increases the morbidity and mortality of patients admitted to hospital.

## Stoma Care Nursing contribution

Recognising that sub-optimally nourished patients have worse outcomes, increased length of stay and a higher morbidity, SCNs play a significant role, as part of the Multidisciplinary Team, in the assessment and management of patients' nutritional status – from before admission, during their hospital stay and following discharge.

SCNs use advanced knowledge and skills, and a nutritional assessment tool, such as M.U.S.T., to identify patients at risk of malnutrition, instigate a nutrition treatment plan and provide counselling and education. Nutritional support may include iron and electrolyte replacement, nutritional supplements and the use of pre-operative carbohydrate loading.

SCNs educate other professionals and patients regarding the importance of minimising pre-operative starvation and the timely re-introduction of food and fluids post-operatively. Through regularly monitoring patients' nutritional status SCNs ensure feeding difficulties are recognised early and action plans are put in place.

## Benefits for patients and the NHS

Evidence suggests that malnourished patients stay in hospital longer, succumb to infection more easily, visit their GP more and require longer-term care and more intensive nursing care. The additional consequences of malnourishment, such as muscle wasting, increased risk of infection, predisposition to falls and pressure ulcers, also delays recovery and reduces quality of life.

It is estimated that malnutrition costs the NHS £7.3 billion annually. Of this, 52% (£3.8 billion) relates to malnourished patients in hospital, and a further 36% (2.6 billion) to patients in long-term care facilities. Proper hydration alone could lead to savings of £0.95 billion.



# Promoting normal birth

## Action

Increase the normal birth rate and eliminate unnecessary caesarean sections (CS) through midwives taking the lead role in the care of normal pregnancy and labour, focusing on informing, educating and providing skilled support to first-time mothers and women who have had one previous CS.

## Extent of the problem

Maternity statistics show that, in England, around 60% of women who had their baby in hospital had a normal birth. In the past 15 years the proportion of births by CS has been increasing steadily in England: in 1989/90 the rate of CS accounted for 12% of all births, whilst by 2005/6 the rate had doubled to 24%. Currently the rate stands at 24.6% for 2008/9. The overall increase in babies born by CS has not been accompanied by a measurable improvement in outcomes for the baby and has been shown to carry an increased risk of morbidity for the mother when compared to normal delivery. The rate of CS is higher amongst women who have an ileo-anal anastomosis, as an intact sphincter complex is essential if they are to remain faecally continent. Those who have a perineal wound resulting from surgery also have an increase risk of damage during a vaginal delivery.

## Stoma Care Nursing contribution

Women with inflammatory bowel disease have an increased risk of premature births, low birth weight babies and babies small for gestational age. The majority of women of child bearing age who have a stoma will have had colorectal surgery as a result of inflammatory bowel disease. In some cases women who have a stoma are able to have a vaginal delivery as having a stoma *per se* is not a contraindication. It is however suggested that women with Crohn's disease, an ileo-anal pouch or perianal disease avoid an episiotomy and should have planned CS.

SCNs play an important role in promoting appropriate birth choices amongst pregnant women who have a stoma, they educate, support and counsel female ostomists who plan to become pregnant to adopt healthy lifestyles prior to conception and throughout their pregnancy.

SCNs work in conjunction with midwifery and obstetric colleagues to improve communication and support for pregnant women with a stoma throughout their pregnancy and ensure they have a birth plan which reflects her individual needs and identifies and mitigates any risks which might result as a result of her previous surgery.

SCNs ensure that women with a stoma receive the information, education and advice they need to support them to have a normal birth where this is appropriate.

## Benefits for patients and the NHS

For women, the benefits of a normal birth include improvements in morbidity rates and a quicker return home to their families. The reduction in the level of unnecessary interventions also results in a reduction of unnecessary complications.

In the UK, CS have been found to cost an average of £1,701 while a vaginal delivery costs an average £749. It has been estimated that a 1% rise in CS rates costs the NHS £5m per year.

Women who have a vaginal delivery spend on average 1 day in hospital after delivery, women with instrumental deliveries 1 or 2 days and CS deliveries is 3 or 4 days.





# Important choices – where to die when the time comes

## Action

Avoid inappropriate admission to hospital and increase the numbers of people who are able to die in the place of their choice.

## Extent of the problem

People in the UK are now living longer and the number of annual deaths is forecast to increase. 50-60% of deaths currently occur in acute hospitals with patients experiencing an average of 18 days as an inpatient spread over 2-3 admissions in their last year of life.

Evidence suggests that many people wish to be cared for and die in a location other than hospital. A study found that in one locality, 40% of patients who died in hospital did not have medical needs which required them to be in an acute setting and could have been cared for elsewhere such as their own home or other appropriate setting.

The ability for people to choose where they die varies across the country. It is often influenced by factors such as where people live and the medical condition they have. The National Care of the dying audit notes that 55% of patients with cancer would prefer to die at home but in fact only around 25% actually achieve this. The Gold Standards Framework states that people who are nearing the end of life or known to be needing end of life care are admitted to hospital rather than supported at home. This is not only expensive but is often inappropriate and is preventable. People and their families should be able to choose to have care at the end of life care closer to home.

## Stoma Care Nursing contribution

SCNs play an important role in promoting appropriate choices, they educate, support and counsel those patients who become terminally ill to enable them to determine the setting where they would prefer to be cared for as they come to the end of their life.

SCNs work in conjunction with the MDT to support patients to make choices regarding their treatment plan once interventions are no longer an option. They input to the Liverpool care pathway and “Gold Standards” and facilitate access to information.

SCNs ensure that the family and carers of patients who become terminally ill are supported and have all the information and education they require to care for the patient at the end of their life, this includes other healthcare professionals eg primary care teams and where appropriate other Clinical Nurse Specialists, social care and hospice staff.

## Benefits for patients and the NHS

Patients and families would benefit by having an opportunity to discuss preferences and choices of where to die and have this supported and recorded. Of the £1.8 billion spent annually on treating cancer patients in the last year of their life, it has been calculated that £104 million could be redistributed to meet people’s preferences for place of care by reducing hospital admissions by 10% and the average length of stay following admission by three days. There is also scope to extend this kind of best practice to other conditions.

Approximately half of all complaints made to acute trusts relate to an aspect of end of life care. The estimated cost for a complaint of average complexity is just under £2,500. It is calculated that a typical acute trust will have total complaint costs of approximately £2 million per year of which around £1 million will be associated with end of life care.

# Fit and well to care

## Action

Reduce sickness absence in the nursing and midwifery workforce to no more than 3%.

## Extent of the problem

More than 45,000 NHS staff call in sick every day resulting in the loss of over 10 million working days. The proportion of working days lost due to sickness or absence varies between trusts from 2.8% to 6% In 2004-05 the average rate of sickness absence for nursing staff was as high as 7.5% (16.8 days per year).

There is wide variation in absence rates for nurses by wards, specialties and grades. One study found the greatest levels of absence are within services that have a high proportion of older patients such as stroke units, rehabilitation units, geriatrics and general medicine. There is less sickness absence in departments that provide specialist services, although rates are still comparatively high.

## Stoma Care Nursing contribution

SCNs are senior experienced members of staff who deliver care across the entire range of health settings including wards, operating theatres, out-patient clinics and in the community. They therefore have a range of opportunities to role model health enhancing behaviours to other health care professionals and staff, for example providing advice on healthy eating and exercise. SCNs usually work in a very small teams and in some cases single handed. They therefore often have contact groups to provide peer support and avoid professional isolation.

SCNs are in an ideal position to promote a culture of lifelong learning and support ongoing education of other staff. This can be achieved on a local basis informally by shadowing, and formally through study days and teaching. Such education improves the quality of care for patients and enhances personal job satisfaction. SCNs are also able to develop effective link nurses who have enhanced expertise to support continuity of patient care when the SCN is not available. This approach also supports career development and effective succession planning which has a positive impact on effective service provision, staff morale and wellbeing.

SCNs maintain effective relationships with industry partners, through which they are able to access formal education, professional development and peer support. This enhances their specialist knowledge and promotes their personal well being.

## Benefits for patients and the NHS

Reduced sickness or absence results in increased continuity of staff. This in turn provides increased continuity of care and has a positive impact on the experience of patients and their relatives. Sickness and absence also has a major impact on the stress levels of those staff that have to cover the workload of absent colleagues. An average 800 bedded, acute trust spends £2.5 million on agency staff, which is equivalent to 5.1% of its staffing costs. This has risen rapidly from 2.9% just seven years ago. There is a large variation in the level of nursing hours lost, for example the variation within acute Trusts is between 5% and 10%. The NHS Health and Wellbeing report found that if absence was reduced by a third this would equate to savings of 3.4 million working days a year equating to an extra 14,900 WTEs and a cash figure of £555m. Improving the experience of staff enables them to provide high quality patient care. Staff access to training which includes personal professional and career development, ensures that patients receive evidenced based quality care.

## Good practice example

The Foundation Course in Stoma Care, was developed by a group of experienced stoma care nurses in 2009 supported and provided by Coloplast Ltd. It provides a self learning interactive CD Rom for all nurses wanting to increase their knowledge of stoma care. Participants in the course are mentored by the local SCN. Currently over 2,700 nurses in the UK have registered on this course.

In Cardiff and Vale LHB the SCNs attend an annual health promotion day for staff and provide information about healthy eating exercise and bowel health. This is arranged in conjunction with occupational health and specialist nurses from other disciplines (eg breast and cardiac) and trainers from the local gym.

# Ready to go – no delays

## Action

Increase the number of patients in NHS provided care whose discharge is managed and led by a Nurse or Midwife where appropriate.

## Extent of the problem

Simple discharges make up approximately 80% of all discharges. The Department of Health states that changing the way in which discharge occurs for this large group of patients would have a major impact on patient flow and effective use of bed capacity. This, in turn, both reduces delays and improve patient experience by helping to ensure that patients are fully informed about the process for leaving hospital.

The move towards nurse led discharge has been, in part, a response to an overall shift in discharge activity brought about by shorter lengths of stay, increasing patient throughput and the increasing acuity of patients admitted to hospital. The importance of nurse led discharge has been highlighted in government plans to overhaul the NHS discharge process.

## Stoma Care Nursing contribution

SCNs provide information and support for patients, prior to surgery, during their hospital stay, and following discharge. Many use an Enhanced Recovery Programme (ERP), which focuses on preoperative preparation and education to improve patient outcome and accelerate recovery after surgery.

SCNs prepare patients for discharge so that they are able to leave hospital safely as soon as they are well enough and ensure that they have the skills they need to manage their stoma and ongoing supplies of appliances and accessories.

SCNs co-ordination role in the MDT helps to ensure that patients receive holistic, individualised, timely care following a recognised care pathway.

SCNs support the continuity of care and provide ongoing support through follow-up arrangements which include onward referral to a local SCN (if the patient is discharged to another area) telephone contact, home visits and/or clinic appointments.

## Benefits for patients and the NHS

Benefits of nurse led discharge include a more timely planned discharge for the patient with fewer delays leading to a more positive patient (and family) experience as well as a lower risk of healthcare associated infections.

The 2009 Annual Health Check, published in October 2009 by the Care Quality Commission, has revealed the proportion of hospitals failing to hit a target to reduce delayed transfers has increased by 12% in the past two years. Nearly a quarter of trusts (24%) failed to meet the required standard for delayed transfer of care.

It is estimated that it costs up to £400 per day to keep an average patient on a surgical ward, indicating real financial benefits to reducing length of stay. It is estimated that a reduction in length of stay of between two and six days per patient could save NHS trusts £15.5m-£46.5m a year in total.



# Protection from infection

## Action

Demonstrate a dramatic reduction in the rate of Urinary Tract Infections (UTIs) for patients in NHS provided care.

## Extent of the problem

It has been estimated that there are at least 100,000 cases of hospital acquired infection annually. UTIs are the second largest single group of healthcare associated infections in the UK and make up 20% of all hospital acquired infections. In primary care, UTIs make up between 1-3% of all GP consultations with the condition affecting women significantly more than men at a ratio of 50:1 in the age group below 60 years. 80% of urinary tract infections occurring in hospital can be traced to indwelling urinary catheters.

## Stoma Care Nursing contribution

SCNs ensure that the care of the small, but significant, number of patients each year that have surgery which results in a urinary stoma (urostomy) is effectively managed to prevent infection, and that an appropriate technique is used if the stoma is catheterised. Whilst teaching the patient to manage their urostomy, SCNs have the opportunity to identify and act upon early signs of urinary tract infection.

SCNs have specific expertise in the management of perineal wounds which are frequently associated with colo-rectal surgery. If a perineal wound is not appropriately managed, leakage may occur which results in contamination leading to a subsequent urinary tract infection.

SCNs have specific expertise in ensuring that faecal output from the stoma is securely contained. If faecal effluent leaks it may result in a urinary tract infection occurring. SCNs also play a key role in managing the output from intestinal fistulae, and open wounds, preventing contamination of the urinary tract.

SCNs, as part of the dietary support they provide, advise and encourage patients on maintaining their fluid intake, as appropriate fluid intake is essential in the prevention of urinary tract infection.

## Benefits for patients and the NHS

Urinary Tract Infections lead to longer stays in hospital for patients. Up to 5% of hospital acquired UTIs develop into secondary bacteraemia; this is often painful and can be life threatening. For pregnant women the development of a UTI can be especially problematic leading to possible pre-term delivery, anaemia and a low birth weight baby.

Adults with hospital acquired infection stay in hospital 2.5 times longer, incur hospital costs 3 times higher and incur higher general practitioner, district nurse and hospital costs after discharge than uninfected patients.

UTIs have been found to extend the average length of hospital stay by 6 days and may account for an extra 798,000 hospital bed days annually. It has been estimated that in 1994/5 costs of treating UTIs in the NHS were in the order of £124 million and the extra financial cost of urinary infection has been estimated at £1,122 per patient.





# Your Skin Matters

## Stoma Care Specific Action

No avoidable skin complications for patients with a stoma.

## Role of the Stoma Care Nurse

SCNs play a key role in maintaining healthy skin integrity around the stoma to ensure that appliances can adhere securely to prevent leakage which results in skin excoriation. This is achieved through:

Educating other professionals in effective stoma care management, sharing their expertise of stoma care appliances and accessories, and working alongside surgeons to ensure a patient's stoma is positioned in the most appropriate place and has a spout which ensures effluent flows into the pouch rather than exuding at skin level.

Educating patients and their carers in the pre and postoperative period to ensure that they have the self care skills to manage their stoma and use appliances and accessories effectively, to reduce adverse outcomes and know when and how to seek further help, advice or support if required.

Recognising and acting on the early signs of stoma complications and associated skin conditions such as the development of a peri-stomal hernia, skin excoriation, fungal infection, granulomas or fistula, initiating an appropriate treatment plan and liaising with other Clinical Nurse Specialists as appropriate.

## Benefits for patients and the NHS

The impact of peristomal skin excoriation is physically and clinically challenging for patients and NHS staff. The condition compromises the ability of appliances to adhere securely, which results in effluent leaking onto the patient's skin, exacerbating the problem and often causing psychological distress.

The cost of pouches and accessories for a patient managing their stoma effectively varies between £780 and £1800 per year. In situations where there are difficulties managing the stoma or appliances are used inappropriately this can rise above £6000.

## Good practice example

During radiotherapy a patient who has a colostomy may frequently experience diarrhoea. This will result in the patient having to change their usual closed pouch much more frequently. If patients undergoing radiotherapy are supported by a SCN they will be advised to use a drainable pouch which can be emptied to avoid frequent changing, reducing the risk of skin damage.

If the patient continued to use a closed pouch whilst they have diarrhoea, typically the cost of pouches and accessories will increase from approximately £40 to over £100 per week.

The cost of treating a patient with excoriated skin varies, but a typical example would be £325 for a two visit episode.



# Keeping nourished – getting better

## Stoma Care Specific Action

Stop inappropriate weight loss and dehydration in patients who have a stoma or fistula.

## Role of the Stoma Care Nurse

SCNs play a key role in ensuring that patients who have a stoma remain adequately nourished and hydrated, especially if the patient worries that eating and drinking will adversely affect the function of their stoma or cause excess odour or flatus. Some patient who have a stoma face particularly challenges as a result of a “short gut” or because they have a very high output stoma or fistula. If this condition is poorly managed it can have severe consequences for the patient. Skilled, knowledgeable SCNs are invaluable in optimising the patients’ outcomes. This is achieved through:

Undertaking high level assessment of patient’s dietary and fluid requirements, and providing clear information and advice to support patients informed choice regarding the timely introduction of appropriate foods and fluids and using their specialist knowledge to educate patients with regard to normal diet and its effects on stoma function, the use of diet and medication to prevent constipation, manage diarrhoea, odour and flatus. Co-ordinating the MDT to develop high output stoma protocols and support the implementation of their use. Using specialist knowledge and practical skills to educate patients with regard to intestinal failure and high output stoma care management and nutrition to equip them to manage their condition and recognise when to seek further help. Educating both other professionals and patients with regard to nutritional management of enterocutaneous fistulas, fistuloclysis and distal feeding. Giving advice and support to patients receiving adjuvant therapy with regard to the effects of treatment on the gastrointestinal tract and stoma function and management of problems.

## Benefits for patients and the NHS

The impact of Intestinal failure and a high output stoma is physically, psychologically and clinically challenging for patients and NHS staff. The condition compromises the patient’s ability to maintain the correct balance of fluids and nutrients and can pose a medical emergency, requiring increased in-patient time, higher-level intervention and potential re-admission to hospital. The provision of telephone advice to patients and professionals or home visits by SCNs, supports early intervention and prevents the escalation of symptoms which may result in re-admission to hospital and potentially haemofiltration. The cost of a telephone consultation with a SCN is approximately £27 and a home visit is £57, whilst the cost of an overnight stay in a surgical ward is up to £400 per day and the cost of keeping a patient in ITU for haemofiltration is in excess of £2000 per day.

Studies have shown fistuloclysis (distal feeding) is a more cost effective option than the long-term use of Parenteral Nutrition which is estimated to cost an average of £60 day (excluding the costs of equipment, apparatus and nursing time)

## Good practice example

At West Middlesex University Hospital NHS Trust, the SCNs compiled a guide for staff on “Management of High Output Stomas” based on the latest clinical research in this field.

Patient information booklets have been developed by the SCNs at Ashford and St Peter’s NHS Trust to support patients with a high output ileostomy: examples include “Information for Patients with an Ileostomy taking Loperamide” and “Information for Patients with a High Output Ileostomy”. Patients in these categories are advised almost exclusively by Stoma Care Specialist Nurses which reduces the need for General Practitioner or Acute hospital medical intervention



# Promoting normal birth

## Stoma Care Specific Action

Ensure all pregnant women with a stoma or who have had continence surgery have the information, advice and support they need to determine an appropriate birth plan to mitigate the risk of anal sphincter damage and subsequent faecal incontinence.

## Role of the Stoma Care Nurse

A third of all women sustain some anal sphincter damage during first vaginal delivery. For some women, having a vaginal delivery represents a high risk, this may be because they have inflammatory bowel disease (IBD), or because they already have some sphincter damage as a result of a previous vaginal delivery, or has had an anal sphincter repair. A number of women with IBD, especially Crohn's Disease, will experience fertility issues and many will not be aware of the increased risk of their children developing the disease

For women who have undergone a restorative procedure such as ileo-anal pouch formation, preservation of the anal sphincter complex or perineum is essential to protect the continence mechanism. For women who have a gastrointestinal disorder which causes frequent diarrhoea or who have had an ileo-anal anastomosis, an intact sphincter complex is also essential if they are to remain continent. The SCN plays a vital role in supporting these women to develop a birth plan which will reduce their risk of sphincter damage. This is achieved through:

Genetic and pre-conceptual counselling to ensure that prospective mothers with IBD are aware of the effect of pregnancy on the disease process and the potential outcome of their pregnancy

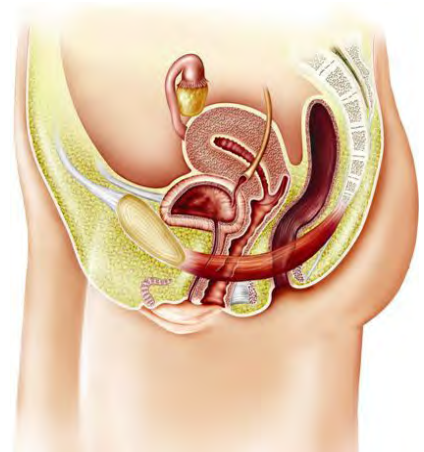
Supporting women in their choice of birth plan to prevent the risk of a perineal tear or sphincter damage which may result in faecal incontinence. Patients with increased risk factors need to understand the risks of normal delivery and the potential necessity of caesarean section.

## Benefits for patients and the NHS

Avoiding sphincter damage in women considered at risk of faecal incontinence as a result of obstetric trauma will have significant physical, psychological and cost savings. An American study calculated the cost to be \$17,166.

## Good practice example

In some instances SCNs work in collaboration with Obstetricians in a Pelvic Floor Dysfunction clinic- this allows the SCN to provide expert advice to both the pregnant women and her obstetrician. In this way an appropriate birth plan is jointly developed to avoid the risk of sphincter damage resulting in faecal incontinence.



# Ready to go - no delays

## Stoma Care Specific Action

All patients admitted for surgery or conditions involving a stoma have their discharge managed by a Stoma Care Nurse.

## Role of the Stoma Care Nurse

SCNs play a key role in ensuring that patients who have undergone surgery involving a stoma or who have been admitted for a stoma related condition can be discharged in a timely manner. This is achieved through:

Engaging the commitment and involvement of the MDT in Enhanced Recovery Programmes (ERP) which improve patient outcomes and accelerate recovery after surgery.

Providing pre and post operative care and support which decreases the length of time patients spend in hospital.

Commencing assessment and preparation for elective surgery in primary care during which the SCN discusses with the patient what to expect pre and postoperatively and begins to teach the patient stoma management using a prosthesis, which supports earlier, safe, discharge from hospital.

Ensuring that patients who are unable to achieve independence are supported after discharge by educating carers or other health professionals to enable them to meet the patients' needs. Early identification of issues that may cause problems after discharge prior to admission supports proactive planning to avoid unnecessary delays in the patients discharge.

Preventing re-admission to hospital by recognising stoma related problems and complications at an early stage and putting in place an effective management plan or making an early referral to another healthcare professional.

## Benefits for patients and the NHS

Stoma education is more effective if undertaken in the pre-operative period which results in the patient being able to proficiently manage their stoma in a shorter time after surgery and as such can leave hospital sooner. Intense preoperative stoma education carried out in the patients own home was shown to reduce the length of hospital stay saving over £1100 per patient.

## Good practice example

In many (but not all) areas of the UK the SCN is able to meet the patient, their family and carer in their own home prior to surgery. In this way pre-operative counselling takes place in surroundings familiar to the patient, enabling them to be more relaxed and thus more likely to express their fears about their forthcoming surgery and having a stoma and also allows for assessment of the patients home situation.

The growing trend for the introduction of ERP for colorectal patients, which shortens the time a patient having stoma surgery spend in hospital, has lead to challenges for SCNs to teach the patient to manage their stoma proficiently to ensure they are self caring prior to discharge.

Some SCNs manage this challenge with intensive, practical stoma care teaching pre-operatively using a pre-operative patient practice pack. A recent evaluation of this Coloplast tool demonstrated overwhelmingly that pre operative teaching is an invaluable aid in enabling patients to learn to manage their stoma.

At Mid Staffordshire NHS Foundation Trust the SCN has developed a simple, yet effective, traffic light system to ensure that all members of the MDT are aware of the patients competence level in managing their stoma.





# Important choices

## Stoma Care Specific Action

All patients who have a stoma are supported by the SCN to make appropriate, informed choices.

## Role of the Stoma Care Nurse

Following diagnosis the SCN in collaboration with the MDT will consider the relevant treatment options for the patient. Depending upon the patients underlying condition, and state of health various treatment options may be available and the SCN will provide clear information and support the patient and their family to make an informed choice. Such choices may include whether the patient has an open or laparoscopic procedure.

In suitable cases whether or not the patient wishes to have an alternative to a permanent stoma such as an ileo-anal pouch.

If the patient is to have a colostomy the SCN will provide information about the alternatives to wearing a pouch, such as managing the stoma by irrigation or using a stoma plug so that the patient can make a choice.

If the patient needs or decides to manage their stoma by wearing pouches, the SCN will support and advise the patient and provide information and samples so that the patient can select the most suitable products.

Whether the patient wishes to have adjunct therapies such as radiotherapy and/or chemotherapy.

In cases where a patient is terminally ill and has a bowel obstruction the choice may be between surgery to create a defunctioning stoma or conservative management.

## Benefits for patients and the NHS

The National Cancer Plan identifies the multidisciplinary team as integral to the management of colorectal cancer to improve outcomes for patients. It is recognised that SCNs are ideally placed as one of the main links between multidisciplinary team members, the patient and family, hospital and community. Providing a team approach to care, bringing together the appropriate specialists enables the patient to make informed choices about their treatment and care.

The costs of appliances and accessories to manage a stoma varies dependant upon patient need. The cost for a terminal (end) colostomy without complications is about £2,300. If a patient is supported to choose irrigation as their preferred method of management the cost per year is approximately £550.

The needs of patient with a stoma who require palliative care can be challenging, the SCNs play a key role in offering patients and their family information, support, guidance and counselling. Through recognising the patients need for palliative care the SCN will liaise with Community and Primary care colleagues at an early stage to ensure the patient is supported and informed choices can be made.

## Good practice example

By assessing and informing the patient regarding all the options available, the SCN can ensure that the appropriate method of management is used.



# Protection from infection

## Stoma Care Specific Action

Demonstrate a reduction in the rate of infections resulting from contamination due to leakage from a stoma or fistula.

## Role of the Stoma Care Nurse

SCNs have specific expertise in ensuring that faecal effluent from a stoma is securely contained. If faecal effluent leaks it may contaminate the abdominal wound or drain site, resulting in infection. SCNs also play a key role in managing the output from intestinal fistulae, and open wounds, preventing contamination which may also give rise to infection.

Patients with a newly created stoma are naturally anxious about their appliance becoming detached and leakage occurring. This anxiousness results in patients touching and handling their appliance frequently, thereby increasing the risk of contaminating their hands with micro-organisms. SCNs have a role in promoting the importance of good hand hygiene to prevent the spread of infection.

SCNs can also provide expertise in the appropriate use of antibiotics, this supports better antibiotic prescribing and helps reduce the risk of patients becoming susceptible to pathogens to avoid patients becoming susceptible to pathogens such as *Clostridium Difficile* and *candida albicans*.

## Benefits for patients and the NHS

Surgical site infections are serious operative complications that occur in 2% of surgical procedures and account for some 20% of health care-associated infections. Good wound care and infection prevention and control practices can reduce the incidence of wound infection. Wound infections have both a physiological and psychological impact on patients and increase clinical treatment costs and length of stay. One study demonstrated that surgical site infections following colon surgery can increase hospital length by 9.4 days with an associated increased cost of £2732.

## Good practice example

In the East Midlands a number of campaigns have been undertaken to raise public awareness and inform patients about the importance of hand hygiene in preventing the spread of infection. The campaigns, have been very successful, have included patient information leaflets, posters, opendays, videos and TV advertising.



# Stoma site identified pre-operatively by a SCN

## Action

The position of all elective stomas is determined prior to surgery and wherever possible emergency stomas are sited pre-operatively.

## Extent of the problem

Patients who do not have the site for their stoma determined and sited pre-operatively by an appropriately trained SCN, have a higher risk of post-operative complications such as; poorly fitting appliances resulting in skin excoriation, leakage and odour resulting in psychological sequelae, difficulty learning self management and impaired rehabilitation. The “text book definition” of the optimal stoma site, is in practice only optimal in few cases, thus there should be collaboration between the Surgeon and SCN to select the most appropriate site. There is evidence that stomas sited by SCNs are superior to those sited by others. A poorly positioned stoma is likely to reduce quality of life for the ostomist.

## The Stoma Care Nursing Action

SCNs are specially trained to identify the site of the stoma prior to surgery. This is often done in advance of admission to hospital. This gives the patient the opportunity to undertake their usual activities of daily living and wear their usual clothes, to ensure that the optimum site has been identified.

The site identified for the stoma to be placed must take account of the patient's physique; the presence of skin creases (that may only appear when the patient adopts different postures and positions); position of the natural waistband; the patient's lifestyle; hobbies and sporting activities.

The site chosen must also be visible to the patient so that they can manage their stoma.

## Benefits for patients and the NHS

A well placed stoma reduces the costs of appliances and accessories whilst reducing the risk of complications that may result in an increased use of products and accessories, extended hospital stay and continued reliance on community nursing services.

The impact of a poorly positioned stoma is very significant. If a patient requires further surgery to re-site or re-fashion their stoma, the cost ranges between £3000 - £4500

If a patient uses on average two, closed, one piece pouches per day, the annual cost is approximately £1800 . If a patient has a stoma that has not been well positioned and fashioned, it is much more complex to manage and the cost of appliances and accessories can rise to more than £3000 per year.

If an ostomist cannot see their stoma, and as such is unable to manage it themselves, their independence is curtailed. This also results in a reliance on carers or community nursing staff. The cost of a home visit by a community nurse is estimated to be at least £60. If a community nurse is required to visit every day then the cost to the NHS would be more than £22,000 per year.

## Good practice example

A poorly-positioned stoma can cause both physical and psychological problems for the patient, whilst a well-sited stoma can improve quality of life for the ostomist, thereby helping the individual accept the stoma and reduce the potential of need for psychological therapies or medication.



# Preventing re-admission to hospital

## Action

Demonstrate a reduction in unplanned re-admission to hospital relating to stoma surgery or due to complications of stoma management.

## Extent of the problem

Enhanced Recovery Programmes (ERP) have been introduced which enable patients to be discharged from hospital much sooner after surgery. However if the patient does not have access to appropriate support after discharge and problems or complications arise, this can result in re-admission to hospital.

## The Stoma Care Nursing Action

SCNs, working across hospital and community boundaries are essential to ensure that potential problems or complications are identified at an early stage and appropriate treatment plans are put in place which prevent the need for re-admission to hospital. This is achieved through:

Ensuring appropriate discharge arrangements were made and providing continuity of care after discharge with telephone contact, home visits and clinic follow-up so that problems or complications can be identified and acted upon promptly, reducing the risk of readmission to hospital.

Ensuring that patients, their families and carers know how to access help, support and advice and have information about the circumstances when it is important to seek help.

Protecting the patient pathway following discharge so that Appliance Use Reviews undertaken by another professional, which can result in duplication and confuse patients, may not be required.

Providing primary care colleagues with open access to the service for advice, guidance and referral, together with information as to when such advice should be sought. In some areas take place in GP practices and community health centres.

Providing ongoing education to GPs and community nursing staff to ensure that they can recognise the early signs of problems or complications relating to stomas and refer the patient back to the SCN promptly.

Provide a rapid response to the A&E Department to ensure patients who attend with a problem or complication relating to their stoma receive prompt, appropriate treatment so that wherever possible admission to hospital is avoided.

## Benefits for patients and the NHS

The cost of an admission to hospital as a result of complications following colo-rectal surgery is between £870 – £2800 depending upon severity. The cost of a SCN undertaking a home visit is approximately £57 and the cost of providing a telephone consultation is about £27. If an emergency admission to hospital is avoided, this represents a minimum saving of £870.

## Good practice example

At Sandwell and West Birmingham Hospitals NHS Trust, the Colorectal Nurses (CRN) are alerted whenever a patient with colorectal cancer is admitted as an emergency. The CRN will visit the patient and if the problem is stoma related, it will be identified and where possible admission will be avoided.

If the reason for attendance is not stoma related the CRN will review the patient opportunistically and if the patient has sustained an injury that will affect their ability to manage their stoma, eg a broken arm the CRN will signpost the patient to the appropriate service and support.



# Reduce the psychological impact of altered body image due to stoma formation

## Action

Minimise adverse psychological effects of altered body image following stoma formation.

## Extent of the problem

Stoma surgery has profound effects, not only physically but also psychologically. Formation of a stoma causes physical and visual changes resulting in altered body image, reduced interaction with others and inability to return to normal role functions.

It is estimated that 20% of ostomists experience clinically significant psychological symptoms post operatively, which include major depression and anxiety disorders. The practical aspects of stoma management contribute significantly to anxiety and are a major concern for patients. The level of patient's technical expertise in stoma management is strongly associated with their emotional, social and sexual rehabilitation. Patients who experience stoma related problems are more likely to experience psychological symptoms. Research has shown that 18% of patients had moderate or severe psychiatric disturbance 3 months postoperatively and there is further evidence that patients who are depressed or anxious 10 weeks after their operation are more likely to still be experiencing psychological problems after 1 year.

## The Stoma Care Nursing Action

SCNs reduce the psychological sequelae of stoma surgery that has a negative impacts on a patient's body image. They develop and maintain supportive, therapeutic relationships during the pre-operative period through surgery, post operative recovery and after discharge. This therapeutic relationship together with timely interventions help to avoid or manage problems, and are a vital step in helping patients to cope and recover. This is achieved through:

Counselling to enable the patient to explore their feelings towards having a stoma and to adapt to an altered body image. Providing information, support and advice to enable the patient to enabling the patient to manage their stoma effectively so that they are confident and can resume their previous lifestyle and adapt to having a stoma. Introducing patients to others who have a positive attitude and have resumed their lifestyle following stoma surgery and providing information about patient associations. Recognising when a patient requires more specialist psychological support and making an early referral.

## Benefits for patients and the NHS

The cost of psychological care in the NHS is significant. A consultation with a psychologist is estimated to cost approximately £150 and the cost of treating depression and anxiety has been quoted as in excess of £1000, which increases if a patient develops a chronic, ongoing condition

## Good practice example

SCNs at Ashford & St Peter's Hospitals' identified that some patients need more skilled psychological intervention than they can provide and that could not be met by established mental health services due to existing workloads. For the past 4 years a clinical psychologist has been attached to the service, providing one half day clinic per fortnight. Referrals to the service are made directly by one of the SCNs who knows the patient well and identifies this additional need. This services ensures that those patients who have complex psychological needs have rapid access and early intervention to address their problems. A research project is in progress to determine whether or not it is possible to predict those patients who will require psychologist intervention following stoma surgery. The psychologist also offers clinical supervision support to members of the SCN team.

# Evidence

## Background: the High Impact Actions for Stoma Care Nursing

Benner P. (1984), *From Novice to Expert*, Addison Wesley Publishing Co, California

Black P. (2008), *Comfort and functionality in stoma care: the new Freestyle® Vie range*, Gastrointestinal Nursing Vol 6, No 8, p28-35

Breckman B. (2005), *Stoma care and Rehabilitation*, Elsevier Churchill Livingstone Edinburgh

Burch J. (2010), *Caring for peristomal skin : what every nurse should know*, British Journal of Nursing, Vol 19, No 3, p166-172

Burdett Trust for Nursing. (2006), *Who cares wins: Leadership and the business of caring*. London: The Burdett Trust for Nursing /OPM

Castledine G and McGee P. (1998), *Advanced and Specialist Nursing Practice*, Blackwell Science Oxford

Cox C. (2000), *The Nurse Consultant: An advanced Practitioner?* Nursing Times 96,(13) p48

Hamric & Spross (Eds). (1989), *The Clinical Nurse Specialist in Theory and Practice* 2nd Edition W.B Saunders and Co. Philadelphia

Herlufsen P, Olsen AG, Carlsen B, Nybaek H, Karlsmark T, Laursen TN and Jemec GBE. (2006) *Study of peristomal skin disorders in patients with permanent stomas*, British Journal of Nursing, Vol 15, No 16, p854-862

Humphris D. (1994), *The basis of Nurse Specialism in Nursing*. In - The Clinical Nurse Specialist: Issues in practice. Macmillan, London

Humphris D. (1999), *A framework to evaluate the role of nurse specialists*. Professional nurse, 14(6), p377-379

Nursing and Midwifery Council (NMC). (2005), *Consultation on a framework for the standard for post-registration nursing*. NMC London

Report by the Prime Ministers Commission on Nursing and Midwifery, Chair Ann Keen RN. (2010), Front Line Care, Department of Health, England

Royal College of Nursing. (2002), *RCN Standards of Care: Colorectal and Stoma Care Nursing*, Royal College of Nursing, London

## Your Skin Matters

Allison M. (2010), *Conservative management of faecal incontinence in adults*, Nursing Standard. 24(26), p49-56

Clark M, Bours, G. & Defloor T. (2004), *The prevalence of pressure ulcers in Europe. In Recent Advances in Tissue Viability*. Quay Books, Salisbury

Colwell JC. (2005), *Care of the obese patient with an ostomy*. Journal of Wound, Ostomy & Continence nursing. 32(6) p384-385

Doughty D. (2006), *Complex ostomy care: paediatric stomas, high output stomas and difficult pouching situations*, WCET Journal

Gallagher S. (2004), *Challenges of ostomy care and obesity*, Ostomy wound management 50(9), p38-40, 44, 46

Kaushal M & Carlson GL. (2004), *Management of enterocutaneous fistulae*, Clinics colon Rectal Surg 17(20), p79-88

Kollmorgen et al. (1994), *The long term effect of adjuvant post operative chemo/ radiotherapy for rectal carcinoma on bowel function*, Annals of surgery 220(5), p676-682

Luscher B. (2007), *Stories from the bedside: Negative Pressure Wound Therapy with integrated ostomy care- or what can be achieved with good interdisciplinary work*, WCET Journal

O'Brien B et al. (1998), *Nursing management of multiple enterocutaneous fistulae located in the center of a large open abdominal wound: a case study*. Ostomy Wound Management 44(1), p20-24

Reed T et al. (2000), *Colocutaneous fistula management in a dehisced wound : a case study*, Ostomy Wound Management 52(4), p60-64, 66

Touche R. (1993), *The Cost of Pressure Sores*. Report to the Department of Health. London: Department of Health

WCET Expert Working Group. (2008), *Vacuum assisted closure-recommendations for use: a consensus document*, WCET Journal

Bass EM, et al. (1997), *Does preoperative stoma marking and education by the Enterostomal therapist affect outcome?* Diseases of the Colon and Rectum 40(4), p440-442

Berry J, Black P, Smith R and Stuchfield B. (2007), *Assessing the value of silicone and hydrocolloid products in stoma care*, British Journal of Nursing 16(13), p778-788

Black P. (2008), *Comfort and functionality in stoma care: the new Freestyle® Vie range*, Gastrointestinal Nursing 6(8) p28-35

Burch J. (2010), *Caring for peristomal skin : what every nurse should know*, British Journal of Nursing 19(3), p166-172

Chaudhri S, Brown L, Hassan I, Horgan AF. (2005), *Preoperative Intensive, Community- Based Vs. Traditional Stoma Education: A Randomised, Controlled Trial*. Diseases of the Colon & Rectum 48, p504-509

Cottam J et al. (2007), *Results of a nationwide prospective audit of stoma complications within 3 weeks of surgery*, Colorectal disease 9(9), p834-838

Dansac. (2007), *Midas skin assessment tool*, SCOR index, Dansac Ltd

Fretwell I, Mallender E and Smith K. (2004), *Computerised digital photography for stoma and wound management*, Gastrointestinal Nursing 2(5), p19-24

Grove GI, Lutz JB, Leyden J and Swartzmiller DH. (1993), Data on file at 3M Health Care, St Paul, USA cited in: Black P. (2007) *Peristomal skin care: an overview of available products*, British Journal of Nursing 16(17), p1048-1056

Herlufsen P, Olsen AG, Carlsen B, Nybaek H, Karlsmark T, Laursen TN and Jemec GBE. (2006), *Study of peristomal skin disorders in patients with permanent stomas*, British Journal of Nursing 15(16), p854-862

King, PM et al. (2006), *The influence of an enhanced recovery programme on clinical outcomes, costs and quality of life after surgery for colorectal cancer*, Colorectal Disease 8(6), p506-513

Lyon CC. (2000), *The spectrum of skin disorders in abdominal stoma patients*, Br J Dermatol 143(6), p1248-1260

Mahjoubi B et al. (2010), *Quality of life in stoma patients: appropriate and inappropriate stoma sites*, World J Surg 34(1), p428-438

Millan M et al. (2009), *Preoperative stoma siting and education by stomatherapists in colorectal cancer patients: A descriptive study of 12 colorectal surgery units in Spain*, Colorectal Disease Online

NHS Institute for innovation and Improvement. (2008), *Quality and service improvement tools: Enhanced Recovery Programme*, NHS Institute for innovation and Improvement, Warwick

Ratcliff CR. (2005), *Descriptive study of peristomal complications*, Journal of Wound Ostomy Continence Nursing 34(2), p128

Royal College of Nursing. (2002), *RCN Standards of care, Colorectal and Stoma Care Nursing*, Royal College of Nursing, London

Rudoni C. (2008), *A service evaluation of the use of silicone based adhesive remover*, British Journal of Nursing, Vol 17, No 2 (Stoma care Supplement), S2-S9

Szymanski KM. (2010), *External stoma and peristomal complications following radical cystectomy and ileal conduit diversion: a systematic review*, Ostomy Wound Management 56(1), p28-35

Turnbull G. (2002), *The position on Preoperative stoma site positioning*, Ostomy wound management, 48(8)

Williams J. (2007), *A guide to maintaining healthy peristomal skin*, Gastrointestinal Nursing, 5(7), p18-22

Williams et al. (2008), *How the ostomy skin tool can help people with peristomal skin disorders*, WCET Journal 28(2), S2

## Staying safe – preventing falls

Help the Aged. (2008), *Falling Short*. Help the Aged. London

National Patient Safety Agency. (2007), *Slips, trips and falls in hospital*. The third report from the Patient Safety Observatory. National Patient Safety Agency, London

Royal College of Physicians. (2008), *National Falls and Bone Health in Older People*, Royal College of Physicians website – [www.rcplondon.ac.uk](http://www.rcplondon.ac.uk)

## Keeping Nourished – getting better

Akbarshahi H, Andersson B, Norden M, Andersson R. (2008), *Perioperative Nutrition in Elective gastrointestinal surgery-potential for improvement*, Dept of surgery, clinical sciences Lund, Lund university hospital, Lund, Sweden. Digestive surgery, 25, p165-174

British Association for Parenteral and Enteral Nutrition (BAPEN). (2009), *Combating Malnutrition: Recommendations for Action*. BAPEN, Worcester

BAPEN Malnutrition Advisory Group. (2006), *Malnutrition Universal Screening Tool (MUST)*, Standing Committee of BAPEN, Worcester

Elia M, Zellipour L, Stratton R.J. (2005), *To screen or not to screen for adult malnutrition*, Clinical Nutrition, 24, p867-84

NICE and the National Collaborating Centre for Acute Care Nutritional Support for Adults. (2006), Oral Nutrition Support, Enteral Tube Feeding and Parenteral Nutrition (Clinical Guideline 32)

Royal College of Nursing (RCN). (2005), *Perioperative Fasting in Adults and Children*, RCN Clinical Practice Guidelines November, RCN London

Stratton RJ, Green CJ, Elia M. (2003), *Disease related malnutrition*, UK: CABI Publishing.

Baker M, Greening L. (2009), *Practical management to reduce and treat complications of high-output stomas*. Gastrointestinal Nursing 7(6), p10-17

Bloomfield, Stone S, Ferries S. (2004), *Dispelling the myths: diet and stoma management*. WCET Journal 24(1), p38-4

Cawich S, McFarlane M, Mitchell D. (2007), *Fistuloclysis; cost effective nutrition for patients with enterocutaneous fistulae*. Internet Journal of third world medicine. 4(2), p1-4

Cottam J. (2003), *Management of high output ileostomy following rectal resection*. Gastrointestinal Nursing 1 (7) p19-23

Farrer K, Teubner A. (2003), *Fistuloclysis Distal Feeding Handbook*, Salford Royal Hospital

Fulham J. (2004), *Improving the nutritional status of colorectal surgical and stoma patients*. BJN 13(12), p702-708

Fulham J. (2005), *Understanding chemotherapy and radiotherapy for the individual with a stoma*. In - Stoma Care, Porrett T, McGrath A (eds) Oxford, Blackwell publishing, p130-156

Fulham J. (2008), *Providing dietary advice for the individual with a stoma*. B.J.N. 17(2) Stoma Care Supplement S22-27

Sica J, Burch J. (2007), *Management of intestinal failure and high output stomas*, B.N.J 16(13), p772,774,776-777

Slater R. (2009), *Nutritional management of enterocutaneous fistulas*, B.J.N. Vol. 18(4), p225-230

St Marks Nursing Team. (2009), *Patient information leaflet - Dietary advice for people with a high output stoma*, St Marks and The Burdett Institute of GI nursing

St Mark's Dietitians. (2009), Short Bowel Syndrome, *Your Guide to Eating and Drinking with a Stoma or Fistula*, St Marks and The Burdett Institute of GI nursing

Teubner A, Morrison K, Ravishanker H, Anderson I, Scott N, Carlson G. (2004), *Fistuloclysis can successfully replace parenteral feeding in the nutritional support of patients with enterocutaneous fistula* BJ Surg. 91(5), p625-31

Thompson MJ, Boyd-Carson W, Trainor B, Boyd K. (2003), *Management of constipation*, Royal Collage of Nursing: Clinical protocols for stoma 3, Nursing standard 18(14-16), p141-142

Wade B. (1989), *A stoma is for life*, Scutari Press London

## Promoting normal birth

Forbes A. (1998), *Clinicians guide to inflammatory bowel disease*. London, Churchill Livingstone

Hospital Episodes Statistics. (2004), NHS Maternity Statistics. England

Kane S. (2003), *Inflammatory bowel disease in pregnancy*. Gastroenterology Clinics of North America 32(1), p323-340

Kornfield et al. (1997), *Pregnancy outcomes in women with inflammatory bowel disease- a population based cohort study*. American Journal of Obstetrics and Gynecology, 117(4), p942-946

NHS Institute for Innovation and Improvement. (2007), *Focus On: Caesarean Section*, NHS Institute for Innovation and Improvement, Warwick

Parliamentary Office of Science and Technology; 2002, Caesarean Sections. Parliamentary Office of Science and Technology, London



Royal College of Midwives (RCM); 2008, *10 top tips for normal birth*. Royal College of Midwives, London

Willoughby C. (1983), *Fertility, pregnancy and ulcerative colitis*. In Allan et al (eds) *Inflammatory Bowel Diseases*. Edinburgh, Churchill Livingstone

Deutekom. (2005), *Costs of outpatients with faecal incontinence*. *Scandinavian Journal of Gastroenterology*, 40(5), p552-558

Forbes A. (1998), *Clinicians guide to inflammatory bowel disease*. London, Churchill Livingstone,

Hill et al. (1997), *Surgical treatment of acute manifestations of Crohn's disease during pregnancy*. *Journal of the Royal Society of Medicine* 90(2), p64-66

Kane S. (2003), *Inflammatory bowel disease in pregnancy*. *Gastroenterology Clinics of North America* 32(1) p323-340

Khosla et al. (1984), *Crohn's disease and pregnancy*. *GUT* 25, p52-56

Korelitz B. (1998), *Inflammatory Bowel Disease and pregnancy*. *Gastroenterology Clinics of North America* 32, p323-224

Mellgren et al. (1999), *Long-term cost of faecal incontinence secondary to obstetric injuries*, *Diseases of the Colon & Rectum*. 42(7), p857-865

Moum B. (2000), *Chronic Inflammatory Bowel Disease and pregnancy*. *Scandinavian Journal of Gastroenterology* 37(7), p673-678

Yang et al. (1992), *The genetics of inflammatory bowel disease*. In - MacDermott R, Stenson W (eds) *Inflammatory Bowel Disease*. New York, Elsevier

## Important choices – where to die when the time comes

Balance of Care Group in association with the National Audit Office. (2008), *Identifying Alternatives to Hospital for People at the End of Life*, National Audit Office online – [www.nao.org.uk](http://www.nao.org.uk)

Hatziandrew E et al. (2008), *The potential cost saving of greater use of home and hospice based end of life care in England*. RAND Europe

Marie Curie Palliative Care Institute. (2007), *National Care of the dying audit*. Marie Curie Palliative Care Institute Liverpool

National Audit Office. (2008), *End of life Care*. The Stationery Office, London

National Audit Office. (2008), *A review of the provision of End of Life Care services in Sheffield Primary Care Trust*. National Audit Office online – [www.nao.org.uk](http://www.nao.org.uk)

NHS Gold Standards Framework Programme. (2006), *Prognostic Indicator Guidance*, online – [www.goldstandardsframework.nhs.uk](http://www.goldstandardsframework.nhs.uk)

Black P. (2004), *The importance of palliative care for patients with colorectal cancer*. *British Journal of Nursing* 13(10), p584 -589

Brown H & Randle J. 2005, *Living with a stoma: a review of the literature*. *Journal of Clinical Nursing* 14, p74-81

Chaney U, Hasson F, Keeney S, Sinclair M, Poulton B & McKenna HP. (2007), *Stoma coloproctology nurse specialist: a case study*. *Journal of Clinical Nursing* 16, p1088-1098

Department of Health. (2008), *End of Life Care Strategy: Promoting High Quality Care for All Adults at the End of Life*. HMSO, London

NHS Executive. (1997), *Improving Outcomes in Colorectal Cancer*. Department of Health, London

NHS Executive. (2000), *The NHS Cancer Plan: A Plan for Investment, A Plan for Reform*. Department of Health, London

Royal College of Nursing (RCN). (2009), *Clinical Nurse Specialists – Stoma Care* RCN London

## Fit and well to care

Confederation of British Industry (CBI). (2007), *Annual absence and turnover survey*. CBI London  
Chartered Institute of Personnel and Development (CIPD) (2009), *Annual absence survey*. CIPD London

Coloplast Ltd.(2010), *Coloplast Academy Education Newsletter, Issue March 2010*. Coloplast Ltd., Peterborough

Cornwell J. (2009), *See the person in the health professional: how looking after staff benefits patients*. Nursing Times 105(48), p10-12

Department of Health. (2009), *NHS Health and Wellbeing: Staff perception research - The Boorman Review*. Department of Health. London

Department of Health. (2010), *Invisible Patients – the health of health professionals*. Department of Health. London

Gopee. (2002), *Human and social capital as facilitators of lifelong learning in nursing*. Nursing Education Today 22(8), p608-616

Health and Safety Executive (HSE). (2007), *A pilot study into improving sickness absence recording in national health service acute trusts*. HSE website - [www.hse.gov.uk](http://www.hse.gov.uk)

National Audit Office. (2006), *Good practice in managing the use of temporary nursing staff in acute and foundation trusts*. The Stationery Office, London

NHS Employers. (2009), *Shared Learning - Reducing sickness Absence*. NHS Employers website – [www.nhsemployers.org](http://www.nhsemployers.org)

Perry-Woodford Z. (2005), *The link that improves care and practice*. Gastrointestinal Nursing 3(3), p20-24

Royal College of Nursing (RCN). (2009), *Nursing Counts: Health, nursing and the next general election*, RCN London

## Ready to go – no delays

Care Quality Commission. (2009), *Annual Health Check. Performance Ratings*. Care Quality Commission, London

Chatterjee M. (2004), *Nurses to take over simple discharge*. Nursing Times, 100(35), p2

Chaudhri S, Brown L, Hassan I, Horgan AF. (2005), *Preoperative Intensive, Community- Based Vs. Traditional Stoma Education: A Randomised, Controlled Trial*. Diseases of the Colon & Rectum. 48, p504-509

Department of Health. (2004), *Achieving timely simple discharge from Hospital*. A toolkit for the multidisciplinary team. Department of Health, London

Department of Health. (2010), *Enhanced Recovery for elective surgery*. Department of Health, London

Johnson A, Porrett T. (2005), *Discharge planning and supporting patient self care*. Chapter 9 in Stoma Care eds Porrett & McGrath Blackwell Publishing Ltd:Oxford

King, PM et al. (2006), *The influence of an enhanced recovery programme on clinical outcomes, costs and quality of life after surgery for colorectal cancer*. Centre for reviews and dissemination, Economic Evaluation database

Lees L. (2004), *Making nurse-led discharge work to improve patient care*. Nursing Times. 100(37), p30

National Audit Office. (2000), *Hip Replacements: Getting It Right First Time*. National Audit Office London

NHS Institute for innovation and Improvement. (2008), *Quality and service improvement tools: Enhanced Recovery Programme*, NHS Institute for innovation and Improvement, Worcester

Webber-Maybank M., Luton H. (2009), *Making effective use of predicted discharge dates to reduce the length of stay in hospital*. Nursing Times; 105, p15

Abbotts M. (2009). *Stoma Care traffic light communication system*. WCET conference. Poster presentation. (Mid-staffordshire NHS Foundation Trust, England)

Chaudhri S, Brown L, Hassan I, Horgan AF. (2005) *Preoperative Intensive, Community-Based vs. Traditional Stoma Education: A Randomized, Controlled Trial*. Diseases of the Colon & Rectum 48, p504-509

Coloplast Ltd. (2009), Dean JM (Ed) *The Pre-operative Patient Practice Pack; Evaluation Feedback Report*. Coloplast Ltd. Peterborough, UK

Department of Health. (2010), *Delivering enhanced recovery. Helping patients to get better sooner after surgery*. Department of Health, London

Rickard MJ, Dent OF, Sinclair G, Chapuis OH, Bokey EL. (2004), *Background and perioperative risk factors for pro-longed hospital stay after resection of colorectal cancer*. ANZ Journal Surgery; 74, p4-9

## Protection from infection

Bard Limited. (2003), *Memorandum to the Select Committee on Science and Technology*. online – [www.publications.parliament.uk](http://www.publications.parliament.uk) (online)

Burch J, Sica J. (2008), *Common peristomal skin problems and potential treatment options*. Br J Nurs, 17(17), S4

Burch J. (2010), *Caring for peristomal skin: what every nurse should know*. Br J Nursing. 19(3), p166, 168, 170

Coello R, Charlett A, Wilson J, Ward V, Pearson A, Borriello PJ. (2005), *Adverse impact of surgical site infections in English hospitals*, Journal of Hospital Infection, 60(2), p93-103

De Lissoyoy G, Fraeman K, Hutchins V, Murphy D, Song D, Vaughn BB. (2009), *Surgical site infection: incidence and impact on hospital utilization and treatment costs*. Am J Infect Control.37(5), p387-97

Health Protection Agency (HPA). (2009), *Trends in rates of Healthcare Associated Infection in England 2004 to 2008*, NAO London

Kalsi et al. (2003), *Hospital-acquired urinary tract infection*. Institute of Urology and Nephrology London: University College London

Mahmoud NN, Turpin RS, Yang G, Saunders WB. (2009), *Impact of surgical site infections on length of stay and costs in selected colorectal procedures*. Surg Infect (Larchmt).10(6), p539-544

National Audit Office (NAO). (2004), *Improving patient care by reducing the risk of hospital acquired infection A progress report*, The Stationery Office, London

National Audit Office (NAO). (2009), *Reducing Healthcare Associated Infections in Hospitals in England*, The Stationery Office, London

Plowman R, et al. (2000), *The socio-economic burden of hospital acquired infection*, PHLS, London

Public Accounts Committee. (1999), *The Management and Control of Hospital Acquired Infection in Acute NHS Trusts in England*, HC 306, Session 1999-2000 1-2

Burch J, Sica J. (2008), *Common peristomal skin problems and potential treatment options*. Br J Nursing. 8;17(17):S4, S6, S8

Burch J. (2010), *Caring for peristomal skin: what every nurse should know*, Br J Nursing. 4;19(3), p166, 168, 170

Coello R, Charlett A, Wilson J, Ward V, Pearson A, Borriello PJ. (2005), *Journal of Hospital Infection*, Adverse impact of surgical site infections in English hospitals 60(2), p93-103

de Lissovoy G, Fraeman K, Hutchins V, Murphy D, Song D, Vaughn BB. (2009), *Surgical site infection: incidence and impact on hospital utilization and treatment costs*. Am J Infect Control. 37(5), p387-97.

Department of Health. (2008), *Clostridium difficile infection: How to deal with the problem*, Department of Health, London

Department of Health. (2007), *Saving Lives High Impact Intervention (HII) No 4, Care Bundle to Prevent Surgical Site Infection* - Brochure - Department of Health, London

Department of Health. (2007), *Saving Lives High Impact Intervention (HII) No 6, Urinary Catheter Care Bundle* - Brochure - Department of Health, London

Department of Health. (2007), *Saving Lives High Impact Intervention (HII) No 7, Care Bundle to reduce the risk of Clostridium difficile (CDI)* - Brochure - Department of Health, London

Mahmoud NN, Turpin RS, Yang G, Saunders WB. (2009), *Impact of surgical site infections on length of stay and costs in selected colorectal procedures*. Surg Infect (Larchmt).10(6), p539-44

## Stoma site identified pre-operatively by a SCN

Bass EM et al. (1997), *Does preoperative stoma marking and education by the enterostomal therapist affect outcome?* Dis Colon and rectum; 40(4), p440-2

Baxter A. Salter M. (2000), *Stoma care nursing*, Nursing Standard. 14(59), p5

Becker et al. (1999), *Stoma Care Nurses: Good Value for Money?* World Journal of Surgery 23(7) p638-643

Black P. (2000), *Holistic Stoma Care*, Baillière Tindall, Edinburgh

Gulbinienė J. et Al. (2004), *The impact of preoperative stoma siting and stoma care education on patient's quality of life*, Medicina (Kaunas). 40(11), p1045-53

Herlufsen P. et al. (2006), *Study of peristomal skin disorders in patients with permanent stomas*, British Journal of Nursing. 15(16), p854-862

Millan M et al. (2009), *Preoperative stoma siting and education by stomatherapists in colorectal cancer patients: A descriptive study of 12 colorectal surgery units in Spain*, Colorectal Disease p1463-1318

Nastro et al. (2009), *Multivariate analysis of complications from intestinal stomata*, Abstract Book ACPGBI. Colorectal Disease 11(1) p37

Padilla & Grant. (1985), *Quality of life as a cancer nursing outcome variable*, Advances in Nursing Science; 8(1), p45-60

Qin W & Bao-Min Y. (2001), *The relationship between site selection and complications in stomas*. WCET Journal. 21(2), p10-12

Rutledge et al. (2003) *Effective stoma siting*. Nursing Standard 18(12), p43-4

Rust J. (2009), *Understanding the complexities of the clinical nurse specialist: A focus on stoma siting*, Gastrointestinal Nursing 7(4), p18-26

Rozen BL. (1997), *The value of a well-placed stoma*. Cancer Practitioner. 5(6), p347-52

Turnbull GB. (2009), *The position on Preoperative stoma site positioning*, Ostomy Wound management, 48(8), p14

Wade B. (1989), *A stoma is for life*, London: Scutari

## Preventing re-admission to hospital

Department of Health. (2010), *Enhanced Recovery for elective surgery*, Department of Health, London

## Reduce the psychological impact of altered body image due to stoma formation

Castledine G. (2004), *The importance of the nurse-patient relationship*, British Journal of Nursing. 4(4), p231

Centre for Economic Performance's Mental Health Policy Group. (2006), *THE DEPRESSION REPORT: A New Deal for Depression and Anxiety Disorders*, The Centre for Economic Performance, London

Follick MJ, Smith TW, Turk DC. (1984), *Psychosocial adjustment following ostomy*, Health Psychology. 3(6), p505-517

Kelly MP Henry P. (1993), *Open discussion can lead to acceptance – the psychosocial effects of stoma surgery*, Professional Nurse 9(2), p101-106

Peplau H. (1998), *Interpersonal Relations in Nursing*, London, Macmillan Education

Prieto L, Thorsen H, Juul K. (2005), *Development and validation of a quality of life questionnaire for patients with colostomy or ileostomy*, Health and Quality of Life Outcomes. 3 62

Simmons KL, Smith JA, Maekawa. (2009), *A Development and Psychometric Evaluation of the Ostomy Adjustment Inventory-23*, J Wound Ostomy Continence Nurs. 36(1), p69-76

Sprangers MA, Taal BG, Aaronson NK, te Velde A. (1995), *Quality of life in colorectal cancer, Stoma vs nonstoma patients*, Diseases of Colon and Rectum 38(4), p361-369,

Thomas C, Madden F, Jehu D. (1984), *Psychosocial morbidity in the first three months following stoma surgery*, Journal of Psychosomatic Research. 28(3), p251-257

Thomas C, Madden F, Jehu D. (1987), *Psychological effects of stomas – I. Psychosocial morbidity one year after surgery*, Journal of Psychosomatic Research. 31 (3) p311-316

Virgin-Elliston T, Williams L. (2003), *Psychological considerations in stoma care*. In: C Elcoat (ed.) Stoma Care Nursing. Hollister: Berkshire



Vujnovich A. (2008), *Pre and post-operative assessment of patients with a stoma*, Nursing Standard. 22 (19) p50-56

Wade B. (1989), *A Stoma is for Life*, Scutari Press: London

Wade B. (1990), *Colostomy patients: psychological adjustment at 10 weeks and 1 year after surgery in districts which employed stoma-care nurses and districts which did not*, Journal of Advanced Nursing. 15 (11) p1297-1304

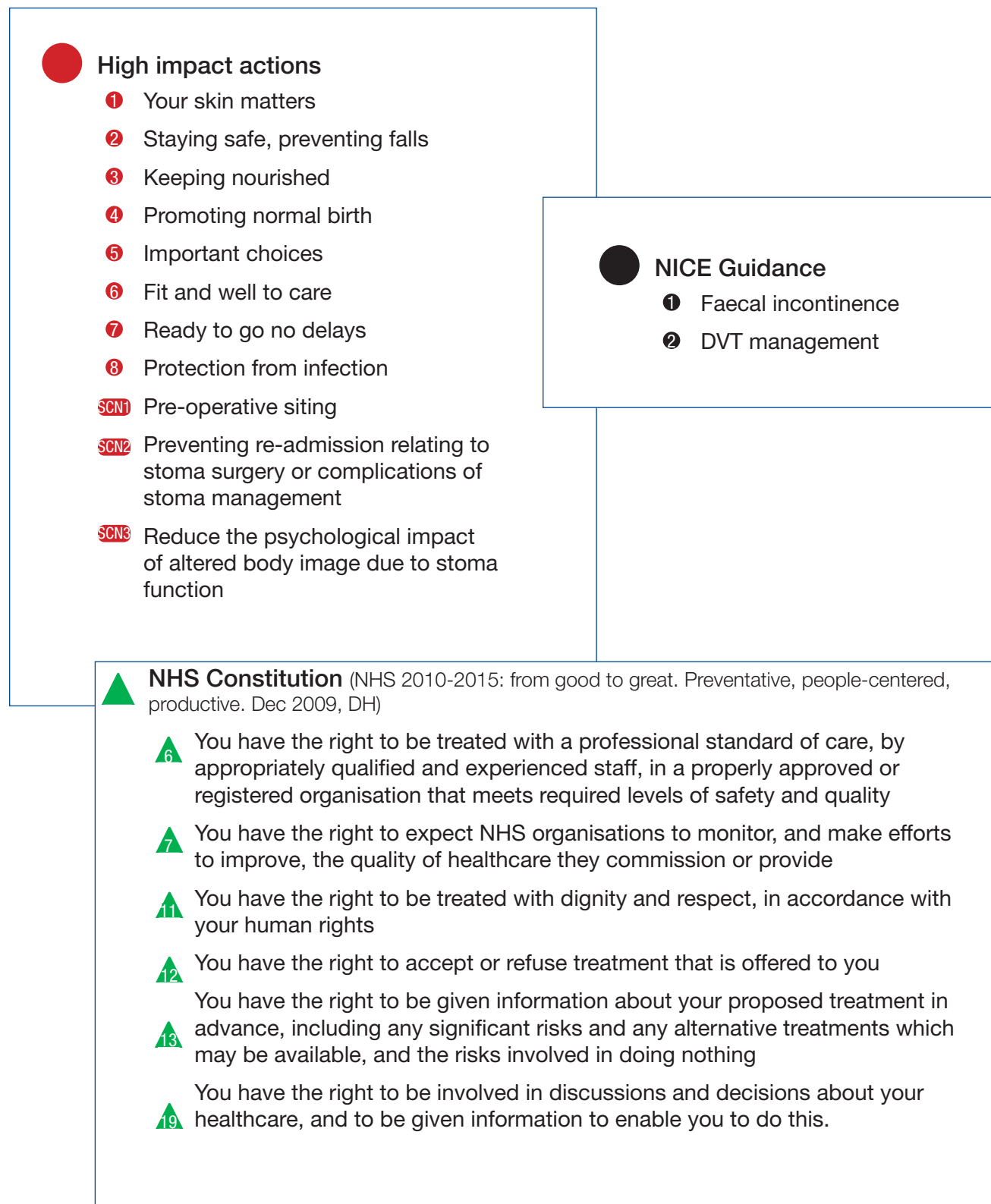
White CA, Hunt JC. (1997), *Psychological factors in post-operative adjustment to stoma surgery*, Ann R Coll Surg Engl 79, p3-7

White C. (1998), *Psychological management of stoma-related concerns*, Nursing Standard.12(36), p35-38

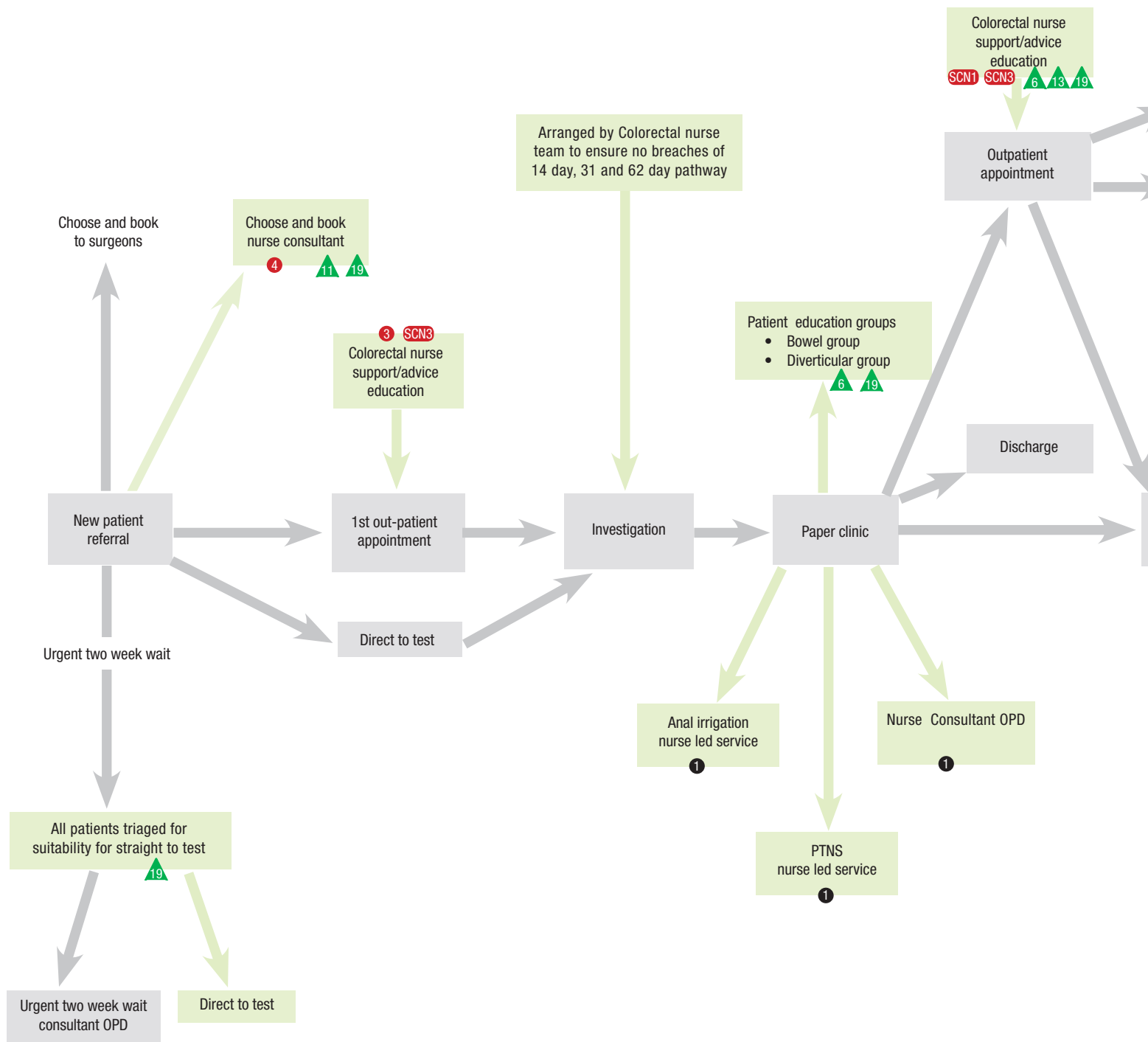
# Colorectal and Stoma Care Nurse impact on the colorectal patient's pathway as applied to the High Impact Actions for Nursing and the NHS Constitution

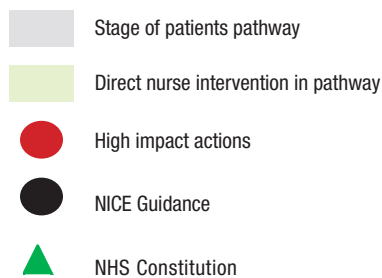
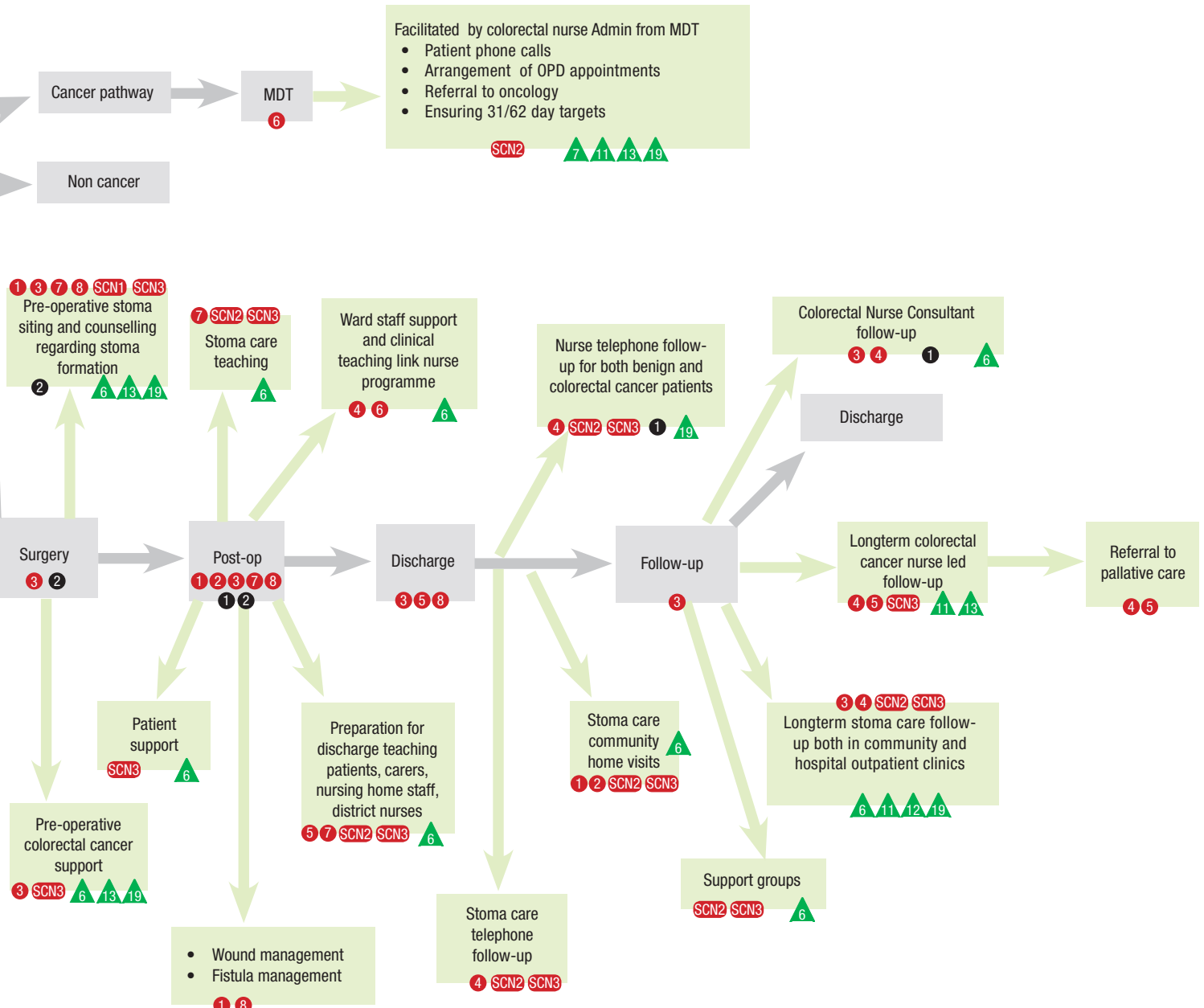
Overleaf is a flowchart example of how SCNs can impact on the colorectal patients pathway, using the High Impact Actions, the NHS constitution and to specific NICE guidelines. This flowchart has been developed by Terri Porett, Nurse Consultant, Homerton Hospital NHS Foundation Trust and may be adapted by other trusts as long as acknowledgement is given to this original document.

Below is the key to the specific areas of impact:



# Colorectal and Stoma Care Nurse impact on the colorectal patient's pathway as applied to the High Impact Actions for Nursing and the NHS Constitution





CL508N



The Coloplast logo is a registered trademark of Coloplast A/S. © [2010-05.]  
All rights reserved Coloplast A/S, 3050 Humlebæk, Denmark.



Coloplast Limited  
First Floor, Nene Hall  
Peterborough Business Park  
Lynchwood  
Peterborough, PE2 6FX  
01733 392000  
[www.coloplast.co.uk](http://www.coloplast.co.uk)