A proven pathway for stoma care: the value of stoma care services

Rebecca Davenport

Abstract

The role of the stoma nurse is often misunderstood by those who have little or no understanding of the complexities of their role. Stoma nurses face challenges when communicating the valuable role they provide in relation to quality, value and cost. The implementation of an accredited pathway designed specifically for stoma patients would not only promote excellence in nursing practice, but would also assist the stoma nurse in building the profile of the specialty. The accredited pathway should outline the sequence and timings of actions necessary to achieve expected patient outcomes and organisational goals regarding quality of care, costs, patient experience and efficiency.

Key words: Stoma ■ Nurse ■ Quality ■ Value ■ Cost ■ Accreditation

The role of the stoma nurse, and the importance of the service provided for patients, have been regularly appraised in nursing literature as being of paramount importance in the rehabilitation of a patient with a newly formed stoma. Patients undergoing stoma formation require specialist nursing care to support both their physical and psychological needs (Porrett and McGrath, 2005; Borwell, 2009). It is suggested that a well-informed, empathetic specialist stoma care nurse will have a positive effect on the patient's quality of life as he or she supports, educates and advises the patient and family (Waller et al, 2009).

However, the challenge for nurses working within this specialty is twofold: first, to communicate this importance in terms of quality (Vidall, 2011); and, second, to demonstrate their worth to key stakeholders in terms of costs and value (Leary, 2011), as many stakeholders do not have an understanding of the complexities of a stoma nurse role.

Nurses must deliver care based on the best available evidence or best practice (Nursing and Midwifery Council (NMC), 2014). This statement is also endorsed by the Care Quality Commission (CQC), which states that care should

> **'Reflect, where appropriate, published research evidence and guidance issued by the appropriate professional and expert bodies as to good practice in relation to such care and treatment.' (CQC, 2010: 12)**

Standards for stoma care practice have been introduced that provide guidance for stoma nurses in relation to quality and audit (Royal College of Nursing (RCN), 2002; Association of Stoma Care Nurses UK (ASCN UK), 2013) and have helped nurses clarify and structure their roles. However, there is still no structured pathway for stoma care.

A care pathway can be described as:

> **'Anticipated care placed in an appropriate timeframe, written and agreed by a multidisciplinary team. It will include locally agreed standards based on evidence where available to help a patient with a specific condition or diagnosis move progressively through the clinical experience. It forms part or all of the clinical record, documenting the care given. It facilitates and demonstrates continuous quality improvement. It includes patient milestones and clinical interventions noted on the day or stage that they are expected to occur'. (National Leadership and Innovation Agency for Healthcare, 2005)**

By this definition, could the introduction of, and adherence to, a stoma care pathway be a way to demonstrate that the care given is evidence-based, timely and effective?

Working group of stoma nurses

Sixteen stoma nurses were asked to form a working group to look at their working practices. Within this group, it was found that, although there were elements of follow-up care in place, there was no universal consensus on the requirement for such care. All 16 nurses provided follow-up within the home or clinic environment within 2 weeks of discharge. However, after this point, the level of interventions varied greatly, with some nurses providing an additional visit for all new patients and others providing this service only if problems arose. Some of the nurses provided a review at 6 or 12 months; others reviewed patients on request to solve specific problems.

These differences in care management are supported by an audit of follow-up care by Wade (1989). The audit asked stoma nurses to describe the frequency and timing of follow-up care after discharge from hospital and found that the number of visits to patients over the first year varied from one to ten visits. The working group was also asked what factors

Rebecca Davenport, Director, Clinical Nursing Services, Hollister Limited

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influenced their practice in relation to follow-up care. It was found that time and resource factors were experienced by all, particularly in relation to the change in their role as a result of enhanced recovery programmes that require intensive stoma training in the immediate postoperative period. Other factors included the age of the patient, type of stoma and ability to self-refer to the department.

It is important to review the literature for available evidence that supports not only the requirement for a pathway, but also at what time-intervals these interventions should occur. This empowers nurses to articulate the need for their interventions, together with an outcome, thereby helping demonstrate the value of the nurse's role. All available literature relating to follow-up care was reviewed by the working group. The group found that there are seven significant 'milestones' within the first year, during which a patient with a newly formed stoma will benefit from advice and support from their stoma nurse specialist. These are classified within four phases of the pathway as:

- Preoperative care
- In hospital
- Returning home (daily telephone calls for 1 week and 1 month following discharge from hospital)
- Life with a stoma (3 months, 6 months and 1 year following discharge from hospital).

Preoperative care and care in hospital

A fundamental role of the stoma nurse is to support a patient as they prepare for life with a stoma, and for stoma-forming surgery. This includes psychological counselling, an assessment of the patient's ability to care for his or her stoma, and the physical identification of a suitable place for the stoma, known as 'stoma siting'. There is evidence to support the importance of this preoperative meeting and assessment in relation to the successful rehabilitation of a patient (Borwell, 2009).

Ongoing inpatient teaching of stoma care for the patient during the hospital phase is also needed to ensure the effective discharge of patients with a newly formed stoma into the community. This is particularly important since the introduction of enhanced recovery after surgery (ERAS) programmes, with more intensive stoma care teaching required in the immediate postoperative phase. Within the working group, it was found that many hospitals had already implemented individual integrated care pathways within this period. As a result, it was decided that these local practices would not be included, but referenced within the pathway during the 'in hospital' phase.

Returning home

The transition from hospital to home in the first few weeks after stoma surgery can be a difficult period of adjustment. Patients often have doubts about their ability to cope at home with the practicalities of managing their stoma (Black,2009). There is no doubt that there has been a reduction in the duration of hospital stays as a result of ERAS and, while ERAS have been shown to have an overall positive benefit for patients, they can increase the level of community support needed for patients with a stoma immediately discharged from hospital. Fearon et al (2005) suggest that ERAS patients will need more supervision when they return home. They also argue that an established follow-up system by which the patient could receive routine contact with health professionals immediately after returning home would enable them to return home with more confidence.

Nurse-initiated calls are strongly recommended in patient follow-up as they are a method of providing confident, reassuring, prompt communication with discharged patients (Mitchell, 2003). Intensive follow-up can improve stoma patients' quality of life when provided in addition to standard follow-up (De la Quintana Jimenez et al, 2010).

The role of the stoma nurse interaction in improving quality of life in the first year of stoma-forming surgery is further supported by Marquis et al (2003), who found that the support provided during the first few weeks following discharge was important for quality of life. This effect was enhanced if patients were reviewed again at 3 and 6 months post-surgery.

In conjunction with the requirement of ongoing psychological support and assessment of ability to self-care, there are also practical reasons for nurse intervention during the first month after discharge from hospital. As a newly formed stoma becomes more established, and postoperative oedema subsides, it may change in both size and shape. Quantities and consistencies of output can also change. These changes can often be the cause of leakage and result in peristomal skin conditions (PSCs), which will require assessment and sometimes treatment from the stoma nurse to ensure that the stoma appliance remains suitable for the patient's needs. Structured follow-up in the first month of surgery also helps to reduce the severity of the PSCs and this in turn has an impact—not only on the level of distress experienced by the patient, but also on the cost of treatment of a mild or moderate PSC compared with a severe case. For example, the estimated mean cost of treating severe PSCs is twice as high (£303) as for moderate cases (£151) (Martins et al, 2012).

Life with a stoma

In addition to reviews at 3 months, stoma patients may also require follow-up, with stoma complications and possible quality-of-life implications still prevalent at 6 months and beyond. A study by Pringle et al (2001) found that only 33% of patients had fully resumed their social activities at 1 year after surgery, and the high incidence of additional physical complications within this first year supports a need for further visits at 6 months and then at yearly intervals to identify problems and instigate interventions if required.

In light of the evidence available, a pathway for stoma care has been established that maps the optimal timings of interventions within each category, together with the required activities to be undertaken, to ensure positive patient experiences and achievement of outcomes (*Figure 1*).

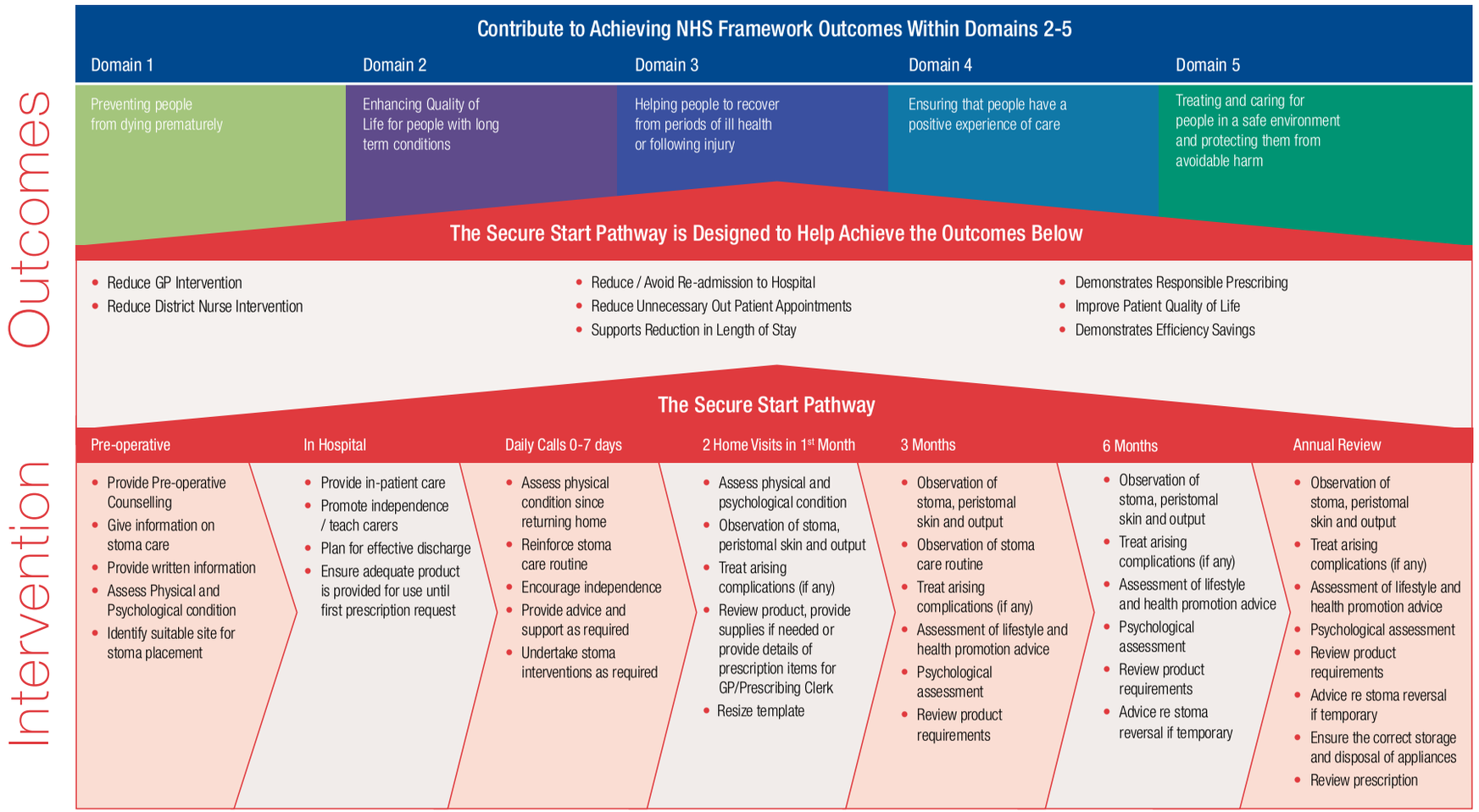
This pathway for stoma care was reviewed and accredited by the RCN in May 2014.

Adding value through the clinical pathway

The use of a structured care pathway can also help the stoma care nurse demonstrate the importance of the role in relation to cost savings, value and measurement of outcomes—all of which are most important in the NHS.

From both the author's experience, and from feedback

Clinical Pathway for Stoma Care



This programme has been accredited by the RCN Centre for Professional Accreditation until 6 July 2015. Accreditation applies only to the educational content of the programme and does not apply to any product.

Figure 2. The clinical pathway

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from other stoma nurses, there is anecdotal evidence that the role of the stoma nurse extends beyond the practicalities of stoma care. Providing advice and further review for patients with high faecal output, bleeding from a stoma, development of parastomal hernia, prolapse and stenosis, can all prevent patients from needing to visit a GP or practice nurse with little or no stoma-care knowledge, or even attending a local accident and emergency (A&E) department.

Following implementation of the pathway in five pilot sites in 2013, an audit of 1027 visits showed that the early intervention of a stoma care nurse provided sufficient advice and support to prevent the patient needing to consult other health professionals (GP, 83 visits) or access NHS services (outpatient attendances, 185 visits; A&E attendance, 51 visits), thereby delivering cost savings for stoma-related issues (*Figure 2*). Drawing on reference costs for services (Department of Health (DH), 2013a) (*Table 1*), it is possible to allocate a monetary value of £43 000 to these interventions, which demonstrates the value of a care pathway that ensures proactive health promotion and early treatment of complications versus reactive management of care.

As discussed earlier, the importance of nurse follow-up in the first 30 days following surgery is paramount if the patient is to rehabilitate successfully. However, there are also additional benefits that relate directly to management of costs associated with the waste of stoma products. As the stoma settles, it can change shape and the stoma output can also change. These may require the stoma nurse to advise on an alternative product (i.e. other than the original product that was suitable on discharge). This can lead to wastage of any remaining quantities of the original product, as a prescription has already been generated and the product dispensed. Over a 12-month period, a group of patients (n=266) with a newly formed stoma were provided with samples of products following discharge, with a prescription request submitted only when the stoma had settled and the prescription requirements were fully understood. Within this group of patients, it was found that the time taken to settle was an average of 14 days (13.7 days).

It is difficult to allocate an exact cost for this provision of 'stabilisation stock', as individual patients will have individual requirements for their stoma-care management, and some patients' requirements may remain unchanged. However, using the *Guidelines for Stoma Care Management* (Patients, Industry and Professional Forum, 2014) as a baseline, it is possible to calculate an approximate cost saving for this 2-week sampling period of £50–£100 per patient with a newly formed stoma, depending on stoma type and product chosen (*Table 2*).

As reported earlier (Pringle and Swan, 2001), there is a requirement for the ongoing review of patients in the longer term from a clinical perspective. In addition, yearly follow-up, which incorporates prescription review, may ensure that stoma prescribing remains appropriate to a stoma patient's needs and this may in turn help keep stoma prescription spends down. Forging relationships with clinical commissioning groups (CCGs) and medicines managers is paramount to appropriate prescribing in stoma care being communicated and understood (Oxenham, 2014).

After the implementation of annual reviews within the pathway, an audit was undertaken of a group of 21 patients within one GP practice. Following a clinical and prescription review, it was found that simple prescription amendments,

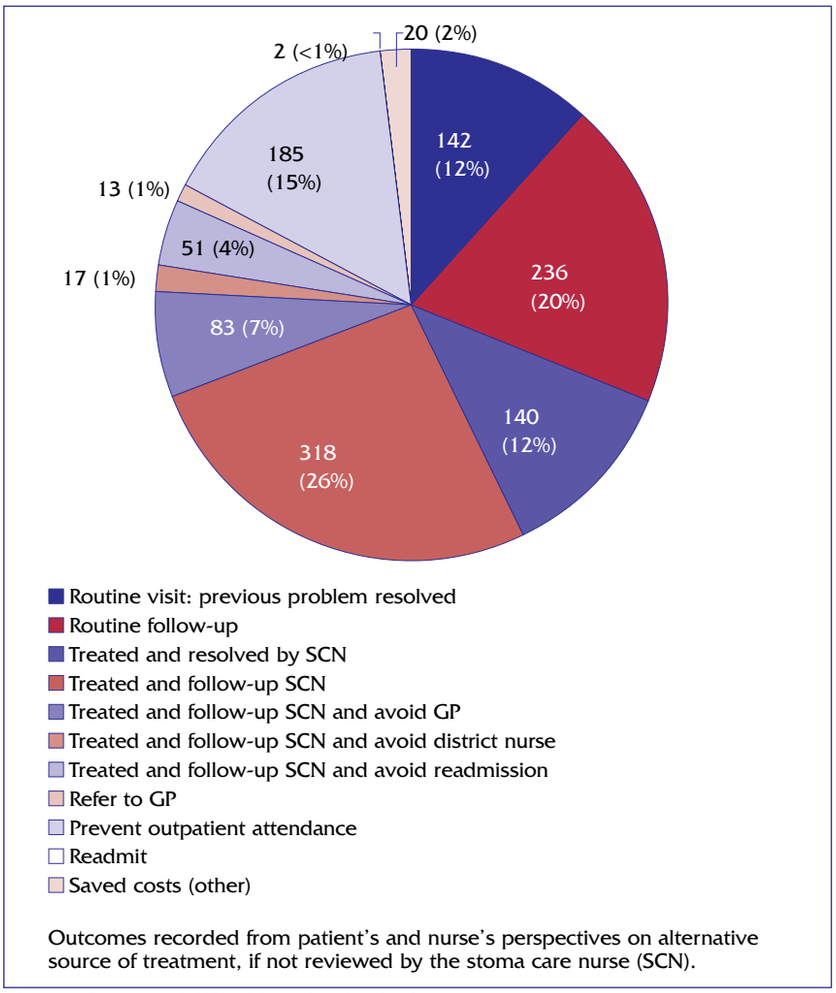

Figure 1. Outcomes of 1027 visits undertaken by the stoma care nurse

Table 1. Costs of resources used in the follow-up of patients with a stoma	
Elective inpatient stay (excluding excess bed days)	£3366
Excess bed day (per day)	£273
Outpatient attendance (nurse-led)	£108
Outpatient attendance (consultant follow-up)	£119
Accident and emergency attendance	£114
District nurse	£39/hour
Clinical nurse specialist (community)	£52/hour
Practice nurse (in GP surgery)	£34/hour
GP (per 11.7 minute contact)	£45
GP home visit (23.4 minutes)	£114

Table 2. Prescription cost savings associated with responsible prescribing	
Within a 12-month period, patients were sampled until product was determined; this was an average of 13.7 days. Based on the patient type, this demonstrates the following cost savings	
Colostomy (110 patients, 3 bags per day)	£11 548/£105 per patient*
Urostomy (50 patients, 3–4 per week)	£2090/£42 per patient*
Ileostomy (106 patients, 1 bag per day)	£4852/£46 per patient*
*Based on drug tariff pricing	

Box 1. Patient experience of care (n=192)
97% of patients said their stoma nurse provided helpful advice
98% of patients found the support helpful after discharge
92% of patients found the daily telephone calls within the first week of discharge helpful
94% of patients reported that they did not see their GP or attend an accident and emergency department &E for a stoma-related issue within 30 days of discharge
98% of patients found the home visits helpful
96% of patients said their experience with the nurse helped 'a lot' when coming to terms with their stoma
95% of patients said the pathway provided a valuable service

mostly in the accessories segment, generated a cost saving of £4314. This represented an 8% reduction of the total stoma care spend (£50087) for that particular GP surgery. This small audit is supported by other recent audits that have been recently published, demonstrating the inappropriate use of accessories (Mangnall et al, 2013; Oxenham, 2014).

Measuring outcomes helps drive improvements to the quality of care people receive (DH, 2008). In addition, the White Paper *Equity and Excellence: Liberating the NHS* outlined an intention to shift the NHS from a focus on process targets to a focus on measuring health outcomes. As a result, *The NHS Outcomes Framework 2014/15* (DH, 2013b) was developed, which sets out the high-level national outcomes that the NHS should be aiming to improve. The stoma pathway has been designed to incorporate these outcomes in order to demonstrate how stoma nurses may contribute to the achievement of them in their own practice.

Patient experience

In addition to the audit of the clinical pathway in relation to cost and outcomes, the pathway has also been audited from a patient perspective to ensure that it meets its aims and objectives, and continues to evolve and develop to meet patients' needs. The pathway is audited at regular intervals and a recent audit of patients in the 'Going Home' phase of the pathway has shown a positive patient experience in relation to the support provided after discharge (*Box 1*).

KEY POINTS

- Patients with a stoma require support and advice throughout the first year of their life with a stoma
- Proactive support and advice is more beneficial than reactive treatment, and may result in less severe peristomal skin complications
- Structured follow-up for patients may reduce costs relating to stoma care management within the community
- An accredited clinical pathway for stoma care promotes excellence within the speciality

Conclusion

The role of the stoma care nurse is complex, often extending into different specialties, and as such can sometimes be misunderstood by others with less experience or understanding of the role. The introduction of a clinical pathway for stoma care provides a framework for the delivery of high-quality care based on evidence and research. The ability to demonstrate the benefits of this preventative approach to care from cost, value and patient perspectives helps nurses to showcase the advantages of their service to key stakeholders, and build the profile of their specialty. BJN

Conflict of interest: none

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