

Enhanced Recovery and Day Surgery: The Ultimate Partners for Elective Surgery

KERRI HOUGHTON

Keywords: Multidisciplinary working; New ways of working; Protocols; Quality of Care

Introduction

Better recovery after surgery has lain at the heart of the philosophy of performing surgery on a day case basis for more than two decades. Teams which have succeeded in achieving good outcomes from day surgery have done so largely through introducing a pathway which includes pre-operative assessment, good information for patients and appropriate pain management strategies. In the 1990s, Henrik Kehlet, Professor of Surgery in Copenhagen and other researchers, were looking at the stress response to surgery and its impact on recovery in more major surgery and described a clinical pathway containing these elements and more, the so-called Enhanced Recovery pathway¹. Other terms are used to describe this approach including accelerated or rapid recovery and fast-track surgery. Day Surgery could be seen as the ultimate in Enhanced Recovery; together they are perfect partners, encompassing potentially all of elective surgical care.

Elective Surgery in 2010

The length of hospital stay for surgical patients has reduced over the years (Figure 1) and a rise in day surgery has made a significant contribution, although there is still plenty of room to improve. A target of 75% of all elective surgery to be performed on a day stay basis was laid down in the NHS Plan in 2000, although very few organisations have achieved this ten years later. Despite this, best performers' statistics suggest that greater ambition is realistic and 80-85% day surgery could probably be achieved, leaving maybe 5% of patients needing a one night stay and only 10% longer than that. The increase in the use of minimally invasive surgical techniques will also facilitate shorter hospital stays.

Surgeons started implementing Kehlet's colorectal pathway with considerable success in the UK soon after it was published, believing it was better for patients². Practice in America leading to shorter stays for major joint replacements were also emulated by some, but progress has been slow. The 'Improving Surgical Outcomes Group' had already published a discussion paper on a similar theme³. Some of these clinicians, convinced of the benefits of these pathways for patients, approached the Department

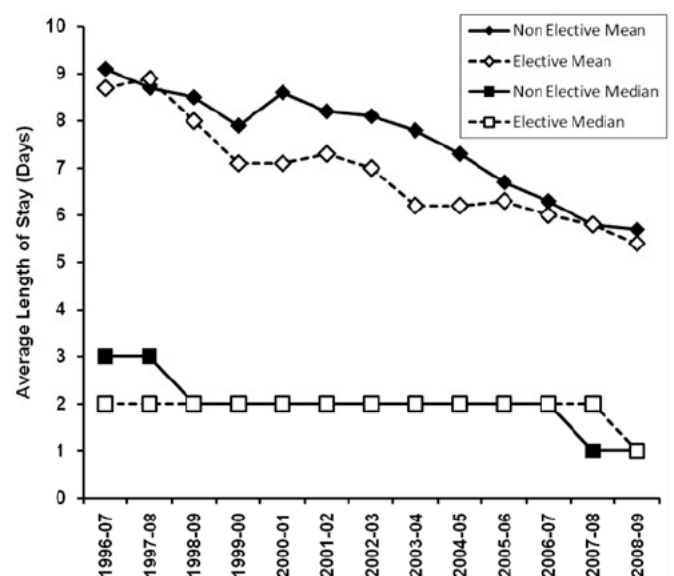


Figure 1 Duration of Stay for Elective and Non-Elective Surgical Procedures.

of Health to seek help to spread this good practice. Investigation confirmed very wide unexplained variation in practice across the UK and in 2009, the Enhanced Recovery Partnership Programme was launched.

The national Enhanced Recovery Partnership Programme

The national Enhanced Recovery Partnership Programme is a joint enterprise, strongly clinically driven and bringing together Elective Surgery and Cancer workstreams with the assistance of NHS Improvement and the NHS Institute⁴. It is now into its second year and fits perfectly with the Department of Health's current QIPP (Quality, Innovation, Productivity & Prevention) agenda. It is led by Professor Monty Mythen, Professor of Anaesthesia & Critical Care at University College London and Mr Alan Horgan, Colorectal Surgeon in Newcastle, supported by a team of advisors. The Senior Responsible Officer for

Author's Addresses

KERRI HOUGHTON National Clinical Advisor to Dept of Health, Elective Care & Diagnostics Branch, South Devon Healthcare NHS Foundation Trust, Torquay, Devon TQ2 7AA, UK

the programme is Professor Sir Mike Richards, National Cancer Director. The aims of the programme are:

- To define 'Enhanced Recovery' as a common language across the UK
- To improve the quality of patient care by improving clinical outcomes and experience using the good practice principles of enhanced recovery models of care, and, as a result of this,
- To reduce the length of the elective care pathway, sustaining the achievements of 18 weeks and delivering the National Cancer Reform Strategy (2007)
- To identify the core quality benefits
- To identify the core general principles that can be applied across multi-specialty pathways
- To identify speciality specific principles in musculoskeletal, colorectal, urological & gynaecological surgery
- To raise awareness of enhanced recovery with the NHS
- To support the NHS with adoption and spread

The national programme has concentrated on the four specialties named above but the intention is that these practices will spread across all elective surgery.

Emergency surgery may also be able to adopt many of the principles. The programme worked first with expert sites and subsequently innovation pilot sites to test out these principles and explore the issues which might help or impede implementation. It has held many events nationally to support adoption and spread. Strategic Health Authorities are now supporting further events, details of which are available at www.dh.gov.uk/enhancedrecovery.

Definition and benefits of 'Enhanced Recovery'

Enhanced Recovery is defined as a novel approach to elective surgery based on generic pathway driven principles, ensuring that patients are in the optimal condition for treatment with pre-management of co-morbidities, that they have a standardised peri-operative process, including evidence based post-operative rehabilitation, and most importantly, the pathway must involve the whole health community. This approach should improve the experience and well-being of individuals needing major surgery, helping people to recover sooner so that life can return to normal as quickly as possible. On this basis, it should provide a better overall experience due to higher quality care and services, and allow individuals to make informed decisions about what's best for them throughout the course of their treatment with help from their GP and the wider healthcare team ("No decision about me without me.")

The currently accruing evidence demonstrates a potential reduction in inappropriate activity through Informed Decision Making, a better patient experience through

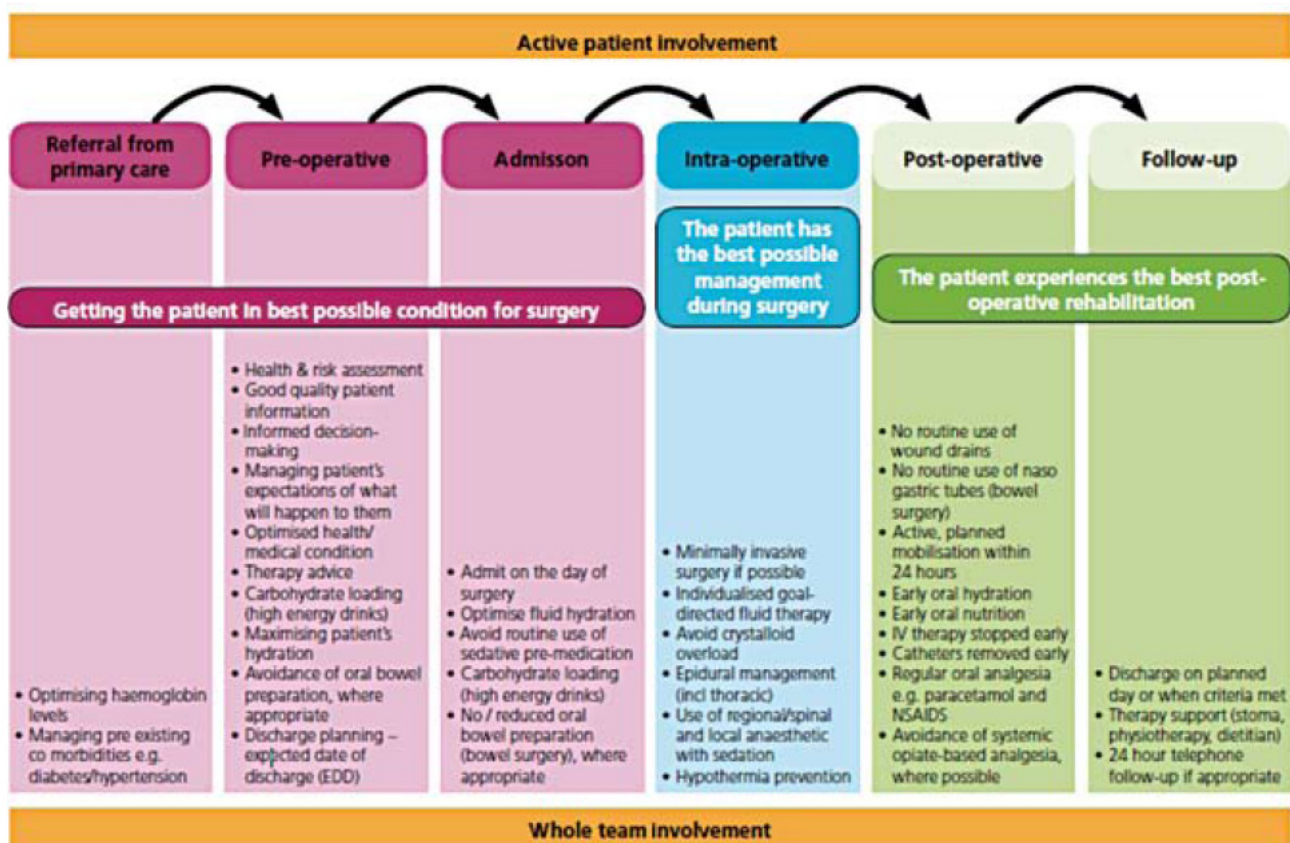


Figure 2 The Enhanced Recovery Pathway.

a partnership approach to care; optimised nutrition management, pain management and early rehabilitation and recovery, and as a result of this, up to 50% reduction in post operative complications and stable or reduced readmission rates. Similarly, there have been demonstrations of a reduction in use of HDU/ITU beds, reductions in length of stay with fewer hospital acquired infections or thrombo-embolic events with many people saying their hospital stay was much less stressful than expected.

What are the components of the Enhanced Recovery pathway?

The pathway components are described in the guide produced by the programme 'Delivering enhanced recovery: Helping patients to get better sooner after surgery'⁴ and summarised in Figure 2. Every part of the pathway needs careful attention if improved outcomes are to be achieved, and this requires the establishment of multidisciplinary teams to ensure delivery. Particular attention needs to be taken to the organisation and delivery of an excellent Pre-operative Preparation service as without this, the pathway will fail⁵. A 'Fitness for Referral' system should be agreed with Primary Care. Identification of high risk patients is essential as these individuals may need to undergo more rigorous evaluation, for example, cardiopulmonary exercise testing, require more time for informed decision making, and have their post-operative level of care defined prior to admission.

Experience from the UK innovation sites

While work is still ongoing at the innovation sites across the UK, various success factors have been demonstrated to be fundamentally important with implementation of an Enhanced Recovery Programme, and these are summarised in Table 1. Most relevant is the development of a well co-ordinated multidisciplinary team that should include nurse specialists and ward nursing staff, dietetics, physiotherapy and occupational therapy, anaesthesia, surgery and other medical staff, primary care and social workers, pain management teams, pre-operative assessment, management representatives, and perhaps most importantly, patients. This team will need to meet to agree way forward and to own, develop and share the pathways, devise a robust, comprehensive project plan with realistic timescales, use PPI events/Focus Groups before implementing, share the pathway and paperwork, have clinical leaders who take ownership and an overview of the whole system. ensure that the multimodal approach happens through tenacious management of the pathway, and gather live evidence/data on what is being done and feed back to all staff.

Future objectives and challenges

The National Programme will continue until March 2011 with support from Strategic Health Authorities. The Enhanced Recovery pathway including Fitness for Referral and Pre-operative Preparation will shortly be available on the Map of Medicine website⁶.

QA4 Mobile Surgery System

The complete multi-purpose mobile operating system

Powered Functions



- Manual or powered option
- Reduced lifting and handling
- Superior surgical access



- Maximum ease of manoeuvrability
- 'C' arm access
- Push button release and self locking functions
- Increased height range
- Advanced braking
- K8 pressure care mattress
- 5 year warranty



ANETIC AID
The Theatre Equipment Specialists

Queensway, Guiseley, Leeds
West Yorkshire, LS20 9LB
Tel: 01943 878647
Fax: 01943 870455
E: sales@aneticaid.co.uk

Table 1 Success factors for implementation of Enhanced Recovery pathways.

<p>Team Working</p> <ul style="list-style-type: none"> • Full engagement of MDT • Inclusive team approach from the start • Involving nursing & reception staff • Social Services engagement • Relationship with PCT • Primary Care engagement • Collaborative working between departments • Commitment to fully implement ER 	<p>Structure / Process</p> <ul style="list-style-type: none"> • Project structure • Project meetings focus on decision making and process development • Clarity of process • Gathering good baseline information • Project planning prior to implementation • Staff education & training programme
<p>Organisational Positioning</p> <ul style="list-style-type: none"> • Included in Quality Schedule with PCTs • Included in Cost Improvement Programme • Report to weekly Stakeholder & Finance Meeting 	<p>Engagement & Empowerment</p> <ul style="list-style-type: none"> • Peer pressure driving decisions around bowel prep • Empowered patients • Patient involvement event • Enthusiastic MDT – spreading the word • All MDT has an increased awareness of programme benefits

It is inconceivable that we should apply an excellent pathway to some patients and not others and the natural output of the programme is that all in-patients will eventually follow this kind of pathway – it should become the norm for all surgical wards, for elective and emergency patients as far as is possible.

Day surgery practitioners will be familiar with many of the principles outlined – they are an extension of what they have been practising for years. Day Surgery is both the originator and the ultimate in enhanced recovery and the challenge will be to make all of surgery follow – and then perhaps medicine!

References

1. Basse L, Hjort Jakobsen D, Billesbolle P, Werner M, Kehlet H. A clinical pathway to accelerate recovery after colonic resection. *Annals of Surgery* 2000;**232**(1):51–7.
2. King PM, Blazeby JM, Ewings P, Longman RJ, Kipling RM, et al. The influence of an enhanced recovery programme on clinical outcomes, costs and quality of life after surgery for colorectal cancer. *Colorectal Disease* 2006;**8**(6):506-13.
3. Improving Surgical Outcomes Group. Modernising Care for Patients Undergoing Major Surgery. Improving Patient Outcomes and increasing Clinical Efficiency. (available from <http://www.ebpom.org/publications>) July 2006.
4. Enhanced Recovery Partnership Programme. Delivering enhanced recovery: Helping patients to get better sooner after surgery. (available from http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_115155) March 2010.
5. Swart M, Houghton K. Pre-operative preparation: Essential elements for delivering enhanced recovery pathways. *Current Anaesthesia & Critical Care* 2010;**21**:142–7.
6. <http://www.mapofmedicine.com>