Chapter 8
Setting Up an Enhanced Recovery Programme

Fiona Carter and Robin H. Kennedy

Introduction

The subject of this chapter is one of the most debated topics at meetings and conferences, with novice teams frequently requesting advice on how to get started with enhanced recovery (ER). The initiative usually begins through the enthusiasm of a clinical champion, who should then form a steering group of key stakeholders to oversee the introduction of ER. This group will also be responsible for the creation of a robust business case to ensure that there is appropriate management and financial backing for the venture. Creation of a new care pathway and associated literature should then follow, together with development of a suitable audit of outcomes or monitoring of the new pathway. Education of professional colleagues, patients, relatives and carers is essential to the success of the programme and it is important to begin with a pilot to test the concept. Once the new pathway has been tested and monitored, the next phase is to embed the protocols as standard practice and to refine and publicise the programme as necessary.

Discussions with expert sites, and follow-up studies with novice groups, have highlighted a number of hurdles that must be negotiated in the adoption of ER. This chapter presents some specific techniques that facilitate change management and then covers all the above issues, in addition troubleshooting and how one overcomes barriers is also reviewed.

F. Carter (✉)
Yeovil Academy, Yeovil District Hospital NHS Foundation Trust,
Yeovil, Somerset, United Kingdom

R.H. Kennedy
St. Mark's Hospital,
Harrow, United Kingdom

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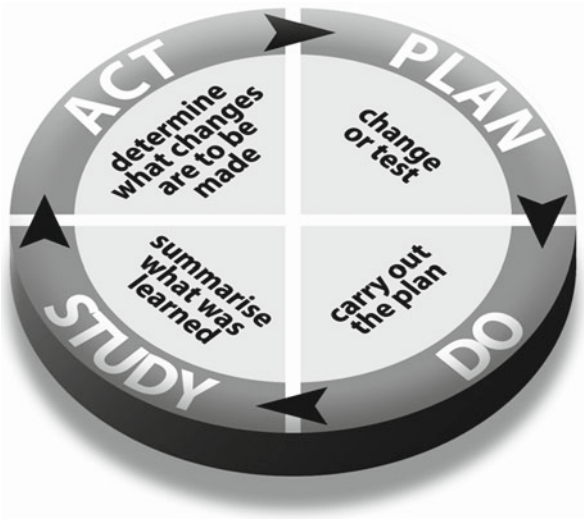

Fig. 8.1 The PDSA Cycle

Principles of Change Management

Health care, like most other industries, resonates to the sound of the latest management technique that promises to deliver improvement. One might become cynical regarding these instructions as many people regard the introduction of change as intuitive. It is however not well done by all and it is worth reflecting on some key principles that help major transitions occur successfully and avoid missed opportunities. We look at three examples of a management techniques: the plan-do-study-act (PDSA) cycle, work published by John P. Kotter [1] on change management and the concept of 'action learning'.

The origins of the humble PDSA cycle (Fig. 8.1) originated in 1620 and are credited to Francis Bacon. The concept was popularised by Dr Edwards Deming in the mid-1900s in order to allow improvement to occur without the paralysis that may accompany change due to fears that the outcome will be wrong. Although other techniques are perhaps more in vogue now, this concept is simple to understand and useful to 'kick-start' the process of change.

John P Kotter from the Harvard Business School, spent time analysing success and failure throughout the world when companies try to make fundamental change in how they do business. He published eight key steps in a transformation strategy [1]:

1. Establishing of a sense of urgency – One might interpret this with respect to ER care as the need to grasp a major opportunity to improve patient care.
2. Forming a powerful guiding coalition – This step ensures that the group leading the change has the necessary influence and tools to achieve it.
3. Creating a vision – Can we deliver a vision that is clear and impressive enough to motivate the team who will deliver it?

4. Communicating the vision – We will touch on this later in the chapter but the important issue is that communication has to be repeated numerous times to different members/groups of staff, and often repeatedly to the same staff.
5. Empowering others to act on the vision – Solutions will come from any member of the team irrespective of their position in the 'hierarchy' and encouraging this team approach forms a powerfully motivated group. One also has to recognise that there will be certain people who might wish to impede the process of change, consciously or not, and their influence needs to be considered and dealt with appropriately.
6. Planning for and creating short-tem wins – The identification of success in the change process is important and needs to be celebrated to maintain momentum
7. Consolidating improvements and producing still more change – As success demonstrates the system is producing results, it is important to harness the momentum and complete the process.
8. Institutionalising the new approach – There may be temporary staff who guided the process of change and they, along with the new approaches, need to be permanently incorporated within the organisation to ensure leadership continues and succession occurs.

Action learning is a process developed by the physicist Reginald Revans in the 1940s. When working for the government in coal production he encouraged managers to meet and share experiences by asking questions regarding the new methods they heard about. This approach produced a radical improvement in productivity and spread to other organisations such as hospitals. Like many visionaries this brought conflict from the establishment as conventional lecture techniques were favoured by the educational institutions. Action learning is now commonplace in industry throughout the world. Instead of traditional teaching methods which focus on the presentation of information a group will pose questions to their colleagues that allow solutions to be developed in a process that incorporates reflection and problem solving. We have found this helpful in local problem-solving meetings when development is reviewed and the issues that seem insoluble are addressed. Some authorities have recommended the use of facilitators or coaches to guide group development but that is not mandatory.

Forming a Steering Group

The adoption of enhanced recovery should ideally be consultant led [2], with surgeons and anaesthetists taking the initiative. These clinical leaders must be able to present the evidence for change in a positive and inspirational manner. Another key to success is the formation of a steering group to ensure that a comprehensive pathway is developed and aligned to local needs. This group should include:

- Surgeon
- Anaesthetist
- Service manager

- Senior ward staff
- Pre-assessment staff
- Specialist nurse consultant (such as colorectal specialist nurse)
- Pain team representative
- Physiotherapist
- Nutritionist
- Occupational therapist
- Social care team representative
- Primary care representative
- Patient representative
- ER facilitator

It is essential that this group takes into consideration the needs of all stakeholders (including commissioners and other organisations or teams that collaborate or compete with the group). Groups that have experience of implementing ER in a relatively short timescale emphasise the importance of close cooperation between all the relevant departments and professions [3].

The role of the ER facilitator is to take the outcomes of the steering group and ensure that they are put into practice. Depending on the local circumstances, the facilitator could be a new, fixed term appointment specifically to introduce ER, or a secondment/re-grading for existing staff on a full or part-time basis (see Chap. 9 for more details).

The main aims of the steering group are:

- To evaluate the existing care pathway with respect to the established ER elements
- Agree on the aspects of the care pathway that need to change
- Create a business case to support any required investment or re-allocation of resources for change
- Identify the potential barriers to change
- Form an action plan to transform the care pathway
- Agree on outcome measures to record that will provide clear information on progress (or lack of it)
- Suggest methods to increase awareness of the new care pathway within the organisation/wider team
- Act as role models and inspire colleagues to adopt change

A series of operational groups should be formed to implement the changes suggested by the steering group. These groups will be linked to each aspect of the care pathway re-design. For example, if the steering group has identified a need to alter the information provided to patients before admission, a pre-assessment sub-group should be formed to ensure that this is implemented effectively. The ER facilitator should act as the link between each sub-group and report progress back to the steering group. Other sub-groups might be concerned with pain control, the provision of appropriate documentation and creation of an optimal environment for ER care. Most expert centres that have developed ER care have changed the ward environment

by creating a dining area and, where possible, a lounge too. This encourages patients to be a more active participants in their recovery, walking to their meals rather than passively receiving them, trapped in their bed.

It is vital to have wider involvement with groups that may influence the care pathway. Optimising the patient's condition prior to admission for surgery is key and good relationships and information sharing with primary care and social care services is essential to ensure the success of ER. In addition to representation of these stakeholders on the steering group, awareness and education events must be scheduled before the programme is piloted. Formal seminars, informal social events and use of conventional and new media (such as local newspapers, DVDs, websites and blogs) can all be used to promote the new initiative.

The attitudes of team members have important implications for the success of the programme so it is essential that any reservations or reluctance are overcome before patients are recruited [2].

Writing a Business Case

Short-term investment may be needed to change the pathway (e.g. to employ an ER facilitator or project manager), to cover training for new skills (e.g. exercise testing), to purchase additional equipment (such as oesophageal Doppler and probes) and to fund awareness events and other educational opportunities.

Areas relating to referral that may require increased investment (dependant upon the existing situation locally) are optimising the health of the patient prior to admission and management of existing co-morbidities (such as diabetes, anaemia). Additional investment may also be related to pre-admission to support the promotion of informed decision-making, preoperative health and risk assessment and preoperative therapy instruction (e.g. stoma care, physiotherapy). The immediate preoperative period may require additional support to allow carbohydrate loading and increased investment for intra-operative factors should cover minimal access surgery, use of regional or local anaesthetic, epidural anaesthetic or spinal blocks and individualised goal-directed fluid therapy. In the postoperative period, additional support may be needed for rapid hydration and nourishment, pain team management and other intensive therapy support (e.g. stoma care, physiotherapy). Finally, further resources could be allocated to the postdischarge period to cover telephone follow-up if that is deemed desirable.

These changes should see the following quality improvements:

- Better medical outcomes
- Reduced complications and decreased demand on ITU/HDU
- Improvements in patient satisfaction (through optimal management of expectations)
- Multi-disciplinary team working

In addition to the following productivity improvements:

- Appropriate length of stay results in improved efficiency
- Capacity will be released and activity may be increased

Note that ER may not necessarily result in cost savings, depending on the existing situation prior to implementing change [4]. Apart from the necessity to identify an ER facilitator, which may require investment if a reallocation of someone is not possible, most changes necessary to develop ER can be resource neutral if one looks critically at what is required, and takes advice from other centres. As the majority of patients leaving hospital in this programme also appear better than they used to be at discharge after conventional care, the concept that there will be increased health care requirements in the community is likely to be false. The concept that ER care reduces postoperative complications has been supported to date by the literature [5] but the number of patients studied is no more than 1,000. Further results will be keenly awaited to confirm that ER outside pioneering centres reduces complications and does not impact negatively on primary care.

Creation of a Care Pathway and Associated Literature

One of the key functions of the steering group is to create a new care pathway. This document should cover all aspects of patient care from admission to discharge, and be completed by the whole multi-professional team, with sections for patient comments or notes. Whilst it is possible to create a new pathway from scratch, many teams have found it helpful to adapt an existing pathway from another centre. As the pathway develops, or is amended, the ER facilitator relates the progress to each subgroup so that they can consider the impact on their own protocols and documentation. Examples of existing care pathways can be found at: http://www.dh.gov.uk/en/Healthcare/Electivecare/Enhancedrecovery/DH_115706

When considering the logistics of implementing the new pathway some thought must be given to covering absences of key staff and continuation of the pathway over weekends. Indeed, the first group to implement ER found that there was a marked, negative effect on the programme when the members of the research team were absent [6].

Setting Up an Audit of Outcomes and Monitoring the New Pathway

It is essential, when making changes to patient care pathways, that appropriate monitoring systems are in place to measure the effectiveness of these changes. Provided the correct aspects are measured, data entered correctly and monitored regularly, it will be possible for the steering group to gauge the success of the new protocol. In addition, any aspects that are not performing correctly can be picked up and corrective action taken. The Enhanced Recovery After Surgery (ERAS) Study

Group has undertaken a prospective audit in 1,035 patients, over a 3.5-year period and found that morbidity and mortality rates were lower for this cohort than previously published data for the same centres (prior to introduction of ER). Recording of compliance with the ER elements throughout the pathway enabled them to detect deviation from the protocol and to consider reasons for this variation [7].

As part of the ER Partnership Programme, a database has been developed for monitoring new ER sites/teams [8]. This consists of compulsory and optional fields covering demographics, admission details, patient experience, readmission, compliance with specific ER elements, complications, risk adjusters, postoperative morbidity score (POMS) and physiological and operative severity score for enumeration of mortality and morbidity (POSSUM).

The steering group should identify one individual with responsibility for data entry (usually the ER facilitator), who will report back to the group and take responsibility for instituting any suggested adjustments to the pathway.

Education

Several authors have stated the importance of increasing awareness and enthusiasm in all staff groups who will be working with the ER protocol [2, 9]. Education of colleagues is therefore a vital aspect for implementation of the programme. Many basic resources explaining the key elements of ER are now available on-line and some experienced sites provide courses or seminars. Comparison of the content between the various courses has yielded a series of key learning objectives [10]:

- Provide an overview to key principles of ER
- Emphasise pre-admission patient education and patient experience
- Outline the importance of preoperative optimisation of the patient
- Describe the anaesthetic aspects of ER
- Explain options for postoperative pain management
- Recount the impact of ER on ward nursing
- Describe roles of colorectal specialist nurse, stoma care practitioner, dietician and physiotherapist in relation to ER
- Together with their ER team, create short-term action plan for ER adoption

In addition to covering the above content, seminars at experienced centres provide a forum for discussion and informal advice, which is often invaluable to the novice group.

It is strongly recommended that a centre wishing to commence ER care take a multidisciplinary group to one of the training courses run on this subject. It is essential that education is delivered by a multidisciplinary faculty as different subspecialists are much more receptive to lectures from within their own specialty than those from others (Fig. 8.2). An example of this is the difficulty that certain clinicians have come across when they intrude on areas that are traditionally considered to be the preserve of other specialists, e.g., the exhortations by surgeons that an anaesthetist might consider changing the way they treat postoperative pain, or alter the type or

Fig. 8.2 Reflections on multidisciplinary working

Fig. 8.3 Courtesy of Jonathan Pugh

volume of fluid given to patients! Such interactions can be acrimonious 'turf' wars that are counter-productive (Fig. 8.3), but with enlightened change management the transition can be both hastened and made less confrontational. The other advantage of a well-run multidisciplinary course is that all levels of staff being trained have the opportunity to see the 'experts' being questioned in front of their peers and normally by the end of the course contentious areas will have been thoroughly explored.

There will need to be a comprehensive programme of in-house education for local staff, which is tailored to the specific pathway and protocols that have been developed by the steering group. This education programme must take into account staff turnover and the need to re-educate at regular intervals [11]. The ER facilitator should take responsibility for delivery of this in-house teaching programme and must therefore have the necessary skills and abilities for this aspect of their role.

The importance of patient and relative (or carer) education cannot be overemphasised. Indeed there is much evidence that setting realistic expectations and giving the patient ownership of their recovery has a positive impact on health outcomes [2]. There is a wealth of resources available on-line together with a range of video and DVD materials [12] that can explain the typical patient journey within an ERP. Inclusion of the relatives and carers will also ensure that the patient is well prepared and positive for their surgery and subsequent recovery. Planning for discharge in the pre-admission clinic and early exploration of medical or social factors that may hinder recovery should ensure better adherence to the pathway.

Embedding the New Care Pathway

It is essential that the steering group set out a clear set of expectations as the pathway is adopted and consider how best to select patients. Another key factor for success is having clearly defined discharge criteria, such as the ability to tolerate solid food, return to preoperative mobility and good pain management with oral analgesia [13]. Any refinements to the protocols resulting from initial experience should be put in place and further awareness and education events organised. Audit and monitoring of the outcomes must continue, with ongoing meetings of the steering group to assess progress and ensure safety and quality elements are being met. Any bottlenecks in the system (such as issues around early mobilisation and oral nutrition or introduction of epidural anaesthesia) must be tackled. The ongoing need to encourage the whole multidisciplinary team to adopt this change should not be underestimated [9].

Overcoming Barriers and Troubleshooting

A follow-up survey of 23 novice ER groups, who had previously attended an introductory seminar at Yeovil District Hospital, found that only 35% had subsequently implemented an ER pathway [10]. Further exploration of the reasons for the lack of progress highlighted a series of barriers to change that mirror the published evidence on the subject. These barriers can be broken down into three types: social, professional and organisational [14].

Examples of social barriers are where staff are uncomfortable when the new protocol requires them to change their normal routine and important local opinion leaders have a negative influence on behaviour (either due to disagreement with

evidence base or obsolete knowledge). Other issues may arise when patients, or their relatives, expect a conventional type of care and this can often be tackled via positive reports in local press and other media. In addition, current training programmes, such as higher surgical training or nurse training courses may not include ER as best practice and the new protocols may not be advocated by national organisations, industry, etc. Half of the novice groups followed up after the Yeovil course said that absence of a key member of staff or opinion leader was the main reason that the programme had stalled. Other articles have stressed the importance of the whole multidisciplinary team working together to improve patient management [2, 9].

Barriers relating to the professional context could be when staff may feel that results from literature could not be replicated in their own workplace or the overload of clinical evidence may cause difficulties with decision making. Specific staff groups tend to raise professional issues and present barriers to the adoption of ER:

- Consultant anaesthetists and surgeons
- Senior management
- Nursing staff

The anaesthetist has control over many vital aspects of the ER pathway and must move from an 'anonymous technician in the operating theatre', to becoming a 'visible perioperative medical specialist' outside theatre [2]. It is essential that the key anaesthetic elements are agreed upon and an appropriate anaesthetic care pathway is developed, with implementation monitored.

Many centres report initial difficulties with convincing their surgical colleagues to adopt ER with the typical reasons for reluctance being [2, 15]:

- Pressure of existing workload, need to meet cancer targets
- ER will increase risk of complications and readmissions
- Some patients do not want to have a short hospital stay
- Wards do not have the resources to support ER
- Risk of increased burden on primary care when patients discharged too soon
- Individuals are unconvinced by the available evidence base.

Thus it is important that a clinical champion and senior management provide support and evidence to refute each of these incorrect assumptions, so that ER is accepted as the optimal standard of care in colorectal surgery.

Restrictions in finances and logistical support can cripple the implementation of a new programme. Senior hospital managers must be convinced of the need for change and the likely benefits so that they can support the clinical champion, ER steering group and co-ordinator to implement the new programme.

It is often difficult to convince nursing staff of the benefits of change when the new care pathway appears to go against the existing culture of care. In addition, time pressures and lack of staff are often mentioned as inhibitors to adoption of a new programme. Any inconsistencies in opinion or practice from senior medical staff will create confusion and uncertainty for nursing staff on the ward. This lack of confidence in the care pathway will ultimately be transferred to the patient. Involving key nursing staff in the steering group and having strong leadership from

the clinical champion and ER facilitator can counteract most of the issues raised above. Provision of adequate resources by senior management will also overcome inadequate staff numbers or other resources.

Organisational barriers to change include financial constraints (e.g. silo funding for specific aspects related to ER), pressure of work, staff shortages, inefficient audit of performance or lack of other resources. There may also be a perception of potential liability such as risks of increased complaints due to high readmission rates or an increased burden on primary care. Finally, there are the perceived expectations of patients; perhaps they are expecting traditional care pathways and we are unsure of the impact of ER on relatives or carers. Of the centres followed up after the Yeovil courses, 72% indicated that lack of resources, financial or administrative support impeded their adoption of ER [10].

Many centres have attempted to adopt ER by gradually incorporating certain elements or involving various disciplines. This can often lead to disillusionment when improvements in patient outcome are difficult to discern. A better approach is to formulate a comprehensive care pathway, involving a steering group, which represents all members of the multidisciplinary team, with a planned audit of results.

Finally, the importance of ensuring that the ward environment is conducive to an ER programme should not be underestimated. Important aspects of ER such as postoperative mobilisation and encouraging patient independence, with supported access to food and self-care facilities require a rehabilitation unit environment. Steps should be taken, where physically and financially possible, to create a patient-friendly environment which supports ER [16].

Summary

This chapter has highlighted the main elements required for success in adoption of ER care and discussed how to get started, step by step. Strong clinical leadership, good multiprofessional collaboration and involvement of all key stakeholders are all vital. Testing and subsequent embedding of the new pathway, together with promotion and educational events, have been described. Groups intending to set out on this journey should be aware of the potential barriers to change and take steps to tackle these issues at an early stage.

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