

Perceptions of perioperative care in the UK

Rapid research review

June 2020

Foreword

This report explores what is known about what healthcare professionals and patients think about perioperative care, the integrated multidisciplinary care of patients from the moment surgery is contemplated through to full recovery.

It provides a tentative picture of how staff and patients in the UK view the perioperative care pathway and integrated care systems across primary, secondary and community care.

Our review found that healthcare professionals appear to support the principles of perioperative care. They are keen for greater investment to develop and evaluate perioperative pathways, and to enable more opportunities for multidisciplinary working.

Surgical patients, in turn, generally support a perioperative approach to their care, and want more information and support in hospital after surgery and after discharge to help them to avoid and manage complications. They would also value a seamless connection between primary and secondary care.

Although there are generally positive perceptions of perioperative care, there are also some perceived barriers. This provides useful pointers for how organisations and systems could work better together. Building on this experience would help to develop and improve the perioperative care pathways that are already proven to have better outcomes for patients.

It is striking that relatively little has been published about what people think about perioperative care and integration in the UK. We encourage those undertaking research or evaluation in this area to publish their findings. We remain committed to engaging further with patients and professionals as part of the journey to embed perioperative care.

Please do let us know what you think about the findings by emailing <u>advocacy@rcoa.ac.uk</u> or tweeting us @CPOC_News.



Dr David Selwyn Director of the Centre for Perioperative Care

Key messages

Perioperative care involves working across sectors to support person-centred care and reduce clinical risks from the moment surgery is contemplated through to full recovery. This way of working is associated with improved health and satisfaction for people having surgery as well as reducing the time people spend in hospital and associated costs. The NHS in England, Northern Ireland, Scotland and Wales already includes many of the foundations of perioperative care such as multidisciplinary working. Perioperative care could be prioritised even further to support population health and Integrated Care Systems.

The Centre for Perioperative Care is developing blueprints to help strengthen perioperative care in the UK. To inform this, we wanted to know what research has been published about patients' and healthcare professionals' views of perioperative care and multidisciplinary working around the time of surgery in the UK. Our rapid review summarises learning from 41 UK studies. To identify relevant research, we searched 10 bibliographic databases and screened more than 3,000 articles available as of June 2020.

We found that little has been published about people's views about perioperative care in the UK, but based on the limited literature:

- Healthcare professionals such as surgeons, anaesthetists, hospital nurses and general practitioners appear to support key principles of perioperative care, such as multidisciplinary working; holistic pathways of care before, during and after surgery; person-centred care; prehabilitation and early supported discharge from hospital. We found few published studies about what policy-makers, healthcare managers or allied health and care professionals think about perioperative care or their role within it.
- People having surgery generally support the principles of perioperative care and value components such as shared decision-making and prehabilitation. They believe that there are benefits from early discharge from hospital, but suggest that more could be done to provide information and support in hospital after surgery and after discharge to help them avoid and manage complications and reduce the need for readmission to hospital. Patients felt that primary and secondary care could work together in a more seamless manner.
- Healthcare professionals believe that factors that may facilitate the implementation of
 perioperative care in the UK include time and funding to build and test pathways; more
 opportunities for professionals from a range of specialities and sectors to build relationships
 and actively work together and more evidence and promotion about the benefits of
 perioperative care for patients, professionals, population health and healthcare systems.

We must treat these findings with caution as they are based on a relatively small number of people's feedback and do not necessarily represent the views of the diverse range of patients and healthcare professionals throughout the UK. The findings inform us that there is much left to learn about people's perceptions of perioperative care and the factors that may help and hinder its implementation locally, but that there is positivity towards a person-centred multidisciplinary approach that is proactive and preventative. We will build on this feedback as we continue to consult with stakeholders about how to embed perioperative care into Integrated Health Systems in the UK.

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The Centre for Perioperative Care (CPOC) is a cross-specialty centre dedicated to the promotion, advancement and development of perioperative care for the benefit of both patients and the healthcare community. We are led by the Royal College of Anaesthetists and work in partnership with patients and the public, the Royal Colleges of Child and Paediatric Health, Physicians, Surgeons, General Practitioners, and Nursing, the Association of Anaesthetists and health and social care practitioners and organisations across the UK.

This rapid review was undertaken for us by an independent organisation, The Evidence Centre. The review describes published research and does not necessarily reflect our views or those of The Evidence Centre.

Setting the scene

Perioperative care

This rapid review examines what people having surgery and healthcare teams think of perioperative care and multidisciplinary working around the time of surgery in the UK.

Around 10 million people have surgery in the UK each year and this number is growing.¹ The NHS in England, Northern Ireland, Scotland and Wales devotes significant resources to supporting people before, during and after surgery. Good pathways of care around the time of surgery can enhance people's satisfaction and health outcomes and ensure that health services are efficient and cost-effective.^{2,3,4,5}

Perioperative care focuses on providing integrated, multidisciplinary, patient-centred care from the moment surgery is contemplated through to full recovery. Perioperative care has many components including multidisciplinary teams working together, shared decisions between patients and professionals, supporting people to be as fit and ready for surgery as possible and helping people to recover after their operation.

The Centre for Perioperative Care is developing resources to help health systems strengthen perioperative care. We wanted to know what people in the UK think about current perioperative and multidisciplinary surgical care so we rapidly reviewed research to see what has been published about this. This will help us understand what is already known about this topic and identify any gaps that we may need to fill as part of our quest to strengthen perioperative care in the UK.

Our review approach

Our rapid review examined the question:

How is perioperative care and multidisciplinary surgical working <u>perceived</u> by frontline teams, managers and patients in the UK?

We searched 10 bibliographic databases for UK research studies of any design or quality published between January 2000 and June 2020.¹

We screened 3,228 potential articles. Studies were eligible if they included empirical data about people's views about perioperative care, multidisciplinary working related to the surgical pathway or integrated systems in the UK. We did not include opinion pieces published without empirical data.

We included 41 studies that met our criteria. We summarised themes from the studies narratively.

Although we searched extensively for research, this is not a systematic review as we did not seek to include and quality assess every relevant study ever published about these topics. Studies of specific interventions may also collect feedback from professionals or patients, but we did not extensively screen these studies because individual interventions were not the focus of our review.

¹ The databases were CABI (multiple databases) Cochrane Library, EBSCO (multiple databases), Embase, Google Scholar, Ingenta Connect, Medline, Mendeley, Scopus and Web of Knowledge (multiple databases).

Views of perioperative care

This section summarises the <u>perceptions</u> of patients and professionals about perioperative care in general or opinions about specific components of perioperative care. Knowing what people think of perioperative care is important because the views of professionals and patients may influence how easy it is to implement such pathways and the extent to which people having surgery will favour and adopt initiatives suggested to them.

Perioperative approach

We found nine UK studies about what patients or professionals think of the concept of perioperative care in general. The limited number of studies may be because it is difficult to define perioperative care as a distinct entity, because this is an emerging concept and/or because researchers may not publish the findings of interviews, surveys or focus groups conducted to support organisational development or to progress specific internal priorities.

Views of people having surgery

Some UK research has suggested that people having surgery or their family members may have different priorities than health professionals when thinking about the elements of surgical care.⁶ We identified only a small number of studies examining what patients think of the concept of perioperative care.

The limited evidence in this area is emphasised by a systematic review that found a paucity of research in the UK and elsewhere about patient experience and attitudes towards perioperative care pathways,⁷ though most international studies have found positive patient satisfaction with perioperative pathways. The limited UK feedback from patients appears largely positive about the premise of perioperative care, whilst acknowledging the potential for ongoing development in practice.

For instance, people in Scotland completed surveys before and after they had major surgery. Surgeons, anaesthetists and nurses experienced in delivering enhanced recovery protocols (perioperative care pathways) also shared their views. This study also included patients and professionals from Norway and The Netherlands. Both patients and healthcare professionals thought that the principles of perioperative care were valuable. They said that most components of perioperative care were equally important, and both patients and professionals tended to prioritise interventions that would relieve pain and nausea after surgery.⁸

Researchers from England suggested that analyses of perioperative pathways often focus on clinical outcomes rather than exploring patient experience. To address this gap, they interviewed 20 people before and six weeks after surgery as part of a trial of a perioperative pathway. Patients viewed the pathway positively and felt motivated by having milestones to aim for. They thought that recovery from surgery largely began at home so were happy with early discharge, but had some concerns about being discharged early from hospital. Those who did not meet milestones or were readmitted to hospital believed they had 'failed'. The researchers concluded that whilst perioperative care pathways can have many benefits, patient expectations and experiences can be complex and patients can have concerns about the perioperative pathway process.⁹

Elsewhere in England, people who had recently had surgery took part in focus groups to talk about their experience of the surgical journey from the decision to operate through to hospital admission, discharge and recovery. Although this study was not explicitly focused on the concept of perioperative care, it explored elements of the care pathway that were most important to patients. Patients said that developing the following things would enhance their experience around the time of surgery: waiting times; better information and preparation; encouragement to be proactive in asking questions and making decisions; being treated with dignity and respect; and ongoing support and continuity of care. The researchers suggested that it should be a priority to provide appropriate and timely information to people considering or planning surgery and ensuring that ongoing support and advice is easily accessible. These types of elements are often included in perioperative care pathways.¹⁰

Views of health professionals

Research about the views of UK health professionals has similar trends, with broadly positive views about the concept of perioperative care and suggestions about factors that may help and hinder implementation.

A recent survey of 758 UK anaesthetists explored their opinions about the vision for perioperative care set out in 2014 by the Royal College of Anaesthetists. Two thirds considered themselves to be a 'perioperative doctor' (64%). Two thirds said they had changed local services in response to the Royal College's vision. Three quarters thought that anaesthetists should lead the development of perioperative care. They viewed time and insufficient training as key barriers to developing perioperative care. The researchers concluded that it may facilitate the implementation of perioperative care to increase professionals' exposure to the concept of perioperative care, targeted education and training and more collaborative working with other specialties.¹¹

In England, 26 healthcare professionals implementing an integrated perioperative pathway were interviewed. The Enhanced Recovery After Surgery Programme introduced by the Department of Health in England more than a decade ago has a sound evidence base, but uptake was low. Interviews across a range of disciplines found that perioperative care was deemed positively, but there were some structural and functional challenges with implementation including:

- frontline staff and managerial resistance to change
- lack of buy-in from relevant stakeholders
- contrasting ward cultures
- lack of visibility of perioperative care
- a fear that standardisation may reduce the level of personalised patient care
- lack of time or resources to provide information to patients
- and perceived poor taste of nutritional drinks used as part of preoperative preparation

Factors thought by these professionals to support the implementation of perioperative care pathways in England included:

- clear alignment with evidence-based practice and drawing on the evidence-base of other specialities
- staff education about perioperative care
- patient involvement and education
- standardising practice across multiple centres and teams
- strong multidisciplinary teamwork
- regular perioperative pathway meetings
- a pre-operative assessment unit
- devoting resources to obtaining Commissioning for Quality and Innovation (CQUIN) funding
- robust data collection and feedback to support improvement¹²

Other researchers in England sought to understand the motivations of 'early adopters' of perioperative care by reviewing 139 applications for a Masters programme in perioperative medicine. Applicants included consultant anaesthetists, anaesthetic trainees, doctors from other specialities and a small number of nurses. Applicants believed that perioperative care was a multidisciplinary speciality that would result in better patient care. They wanted further training because they believed that perioperative care represented the future of practice for anaesthetists and they wanted to better lead local developments.¹³

A survey of UK colorectal surgeons found that they supported the concepts of perioperative care pathways and that they reported implementing elements such as preoperative information and assessment and early initiation of fluids and food after surgery. Most were not undertaking carbohydrate loading prior to surgery.¹⁴

Another survey of 82 professionals from the UK and Ireland found that only fewer than half implemented elements of the perioperative care pathway such as smoking cessation support, the period for fluid fasting and malnutrition screening. Perceived barriers were staffing levels, lack of consistent teamwork, limited resources over weekends and reduced access to smoking cessation services.¹⁵

UK-wide surveys with around 2000 representatives from 20 patient organisations and 25 professional organisations invited people to share their opinions about priorities for perioperative care and anaesthesia research. Priorities included understanding what can be done to help people avoid chronic pain after surgery, what outcomes can be used to measure the success of perioperative care, how to improve recovery from surgery for elderly people, whether enhanced recovery programmes improve short and long-term outcomes, how preoperative exercise or fitness training may improve outcomes after surgery and how to improve communication between the teams looking after patients throughout their surgical journey.¹⁶

Components of care

Perioperative care has many different components. We found 18 studies exploring patient or professional views about some of these components in the UK. Most of these were somewhat tangential to the focus of our review but they are reported here to show the type of research that has been published about perceptions in the UK.

Shared decision-making

We found a small number of studies about healthcare professionals' opinions about providing information or tools to support shared decision-making about surgery between patients and professionals.

A survey of 272 consultant surgeons in England found that eight out of ten thought that patient decision aids were a good idea to support shared decision-making (79%). The preferred approach of surgeons was to give people a booklet to take home containing information about their operation.¹⁷

In another part of England researchers tested an option grid to support shared decisionmaking with people where surgery was an option. Six clinicians were interviewed before and after using the tool with patients. Before using the tool, clinicians were concerned that using a decision support tool would increase the length of consultations, that patients would be resistant to being involved in decisions and that there may be 'information overload'. However, after using the tool the clinicians reported that this had changed their usual way of communicating and that it was feasible and helpful to integrate into practice.¹⁸

Information

We also identified research about what patients and professionals think about the information provided to people before and after surgery.

In England 292 people were surveyed before their operation and again up to six months after surgery. Before surgery most patients were highly satisfied with the information they received but after surgery they were less satisfied with the amount of information provided. People who received information about things they could do to help themselves get well continued to have high satisfaction after surgery. People often said they wanted more information about aftercare and selfcare.¹⁹

In England 103 patients who were given a simplified patient information booklet about anaesthesia at a preadmission clinic were surveyed before surgery. Almost all said that they had read the booklet (96%) and found it helpful to some degree (99%). One third said that reading the booklet worried them (35%), but only 3% said that they discussed the information provided with the anaesthetist. The researchers concluded that although people having surgery like to receive information about the process of anaesthesia, it is important that such information is provided in an appropriate form, including enough detail to alleviate concerns.²⁰

A survey of 134 randomly selected surgeons and anaesthetists in England found that more than half believed that the consent process for surgery may be inappropriate as people do not usually remember the information given to them (55%). The researchers suggested that whilst many surgeons and anaesthetists have positive attitudes to providing person-centred information, a significant proportion hold more paternalistic views, which may mean more training and support is needed to ensure patients get robust information to inform their decisions and preparation.²¹

Prehabilitation

Prehabilitation involves supporting lifestyle and activity changes to improve people's health and readiness for surgery. This includes initiatives to target risk factors such as inactivity, smoking, weight and alcohol consumption, for example. Not only might prehabilitation help people prepare for surgery, but it also has the potential for general longer-term health benefits.^{22,23,24,25}

We found a small number of studies that suggested that the concept of prehabilitation may be valued by some patients and professionals in the UK.

A survey of 299 people in England examined the health behaviours of people preparing for surgery and how motivated and confident they were to make changes to their lifestyles. 42% of people had health behaviours that might benefit from change. People said that it was a priority to increase physical activity, manage their weight and reduce alcohol consumption in order to be prepared for surgery. People perceived having surgery to be more of a motivator than general health benefits. Although people were motivated to make change, they were generally not confident that they would be able to achieve change. They reported being least confident about smoking cessation. The researchers concluded that patients' high desire to modify behaviours for short term surgical benefit meant that preoperative care was an important 'teachable moment' to support population health but that structured preoperative support was needed because people do not feel confident to make changes alone.26

Thirty-four men undergoing cancer surgery and their partners took part in a prehabilitation intervention that included educational material, a self-management group seminar and physiotherapy instruction. Participants said that they valued prehabilitation, particularly the quality of information provided to support selfmanagement, opportunities to openly ask questions of multidisciplinary healthcare professionals and inclusion of partners.²⁷ A survey of 362 health professionals (most from the UK) helped to identify preferred elements of a care bundle to prevent postoperative pulmonary complications. Professionals said that they supported supervised exercise programmes and strength training before surgery as well as specific initiatives during and after surgery.²⁸

Assessment before surgery

Some research has explored perceptions of how UK services assess people prior to surgery, either well before surgery to help people prepare for their operation or very close to the time of surgery to review clinical indicators.

A survey of patient satisfaction with preoperative assessment for general anaesthesia collected feedback from 275 people having day surgery in England. Overall people said they were satisfied with preoperative assessment, but they often said that they were not provided with sufficient preoperative information about their surgery, what they could do to prepare themselves or aftercare. Some reported anxiety and said they were not treated with a supportive attitude. The researchers suggested that preoperative assessment should pay attention to people's individual needs.²⁹

Cardiopulmonary exercise testing is an exercise stress test that provides a noninvasive measure of functional capacity under stress. Such testing has been found to predict postoperative morbidity and mortality after major surgery. A survey of representatives of all NHS Trusts across the UK found that professionals were concerned about variability in the interpretation and reporting of the tests, with most tests being undertaken by anaesthetists and limited external validation of results.³⁰

Geriatric care pathways

A survey in 2019 found that 81% of responding NHS Trusts in the UK had geriatrician-led perioperative care services for older surgical patients compared to less than one third in 2013. Clinical leads believed that barriers to further developing perioperative care included workforce and funding. Multidisciplinary collaboration was believed to have increased, as evidenced by one third of teams holding joint audit meetings (33% up from 21%) and developing guidelines collaboratively (31% up from 17%). However, professionals felt that further work was needed in these areas. There was considerable variation across the UK and the researchers suggested that developing a national network may facilitate wider adoption of geriatric perioperative care.³¹

In the earlier 2013 survey, clinical leads for geriatric medicine in acute NHS trusts throughout the UK said there was an appetite to provide geriatrician-led services to older surgical patients, but most services were reactive. At that time, only around 10% of Trusts provided geriatric preoperative assessment, with the same proportion providing risk assessment or preoperative optimisation. Clinical leads believed that barriers to establishing perioperative geriatric medicine services included funding, workforce issues and a lack of multidisciplinary collaboration.³²

Postoperative care and discharge

A survey with 710 consultant surgeons from across the UK found that only one third felt that postoperative patients were receiving appropriate amounts of water, sodium and potassium, though this study was almost two decades old. Surgeons believed that that problem-orientated ward rounds, written guidelines and discussion of patient scenarios may help to educate other staff about evidence-based postoperative care.³³ In depth interviews with 16 nurses working in inpatient surgical areas in the UK found that these nurses tended to uncritically adopt a medicalised model, focus on technical aspects of postoperative management and treat pain after surgery as something 'normal'. The researchers suggested that based on the nurses' feedback, there may be scope to improve person-centred care and the extent to which more holistic postoperative care is seen as the norm.³⁴

Good preparation for discharge may involve providing patients with information about selfmanagement and how to access ongoing as well as communication with primary care services. Interviews with 30 people undergoing surgery in England found that patients thought that more could be done to prepare them for discharge or to support same day discharge. This included providing more timely information after the procedure and more details about when people could expect to resume their usual activities. Some said that their mental health and body image was affected after surgery due to swelling, bruising or skin discolouration and they would value more help with what to do about this.³⁵

Workforce development

We found a small number of studies where health professionals shared their views for areas of staff development or training that may support the implementation of perioperative care.

Many UK hospitals now employ a local lead for perioperative care. A survey of 86 of these leads found that nine out of ten wanted more support and training in shared decisionmaking. The top five topics that leads prioritised for support were shared decisionmaking, perioperative team development, frailty screening and management, predicting postoperative morbidity and collaboration with primary care.³⁶ In Northern Ireland 106 surgical and medical nurses provided feedback about their confidence in caring for people with cancer. Self-perceived educational needs included more knowledge and skill sin psychosocial care, communication, treating adverse effects of treatment and pain management.³⁷

Some suggest that a component of good perioperative care involves using data and regular review to continuously improve surgical care.^{38,39} Healthcare teams have suggested that this may be an area for ongoing development in the UK. For instance, in England interviews with surgeons and trainees and observation of surgical cases suggested that debriefing after surgery did not happen as frequently or in as much depth as it could. There was a mismatch between what surgeons thought was good practice and what occurred day to day. Hospital and team culture were viewed as significant barriers to debriefing.⁴⁰

A children's hospital in England reviewed surgical ward rounds used to support team learning and postoperative care. 16 members of the surgical team. 30 ward nurses and 38 children and their parents provided feedback. Members of the surgical team were more positive about ward rounds than nurses or patients and parents. Nurses thought that rounds should be altered to improve patient care and parents were concerned about their children feeling anxious and the confidentiality of the information.⁴¹

Multidisciplinary care views

Multidisciplinary working, whereby health professionals from a range of disciplines work together, is a cornerstone of perioperative care. We looked for studies of <u>opinions</u> about multidisciplinary working related to surgery in the UK, regardless of whether the research focused on perioperative care. We found 11 studies about people's views of multidisciplinary working around the time of surgery in the UK. We did not include studies of the implementation of multidisciplinary initiatives, only people's opinions.

Multidisciplinary working

Some studies focus on health professionals' perceptions of the extent of multidisciplinary working. For example, a survey of surgeons in England identified concerns about a lack of multidisciplinary approaches to support patients.⁴²

A survey in Scotland included 352 consultant surgeons, trainee surgeons and theatre nurses. Participants were generally positive about teamwork within the operating theatre, but surgeons had more positive views about the quality of surgical leadership and communication.⁴³

In a UK-wide study, researchers surveyed 157 surgery trainees about the extent to which they felt prepared to support older people having surgery, including preoperative assessment and closer collaboration with geriatricians. Nine out of ten trainees supported close collaboration with geriatric medicine and shared care of complex older people (94%). They often thought that collaboration between surgery and geriatric medicine was inadequate (68%). The trainees did not feel well prepared to look after older people or to work collaboratively with geriatricians. They wanted more geriatric medicine in the surgical curricula (89%).⁴⁴ In another study of surgical trainees' views, researchers explored the extent of multidisciplinary working in surgical morbidity and mortality review meetings in Scotland. 25 trainees from across 15 general surgery units provided feedback. Trainees believed that multidisciplinary working was worthwhile but not routinely implemented. There was wide variation in the frequency of multidisciplinary meetings and their approach between units. Fewer than half included foundation-level trainees and only one was attended by nursing staff.⁴⁵

A survey of 65 hospital doctors in England sought to understand why people with COPD were not being considered for a specific type of surgery. 70% said that they did not have a specific multidisciplinary team with which to discuss patient management.⁴⁶

In England there is a rapid referral system for people with suspected cancer. Feedback from 27 GPs and 15 head and neck surgeons found that professionals thought that prereferral communication between primary and secondary care could be improved to support joint working, including more education for general practitioners.⁴⁷

Multidisciplinary meetings

Other studies have explicitly explored opinions about multidisciplinary team meetings, whereby professionals from different specialities come together to discuss individual patient cases.

A survey with 136 surgeons across the UK involved in multidisciplinary meetings found that in many centres not all patients with breast cancer were discussed before surgery. Surgeons suggested that multidisciplinary team meetings could be improved by including a wider range of disciplines, holding meetings during protected sessions, giving professionals time to prepare for meetings and allocating a designated co-ordinator.⁴⁸

A national survey of 1145 members of cancer multidisciplinary team meetings in England (including surgeons) found wide variation in professionals' perceptions of how these meetings were run and the extent to which they supported patient-centred decisionmaking. Professionals said that preparation for and organisation of multidisciplinary team meetings could be more structured.⁴⁹

Some research has explored patient involvement in multidisciplinary team meetings (which may include discussions about surgery). For instance, feedback collected by a cancer charity in England found that patients reported distress at not feeling involved or represented at multidisciplinary team meetings. Patients said there was a lack of communication about how decisions were made and they did not know who to approach for answers to their questions.⁵⁰

Other research

Some studies have asked patients whether it is acceptable for them to be supported by various types of professionals, such as nurses or allied health professionals. For instance, in a study in England appropriately trained nurses undertook pre-operative assessment instead of a junior doctor. Having appropriately trained nurses leading the pre-operative assessment was acceptable to patients, though there was no evidence that having nurses instead of junior doctors in this role improved communication between senior medical staff and those carrying out preoperative assessments. This study was almost two decades old.⁵¹

A UK-wide survey of 505 consultants, other doctors, trainees and surgical nurse practitioners explored ways to improve the working environment for safe surgical care. Professionals expressed common themes, regardless of their discipline. They believed that a lot could be done to restructure the workforce to provide more integration and continuity without increasing costs. Whilst participants thought that more staff were needed, they also suggested that building team unity and cohesion rather than what they believed was a siloed and hierarchical system, could improve surgical processes and patient experience, as well as staff experience. A lack of resources was cited as a key barrier to improving the efficiency of the surgical team.52

Perioperative care pathways may include a facilitator to support patients to adhere to recommended initiatives. In the UK this role is often undertaken by a nurse. UK nurses' opinions were sought about the role of the perioperative care pathway facilitator. Patient education, staff education, supporting patients throughout the pathway and collecting data were viewed as important components.⁵³

Views about integration

This section summarises research about people's perceptions of integrated systems of working in the UK.

Integrated Care Systems and Accountable Care Organisations are relatively new in the UK.^{54,55} The broad remit is for organisations to work together across the health and care sectors to provide more streamlined and efficient patient care, with shared resources.⁵⁶ Integrated Care Systems devolve the responsibility for the planning and delivery of health and social care services to local healthcare providers in partnership with local government, social care, primary care networks and the voluntary sector. This new way of working could provide an opportunity to better integrate perioperative care across the entire pathway.⁵⁷

We did not identify any studies about the views of patients or professionals related to integrated systems specifically linked to surgery in the UK, though there are descriptive examples of how Integrated Care Systems are implementing components of perioperative care locally.⁵⁸

We summarise here learning from two studies about <u>perceptions</u> of integrated systemsworking more generally in the UK (not specific to surgery and not focused on examples of implementation or outcomes).

One study in England included interviews and telephone surveys about the work of Clinical Commissioning Groups (CCGs) and factors that helped or hindered the development of integrated care systems. Policy makers, general practitioners and CCG managers and staff provided feedback. Participants had mixed views about the value of new collaborative service models and Sustainability and Transformation Partnerships. There was perceived to be a lack of understanding of the roles of different sectors. Whilst there were examples of collaborations in some areas, in general this was not translated into integration across wider footprints.⁵⁹

Another study in England explored patients' views of integrated care. This was part of a pilot to integrate care across primary, acute, community, mental health and social care for people with diabetes and/or those aged 75 and over through care planning, multidisciplinary case reviews and information sharing. In total, 405 people who had an integrated care plan were surveyed. Patients perceived many benefits from the integrated care model, including increased patient involvement in decision-making, improved patient-provider relationships, better access to care and better communication between professionals. However, only one in five were aware that they had a care plan and of these only one third had a copy of their plan. The researchers concluded that integrated care approaches may improve the quality of patient experience, but that integrated working and care planning was a complex and technically challenging process that occurred more slowly than planned.60

Summary

Key points

Our rapid review identified 41 studies of some relevance to people's perceptions of perioperative care or multidisciplinary working in the UK, though some were on related topics, not specific to perioperative care.

We did not expect that a great deal would have been published about this so it was not a surprise that we found a limited amount of UKspecific information.

This may mirror international trends. For instance, a systematic review of research about health professionals' opinions of perioperative care pathways included 8 studies in six countries and four surgical specialities. It focused on health professionals' views before, during and after implementation of an enhanced recovery after surgery pathway. The review found that professionals perceived a resistance to change and described the importance of effective multidisciplinary team collaboration and communication to support the implementation of perioperative care. The reviewers concluded that staff attitudes towards perioperative care pathways tend to become more positive over time, as practices are embedded as part of usual care.61

Another systematic review of international studies focused on how patients perceive perioperative care pathways. Based on 11 studies, the reviewers concluded that providing information about the surgical journey helped patients feel secure and prepared for surgery, but patients said that they were provided with better information before surgery than afterwards. They reported being motivated to participate in their recovery process, but often found this challenging when they faced symptoms such as pain, nausea and weakness. Patients in perioperative care pathway programmes wanted more consistency between pre- and postoperative information and support.⁶²

Various other international studies are available about patients' and professionals' views about perioperative care.^{63,64,65,66,67,68,69,70,71} The themes in international studies appear to be similar to the trends in UK studies.

Our rapid review fills a gap by compiling the (little) published data that exists about patient and professional perceptions of perioperative care and multidisciplinary working in surgery in the UK. The 'take away messages' from our review are:

- Patients and professionals may broadly support the principles of perioperative care, including person-centred care, multidisciplinary working and a holistic pathway approach.
- However, there may be work to do in the UK to embed this vision as routine practice. Many studies highlighted areas of care before, during and after surgery that patients and healthcare professionals believed could be further developed.
- Healthcare professionals believe that factors that may facilitate the implementation of perioperative care in the UK include time and funding to build and test pathways; opportunities for professionals from a range of specialities to actively work together and more evidence and promotion about the benefits of perioperative care for patients, professionals, population health and healthcare systems.

Things to bear in mind

The studies included comments about many different types of surgery and there were no differences identified between surgical specialities. However, most of the feedback from health professionals came from anaesthetists and surgeons. There was little published research about the views of nurses, allied health and care professionals, healthcare managers and policy makers.

We did not identify any studies setting out people's opinions about Integrated Care Systems in relation to surgery in the UK.

The studies we compiled represent research that has been formally published about people's views. These do not necessarily show the full picture as it is likely that unpublished research exists and people's views may change over time. We did not include studies about the outcomes of perioperative care or the way that it has been implemented – only people's opinions about it.

There are also many methodological issues with studies that collect people's feedback. They often have small samples and those who choose to take part in focus groups or surveys may not be representative of others. Many of the studies targeted professionals who may be well versed in and supportive of perioperative care rather than asking robust and generalisable questions to seek a diverse range of views. Furthermore, just because people say they perceive something to be a certain way does not mean that is what happens in practice. These caveats mean that it is important to treat the opinions summarised in this review with caution. Even so, the overarching theme is one of positivity towards the potential for further multidisciplinary working and perioperative care.

As the NHS has adapted to respond to population health priorities and Integrated Care Systems, and then to addressing COVID-19, other views may have emerged about the importance of working collaboratively within teams and across sectors to provide patients with the best experience of care in the most cost-effective manner.

The Centre for Perioperative Care's work is guided by wide consultation and the priorities of our partners and stakeholders. Our rapid review has shown that there is much left to learn about how stakeholders in the UK view perioperative care, and this strengthens our resolve even further to actively seek feedback to guide our work.

References

- 1 Abbott TEF, Fowler AJ, Dobbs TD, Harrison EM, Gillies MA, Pearse RM. Frequency of surgical treatment and related hospital procedures in the UK: a national ecological study using hospital episode statistics. BJA 2017; 119(2):249-57.
- 2 Lee Y, Yu J, Doumouras AG, Li J, Hong D. Enhanced recovery after surgery (ERAS) versus standard recovery for elective gastric cancer surgery: A meta-analysis of randomized controlled trials. Surg Oncol 2020;32:75-87.
- 3 Siotos C, Stergios K, Naska A, Frountzas M, Pergialiotis V, Perrea DN, Nikiteas N. The impact of fast track protocols in upper gastrointestinal surgery: A meta-analysis of observational studies. Surgeon 2018;16(3):183-192.
- 4 Paton F, Chambers D, Wilson P, Eastwood A, Craig D, Fox D, Jayne D, McGinnes E. Initiatives to reduce length of stay in acute hospital settings: a rapid synthesis of evidence relating to enhanced recovery programmes. Southampton: NIHR Journals Library; 2014.
- 5 Treanor C, Kyaw T, Donnelly M. An international review and meta-analysis of prehabilitation compared to usual care for cancer patients. J Cancer Surviv 2018;12(1):64-73.
- 6 Gidman W, Elliott R, Payne K, Meakin GH, Moore J. A comparison of parents and pediatric anesthesiologists' preferences for attributes of child daycase surgery: a discrete choice experiment. Paediatr Anaesth 2007;17(11):1043-52.
- 7 Jones EL, Wainwright TW, Foster JD, Smith JR, Middleton RG, Francis NK. A systematic review of patient reported outcomes and patient experience in enhanced recovery after orthopaedic surgery. Ann R Coll Surg Engl 2014;96(2):89-94.
- 8 Hughes M, Coolsen MM, Aahlin EK, Harrison EM, McNally SJ, Dejong CH, Lassen K, Wigmore SJ. Attitudes of patients and care providers to enhanced recovery after surgery programs after major abdominal surgery. J Surg Res 2015;193(1):102-10.
- 9 Vandrevala T, Senior V, Spring L, Kelliher L, Jones C. 'Am I really ready to go home?': a qualitative study of patients' experience of early discharge following an enhanced recovery programme for liver resection surgery. Support Care Cancer 2016;24(8):3447-54.
- 10 Davis RE, Vincent C, Henley A, McGregor A. Exploring the care experience of patients undergoing spinal surgery: a qualitative study. J Eval Clin Pract 2013;19(1):132-8.
- 11 Partridge JSL, Rogerson A, Joughin AL, Walker D, Simon J, Swart M, Dhesi JK. The emerging specialty of perioperative medicine: a UK survey of the attitudes and behaviours of anaesthetists. Perioper Med 2020;9:3.
- 12 Herbert G, Sutton E, Burden S, Lewis S, Thomas S, Ness A, Atkinson C. Healthcare professionals' views of the enhanced recovery after surgery programme: a qualitative investigation. BMC Health Serv Res 2017;17(1):617.
- 13 Groves C, Whiteman A, Kumar G, Stephens R, Walker D. Early adopters of perioperative medicine: who are they and what motivates them? Br J Hosp Med 2017;78(11):642-6.
- 14 Arsalani-Zadeh R, Ullah S, Khan S, Macfie J. Current pattern of perioperative practice in elective colorectal surgery; a questionnaire survey of ACPGBI members. Int J Surg 2010;8(4):294-8.
- 15 Budacan AM, Mehdi R, Kerr AP, Kadiri SB, Batchelor TJP, Naidu B. National survey of enhanced recovery after thoracic surgery practice in the United Kingdom and Ireland. J Cardiothorac Surg 2020;15(1):95.
- 16 Boney O, Bell M, Bell N, Conquest A, Cumbers M, Drake S, Galsworthy M, Gath J, Grocott MP, Harris E, Howell S, Ingold A, Nathanson MH, Pinkney T, Metcalf L. Identifying research priorities in anaesthesia and perioperative care: final report of the joint National Institute of Academic Anaesthesia/James Lind Alliance Research Priority Setting Partnership. BMJ Open 2015;5(12):e010006.
- 17 Adam JA, Khaw FM, Thomson RG, Gregg PJ, Llewellyn-Thomas HA. Patient decision aids in joint replacement surgery: a literature review and an opinion survey of consultant orthopaedic surgeons. Ann R Coll Surg Engl 2008;90(3):198-207.
- 18 Elwyn G, Rasmussen J, Kinsey K, Firth J, Marrin K, Edwards A, Wood F.On a learning curve for shared decision making: Interviews with clinicians using the knee osteoarthritis Option Grid. J Eval Clin Pract 2018;24(1):56-64.
- 19 Oswald N, Hardman J, Kerr A, Bishay E, Steyn R, Rajesh P, Kalkat M, Naidu B. Patients want more information after surgery: a prospective audit of satisfaction with perioperative information in lung cancer surgery. J Cardiothorac Surg 2018;13(1):18.
- 20 Gillies MA, Baldwin FJ. Do patient information booklets increase perioperative anxiety? Eur J Anaesthesiol 2001;18(9):620-2.
- 21 Jamjoom AA, White S, Walton SM, Hardman JG, Moppett IK. Anaesthetists' and surgeons' attitudes towards informed consent in the UK: an observational study. BMC Med Ethics 2010;11:2.

- 22 Hughes MJ, Hackney RJ, Lamb PJ, Wigmore SJ, Deans DAC, Skipworth RJE. Prehabilitation before major abdominal surgery: a systematic review and meta-analysis. World J Surg 2019;43(7):1661-8.
- 23 Gillis C, Buhler K, Bresee L, Carli F, Gramlich L, Culos-Reed N, Sajobi TT, Fenton TR. Effects of nutritional prehabilitation, with and without exercise, on outcomes of patients who undergo colorectal surgery: a systematic review and meta-analysis. Gastroenterology 2018;155(2):391-410.e4.
- 24 Hijazi Y, Gondal U, Aziz O. A systematic review of prehabilitation programs in abdominal cancer surgery. Int J Surg 2017;39:156-62.
- Luther A, Gabriel J, Watson RP, Francis NK. The impact of total body prehabilitation on post-operative outcomes after major abdominal surgery: a systematic review. World J Surg 2018;42(9):2781-91.
- 26 McDonald S, Yates D, Durrand JW, Kothmann E, Sniehotta FF, Habgood A, Colling K, Hollingsworth A, Danjoux G. Exploring patient attitudes to behaviour change before surgery to reduce peri-operative risk: preferences for short- vs. long-term behaviour change. Anaesthesia 2019;74(12):1580-8.
- 27 Paterson C, Primeau C, Pullar I, Nabi G. Development of a prehabilitation multimodal supportive care interventions for men and their partners before radical prostatectomy for localized prostate cancer. Cancer Nurs 2019;42(4):E47-53.
- 28 Griffiths SV, Conway DH, Sander M, Jammer I, Grocott MPW, Creagh-Brown BC. What are the optimum components in a care bundle aimed at reducing post-operative pulmonary complications in high-risk patients? Perioper Med 2018;7:7.
- 29 Fraczyk L, Godfrey H. Perceived levels of satisfaction with the preoperative assessment service experienced by patients undergoing general anaesthesia in a day surgery setting. J Clin Nurs 2010;19(19-20):2849-59.
- 30 Reeves T, Bates S, Sharp T, Richardson K, Bali S, Plumb J, Anderson H, Prentis J, Swart M, Levett DZH. Cardiopulmonary exercise testing (CPET) in the United Kingdom-a national survey of the structure, conduct, interpretation and funding. Perioper Med 2018;7:2.
- 31 Joughin AL, Partridge JSL, O'Halloran T, Dhesi JK. Where are we now in perioperative medicine? Results from a repeated UK survey of geriatric medicine delivered services for older people. Age Ageing 2019;48(3):458-62.
- 32 Partridge JS, Collingridge G, Gordon AL, Martin FC, Harari D, Dhesi JK. Where are we in perioperative medicine for older surgical patients? A UK survey of geriatric medicine delivered services in surgery. Age Ageing 2014;43(5):721-4.
- 33 Lobo DN, Dube MG, Neal KR, Allison SP, Rowlands BJ. Peri-operative fluid and electrolyte management: a survey of consultant surgeons in the UK. Ann R Coll Surg Engl 2002;84(3):156-60.
- 34 Mackintosh-Franklin C. Registered nurses' personal responses to postoperative pain: a descriptive qualitative study. Pain Manag Nurs 2014;15(3):580-7.
- 35 Gilmartin J. Contemporary day surgery: patients' experience of discharge and recovery. J Clin Nurs 2007;16(6):1109-17.
- 36 Bougeard AM, Brent A, Swart M, Snowden C. A survey of UK peri-operative medicine: pre-operative care. Anaesthesia 2017;72(8):1010-15.
- 37 McCaughan E, Parahoo K. Medical and surgical nurses' perceptions of their level of competence and educational needs in caring for patients with cancer. J Clin Nurs 2000;9(3):420-8.
- 38 Wainwright TW, Gill M, McDonald DA, Middleton RG, Reed M, Sahota O, Yates P, Ljungqvist O. Consensus statement for perioperative care in total hip replacement and total knee replacement surgery: Enhanced Recovery After Surgery (ERAS(®)) Society recommendations. Acta Orthop 2020;91(1):3-19.
- 39 Low DE, Allum W, De Manzoni G, Ferri L, Immanuel A, Kuppusamy M, Law S, Lindblad M, Maynard N, Neal J, Pramesh CS, Scott M, Mark Smithers B, Addor V, Ljungqvist O. Guidelines for Perioperative Care in Esophagectomy: Enhanced Recovery After Surgery (ERAS(®)) Society Recommendations. World J Surg 2019;43(2):299-330.
- 40 Ahmed M, Sevdalis N, Vincent C, Arora S. Actual vs perceived performance debriefing in surgery: practice far from perfect. Am J Surg 2013;205(4):434-40.
- 41 Birtwistle L, Houghton JM, Rostill H. A review of a surgical ward round in a large paediatric hospital: does it achieve its aims? Med Educ 2000;34(5):398-403.
- 42 Schnitzbauer AA, Proneth A, Pengel L, Ansorg J, Anthuber M, Bechstein WO, Schlitt HJ, Geissler EK. Evidence-based medicine in daily surgical decision making: a survey-based comparison between the UK and Germany. Eur Surg Res 2015;54(1-2):14-23.
- 43 Flin R, Yule S, McKenzie L, Paterson-Brown S, Maran N.Attitudes to teamwork and safety in the operating theatre. Surgeon 2006;4(3):145-51.
- 44 Shipway DJ, Partridge JS, Foxton CR, Modarai B, Gossage JA, Challacombe BJ, Marx C, Dhesi JK. Do surgical trainees believe they are adequately trained to manage the ageing population? A UK survey of knowledge and beliefs in surgical trainees. J Surg Educ 2015;72(4):641-7.
- 45 Khine M, Leung E, McGregor JR. A survey of morbidity and mortality review meetings in the general surgical units of the West of Scotland. Scott Med J 2015;60(4):244-8.

- 46 McNulty W, Jordan S, Hopkinson NS. Attitudes and access to lung volume reduction surgery for COPD: a survey by the British Thoracic Society. BMJ Open Respir Res 2014;1(1):e000023.
- 47 Bethell GS, Leftwick P. Views of general practitioners and head and neck surgeons on the referral system for suspected cancer: a survey. J Laryngol Otol 2015;129(9):893-7.
- 48 Macaskill EJ, Thrush S, Walker EM, Dixon JM. Surgeons' views on multi-disciplinary breast meetings. Eur J Cancer 2006;42(7):905-8.
- 49 Lamb BW, Sevdalis N, Taylor C, Vincent C, Green JS. Multidisciplinary team working across different tumour types: analysis of a national survey. Ann Oncol 2012;23(5):1293-300.
- 50 Morement H, Harrison R, Taylor-Robinson SD. The multidisciplinary team meeting in the UK from the patients' perspective: comments and observations from cholangiocarcinoma patients and their families. Int J Gen Med 2017;10:305-10.
- 51 Kinley H, Czoski-Murray C, George S, McCabe C, Primrose J, Reilly C, Wood R, Nicolson P, Healy C, Read S, Norman J, Janke E, Alhameed H, Fernandez N, Thomas E. Extended scope of nursing practice: a multicentre randomised controlled trial of appropriately trained nurses and pre-registration house officers in pre-operative assessment in elective general surgery. Health Technol Assess 2001;5(20):1-87.
- 52 Baggaley A, Robb L, Paterson-Brown S, McGregor RJ. Improving the working environment for the delivery of safe surgical care in the UK: a qualitative cross-sectional analysis. BMJ Open 2019;9(1):e023476.
- 53 Balfour A, Burch J, Fecher-Jones I, Carter FJ. Exploring the fundamental aspects of the Enhanced Recovery After Surgery nurse's role. Nurs Stand (Published online ahead of print November 2019).
- 54 McClellan M, Kent J, Beales SJ, Cohen SI, Macdonnell M, Thoumi A, Abdulmalik M, Darzi A. Accountable care around the world: a framework to guide reform strategies. Health Aff 2014;33(9):1507-15.
- 55 Ahmed F, Mays N, Ahmed N, Bisognano M, Gottlieb G. Can the Accountable Care Organization model facilitate integrated care in England? J Health Serv Res Policy 2015;20(4):261-4.
- https://www.kingsfund.org.uk/publications/articles/health-wellbeing-boards-integrated-care-systems
 Bougeard AM, Moore J. Delivering perioperative care in integrated care systems. Clin Med 2019;19(6):450-
- Moore J, Merchant Z, Rowlinson K, McEwan K, Evison M, Faulkner G, Sultan J, McPhee JS, Steele J.
- Implementing a system-wide cancer prehabilitation programme: The journey of Greater Manchester's 'Prehab4cancer'. Eur J Surg Oncol (Published online ahead of print May 2020).
- 59 McDermott I, Checkland K, Moran V, Warwick-Giles L. Achieving integrated care through commissioning of primary care services in the English NHS: a qualitative analysis. BMJ Open 2019;9(4):e027622.
- 60 Mastellos N, Gunn L, Harris M, Majeed A, Car J, Pappas Y. Assessing patients' experience of integrated care: a survey of patient views in the North West London Integrated Care Pilot. Int J Integr Care 2014;14:e015.
- 61 Cohen R, Gooberman-Hill R. Staff experiences of enhanced recovery after surgery: systematic review of qualitative studies. BMJ Open 2019;9(2):e022259.
- 62 Sibbern T, Bull Sellevold V, Steindal SA(1), Dale C, Watt-Watson J, Dihle A. Patients' experiences of enhanced recovery after surgery: a systematic review of qualitative studies. J Clin Nurs 2017;26(9-10):1172-88.
- 63 Gobbo M, Saldaña R, Rodríguez M, Jiménez J, García-Vega MI, de Pedro JM, Cea-Calvo L. Patients' experience and needs during perioperative care: a focus group study. Patient Prefer Adherence 2020;14:891-902.
- 64 Shafer JS, Jenkins BN, Fortier MA, Stevenson RS, Hikita N, Zuk J, Gold JI, Golianu B, Kaplan SH, Mayes L, Kain ZN. Parental satisfaction of child's perioperative care. Paediatr Anaesth 2018;28(11):955-62.
- 65 Arakelian E, Swenne CL, Lindberg S, Rudolfsson G, von Vogelsang AC. The meaning of person-centred care in the perioperative nursing context from the patient's perspective an integrative review. J Clin Nurs 2017;26(17-18):2527-44.
- 66 Rosenbloom JM, Jackson J, Alegria M, Alvarez K. Healthcare provider perceptions of disparities in perioperative care. J Natl Med Assoc 2019;111(6):616-24.
- 67 Forsberg A, Vikman I, Wälivaara BM, Rattray J, Engström Å. Patients' perceptions of perioperative quality of care in relation to self-rated health. J Perianesth Nurs 2018;33(6):834-43.
- 68 van der Meij E, Bouwsma EVA, van den Heuvel B, Bonjer HJ, Anema JR, Huirne JAF. Using e-health in perioperative care: a survey study investigating shortcomings in current perioperative care and possible future solutions. BMC Surg 2017;17(1):61.
- 69 Sjöberg C, Amhliden H, Nygren JM, Arvidsson S, Svedberg P. The perspective of children on factors influencing their participation in perioperative care. J Clin Nurs 2015;24(19-20):2945-53.
- 70 Auckley D, Cox R, Bolden N, Thornton JD. Attitudes regarding perioperative care of patients with OSA: a survey study of four specialties in the United States. Sleep Breath 2015;19(1):315-25.
- 71 Turner K, Van Denkerkhof E, Lam M, Mackillop W. Perioperative care of patients with obstructive sleep apnea a survey of Canadian anesthesiologists. Can J Anaesth 2006;53(3):299-304.

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