Delivering prevention through perioperative care

Response to the Government Green Paper: Advancing our Health – Prevention in the 2020s

About the Centre for Perioperative Care (CPOC)
CPOC is a new cross-organisational, multidisciplinary initiative to facilitate cross-organisational working on perioperative care for patient benefit. It is a partnership between patients and the public, other professional stakeholders including Medical Royal Colleges, NHS England and the equivalent bodies responsible for healthcare in the other UK devolved nations.

What is perioperative care?
Perioperative care is the integrated multidisciplinary care of patients from the moment surgery is contemplated, through to full recovery. Good perioperative care should improve patient experience of care, including quality of care and satisfaction with care, improve health of populations, including returning to home/work and quality of life, and reduce the per capita cost of health care through improving value.

Why is it important?
Around 10 million patients undergo surgery annually in the UK. For most patients surgery is a success, in terms of the procedure itself and the care before and afterwards. However, the population is changing and so must our services. There are 250,000 patients at higher risk from surgery and this is set to rise, due to the increasing number of patients with multiple long term conditions. We believe that collaborative and efficient perioperative care is the route to effective and sustainable surgery.

Key recommendations
The Government should actively support and facilitate:

- the adoption of the perioperative care approach across specialties to streamline and improve clinical care pathways.
- the embedding of prevention, including perioperative care pathways and prehabilitation programmes, into routine clinical practice to ensure that every opportunity to improve the patient health is fully realised.
- the implementation of perioperative care pathways across integrated care systems (ICSs), enabling providers to work collaboratively and deliver seamless patient care and long term population health benefits.
1 Introduction

The Centre for Perioperative Care (CPOC) welcomes this opportunity to respond to the Government’s consultation document, *Advancing our health: prevention in the 2020s*. In recent years, the NHS has moved away from a system built around prevention to instead focus its efforts on immediate, acute demand. This Green Paper is a chance to rebalance the NHS from an illness to a wellness service.

The commitments outlined, combined with those in NHS England’s Long-Term Plan, recognise the key role the NHS has to play in reducing health inequalities and tackling obesity, smoking and alcohol intake.1

One way that it can do this is through the development of perioperative care – the integrated care of patients from the moment surgery is contemplated through to full recovery. By empowering the millions of patients undertaking a surgical procedure each year to adopt healthier lifestyles and change behaviour ahead of their operation, the NHS can improve patient care and population health, while reducing costs.

As we move forward, it will be important that the Green Paper does not become the ‘local authorities’ plan’ and the NHS Long-Term Plan for England, the ‘NHS’s plan’. Through that lens CPOC explores two key questions identified in the consultation: How can we make better use of existing assets to promote the prevention agenda; and what more can we do to help local authorities and NHS bodies work well together?

2 Prevention in the NHS

Prevention in the NHS operates in different ways, at different times, and at different levels. This makes cross-sector action challenging to operationalise at the scale required to improve population health outcomes and reduce health inequalities. There is currently no common thread from national to system/organisational level prevention strategies, with accountability mechanisms. A recent survey of 310 NHS leaders on what they think the NHS’s prevention priorities should be in their local areas has revealed three key priorities:

- delivering a systems approach to prevention (64%)
- embedding prevention into routine practice, eg Make Every Contact Count (45%)
- embedding prevention into clinical and/or patient pathways (43%).2

The NHS can make the most of its existing assets and interactions by building prevention into clinical pathways and working across organisations to ensure services are joined up. Perioperative care offers a means of supporting primary and secondary care organisations to deliver system wide prevention interventions that operate at both individual and population health level.

3 System level perioperative change

Perioperative care means reviewing the surgical perioperative pathway, our patient flows and how we prepare our patients for surgery, and how and who decides they are optimised for surgery. It means changing the postoperative course with increased emphasis on enhanced recovery after surgery and re-designing our discharge processes so it is planned and arranged in advance of the surgical event.

And, it means designing care pathways that embed important patient discussions – true shared decision-making where the focus changes from a technically possible surgical procedure, to the delivery of perioperative care designed and wrapped around the patient. The final decision is therefore one where the patient is at the centre of decision making, and that they, along with the various stakeholders, agree to the appropriate course of action for their condition.

This will ensure patients understand the risks and outcomes and allows clinicians from various specialties to empower patients to get in the best possible physical shape before surgery. These ‘teachable moments’ provide us an opportunity to ensure that we can really start to address the prevention agenda around smoking, diabetes, obesity and exercise.3
4 A population health approach
Current NHS priorities are largely risk factor and single-issue based. The NHS prevention programme has been shaped by the key risk factors causing premature deaths, eg smoking, diet, blood pressure, obesity, alcohol and drug use. This focus is very welcome. However, individual interventions alone will not achieve the change we need to deliver at a population level. NHS and public health leaders alike think the NHS should prioritise a systems approach to prevention. The perioperative care pathway, because of cross-specialties and cross-disciplinary nature, is an ideal approach to deal with the co-morbidities that many of the high risk surgical patients present with.

In this context, with half of all primary and secondary care consultations and admissions for patients with multiple long term conditions, perioperative care is a natural enabler for the treatment of this cohort of patients and CPOC would be keen to see the development of an explicit national strategy to address multimorbidity. The shift to ICSs and primary care networks will help bring together commissioners, providers and local authorities to make decisions in the interests of the entire health economy, based on clusters of disease profiles across populations. Cross-sector partnerships with local authorities, community and voluntary organisations and statutory bodies are enablers of prevention.

5 The need for better collaboration between specialties during the perioperative period
Ensuring a patient is in the best possible condition for their operation, receives high quality care during surgery and is supported through to a full recovery should not be seen as three separate aims. Instead, every patient’s journey should be along a single, coordinated pathway of care, in which the right services and staff are all involved. This is the central insight that shapes the perioperative approach.

The perioperative team might consist of:
While aspects of best practice exist across the NHS, many hospitals cannot offer a complete perioperative care package for every patient, and uptake across medical and surgical specialties remains patchy. The BMA signals ongoing barriers to collaboration between medical specialties, reporting that only 16% of doctors feel that there is clear communication between primary and secondary care. In turn, the Royal College of Anaesthetists (RCoA) identifies barriers including lack of engagement with other medical specialties, resistance to new ways of working and systems and processes that do not enable collaboration. Yet, evidence is emerging that perioperative care pathways, with an emphasis on prehabilitation of patients ahead of surgery, can have a long-term positive impact on the patient health that lasts well beyond the perioperative period. The full potential of perioperative care will only be realised when all specialties collaborate towards one common goal with the patient at its centre – optimal outcomes supported by prevention of ill health.

Recommendation: The Government should actively support and facilitate the adoption of the perioperative care approach across medical specialties to streamline and improve clinical care pathways.

6 Embedding prevention into routine clinical practice

The time available to patients to prepare for surgery is a ‘teachable moment’, where a patient can be encouraged by their GP, surgeon and perioperative team to make positive and lasting changes to their lifestyle. The ‘Making Every Contact Count’ (MECC) approach recognises that ‘the opportunistic delivery of consistent and concise healthy lifestyle information enables individuals to engage in conversations about their health at scale across organisations and populations’.

The RCoA has launched Fitter Better Sooner, a toolkit to help patients make the most of the perioperative care period and to equip them with the information they need to get fitter for surgery, reduce postoperative complications and adopt a healthier lifestyle. Prehabilitation of surgical patients through exercise has been proven to be particularly effective in reducing postoperative complications and helping patients to return to a full functional state quicker. A structured programme of exercise ahead of surgery improves cardiovascular and muscular conditioning and helps the patient better withstand the physiological stresses of surgery. As well as making the patient more resilient for surgery, this prehabilitation phase offers an opportunity for patients to experience the benefits of exercise and gives them the tools and knowledge they need to stay physically active long after the postoperative period.

The case study below offers an example of the benefits that comprehensive prehabilitation ahead of surgery and discussions with patients about their lifestyles can bring to patients and their long term health. This type of initiatives are effectively ‘prevention in action’.

**Case study: PREPARE**

**What is it?** The PREPARE for surgery programme highlights the cost-effectiveness of delivering comprehensive prehabilitation services in advance of surgery by helping ‘train’ patients for surgery, based on individual need. The PREPARE team look at factors before and after a patient’s procedure, including physical activity, diet, psychological wellbeing and medication management.

**What happened?** Analysis of the PREPARE programme – run by the Imperial College Healthcare NHS Trust – calculates that the cost of the core delivery team is £20,900 per year while identifying an estimated cost saving of £265,000 per year, based on a reduced rate and severity of complications and length of (hospital) stay.

**What next?** The award winning PREPARE programme is being expanded beyond oesophago-gastric cancer patients to work with urological and lung cancer patients who also require major surgery and intensive recovery. For these patients, national targets dictate they should undergo surgery as soon as possible – usually within two weeks. The programme will therefore be adapted from a four-week, to a two-week timeline for these patients.

Prehabilitation is also particularly important for cancer patients. Seventy per cent of the 1.8 million people in the UK living with cancer are also living with one or more other long-term health conditions. The guidance report, Prehabilitation for people with cancer, a partnership between the RCoA, the National Institute for Health Research and Macmillan Cancer Support, contains evidence that when services are redesigned so that prehabilitation is integrated into the cancer pathway the quality of life and long-term health of patients is considerably improved.
Principles and guidance for prehabilitation within the management and support of people with cancer

What is the purpose of prehabilitation for people with a cancer diagnosis?
Prehabilitation enables people with cancer to prepare for treatment through promoting healthy behaviours and through needs-based prescribing of exercise, nutrition and psychological interventions. Prehabilitation is part of a continuum to rehabilitation. The aims of prehabilitation are to empower patients to maximise resilience to treatment and improve long-term health. Prehabilitation can:

- reduce length of stay
- enhance recovery following treatment
- reduce post treatment complications
- provide a teachable moment to enable smoking and alcohol cessation
- improve cardiorespiratory fitness
- improve nutritional status
- improve aspects of neuro-cognitive function
- enhance quality of life

The benefits of prehabilitation can be seen in as little as two weeks. Prehabilitation empowers people with cancer to enhance their own physical and mental health and wellbeing and thereby supports them to live life as fully as they can.

The perioperative approach of engaging in conversations with patients about their lifestyle and providing the tools and information they need to make meaningful changes should be embraced across all care settings and healthcare professions. Lifestyle change can be daunting for patients and complex for healthcare professionals to deliver. It requires a truly multidisciplinary approach and collaboration between specialties. The greatest success is achieved when patients are encouraged to start changing their lifestyle as soon as they are told they will require surgery by their GP, health assistant or specialty consultant.

Recommendation: The Government should actively support and facilitate the embedding of prevention into routine clinical practice, including perioperative care pathways and prehabilitation programmes, to ensure that every opportunity to improve the health of patients is fully utilised.

7 Implementing perioperative care pathways across ICSs
Changing clinical pathways is one of the biggest challenges in moving to a population health approach. It requires not only development of new care models, but clinical roles and adoption of new ways of working.

While the specialty of anaesthesia is seeing an evolution of the anaesthetist into the ‘perioperative care physician’, this new role cannot work in isolation and the ‘prehab to rehab’ model will only be successful with the buy-in of ICSs, their leaders and staff across all providers. We believe that the implementation of this model of care across system providers can provide the tools needed to help ICSs achieve their goal of improving the health of local populations.
The RCoA's report *A teachable moment – delivering perioperative medicine in integrated care systems* contains a detailed analysis of the first ten ICSs and offers a series of practical solutions for each to embed perioperative best practice to support their identified clinical priorities and develop related pathways. The example below shows one model of how an ICS can benefit from adoption of perioperative pathways, in this case by making diabetic patients partners in controlling their condition ahead of surgery.

CPOC will strive to facilitate greater collaboration between specialties to improve perioperative care pathways, and we look forward to working with Government and arms-length bodies to support them as they play a key role as catalysts of the culture change needed to achieve this.

### Embedding perioperative best practice in clinical pathways

The diagram below sets out how the perioperative management of adult inpatients with diabetes could support Berkshire West’s priority to deliver: **A programme of care support targeted at those with complex diabetes, involving the use of specialist staff to support better control and avoid repeat admissions and attendances at emergency departments.** The pathway outlined below captures the perioperative management of adult inpatients with diabetes implemented within The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust and also notes the recommendations from Diabetes UK’s report ‘Making hospitals safe for people with diabetes’ [2018].

<table>
<thead>
<tr>
<th>Referral</th>
<th>1 Referral: patient referral is made from a generic screening unit or from a nurse practitioner embedded within a specialist team.</th>
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<tbody>
<tr>
<td>Shared decision-making</td>
<td>2 Shared decision-making: undergoing surgery represents a high-risk period for diabetic control and it is important that patients are partners in management of their diabetes. As part of a shared decision-making protocol in the management of the surgical pathway, where required, patients will be referred to an anaesthetic pre-assessment clinic.</td>
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<tr>
<td>Preoperative assessment</td>
<td>3 Preoperative assessment: surgery will only take place if patients attend the pre-assessment clinic and are also invited to attend a meeting with a diabetes specialist nurse. In the event of any problem being identified, the nurse can refer a patient back to primary care to address glucose management.</td>
</tr>
<tr>
<td>Hospital admission</td>
<td>4 Hospital admission: Diabetes UK recommends that hospitals should have a perioperative diabetes team, made up of multi-disciplinary representation from surgery, pre-admission, anaesthetic department, recovery nursing and analytic team, to manage care along the perioperative pathway.</td>
</tr>
<tr>
<td>Continuity of care</td>
<td>5 Continuity of care: the team at the Royal Bournemouth Hospital has redesigned the prescription chart for patients, and made the ‘Safe Use of Insulin e-learning module’ [developed by NHS Diabetes] mandatory for all newly trained doctors.</td>
</tr>
<tr>
<td>Discharge</td>
<td>6 Discharge: Diabetes UK recommends that all hospitals should have an electronic safe discharge checklist in place that can be audited.</td>
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### Outcome

After introducing the UK’s first specialist pre-assessment clinic for patients with diabetes on a surgical pathway, the average length of stay for inpatients with diabetes at the Royal Bournemouth hospital has reduced to a level consistent with non-diabetic patients.

Since a ‘Root Cause Analysis Prescription Error Pathway’ was implemented, there has been a significant reduction in prescription errors and the Royal Bournemouth Hospital is now the best performing trust within Wessex with regards to insulin management and reduction in medication errors.

### Recommendations

The Perioperative Quality Improvement Programme [PQIP] recommend that all patients with diabetes should benefit from a care plan – developed in collaboration between healthcare professionals and the patient – that is activated on admission to hospital.

Diabetes UK recommend that hospitals should have a multidisciplinary perioperative diabetes team in place.
Recommendation: The Government should actively support the implementation of perioperative care pathways across ICSs to enable providers to work collaboratively to deliver seamless care for patients and long term population health benefits.

Conclusion
CPOC is at the very early start of its journey and is in the process of developing discreet workstreams and setting policy objectives for the next two or three years. The development of a patient centred, cross organisational and multidisciplinary process for healthcare is the natural progression to support NHS England’s Long Term Plan.

The Centre for Perioperative Care looks forward to working with the Department of Health and Social Care to explore ways in which perioperative care can offer practical solutions in delivering prevention and improving the health of populations. The Centre, which already benefits from existing partnerships between patients, the public, and other professional stakeholders, including Medical Royal Colleges and NHS England, is in a unique position to advance perioperative care to improve patient outcomes.

References
2. The role of the NHS in prevention. What public health and NHS leaders are telling us. FPH, 2019.
5. Survey to engagement panel members of perioperative care and CPOC. RCoA, 2019 (results available on request).