Centre for Perioperative Care

Delivering on Government priorities and for an NHS in crisis

Investing in perioperative care pathfinders

A partnership between:

RCOA Royal College of Anaesthetists | Royal College of Surgeons of England | Royal College of Physicians | Royal College of Nursing | RCGP Royal College of General Practitioners | RCPCH Royal College of Paediatrics and Child Health | Association of Anaesthetists | Faculty of Public Health | CODP College of Operating Department Practitioners

Reducing operation waiting lists and improving patient outcomes, within current budgets

The Government's 'Build Back Better' health and social care plan is a significant step forward in the battle to respond to extensive waiting lists and tackling service efficiency. However, the Government's approach and plan cannot be delivered without the further introduction and embedding of perioperative care across the entire NHS.

This is the view of the Centre for Perioperative Care (CPOC), its partners are Royal College of Anaesthetists, Royal College of Surgeons of England, Royal College of Physicians, Royal College of Nursing, Royal College of General Practitioners, Association of Anaesthetists, Royal College of Paediatrics and Child Health, Faculty of Public Health and the College of Operating Department Practitioners.

The Centre for Perioperative Care is urging HM Treasury to invest in establishing ten pathfinder programmes to gather, implement and then disseminate evidence-based practice across the NHS, allowing better planned care, cutting through elective waiting lists and improving patient outcomes.

Accelerating elective activity while still responding to Covid-19 is the greatest challenge the NHS has ever faced at a time when the NHS has never been under greater pressure.

Around 10 million people currently have surgery in the UK each year, and about one third of all admissions to hospital are related to surgical procedures[1]. The NHS spends more than £16 billion each year on elective surgery. For most, surgery is a success, but it is estimated that around one in five people experience complications after surgery[2].

There is an increasing need for well- coordinated, planned care around the time of surgery, including deciding whether surgery is appropriate. In the UK, the number of people having surgery is growing and so too is the complexity of operations. The population is aging, and many have long-term medical conditions or health behaviours that may increase the risk of complications from surgery. Over 250,000 people at higher risk have surgery each year in the UK and this number is set to rise[3].

CPOC recognises that as health and care professionals, we all need to take a new approach to delivery or the NHS will, under the weight of workforce pressures, waiting lists and aging population...collapse. Patients also need to be supported to take responsibility for their care and preparation prior to their procedure.

Perioperative care is already making an impact in the NHS – with investment in workforce, process and

patients being central to its success. That impact is restricted to the few trusts and economies delivering it, as practice remains siloed. There is limited operational dissemination or implementation of best practice and impact and benefits to the patient and the NHS remain limited.

This representation and programme is designed to take that best practice, join it into single, coherent pathways of patient-centred planned care - and then test its impact, evaluate and share it across the entire NHS in all four nations.

Executive Summary

The health and social care plan 'Build Back Better' is a landmark document that seeks to address the current needs of patients and the operational priorities of the NHS (initially) at an unprecedented time.

It is the opinion of the Centre for Perioperative Care's (CPOC) partners that the Government's response and plan to build a new health and social care system will fail unless we take a new evidence-based approach to delivery – embedding perioperative care across the NHS.

This representation by CPOC and its partners is designed to address the systemic challenges in the current Government plan and lay a strong foundation for NHS provision in the long term.

The drive to put perioperative care and shared decision-making at its centre will reduce unnecessary spend in the NHS, improve patient care and create efficiencies in the operational NHS.

OUR ASK: We want Her Majesty's Treasury to fund the establishment of ten perioperative pathfinders across the United Kingdom. Seven integrated care systems in England and one appropriate health body in each of the devolved nations.

These pathfinders will:

- Improve patient outcomes and satisfaction within their first six months and reduce readmissions due to complications, emergency admissions and unnecessarily long length of stay.
- Increase numbers of elective and emergency patients being treated within the first six months, increasing for the longer term.
- Reduce cancelled and unnecessary operations with a co-ordinated and embedded approach to shared decision-making and prehabilitation.
- Deliver efficiency saving to help address ICS financial funding gaps.
- Deliver a strengthened multi-disciplinary approach to care and strengthen the NHS as a medical, clinical and non-clinical employer of choice – initially in the pathfinder areas.
- Begin to embed a long-term solution to bed management, cancelled operations, waiting lists and unnecessary wastage within the NHS.
- Develop a set of evidence-based, value orientated standards that can be implemented across all four nations' NHS delivery.

There are fundamental elements to our representation for the Spending Review. They are:

- The perioperative pathway must be in place for all appropriate surgical interventions. For the ten pathfinders, there should be clear focus on:
    - Day case procedures, as recommended by the British Association of Day Surgery[4].
    - High-risk patients e.g. surgical patients who should not be optimally cared for in a general ward environment or at high risk of complications.
    - Those patients where early intervention and any required intervention could lead to better surgical outcome
- The perioperative pathway must be a multi-disciplinary approach that includes both clinical and non-clinical professionals – from the patient contemplating a procedure and the first phone call made, through clinical intervention to the last communication, including social care.
- We must embed earlier preoperative screening, beginning at the very start of the patient journey:
    - We need to turn waiting lists into 'preparation lists' whereby the time before surgery is used actively and positively to prepare patients physically and mentally. This has been shown to lead to improved outcomes, reduced surgery and can have positive impacts on long term health.[5]
    - The patient and their family must be at the heart of the perioperative pathway, with shared decision-making throughout their journey. This must be embedded in the culture of staff with training and education. Shared decision-making should be a priority to manage the backlog and importantly, high-risk patients, where the impact is sizeable.
- We have to learn from the pathfinders to implement change across the health system. A robust system of learning, evaluation and dissemination across the NHS is fundamental to this representation.
- We need clear perioperative standards and a toolkit for others to follow in the NHS – from commissioners, finance teams to NHS professionals, medical, clinical, administrative or support staff.

What is perioperative care?

Perioperative care is the delivery of integrated care of patients before, during, and after an operation or procedure. It is a highly cost-effective way of improving outcomes for surgical patients and reducing NHS waiting lists, delivering benefits that matter to people – more patient choice, better quality of care, and extra years spent in good health.

Perioperative care involves many components along the surgical pathway, including support to help patients get 'match fit' for their procedure so they can have better outcomes and then recover and return home sooner.

Perioperative care for patients and from a patients' perspective, very much sets the direction for their experience, their outcome and subsequent impact on the NHS.

By investing in perioperative care, we can improve outcomes for millions of patients who have surgery on the NHS every year, tackle the backlog of elective care sooner, and lower costs to the NHS, social care, and public health system.

Despite sector support and a strong, emerging evidence base, perioperative care interventions are not yet core clinical practice within the NHS and there is wide variation in delivery. This is a huge, missed opportunity for the NHS as it recovers from Covid. Without implementing perioperative care, the NHS will continue repeats of operational and systemic failures in the health and care system. Patients and the Service will suffer.

Perioperative care in practical terms

There are three phases or stages to perioperative care.

Pre-procedure:

Currently there is no joined up approach across the NHS for how patients are assessed, triaged or managed prior to surgery/procedures. Too often the NHS relies on a pre-assessment in the days or weeks before the procedure when any necessary intervention is too late. There is also little communication between primary care, social care or secondary/tertiary care at the point of referral.

Patient story

Chloe, 33, was asked to have biopsies on two moles as a day case procedure. Having arrived, she was told they were operating and taking the moles out and not having a biopsy. The doctor then surprised Chloe with the impact on her life and the need for removal.

Without prior notice, Chloe had a panic attack and refused to have the procedure there and then. She went home, traumatised, wasting a day case elective appointment and delaying her treatment. All due to poor communication and shared decision making in pre-admission.

There is also little communication between primary care, social care or secondary/tertiary care at the point of referral. Complications can be reduced by 30-80% with specific prehabilitation[6] (eg exercise, nutrition, smoking cessation), medication reiew, etc.

Additionally, there is a disparity in the preoperative screening as medical intervention prior to surgery is treated separately to social and lifestyle, despite them often being linked.

As mentioned, this leads to cancelled operations, clinical complications, extended lengths of stay, bed blocking and most importantly significant patient regret from the procedure. This approach has a significant impact on inefficiencies in the NHS and the driving up of procedure costs.

For patients and for the best clinical outcomes, it is essential that a number of things happen in the pre-procedure phase:

1. Patients are put at the heart of the decision-making with focused open two-way communication between the patient, referrer (GP) and provider.
2. Patients are supported to self-screen at point of referral by primary care professionals.
3. The patient is triaged early in the pre-procedure phase so the right patient pathway can be established earlier, including the two-step consenting process recommended by the Paterson

Inquiry. This approach leads to an increase on day case procedures, with patients attending hospital fitter and more motivated to recover.

4. A key element of the early triage and patient-led self screen is a comprehensive and joined up prehabilitation programme. The programme must align medical management alongside social/lifestyle such as physical exercise, a reduction on smoking or alcohol consumption. Managed together there is great chance of success, better outcomes for the patient and less chance of readmission.
5. There is open communication between the GP referrer and the consultant team throughout.

Intra-procedure:

The moment the patient enters the operating environment, they are placing their healthcare into the team's hands. While it is rarely an experience the patient is looking forward to, it is important that the patient feels at ease and the procedure goes as planned.

Patient story

Sarah, 64, was taken to the operating theatre for her procedure as normal. The procedure was successful and undertaken significantly quicker than expected, allowing the team to take the next patient on the list sooner. This presented several challenges within theatre.

Without an expectation or discussion regarding potential timescales of the procedure, the recovery specialist had not been aware of the procedure running ahead of time and left theatre for their break. This meant a delay for Sarah leaving the theatre, moving into recovery and a shortened break for the recovery specialist.

With time now available, the next patient was not ready to be taken from the ward to the operating theatre. There was no porter available and the patient was not fully prepared for the procedure, leading to unnecessary delays.

That available time to bring forward the next procedure was ultimately lost due to poor multidisciplinary planning and communication between the operating staff and the ward.

Unfortunately, because there is variation in perioperative care pathways across the country, the patient's journey can be at best, exceptional and positive, but at worst, can impact on safety and recovery. The process is also highly inefficient with large delays[7].

- Other related conditions, individual issues or co-morbidities are also not always communicated appropriately to the theatre team, meaning in some cases the procedure doesn't happen as planned and is cancelled on the day or the management of those conditions during and after the procedure is not efficient or effective. Many of the resulting delays could have been anticipated and avoided, improving theatre productivity.
- Effective communication from the pre-operative phase to theatre can improve outcomes
- In many cases, procedures that are planned for one- or two-night stays could potentially be undertaken as day cases, to improve outcome and NHS efficiency.
- While the WHO Surgical Safety Checklist in theatre is used in 90% of procedures, its implementation can vary.

It is increasingly necessary to see the care provided during the procedure, not as an isolated episode, but as part of a continuum starting with the decision to operate.

An effective intra-procedure process will ensure:

1. High risk patients have access to enhanced care, improving their outcomes and saving resources for the NHS. High risk patients are a minority but account for 4 out of 5 deaths after surgery.

2. Consistent use of the WHO Surgical Safety Checklist and other tools during surgery are adopted widely and used every time across the NHS.

3. The care pathway is focused on the time in the procedure environment, such as an operating theatre. This will include preparing appropriately and managing other related conditions, individual issues or co-morbidities, with an appropriate multidisciplinary team, to improve outcomes and efficiency.

4. Timely administration with early availability of the patient records and good planning across teams, permitting an operating theatre to run better to time - with fewer cancelled procedures and more accurate coding.

5. All multidisciplinary theatre staff have planned the intra-operative care in advance. Joined up communication and preparation would reduce delays and late starts maximising efficiency.

Post procedure:

From the point of leaving the operating environment, the patient is on a recovery pathway for discharge to a home environment. This may include management in the community by primary or social care.

Patient story

Valerie, 82, suffers from mild dementia and had a fall. Being admitted as an emergency, she had a small procedure on her knee. Her mobilisation was delayed, which then impacted on her discharge. On discharge, it was decided the current home care package was not enough to support her.

Social care were informed, and discharge was delayed a further two weeks as the care provider had to put the service in place before Valerie could go home. In total, Valerie was an inpatient for nearly four weeks.

The NHS delivers effective post procedure perioperative care pathways but they are few and not shared widely across the sector. Generally, across the NHS, there are huge inconsistencies in post procedure management of patients.

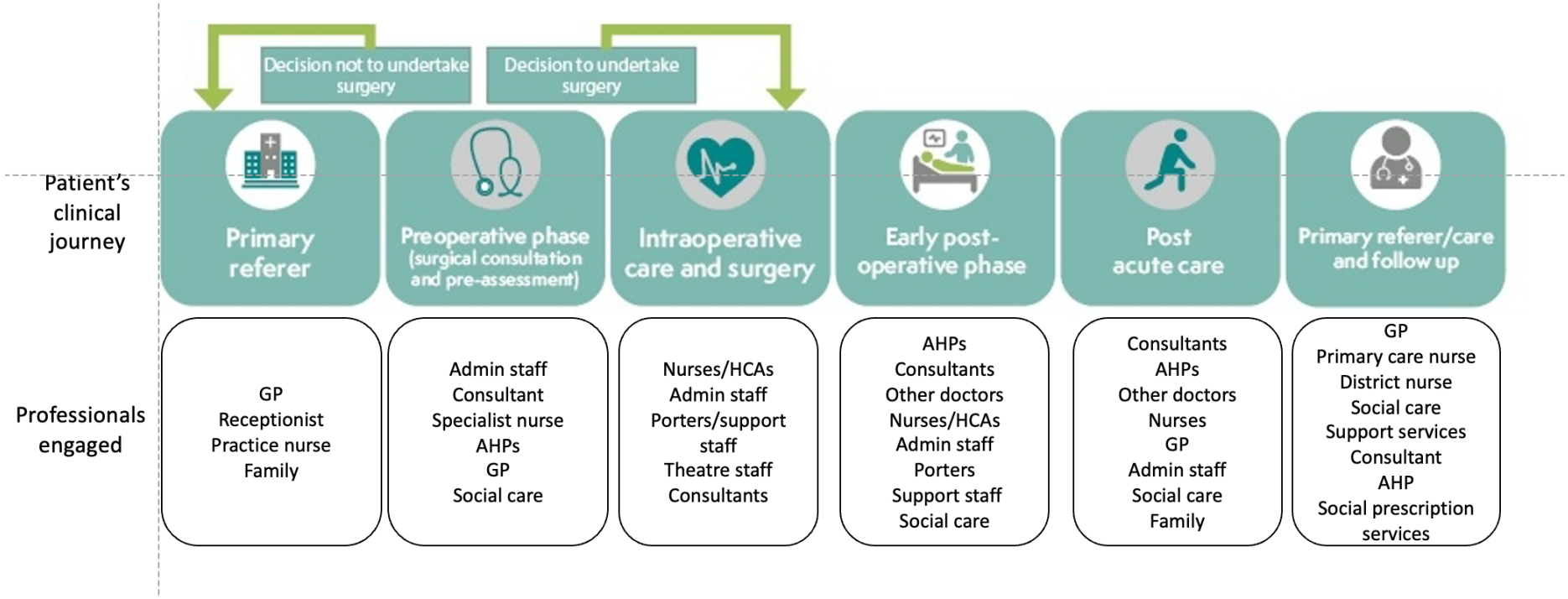
- Currently there is limited planning in the preoperative screening process for recovery and discharge, for elective day case procedures or high-risk patients.
- There are also significant variations in early mobilisation of patients and their rehabilitation pathways
- Poor post procedure planning leads to extensive bed blocking – the impact of which is felt throughout the NHS every day with significantly high levels of occupancy reducing the ability to flex. This is the natural benefit of moving to a default day surgery environment.
- There is general poor communication with patients, understanding their needs and putting the patient at the heart of their own care and journey to their home environment.
- Readmission rates remain high and are increasing. In a Nuffield Trust report[8], it states "Between 2013/14 and 2018/19, the number of 30-day emergency readmissions to hospital in England increased by 25%, from 748,721 to 935,314.

"The total number of emergency admissions increased by 9% over the same time period, from 6,004,647 to 6,547,534. This resulted in an increase in the emergency readmissions rate, from 12.5% in 2013/14 to 14.3% in 2018/19."

An effective post-procedure process will have these in place:

1. Pre-procedure planning and optimisation should be implemented effectively, the recovery plan will be agreed and actionable - this will allow the NHS to plan accurately and efficiently.
2. All staff are training in perioperative care and are therefore supportive of the patient, ensuring they are motivated and practically prepared for discharge and recovery e.g. having been to the toilet, arranged the journey home, homecare in place.
3. Post procedure communication is clear and effective between the provider, GP and community services, should they be needed. The patient therefore is discharged into a seamless service that reduces any chance of readmission.
4. The patient, having been planned, has a clear discharge plan at the point of leaving theatre that all professionals can work towards. Given the average age of patients undergoing procedures is 75 years of age, perioperative care ensures joined up social care and health provision.

What is perioperative care – an illustration



AHPs = Allied Health Professionals
HCAs = Health Care Assistants

To see what good perioperative care can look like, please watch our animated film (first published in 2015) and follow our patient 'Doug' along his surgical pathway:

https://youtu.be/BA6ZUsf5jdo

What is perioperative care – case studies: Preadmission and setting the right patient pathway

Colchester General Hospital:

Focus: Streamlined assessment direct from surgical outpatients for patients diagnosed with **Invasive Pulmonary Aspergillosis (IPA)**

1. Early identification of medical issues
2. Reduced visits for low risk patients.

All patients planned for elective surgery in a surgical outpatient clinic should receive an IPA form at their clinic appointment. Here the IPA nurse assesses them, measures BMI and observations, and perform MRSA swabs.

The IPA nurse also arranges investigations as appropriate for their medical co-morbidities and the type of surgery they are due to have.

The IPA nurse will perform a Rockwood frailty assessment for all patients over 65 years. On the basis of this assessment, patients will be triaged into red, amber and green groups. 'Green' patients can proceed directly to surgery, 'amber' patient require a nurse-led pre-assessment appointment and 'red' patients will require a nurse-led pre-assessment with notes or face-to-face review by a Consultant Anaesthetist.

Outcomes to date:

This has meant an improvement in quality of care for the patient through referral, and optimisation for the procedure at the earliest opportunity:

- All 'red' patients, 73, had consultant anaesthetist review (either notes review or face-to-face)
- 33 patients were identified to be hypertensive and were referred to the GP for management of this
- 43 patients were identified to be anaemic and commenced on the anaemia pathway
- 5 patients identified to have poorly controlled diabetes so referred for optimisation of diabetic control
- 6 patients were identified to have a BMI above our CCG's threshold of 35 for joint replacement so referred back to their GP
- Some referrals of our most frail and elderly patients were made directly to our high risk pre-assessment clinic run jointly with a consultant anaesthetist and a consultant physician.

What is perioperative care – case studies: Intra-procedure

Guys and St Thomas Hospital

Focus - delivering a high intensity theatre team to increase efficiency

1. Designing a process to streamline the patient pathway and dramatically improve theatre efficiency.
2. Scheduling extra High Intensity Theatre (HIT) lists on Saturdays using two theatres which are run in parallel.

The pandemic has led to a massive backlog of patients waiting for non-urgent surgery. “Hospitals have to prioritise patients for surgery so those who are lower priority keep getting pushed further down the waiting list, despite their need for surgery. ” says Imran Ahmad, consultant anaesthetist at Guy’s and St Thomas’ NHS Foundation Trust.

“We do these lists in a super-efficient way that instead of 5 or 10 cases we can get 30 or 40 cases done in the same time period.
“We can achieve this as we carefully select the cases, patients, and teams,” says Ahmad. The project requires multi-disciplinary teamwork and thorough planning. Each HIT list requires at least three planning meetings to ensure safe and smooth running of the list.

Outcomes:

- Over 150 cases completed through 8 HIT lists across five surgical specialties.
- The impact on waiting lists has been significant e.g. one surgeon’s waiting list for anterior cruciate ligament reconstructions was halved.
- Under the new system, surgeons were actively operating for over 90% of the day compared with the usual “touch” time of 35-40%.

What is perioperative care – case studies: Post-procedure

York Teaching Hospital NHS Foundation Trust

Focus: Risk stratification and use of a Level 1 postoperative unit, (colorectal)

1. Establish a perioperative service which would use resources appropriately
2. Reduce the reliance on critical care for major colorectal surgery.
3. Reduce complication rates and ensure coordinated care throughout a patient's surgical journey.

All colorectal surgical patients over the age of 55 were including in this project. The preassessment pathway was standardised incorporating frailty indexes, cognitive, ARISCAT scoring (amongst others) along with traditional cardiopulmonary exercise testing (CPET). Patients were formally risk stratified to low, medium or high risk.

Patients in the low risk group were allocated to a standard care pathway and would be nursed in the ward environment. Those in the medium group were to be treated on an "enhanced perioperative pathway" and high risk patients would continue to be treated in critical care.

Outcomes:

- Our medium length of stay (LOS) reduced from 8 to 6 days with our variation significantly reducing, with prolonged LOS (>12 days) reduced from 25% to 9%.
- Planned critical care usage reduced from 43% to 16-17% with unplanned critical care LOS also reducing.
- Both our major and minor complication rates reduced and complications directly related to fluid administration significantly reduced.
- Although IV fluid use in theatre remained static, patients postoperative fluid balance was significantly improved with a reduction in almost 1.5 litres at 24 hours.

What are the challenges facing the Govt's 'Build Back Better" plan?

The Build Back Better plan, published by Government in September, faces many challenges in delivering its proposed outcomes. Unless it urgently prioritises perioperative care now and puts it at the heart of the patient journey, Build Back Better and any long-term plan for the NHS will fail.

The challenge facing the Government and NHS without implementing perioperative pathways:

1. The NHS does not have the multi-disciplinary trained workforce to deliver a short to medium term waiting-list recovery plan or new ways of working. For example:
    a. Multi-disciplinary working across a perioperative pathway is only delivered in siloes in individual trusts. There is no comprehensive workforce approach across the NHS.
    b. There is no ubiquitous approach to training for non-clinical staff, core to waiting list management, on joined up approach to perioperative care or pro-active management of patients. If it happens, it is siloed.
    c. It is expected that significant numbers of clinical and medical staff will leave the NHS over the coming years. It is estimated that 1 in 4 anaesthetists are due to retire in the next five years leading to an estimated 1m operations a year being postponed or cancelled[9][10].
    d. This consultant shortage is also underpinned as many senior consultants face new large taxation liabilities related to hypothetical increases in their pension pot and are being advised to reduce sessions or retire[11].
    e. Using the limited workforce available in the same ways as previously cannot deliver the improvements in efficiency and outcomes that are required. Better training of current staff members to allow them to work 'at the top of their licence' and moving to a trans-professional style of working can improve staff satisfaction with their roles at the same time as improving patient care within the current resources.
2. The NHS is running at an average occupancy level of over 90% rising to 95% with winter pressures[12]. The capacity in the NHS is not there to tackle waiting lists – elective or emergency unless it changes the way it operates. Using day surgery as a default and targeting those patients where intervention can make a difference by reducing cancellations and complications, avoiding prolonged stays and improving patient flow.
3. Surgical spend is still too high per hospital patient. The largest contributor is patients having complications and unnecessarily extended lengths of stay[13]. Without finding a new way to address this problem, surgery costs will increase without a solution.
4. As many as 14% of people who have an operation (1 in 7) have some regrets following the op. This is often because the expectations of the patient have not been properly explained or understood or the surgeon has been over-focussed on the operative the outcomes[14].
5. Most cancellations of elective surgery are due to lack of beds[15]. Trusts cannot run elective lists, catching up on waiting lists if there are difficulties discharging patients for beds. Unless

the NHS fundamentally changes pre-admission to earlier preoperative screening with optimisation and adopts shared decision-making as ubiquitous high standards of care, it will be impossible to meet that challenge.

6. Many processes are archaic, duplicate effort and increase time-consuming bureaucracy for clinical and non-clinical staff. They limit the ability in many trusts to plan properly and implement fundamental changes such as perioperative care.
7. Many patients have deconditioned during lockdown whilst waiting for surgery, increasing complications. If the NHS does not use the time spent on waiting lists to improve patients' pre-operative health then pressure on the system will continue.
8. The median age for surgery of those having an operation with an anaesthetic in the UK is the decades age 70-79. Many people have other conditions that are poorly addressed and increase complications. Many would decide against surgery, or would be better prepared for it, if shared decision-making was practised more widely. Better multi/trans disciplinary working, as has been demonstrated in orthogeriatric, improves outcomes, reduces length of stay and improves patient care.
9. There is significant variation across the UK in proportion of people treated as a day case (which is more efficient, cheaper and safer). Some Trusts admit twice as many cases for overnight stays compared with other Trusts. Unless there is a uniform approach to day surgery and best practice embedded, medical complications and extended lengths of stay and bed blocking will continue.

Delivering efficiencies and releasing capacity through perioperative care

The Government's Build Back Better health and social care plan faces significant challenges in its delivery. As detailed, these challenges, in many cases are driven by limited capacity in the system, wasted capacity in the system and resources.

Perioperative care has clear and obvious benefits to patients. It also remains core to the modernisation of a fragmented and broken NHS that still continues to 'punch above its weight', delivering outstanding care for so many.

The NHS cannot recover or blossom unless its workforce, resources and capacity issues are solved and that, in many cases is an economic and process challenge. This can only be met by implementing perioperative care across the NHS landscape and realising operational efficiencies.

These savings derived from implementation of perioperative care will allow the NHS to reinvest in the very things its needs to build a stronger foundation for the future.

£400m annual savings

In a recent landmark report published by Getting It Right First Time (GIRFT)[16], it was estimated that implementing perioperative care across the NHS could realise potential annual savings of c.£400m (an average of around £3m per trust). This was calculated on a number of index procedures, with

potentially far greater opportunities once wider-ranging recommendations are implemented.

The following figures are taken from the GIRFT report referenced above, which visited 72 trusts to investigate the savings from implementing perioperative care. GIRFT state ‘It should be noted that the savings below are calculated on the basis of GIRFT Anaesthesia and Perioperative Medicine index procedures only or on a single pathway when, in fact, our proposals are much wider-ranging and the potential savings therefore much greater than those detailed below.’

GIRFT Report illustrative savings/opportunities from perioperative care

DAYCASE PATHWAY

Recommendation 1,2: Ensure that day case surgery is the default for all suitable elective surgical procedures.

Cost estimated based on average excess bed day cost - surgical specialties (17/18 ref costs uplifted to 20/21 prices)

Base data: April 18- Mar 19

Surgery Type		Standard			Target		
		Target	Activity opportunity* (bed days)	Gross notional financial opportunity**	Target	Activity opportunity* (bed days)	Gross notional financial opportunity**
Elective surgery		75% shift towards BADs rates for elective DC surgery	188,100	£83.29m	BADs rates for elective DC surgery	250,600	£110.94m
Emergency surgery		75% shift towards BADs rates for emergency day surgery	33,900	£13.58m	BADs rates for emergency day surgery	45,100	£18.07m

ELECTIVE PATHWAY

Recommendations 3, 4: Deliver enhanced recovery[1] across all elective inpatient surgical pathways.

Cost estimated based on average elective excess bed day cost - GIRFT index procedures (17/18 ref costs uplifted to 20/21 prices)

Base data: HES April 18- Mar 19

Procedure	National average (mean) length of stay (for info)	Standard			Target		
		Target Best Quartile for average length of stay	Activity opportunity* (bed days)	Gross notional financial opportunity**	Target Best Decile / GIRFT Gateway for average length of stay	Activity opportunity* (bed days)	Gross notional financial opportunity**
Primary hip replacement	*4.13 days*	3.79 days	22,900	£8.38m	2.7 days	71,600	£26.19m
Primary knee replacement	*4.09 days*	3.63 days	33,800	£13.06m	2.7 days	82,900	£32.04m
Colectomy	*9.21 days*	7.92 days	19,500	£7.59m	6.91 days	30,800	£11.99m
Rectal resection	*9.89 days*	8.4 days	18,800	£7.36m	7.16 days	30,200	£11.82m
Nephrectomy and/or nephroureterectomy	*4.69 days*	3.81 days	6,600	£2.68m	2.97 days	11,300	£4.59m
Open hysterectomy	*3.01 days*	2.26 days	21,100	£11.92m	1.89 days	29,300	£16.56m
Cystectomy	*12.06 days*	9.35 days	5,200	£1.91m	8.3 days	6,800	£2.5m
Caesarean section@	*3.37 days*	2.98 days	65,000	£39.17m	2.83 days	85,700	£51.64m

EMERGENCY PATHWAY

Recommendation 6: Ensure effective multidisciplinary input into emergency surgery pathways.

Cost estimated based on HE11 HRGs (hip fracture) - non elective excess bed day cost (17/18 ref costs uplifted to 20/21 prices)

Base data: HES April 18- Mar 19

Procedure	National average (mean) length of stay (for info)	Standard			Target		
		Target Best Quartile for average length of stay	Activity opportunity* (bed days)	Gross notional financial opportunity**	Target Best Decile for average length of stay	Activity opportunity* (bed days)	Gross notional financial opportunity**
Hip Fracture Repair	*17.7 days*	15.1 days	188,500	£58.71m	13 days	296,300	£92.28m

Emergency Notes:

Opportunity = Reduce emergency surgeries length of stay (note: Single procedure only - hip fracture - included in calculation here)

Note: Hip fracture has been chosen as an illustrative case for opportunities available in emergency surgical pathways with greater multidisciplinary collaboration across emergency pathways. The drivers of the LoS variation is multi-factorial and arrangements for step down would be a significant driver of that. As such, the orthopaedic trauma report will look at this opportunity further to provide additional guidance on how to realise length of stay reductions in Hip Fracture.

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Why choose integrated care systems in England as the pathfinders?

The NHS has to change the way it delivers care. The announcement and development of integrated care systems is fundamental to that change – in process, in resource investment and mindset.

With that in mind, we have chosen to focus our England-based pathfinder programme on ICSs for the following reasons:

- To only focus on realising effective best practice in a range of single NHS trusts/boards, reinforces the siloed approach and limits learning and investment to a small single location.
- Perioperative care only works from a multi-disciplinary, system wide approach that incorporates professionals across primary, secondary, tertiary and the community. Systems work beyond the individual trust as does the perioperative care approach.
- Fundamental to this approach is to move away from funding patient care by specialty – health and social care has changed.
    - Teams, departments and specialties are naturally protective of their budgets and that limits multi-disciplinary working in trusts and pathways.
    - In many ways, the funding of patient care and the approach of those managing that funding and budgets are fundamental to delivering better patient care. In many cases, they are not the clinical decision-makers. Delivering a localised pathway would not drive that change holistically as individual budget holders and commissioners may continue in the current approach. We need a broader view in the pathfinders.
    - Unless we change the way care is commissioned, funded and planned we cannot change the way we deliver care, solve the waiting list crisis or embed the necessary change for a strong NHS in the future. Centalising the ICS as the pathfinder allows a helicopter view across commissioning, epidemiology, providers and need.
- ICSs are the Government's vehicle of choice to drive change in the England NHS and are naturally best placed to be the conduit for wider improvements in patient change and NHS efficiency.
- There are historic barriers between the operational NHS and social care. Effective and best practice perioperative care brings social care into the patient journey, from the first thought of a procedure. ICSs are the best placed organisation to drive a different way of working across the community divide.

Working in devolved nations

The first seven pathfinders will be in England. However, we already work effectively with devolved governments in Scotland, Wales and Northern Ireland. For many, we have already begun discussions on perioperative care and the impact it can have on their own population.

Once the spending review is announced and obviously spending provision is published for the devolved nations, we will continue to evolve these pathfinders based on their own health and care infrastructure.

Centre for Perioperative Care

Our asks of Her Majesty's Treasury

Our asks of HM Treasury - Overview

For the Government to deliver on its 'Build Back Better' plan and for the NHS to recover, it must prioritise and harmonise perioperative best practice already being delivered in the NHS. The Government must then ensure it is embedded in the patient's home environment and across commissioning, primary, secondary, tertiary and social care.

- **Ask one:** Supporting NHS England, its partners to build on CPOC research and establish ten NHS pathfinders in all four countries – the first seven in England.
- **Ask two:** Establishing a workforce fit for a modern NHS to deliver best practice perioperative care.
- **Ask three:** Investing in perioperative care processes and systems.
- **Ask four:** Mandate delivery of perioperative care.
- **Ask five:** To note the urgent need for enhanced care in the NHS and prioritise its delivery as soon as possible.

This means:

- Funding and supporting 10 pathfinders across the NHS. This comprises of:
    - Seven integrated care system areas in England; and
    - One NHS pathfinder in each devolved nation, representative of the joined-up nature of each sector e.g. health board.
- Each pathfinder will be selected based on their ability to deliver a multi-disciplinary approach to perioperative care across all recommended day case procedures and agreed patient groups. These will be chosen utilising our partners' insight, previous ICS and perioperative research, BADS guidelines and in discussions with NHS England and fellow partners.
- Bringing all pathfinders' perioperative care delivery to within 10% parameters of best practice – uniting the very best delivery across the NHS in the ten ICS areas.
- A focus on delivering a set of standards within 18 months of the start of the pathfinder projects. Those standards will be evidence-based, value orientated and implementable across the NHS in all four nations.

Ask one of HM Treasury: Supporting NHS England, its partners to build on CPOC insight and research and establish seven NHS pathfinders in England and provide funding for three in devolved nations.

- As the UK's leading perioperative care organisation, we have developed a deep understanding of the perioperative care landscape and best practice. However, we are aware that to develop effective pathfinders it is essential we use our knowledge and insight alongside that of Government, NHS England/Improvement and the NHS itself. We must also listen directly to the patient voice. With that in mind, we call for

funding of joint research and development work to establish and capture best practice and select pathfinder sites with our partners in Government, NHS and the patients themselves.

- This will include:
    - Peer review and reflection of clinical and medical research and current reports delivered by CPOC, BADS, GIRFT and other partners.
    - Further reflect on and listen to patient stories illustrating best and worst practice.
    - Where gaps exist in knowledge, dedicated data capture/trawl of current activity in the NHS and private health systems.
    - Review the most effective areas for delivery of a pathfinder.
- Establish or further resource the perioperative teams within NHS England/Improvement, and partners to plan and deliver the pathfinder programme across the sector.
- Recognise where it is necessary to invest in workforce and systems e.g. training to deliver the Perioperative Care Pathfinder Programme within frontline delivery, including medical, clinical, support and administrative staff.
- Resource, where necessary, pathfinder ICSs and its sector to deliver the programme - this is detailed further in this section.
- Fund the establishment of evaluation systems at the outset of the Programme to ensure delivery of robust and practical standards to be delivered across the NHS in all devolved nations.

Ask two of HM Treasury: Establishing a workforce fit for a modern NHS to deliver best practice perioperative care

Perioperative care cannot be delivered without investment in NHS staff. This includes all medical, clinical and administrative/support staff e.g. catering, in the pathways of the chosen patient groups.

The following asks of HM Treasury will allow each pathfinder to deliver:

- A regional approach driven by ICSs that co-ordinate providers and commissioners into a united patient-centred pathway.
- A comprehensive and effective day surgery approach reducing post-operative complications, releasing bed days and reducing cost of surgery.
- A more informed patient able to decide their own care, reducing cancelled or unnecessary procedures and feeling empowered to take control.
- A more effective preoperative screening programme that empowers patients in their own care, improves professionals' communications and multi-disciplinary working.
- Empowers staff to broaden their skill base and increase their sense of impact and value in the workplace.

- Better communication between primary, secondary and tertiary professionals.

Our asks:

- Training all multi-disciplinary staff (clinical and non-clinical) in perioperative approach and systems from primary care to discharge teams in secondary and tertiary care. This includes:
  - Comprehensive staff training on day case management.
  - Patient communication.
  - A focus on shared decision-making, listening and putting the patient at the heart of their own care.
  - Ensure funding and resource is available to all - administrative, managerial, support staff and ALL medical clinical staff including. doctors, nurses, allied health professionals (AHPs).
- Recognition that for some providers this will be a change of role for some professions and in places. This may need resourcing.
- Recognise that short, mid and long-term planning and funding of clinical and medical staff is imperative if the Government is to deliver its health and social care plan.

Ask three of HM Treasury: Investing in perioperative care processes and systems

Early preoperative screening and moving from a waiting list approach to one of preparation is already being delivered successfully across the NHS, but in siloes. These exemplars are not just driven by a change in professional attitude and skill-base, but also by operational systems and processes. Effective processes and systems provide the legacy on which to build permanently efficiency pathways and effective communication.

The following asks of HM Treasury will allow each pathfinder to deliver:

- A more effective preoperative screening programme that empowers patients in their own care, improves professionals' communications.
- A renewed investment and approach to IT systems, underpinning fundamental long-term change to help realise the benefits to patients in the NHS.
- A consistent approach to patient care and communication centred around shared decision-making.
- Better communication between primary, secondary and tertiary professionals and patients from the outset of care.
- An improved system of shared patient records, coding and financial accountability to reduce wastage and increase efficiency and operational effectiveness.
- A robust legacy on which to drive further change across the NHS, based on

regionalised ICS priorities.

Our asks:

- This will mean investment in the following in each pathfinder.
    - Research to establish the most effective systems and processes to manage patients across the perioperative care pathways.
    - The right purpose-built processes to ensure the patient is on the right clinical pathway from the outset of referral.
    - Funding the change management to move to a single prehabilitation process that aligns medical preparation with social e.g. physical activity, smoking and alcohol consumption, ahead of procedure in one place.
    - Investment in digital infrastructure, such as software and computers, to ensure systems provide patients information and remote monitoring to reduce post-operative complications across the entire pathways.
    - Invest in unifying theatre data capture systems to improve patient care.
    - Ensure that each pathfinder has appropriate processes to record day case activity that can be shared across locations and the wider NHS.

Ask four of HM Treasury: Mandate delivery of perioperative care

It is essential that we do not lose sight of the primary reasons for the perioperative pathfinder programme – to improve patient care and increase efficiency and effectiveness within the NHS. So it is essential that all steps of the pathfinders progress is recorded and focused on moving to a scenario where it is seen as business as usual across the NHS.

With that in mind, together with our partners, the programme would plan the evaluation and dissemination of best practice throughout the NHS, from the outset funding agreement.

The following asks of HM Treasury will allow each pathfinder to deliver:

- Comprehensive, evidence-based capture of insight and impact, focused both on clinical outcomes and patient experience.
- A clear action plan to share best practice and put in place steps to disseminate and embed best practice across the NHS.
- A series of evidence-based standards that can be adopted into NHS delivery.
- A roll-out toolkit for NHS organisations including GPs, ICSs and boards, and NHS trusts that incorporates practical steps to implement perioperative care including training, process, IT systems.

Our asks:

- To deliver the above items, we request funding is made available for:

- A research team to develop core criteria for evaluation and delivery at the outset of programme.
- Resources from internal teams to train in evaluation and data collection where necessary.
- IT resources necessary to capture data, share insight and evaluation where necessary – based on current best practice.
- Building the toolkit and distribute in the priority areas/regions chosen by NHS England/Improvement and partners.
- Resources to take best practice and develop NHS-wide standards for perioperative care.

Ask five of HM Treasury: To note the urgent need for enhanced care in the NHS and prioritise its delivery

The majority of patients who are admitted to critical care units (excluding Covid patients) could be better managed elsewhere. Enhanced care is a level of care above that offered by a standard ward but below that of a critical care ward17. To tackle the backlog, late or on the day cancellations must be reduced to an absolute minimum. The use of enhanced care is key in achieving this as it reduces the pressure on critical care, leaving greater flex for emergency care.

Given the pre-existing inequity of access to critical care beds and the lessons learnt from the rapid expansion of critical care beds and staffing levels in response to Covid-19, this is the ideal time to review critical care provision and develop this new model of enhanced care units. Developing enhanced units will help created the 'reservist infrastructure' that a post-Covid health landscape requires. There are currently very few enhanced care NHS units.

Importantly, with the introduction of enhanced care, patients and the NHS would see significant benefits – many of which would already come from existing nursing staff. Some of those benefits were realised as a result of the pandemic - albeit limited and enforced.

Importantly, with enhanced care beds, it allows patients who do not require ICU support to move to a more appropriate environment. This reduces the cost of the treatment to the hospital and importantly, potentially improved patient outcomes and frees up essential intensive care resources. This is often the cause of cancelled procedures for high risk patients.

Our asks:

At this point, we feel the asking for funding and embedding this in this current spending review would be too much and a step beyond what is currently possible in the NHS's priorities. To effectively implement enhanced care will require a potential increase in capital expenditure for some providers, dissemination of learning and targeted education of key staff. This is not currently a priority for the NHS which is still facing pandemic challenges with staff focus targeted at operational priorities rather than training in areas such as enhanced care. However, given the flexibility NHS trusts have built into their pandemic response, particularly around critical and intensive care, we believe now is the perfect opportunity to recognise the need for enhanced care across the NHS and begin thinking about how it can be funded and delivered.

The following are indicative savings/financial opportunities published in the GIRFT report for Anaesthesia and Perioperative Medicine, published in 2021.

ENHANCED CARE

Recommendation 7: Develop and provide enhanced care[2] to the appropriate elective and emergency surgical patients.

Cost estimated based on Average adult critical care less HDU ward admission (18/19 ref costs uplifted to 20/21 prices)

Base data: ICNARC April 18- Mar 19

		Standard			Target		
		Target Clinical view	Activity opportunity* (CCU admissions)	Gross notional financial opportunity**	Target Clinical view	Activity opportunity* (CCU admissions)	Gross notional financial opportunity**
Critical Care admissions		80% reduction in surgical CCU admissions with LoS 1-3 days	7,500 CCU admissions	£11.86m	95% reduction in surgical CCU admissions with LoS 1-3 days	8,900 CCU admissions	£14.07m

Enhanced Notes:

Opportunity = Reduce short stay (1-3 day) critical care admissions for post-surgical patients (the above calc includes some vascular and colorectal procedures only)

What is the Centre for Perioperative Care?

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 one of the leading centres of research and evidence-based practice dissemination on peri-operative care in the UK. By working with our colleagues in NHS England/Improvement, the Department of Health and Care and those leading care in the devolved nations, we have supported the development of perioperative care across a range of NHS providers.

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.

CPOC's Partners are:

- Royal College of Anaesthetists,
- Royal College of Surgeons of England,
- Royal College of Physicians,
- Royal College of Nursing,
- Royal College of General Practitioners,
- Association of Anaesthetists,
- Royal College of Paediatrics and Child Health,
- Faculty of Public Health,
- College of Operating Department Practitioners.

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References and further reading:

[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] Ghaferi AA, Birkmeyer JD, Dimick JB. Variation in hospital mortality associated with inpatient surgery. N Engl J Med 2009;361(14):1368-75.

[3] Royal College of Anaesthetists. Perioperative medicine. The pathway to better surgical care. London: Royal College of Anaesthetists, 2015.

[4] https://cpoc.org.uk/national-day-surgery-pathway-delivery-pack-published-0

[5] GIRFT - Anaesthesia and Perioperative Medicine GIRFT report https://www.gettingitrightfirsttime.co.uk/girft-reports/

[6] https://www.cpoc.org.uk/cpoc-publishes-major-evidence-review-impact-perioperative-care

7 https://www.bbc.co.uk/news/health-41727535

8 https://www.nuffieldtrust.org.uk/resource/emergency-readmissions#background

9 https://www.independent.co.uk/news/health/nhs-backlog-operations-cancelled-anaesthetists-b1920058.html

10 RCoA - The Medical Workforce Census Report 2020.

11 https://www.bma.org.uk/news-and-opinion/pensions-inequity-fuels-doctor-retention-decline

12 https://www.kingsfund.org.uk/publications/nhs-hospital-bed-numbers

[13] GIRFT - Anaesthesia and Perioperative Medicine GIRFT report https://www.gettingitrightfirsttime.co.uk/girft-reports/

[14] Wilson A, Ronnekleiv-Kelly SM, Pawlik TM. Regret in Surgical Decision-making: A Systematic Review of Patient and Physician Perspectives. World J Surg. 2017 Jun;41(6):1454-1465. doi: 10.1007/s00268-017-3895-9 https://www.ncbi.nlm.nih.gov/pubmed/28243695

[15] https://academic.oup.com/intqhc/article-abstract/33/2/mzab092/6294831?redirectedFrom=fulltext

16 GIRFT - Anaesthesia and Perioperative Medicine GIRFT report https://www.gettingitrightfirsttime.co.uk/girft-reports/

[17] Centre for Perioperative Care and Faculty of Intensive Care Medicine (2020), Guidance on Establishing and Delivering Enhanced Perioperative Care Services, https://cpoc.org.uk/sites/cpoc/files/documents/2020-10/Enhanced%20Perioperative%20Care%20Guidance%20v1.0.pdf