Delivering on Opportunities for Better Health and Perioperative Care in the COVID-19 Era

Introduction
The COVID-19 pandemic has had a huge impact on patients, healthcare and the public. Dramatic changes to people’s lives and across NHS organisations have occurred swiftly. From this disruption, comes an opportunity to re-design surgical pathways, deliver quality perioperative care, promote health literacy and facilitate integrated community, secondary and social care.

Good care, with fewer complications, benefits patients and saves substantial financial costs. Half of NHS hospital costs are accounted for by just 7% of in-patients with complex or unplanned additional needs.¹

The role of the Centre for Perioperative Care (CPOC)
The Centre for Perioperative Care (CPOC) is a collaboration between seven Royal Colleges and other organisations.² Its aim is to improve care from the moment surgery is contemplated, through preparation, operation, after-care and rehabilitation. This includes evaluation and management of risk, shared decision-making, optimisation of patient factors, standardisation of processes and using best possible care throughout delivered by a multi-professional team. CPOC is in a unique position to promote holistic and integrated care and provide an opportunity to test innovative models of care. It includes all stakeholders unified to change.

Who is this briefing for?
This briefing is for organisations involved in planning health services, particularly those involving patients considering surgical options.

What is this briefing for?
- To highlight opportunities arising from the pandemic.
- To set out a number of actions needed to achieve these.
- To make the case for ongoing, sustained investment to foster these opportunities.

Key messages
CPOC is already working with organisations developing essential changes. CPOC is keen to lead or be included in further work in all UK nations. Some actions require funding. In general, good care is both more efficient and cost effective. CPOC has the clinical credibility to ensure changes are sustained.

1. Retain critical care and develop Enhanced care as a bridge between ward care and critical care.
2. Improve efficiency of surgical patient flow. This needs: protected surgical beds and areas, including for children; increased use of day surgery; better team-working and effective perioperative pathways.
3. Embed shared decision making at the heart of perioperative care. With waiting lists, ensuring every patient is appropriate, motivated, prepared and empowered.
4. Perioperative care should be a model to promote healthy living and prevention of ill-health.
5. Effective virtual patient-centred solutions should be developed further.
Opportunities

1. **Retain critical care and develop Enhanced care facilities**

   Critical care capacity expanded in response to the COVID-19 pandemic. Sustaining this increase is essential, not only as an effective reserve for future pandemics but also to address previous deficiencies in care for postoperative surgical patients. 42% of critical care beds are used for post-operative surgical patients (split equally between elective and emergency surgery).[^3]

   Prior to COVID-19, 21% of high risk patients undergoing emergency abdominal surgery went directly back to a general ward, despite recommendations that all such patients should go to critical care post-operatively.[^4] Retaining increased critical care bed capacity and the necessary staffing is essential to improve post-operative care for patients at high risk of complications, mortality and poor recovery.[^5] This would also improve efficiency for complex surgery as lack of critical care beds is a major cause of short notice cancellations, when operating list slots cannot be reallocated.[^6] Many of the interventions currently delivered in critical care could be delivered in Enhanced care, a bridge between critical care and normal ward care.[^7]

   Opportunities include:
   - Retaining critical care beds and developing Enhanced care with practicalities, standards, guidance and workforce. CPOC already has a leadership role working with the Faculty of Intensive Care medicine (FICM) and NHSE and this should be supported and developed across the UK.

2. **Improve efficiency of surgical patient flow. This needs: protected surgical beds and areas, including for children; increased use of day surgery; better team-working and effective perioperative pathways**

   For many years, lack of availability of a surgical bed has been the principal reason for late cancellation of elective surgery[^8,^9] and inefficient patient flow. Bed occupancy in NHS hospitals has run higher than the optimum of 85%, causing lack of flexibility for operating lists. In England, 100,000 patients per year are cancelled at short notice, principally due to a critical care bed or ward bed not being available.[^10] Initiatives to improve quality of care and patient flow pre-COVID included Enhanced Recovery programmes[^11,^12] and a move to ambulatory surgery. Disappointingly, there has been variable uptake of Enhanced Recovery. Data from Getting It Right First Time (GIRFT) highlights large variation between Trusts in rates of day case procedures.[^13]

   During planning for the pandemic, a focus on safe and effective discharge processes and on admission avoidance contributed to unprecedented reductions in bed occupancy. This clearly illustrates the need for and benefits of cohesive, integrated working between health and social care.

   In the COVID era, actions to ensure efficient surgical patient flow will include:
   - A focussed approach to increasing day case rates, thus reducing bed days, improving patient experience and minimising patient exposure to hospital acquired infections.
   - Development of areas with low risk of nosocomial COVID-19 infection including for children. This means ring-fenced surgical wards with less than 85% bed occupancy to allow for variations in patient flow. Without this, emergency patient admissions with possible COVID-19 may make whole wards inaccessible for elective surgical use and waiting lists will continue to rise.
   - Co-location of complex surgery at sites with other specialist services including physician support and access to rehabilitation services to ensure effective discharge planning and integration with social care.
A renewed focus on Enhanced Recovery programmes as well as embedding of standardised approaches to preoperative risk assessment, optimisation, shared decision making and planning of the perioperative pathway. This will ensure effective use of day surgery, enhanced care and critical care as well as a reduction in hospital bed days.

New, collaborative, ways of working across primary, secondary and community care. with a reduction in silo working, increased cross-skilling such as TransDisciplinary team-working and focus on a patient centred pathway rather than a specialty centred pathway.

3. Embed shared decision making at the heart of perioperative care
The COVID pandemic has provided an opportunity by engaging the public in the discussion about risk and benefit of healthcare intervention and about treatment escalation planning as well as advance care planning. Furthermore, the concept of Shared Decision Making (SDM) has gained greater emphasis in the COVID era, with a shift in the risk/benefit equation for medical intervention in individual patients\(^1\). Consent discussions have changed. Embedding shared decision making into routine clinical practice can improve patient experience, develop health literacy and support behaviour modification. In perioperative consultations, a thorough discussion of Benefit and Risk as well as Alternatives and the option of No surgical intervention (BRAN), may lead to reduced risk of postoperative complications and fewer operations.\(^1\)

CPOC will continue to collaborate with organisations and initiatives such as Choosing Wisely, the Academy of Medical Royal Colleges, GIRFT, the Personalised Care Institute and NatSSIPS (National Safety Standards for Invasive Procedures) to promote shared decision making.

Action is needed to:
- Support clinicians to develop a BRAN approach to perioperative decision making, through developing educational resources for healthcare professionals about SDM
- Embed SDM into routine perioperative practice by developing and supporting the use of decision aids and tools
- Promote health literacy amongst patients using existing educational tools and literature. Patient information resources can be accessed via the CPOC website.
- Ensure patients are involved in early discussions about treatment escalation planning and advance care planning.

4. Perioperative care should be a model to promote healthy living and prevention of ill-health
The preoperative period, a time when people are particularly receptive to health promotion messaging, is a ‘teachable moment’. During the COVID pandemic, the public have been confronted with the risks of co-morbidities including diabetes and of other issues such as obesity, physical inactivity and smoking. Patients require information about the perioperative risks related to these issues as well as information about and access to timely interventions. For example, evidence that stopping smoking four weeks before an operation, reduces the risk of complications by 19%, with further gains up to 50% for longer cessation.\(^1\) Similarly, even short increases in pre-operative exercise or physical activity can reduce complications by 20-80%.\(^1\)\(^2\) The interventions that improve fitness for an operation are the same as those that improve health in general: smoking, nutrition, exercise, alcohol/drugs, interpersonal interactions, mental health, medication review and pollution. Lifestyle changes are more powerful than drugs or surgery in preventing and treating many common conditions. For example, exercising 150 minutes per week reduces the risk of dementia by 30%, bowel cancer by 45%, type 2 diabetes by 45%, cancer recurrence and complications of diabetes or heart disease.\(^2\) Yet only 66% of adults achieve this level of exercise, with 22% doing none at all\(^2\) and large variations through
social deprivation mirroring ill-health. Behaviour change is much more challenging in difficult socio-economic and environmental circumstances. During the pandemic, people helped their neighbours and families and have more insight into changing lifetime goals and diverse opportunities. Furthermore, the public has a greater awareness of the need for rehabilitation after acute illness, following personal experience or media coverage of post COVID recovery.

Action is needed to:

- Promote health literacy building on using the perioperative period as a teachable moment.
- Ensure access to interventions to address obesity, smoking, alcohol excess and sedentary behaviours with the aim of developing lifelong healthy behaviours, pre-operatively and wider.
- Develop postoperative pathways to facilitate seamless rehabilitation from hospital to community, working with primary and community care services.
- Support policy change to facilitate active lifestyles and improved nutrition, hence improving health and reducing the need for social care.
- Support health service employers to develop a healthy workforce, by providing healthy food options, hydration, active travel facilities and access to employment for those with disabilities.

5. Effective virtual solutions should be developed further

During the COVID pandemic, we have seen a rapid expansion in the use of technology, including virtual consultations. To build on these innovations, the following examples should be expanded:

- Electronic systems for pre-operative assessment and planning care can ensure a standardised work-up, support for modifiable risk factor interventions and highlight where individualised care is needed to reduce complications.
- Patient empowerment, eg SafeFit (a partnership with Macmillan, CPOC, University of Southampton and CanRehab) offers a home-based approach to improving physical, nutritional and psychological health for people with cancer avoiding cost, travel time, time off work and exposure to hospital acquired infections.
- E-learning, videos and webinars have rapidly educated many staff working outside their normal area. This opens up possibilities for widespread education in health promotion, ill-health prevention, risk assessment, motivational interviewing and general care reaching large numbers of staff cheaply and comprehensively.
- Virtual meetings have become commonplace. These allow diverse staff to participate, sharing local data, discussing of best practice ideas and understanding each other’s views. All team members can feel included in decisions, so service changes and improvements in patient care are more likely to be successful.

Summary: Building on the goals of perioperative care

Perioperative Care is the integrated multidisciplinary care of patients from the moment of contemplation of surgery until full recovery. Our patients’ best interests should at all times, drive the development, dissemination and delivery of Perioperative Care.

Perioperative Care meets the quadruple aim of:

- Improving patient experience including quality of care and satisfaction with care
- Improving health of populations, including returning to home/work and quality of life
- Reducing the per capita cost of health care through improving value.
- Improving the experience of providing care

This aligns with national priorities on public health, workforce and effective integration of primary, secondary and social care. There is strong evidence for the effectiveness of
perioperative care. Our five key messages highlight practical ways to make the best of the opportunities at this extraordinary time.

References

2 The Centre for Perioperative Care www.cpoc.org.uk
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