CPOC, perioperative care pathway & curriculum

The Preoperative Association
Manchester
4\textsuperscript{th} March 2024

David Selwyn
Director CPOC
PERIOPERATIVE CARE
The key to reducing waiting lists
The Centre for Perioperative Care (CPOC) aims to optimise the surgical pathway from the moment surgery is contemplated until full recovery. Good perioperative care is better for patients, staff and costs.

- 45% of operations requiring an anaesthetist are in people age 65+.
- 67% of over-65s have multiple comorbidities.
- 41% of admissions to intensive care units are following surgery.
- 2.5x variation in patients admitted as in-patient rather than being day case.

14.8% of patients decide against surgery after discussing with a geriatrician-led service.

12% of operations have a complication.

At least 4x more complications if physically inactive.

At least 4x more complications if frail.

50% reduction in complications with smoking cessation.

If any of the events are true:

- 14% of patients express regret after surgery.
- UP TO 50% reduction in complications with pre-op prep (especially exercise).

£400 million lost operating theatre time costs due to cancellations on the day of surgery per year.

- 3% of high risk patients are responsible for 45% of hospital costs.
- 10% of ops are cancelled (many due to bed shortages).
- 11.5% of re-admissions are preventable.

How to get good perioperative care

1. Preoperative preparation
   A perioperative approach reduces complications by 50 per cent and bed stay by one to two days. Seven interventions are effective before surgery — these also reduce long-term ill-health and health inequalities. Provision of prehabilitation facilities or even advice is patchy. See Moving Medicine and CPOC. Preparation includes discharge planning to minimise delayed discharge. Assessment should be used to optimise.

2. Team-working, using the whole workforce and pathways of care
   Departments currently work in silos. There are inefficiencies and late cancellations. Pathways should be standardised with clear triggers for intervention or senior discussion with patient. Teams need to identify tasks, share skills and work with patients. The team consists of:
   - Surgeons, geriatricians, anaesthetists, specialists and other senior clinicians — for complex patients and for Shared Decision Making (SDM) discussing risks and alternatives
   - Nurses and other professionals to be pro-active optimising health with patients
   - Doctors, Assistants, care coordinators and administrators to work to agreed pathways
   - Links with primary care and the community.

3. Shared Decision Making/Senior Review
   SDM means discussing with the patient about benefits, risks, alternatives and ‘doing nothing options, or ‘BRAN’. Many will decide against surgery. Optimisation (smoking cessation, exercise, etc) can also be agreed individually. Comprehensive Geriatric Assessment is of proven benefit and can reduce unwarranted surgery. For emergency presentations, ‘hot clinics’ with a senior decision-maker can reduce admissions by 20 per cent.

4. Day surgery
   Day surgery is far more efficient for beds, staff, lists and has better outcomes for patients. There is a two-to-three fold variation across the UK in rates of people admitted overnight who could have had care as a day case. Preparation and optimisation for each patient and standardisation of pathways increases day case rates. Many Trusts are using out of date criteria — CPOC/GIRFT/BADS new Delivery Pack needs embedding.

5. Patient involvement
   Patients have an important role to play in their own healthcare. They need to understand how they can maximise their physical and mental health prior to a potential operation. To do this, they need to be supported and encouraged in being active partners in their decision making and preparation for treatment. In this way, outcomes will be improved and quality of life optimised.

CPOC is a partnership between

- RCOA
- Royal College of Anaesthetists
- RCPCH
- Association of Anaesthetists
- Royal College of Surgeons of England
- RCP
- Royal College of General Practitioners
- AfPP
- CODP
- Royal College of Physicians

© 2023 Centre for Perioperative Care
Churchill House, 35 Red Lion Square, London WC1R 4SG

info@c poc.org.uk | c poc.org.uk | Facebook | Twitter
Strategic priorities; promotion and impact

- 1. Improving patient outcomes and experience
- 2. Empowering patients, carers and the public
- 3. Educating and developing the workforce
- 4. Influencing policy
- 5. Promoting research, technology and innovation

www.c poc.org.uk
Improving patient outcomes and experience

The Perioperative Pathway

Referral
Preoperative assessment and optimisation
Intraoperative care and surgery
Early postoperative recovery
Rehabilitation and follow up

Key Principles
- Patient centered care
- Shared decision making
- Joined up team working
- Technology that works

Core Competencies
- Recognise & Optimise long term conditions, frailty, anemia and diabetes
- Support Patients to stop smoking, be active and exercise more, reduce alcohol, improve nutrition, prepare mentally and manage their weight
- Assess Risk with anticipation and prevention of complications
- Plan the perioperative period and discharge
- Rehabilitate to community

Centre for Perioperative Care
Good perioperative care is effective, efficient and cheaper

Preoperative
- Reduced outpatient referrals (often to multiple specialties/unnecessary tests)
- Improved shared decision making (less surgery?)
- Better use of workforce – reduced need for parallel services
- Reduced late cancellations
- Increased appropriate day surgery

Inpatient
- Improved quality, reduced medical complications
- Reduced need for level 2/3
- Reduced need for organ specialties & general medical SpRs
- Reduced LOS
- Better use of community services – Virtual wards, Hospital at home, Rehab

Post discharge
- Reduced readmissions across the hospital (heart, lungs, kidneys, brain
- Reduced postoperative referrals to surgery and medicine
- Reduced long term complications
- Better recovery/rehabilitation
Nundy S, Cooper LA, Mate KS. The quintuple aim for health care improvement: A new imperative to advance health equity. *JAMA.* 2022;327(6):521-522
7 things proven to reduce complications by 50%

1. Smoking
2. Exercise
3. Nutrition
4. Medication review + Senior review
5. Alcohol/drugs
6. Mental health & psychological preparedness
7. Physical preparedness

AND may make day case-able

- Heart/lung fitness, oxygenation
- Inflammation
- Metabolic effect
- Empowerment
- Pain management

@scarlethmcnally www.scarlethmcnally.co.uk
Fig 1. Processes involved in the preparation of patients waiting for elective surgery.
On average, women living in Nottingham can expect to live 57.5 years in good health, compared to 60 years for women in Nottinghamshire. This is lower than the England average of nearly 64 years.

Life expectancy for men is significantly lower among those aged 65 years and over, the

**Improving Healthy Life Expectancy**

More than 11,000 hospital admissions and more than 4,500 preventable deaths each year in our ICS are caused by smoking.  

More than 65% of adults across Nottingham and Nottinghamshire are overweight or obese.

Data over the past two years shows one in six young people aged 6-19 years now has a probable mental health disorder.

Compared to other systems, we have a high prevalence of obesity, diabetes, chronic kidney disease and coronary heart disease.

**Improving Life Expectancy**

**Reducing Health Inequalities**
Trust extends support to help more pregnant families quit smoking

Posted Friday, January 19, 2024 2:43 PM

January is a popular time for smokers to quit but the good news for pregnant families is that they will continue to receive free support all year round, thanks to the extension of a specialist team.

Sherwood Forest Hospitals NHS Foundation Trust has given the green light on funding for its Phoenix Team, a maternity tobacco dependence treatment service, making it a permanent fixture in the Trust’s Maternity department.

The team helps mothers and birthing parents to give up smoking during pregnancy with one-to-one support from trained tobacco dependence advisors and free nicotine replacement products.
Surgery Hero

A new approach to tackling the waiting list:
Smart triage and personalised digital prehabilitation.

**KEY RESULTS**

- 2.6 day reduction in length of stay
- 65% fewer complications
- £1110 cost saving per patient
- 80+ Net Promoter Score (NPS)
- 0% pulmonary complications
East Midlands Prehabilitation Forum

- Personalised approach
  - N=758
- Prehab team
  - Prehab lead
  - Exercise professionals
  - Admin
  - Social prescriber
  - Community exercise provider
  - Clinical psychologists
- Physical outcome measures
  - Shuttle walk test
  - Sit to stand
  - Hand grip dynamometry
- PROMs
  - EQ-5D-5L (QoL)
  - GAD-7 (anxiety)
  - PHQ9 (depression)
  - Activity tracker

- 3 sessions a week
  - Input from a social prescriber
  - Level 3/4 psychological support (video psychotherapy pilot)
  - Smoking, alcohol or drug cessation support services
  - Signposting to the MacMillan Cancer Service, Maggies, Cancer rehab provided by CARE (Notts County) and a number of green space initiatives

Results (4th April 2022 – 31st July 2023)

<table>
<thead>
<tr>
<th></th>
<th>Mean reduction in LOS per patient (days)</th>
<th>Actual reduction in bed days to date (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All bed levels</td>
<td>1.7</td>
<td>691.5</td>
</tr>
<tr>
<td>Level 2 beds</td>
<td>0.4</td>
<td>67.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reduction in readmissions within 90 days post op (%)</th>
<th>Reduction in ED attendances within 90 days post op (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-17.7%</td>
<td>-3.5%</td>
</tr>
</tbody>
</table>

Mean change in outcome measures pre and post Prehab intervention
Review Article

Psychological factors, prehabilitation and surgical outcomes: evidence and future directions

D. Z. H. Levett¹,² and C. Grimmett³

1 Professor, Anaesthesia and Critical Care Research Area, Southampton NIHR Biomedical Research Centre, University Hospital Southampton NHS Foundation Trust, Southampton, UK
2 Integrative Physiology and Critical Illness Group, Clinical and Experimental Sciences, Faculty of Medicine,
3 Senior Research Fellow, School of Health Sciences, University of Southampton, Southampton, UK

Summary

The pre-operative optimisation of comorbidities is increasingly recognised as an important element of the pre-operative pathway. These efforts have primarily focused on physical comorbidities such as anaemia and the optimisation of exercise and nutrition. However, there is a growing recognition of the importance of psychological morbidity. Increasingly, evidence suggests that psychological factors have an impact on surgical outcomes in both the short and long term. Pre-operative anxiety, depression and low self-efficacy are consistently associated with worse physiological surgical outcomes and postoperative quality of life. This has led to the emergence of psychological prehabilitation and the trimodal approach to prehabilitation, incorporating psychological intervention as well as exercise and nutritional optimisation. However, there is currently insufficient evidence to be sure that pre-operative psychological interventions are of benefit, or which interventions are most effective, because their impact has been mixed. There is an urgent need for high quality, contemporaneous prospective trials with baseline psychological evaluation, well-described interventions and agreement on the most appropriate psychological, quality of life and physiological outcomes measures.
Latest news

- **National No Smoking Day**
  - 13 February 2024
  - 13 March 2024

- **CPOC Fellow Recruitment 2024**
  - 07 February 2024
  - Apply here!

- **Radio 4 Podcast: 'A Thorough Examination' Series 3 Epis**
  - 07 February 2024
  - CPOC on Radio 4 talking all things exercise

- **Radio 4 'Exercise'**
  - 24 January 2024
  - Tune in to Radio 4 to hear CPOC

- **Embedding CFS Screening in Preoperative Assessment**
  - 18 January 2024
  - Dr Sam Moore, CPOC Fellow writes about the importance of preoperative CFS screening

- **Sustainability in healthcare: patient and public perspe**
  - 17 January 2024
  - Co-authored article in the Anaesthesia Journal on Sustainability in healthcare: patient and public perspectives

- **The Health Creation Alliance**
  - 17 January 2024
  - C4PC partner The Health Creation Alliance have published literature reviews on social prescribing, personalised care – and community strengthening.

- **Paediatric pre-assessment practitioner**
  - 27 November 2023
  - Find out more about the South West and Wessex Operational Delivery Network's free competency-based paediatric pre-assessment practitioner course for nurses.

- **Sustainability in surgery**
  - 27 November 2023
  - Read the new 'Green Surgery report 2023' and check out the 'Green Surgery checklist', which shows how to start operating more sustainably.
Implementation Strategy
Guideline for the perioperative care of people living with frailty undergoing elective and emergency surgery

1. Promoting visibility
   The multi-organisational working group provides a platform to promote the guideline across public and professional groups.

2. Supporting infrastructure
   - Accessible clinical and educational tools and resources for professionals and patients
   - Signposting to national networks including NHF Patient Safety Foundation, NELA, GIRFT and PQIP to reduce data burden
   - Recommendations for commissioners and service providers to facilitate implementation with funding and workforce

3. Measurement for change
   - Providing standardised metrics against which units can measure process, outcomes, and workforce development
   - Signposting to national audits such as NHFDS, NELA, GIRFT and PQIP to reduce data burden

This strategy is underpinned by proactive, iterative patient involvement in the co-design and co-production of whole pathway services.
KEEP CALM. THERE'S AN APP FOR THAT
Modern influencing and impact

- Top Down Approach:
  - Jobs are Altered and Completed Based on Higher Authority
  - Employees Receive Specific Tasks
  - Tasks Delegated by Upper Management

- Bottom Up Approach:
  - Employee Input
  - Company Wide Collaboration
  - Tasks Completed and Sent to Higher Ups
Modern influencing and impact

- NIHR, EBM
- Networks
- PPEN
- Advisory Board
- SIG
- Global reach
- Mainstream media and comms plans

- Blended approach
- Social media
- Relationship building
  - www.bslm.org.uk
  - www.phcuk.org
- AI
Who?

Multiprofessional
Multispecialty
Transdisciplinary
Flexible

Curricula
Resources

Undergraduate
Postgraduate
Educating and developing the workforce

- To attain the highest quality care for patients contemplating and recovering from surgery through training & assessment
- Multiprofessional approach in partnership with patients
- Mapped to GMC domains of Generic Professional capability
- Training and assessment based on best-practice in education aligned to Health education England Advancing Practice Standards
- Helps to set standards for training & fellowships
- Supports NHS workforce planning across 4 nations of UK
Multi-disciplinary Curriculum in Perioperative Care

Delivering quality perioperative care requires a workforce equipped to manage patients in different healthcare settings and those undergoing all types of surgery from minor to complex procedures. CPOC recognises the need for better use of the entire workforce through broader training, cross-skilling and a more flexible approach.

The purpose of the curriculum is to describe the knowledge and skills required for a practitioner to manage and enable the holistic care of a person as they prepare for and recover from surgery.

- Medical curriculum
- Nursing & Allied Health Professionals curriculum
- Non-medical, non-nursing, non-Allied Health Professionals curriculum
The purpose of the curriculum is to describe the knowledge and skills required for a practitioner to help co-ordinate the holistic care of a person as they prepare for and recover from surgery.
Education in Perioperative Medicine

Potential Gaps in POM FRCA

- Prehabilitation
- Postoperative complications
  - Recognition & management
- Pharmacology & medicines reconciliation
- Behavioural science in health promotion
- Models of care between community & hospital services
Figure 10.3 Reported subspecialty among consultant and SAS anaesthetists that responded to the NAP7 Baseline Survey $[n = 6,854]$
Levels of Practice

Enhanced Practitioner: post-registration

Advanced Clinic Practice: minimum of 5 years post-grad experience
Advanced Practice  HEE 2016

‘a level of practice characterised by a high level of autonomy and complex decision-making’

- ability to manage complete clinical care in partnership with patients/carers
- analysis and synthesis of complex problems across a range of settings
- innovative solutions to enhance patient experience and improve outcomes
Enhanced Practitioner

- Post-registration learning
- Workplace supervision + CPD via HEI or in-house
- Currently ad-hoc in Perioperative Care
  - Preoperative assessment courses
  - Recovery / PACU
- Standardisation in some disciplines
  - National standard / competency eg Critical Care
  - Level 6 or Level 7 education, 30 credits
Perioperative Workforce of the future

- POM model of care for surgical patients
  - Assessment & shared decision making
  - Prehabilitation to rehabilitation
  - Enhanced & ward-based postoperative care
- Integrated across services
- Addressing health inequality
- Widening entrustable activities across team
Advanced Clinical Practice in Older People Curriculum Framework
Joint statement on legislation to regulate the role of anaesthesia associates

Published: 27/02/2024

Royal College of Anaesthetists and Association of Anaesthetists joint statement on legislation to regulate the role of anaesthesia associates

The passing of the Anaesthesia Associates and Physician Associates Order 2024 by the House of Lords last night means that AAs will be a regulated profession by the end of the year.

We will be responding to the forthcoming General Medical Council (GMC) consultations around regulation to make sure the views of our members are represented, particularly in relation to concerns about supervision and scope of practice.

The Association and the Royal College of Anaesthetists are working with other stakeholders to develop a clear scope of practice for AAs that is focused on patient safety, ensures appropriate supervision and protects the development of anaesthetists in training and SAS doctors.
Practitioners in POC

- Work in POA and post operative care
- Co-ordinate prehabilitation
  - Triage to digital-based or 1-to-1
- Integral part of service developments
  - Remote POA
  - Prehabilitation & Surgery School
  - Enhanced Care Areas
Perioperative Care curriculum

- Describe and define
  - Achievable and equity of access
- Educational requirements and resources
  - Avoid re-invention, over complicate
- Assessment competencies
  - Advantages and disadvantages
  - Colleges, faculties and initiatives
- Role of professional regulators
  - GMC, NMC
What’s CPOC new?

- Patient voice and resource
- Guidelines and guidance
  - Nutrition, smoking,
- Curriculum
- Dreaming
- Data and AI

DrEaMing and postoperative complications

<table>
<thead>
<tr>
<th>General postoperative complication rate: 25.4%</th>
<th>37% in patients who did not DrEaM within 24h</th>
</tr>
</thead>
<tbody>
<tr>
<td>17% in patients who did DrEaM within 24h</td>
<td></td>
</tr>
</tbody>
</table>

- Specific complications higher in patients who did not DrEaM within 24h
- Pulmonary (3.7% vs. 1.9%)
- Cardiovascular (4.8 vs 1.9%)
- Gastrointestinal (20.7 vs. 6.3%)

Source: British Journal of Anaesthesia, 129 (1): 114–126 (2022)
Improving the preoperative pathway

B. Supporting patients to prepare for surgery

One third of on-the-day cancellations are due to clinical reasons, such as patients being unfit for the type of surgery or anaesthetic they were listed for. Patients with lower fitness or who struggle to control their long-term conditions are at risk of major complications after inpatient surgery, which can increase average length of stay three-fold or more, and reduced long-term survival and quality of life. Therefore, it is essential that potentially modifiable risk factors are identified and treated early on.

Ambition

From April 2023, providers will be asked to establish Perioperative Care Co-ordination teams. These teams could consist of, for example, care co-ordinators, nurses and peroperative physicians who will assess health needs to proactively inform pre and post-operative care and identify surgical risk factors. They will identify low-risk patients who do not need to attend face-to-face preoperative assessment and patients who could be treated in elective units focused on providing high volume low complexity surgery.

This will enable patients to be treated in the place most appropriate for their condition, as well as freeing up capacity for those who require more complex care in a higher acuity setting.

How we will deliver

The teams will work with patients to develop personalised preparation plans. These plans will detail both the clinical and the wider support needs of patients both leading up to the time of surgery and in the post-surgical period. The Perioperative Care Co-ordination teams will be able to refer people for specialist secondary care input where required and, in conjunction with social prescribing link workers, to connect people to the most appropriate community support for them.

We will strengthen periperaoperative pathways starting at the point of referral or listing for surgery to support patients’ preparation. With improved sharing of data and digital tools, providers will enable patients to better prepare for their treatment. Digital patient-led perioperative questionnaires are currently being scoped and will enable the capture of risk factors not traditionally included within health records without additional burden for NHS staff.

The teams support patients to provide regular contact with those patients on their waiting lists. This contact should collect information on the patient’s current condition and overall health and provide an update on likely remaining wait.
Conclusions

- CPOC is amazing
- Everyone in this room is now a Public Health advocate/activist
- Implementation and impact of guidelines
- Educating, supporting, finding the workforce (Team) solutions is the future
- Co-design