Perioperative Medicine: 2015-2020

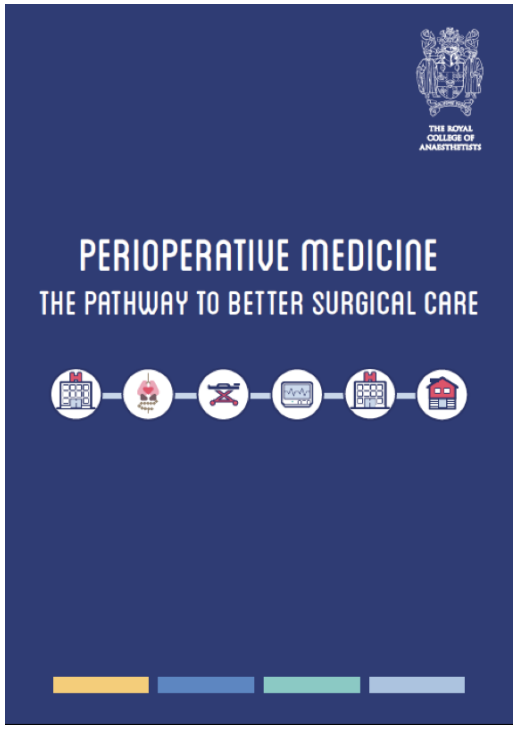
Dr David Yates

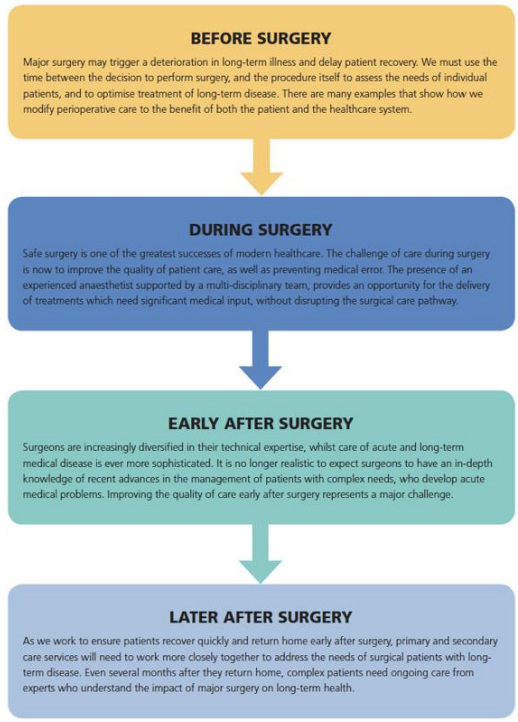
York Core Topics 7th Feb 2020

Association of Anaesthetists

Declarations

- External Examiner UCL Perioperative Medicine MSc 2016-2019





Visit the main page

WIKIPEDIA
The Free Encyclopedia

Main page
Contents
Featured content
Current events
Random article
Donate to Wikipedia
Wikipedia store

Interaction
Help
About Wikipedia
Community portal
Recent changes
Contact page

Tools
What links here
Related changes
Upload file
Special pages
Permanent link
Page information
Wikidata item
Cite this page

Print/export
Download as PDF
Printable version

Not logged in Talk Contributions Create account Log in

Article Talk | Read Edit View history | Search Wikipedia

Perioperative medicine

From Wikipedia, the free encyclopedia

This article includes a list of references, related reading or external links, **but its sources remain unclear because it lacks inline citations**. Please help to improve this article by introducing more precise citations.
(December 2011) (Learn how and when to remove this template message)

Perioperative medicine is the medical care of patients from the time of contemplation of surgery through the operative period to full recovery, but excludes the operation or procedure itself. Perioperative care may be provided by an anesthesiologist, Intensivist, an internal medicine generalist or hospitalist working with surgical colleagues.

Background [edit]

Perioperative medicine encompasses the care of the patient preparing for, having and recuperating from surgery. In the practice of perioperative medicine the surgeon, anesthesiologist, intensivist and medical consultant work in concert. The medical knowledge distinct to this field includes that of operative risk and complications, of patient specific risks, of methods to reduce risk, and of the management of medical illness during this time period. Evidence supporting best practices in perioperative medicine is expanding, though historically this field has been directed by common practice and experience. It remains a field governed primarily by the art of medicine.

Notably, in the last decade, there has been a concerted effort by various anesthesia representative bodies to incorporate greater teaching into management of patients during the perioperative period. Specifically, an annual summit has been held in the US, and various courses exist to encourage this field of medicine.

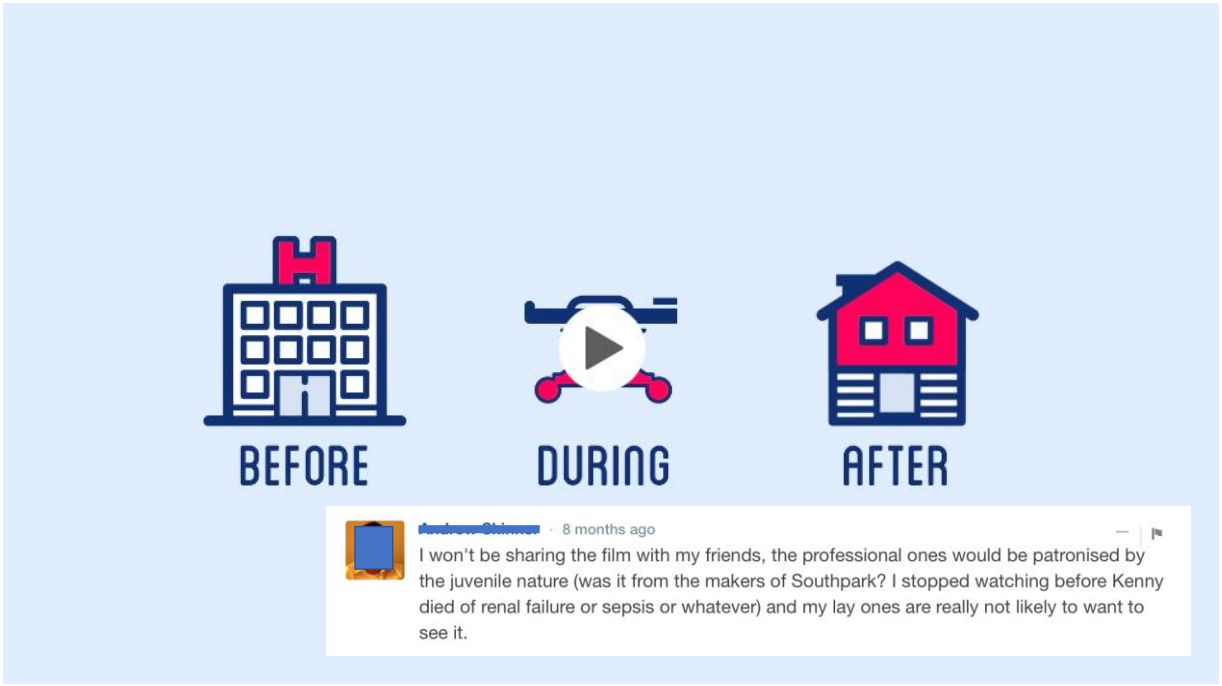
See also [edit]

- Pre-anesthesia checkup

Medicine portal

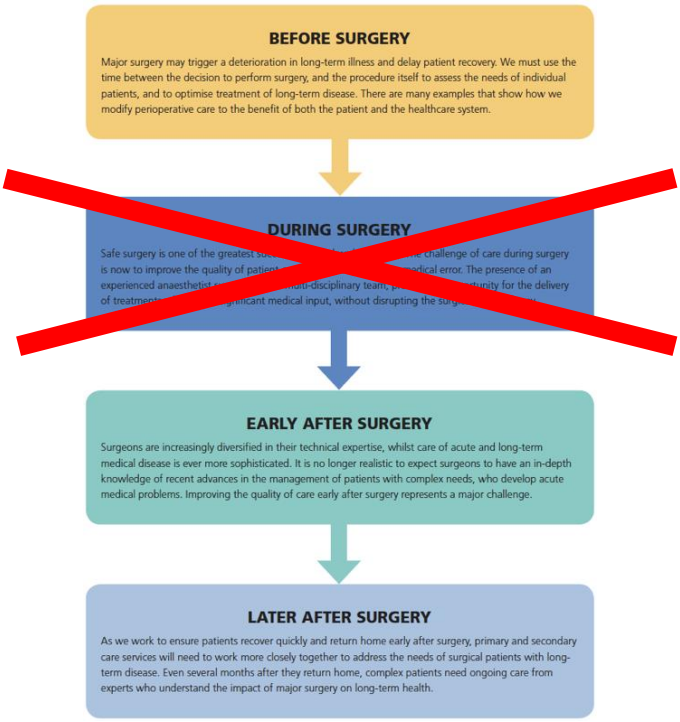
External links [edit]

- Royal College of Anaesthetists 2014 vision document to contextualise and introduce the future care of patients contemplating surgery with examples from



> Unless we re-engage with the wards to provide care before and after surgery, we will lose relevance. A retreat to the operating theatre will be to the detriment of the specialty.
>
> **RCoA Curriculum Survey 2014**

Nonsense



Achievements

- Awareness
  - Other colleges
  - National projects (PQIP, etc)
- New status for Specialty
  - Academic appointments, etc
- Perioperative Medicine Leads
- Shared Decision Making
- Prehabilitation
- Pathway/Guideline development
  - Anaemia
  - Diabetes
  - Frailty
  - Preop exercise

Anaesthesia 2018, 73, 750–768 doi:10.1111/anae.14177

Guidelines

Clinical guideline and recommendations on pre-operative exercise training in patients awaiting major non-cardiac surgery

G. A. Tew,[1] R. Ayyash,[2] J. Durrand[3] and G. R. Danjoux[4,5]

1 Associate Professor, Department of Sport, Exercise and Rehabilitation, Northumbria University, Newcastle-upon-Tyne, UK
2 Consultant, 4 Consultant and Research Lead, Department of Anaesthesia, James Cook University Hospital, Middlesbrough, UK
3 Academic Clinical Fellow, Northern School of Anaesthesia and Intensive Care Medicine and Newcastle University, Newcastle, UK
5 Visiting Professor, School of Health and Social Care, Teeside University, Middlesbrough, UK

Summary

Despite calls for the routine implementation of pre-operative exercise programmes to optimise patient fitness before elective major surgery, there is no practical guidance for providing safe and effective exercise in this specific context. The following clinical guideline was developed following a review of the evidence on the effects of pre-operative exercise interventions. We developed a series of best-practice and, where possible, evidence-based statements to advise on patient care with respect to exercise training in the peri-operative period. These statements cover: patient selection for exercise training in surgical patients; integration of exercise training into multi-modal prehabilitation programmes; and advice on exercise prescription factors and follow-up. Although we acknowledge that further research is needed to identify the optimal exercise prescription in different clinical scenarios, we urge peri-operative teams to make use of these recommendations.

Correspondence to: G. Danjoux
Email: gerard.danjoux@nhs.net
Accepted: 5 November 2017
Keywords: guideline; physical exercise; postoperative complications; prehabilitation; surgery

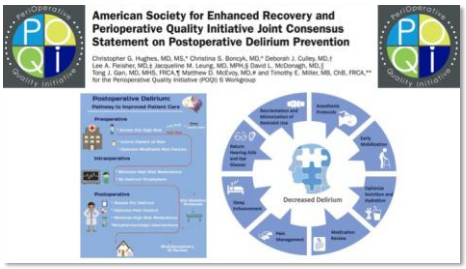
Summary of key recommendations

1 Pre-operative exercise training should be offered to patients scheduled for major or complex elective surgery with a view to improving their physical fitness and health status and reducing the risk of peri-operative morbidity and mortality. If resources are limited, priority of referral to pre-operative exercise training should go to patients who are at increased risk of peri-operative complications, such as those with low cardiorespiratory fitness.

2 Pre-operative exercise training should be offered as part of a multi-modal prehabilitation programme that addresses a variety of peri-operative risk factors including cigarette smoking, excessive alcohol consumption, and anaemia.

3 Healthcare professionals making referrals to a pre-operative exercise programme should have basic knowledge about what the programme entails and its potential effects. A pre-operative exercise programme should be presented to the patient by the referring clinician as a fundamental part of their

750 © 2018 The Association of Anaesthetists of Great Britain and Ireland



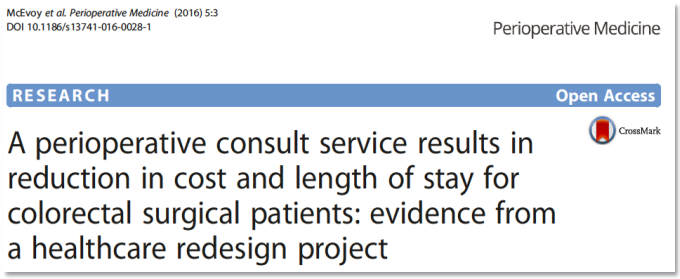
American Society for Enhanced Recovery and Perioperative Quality Initiative Joint Consensus Statement on Postoperative Delirium Prevention

Christopher G. Hughes, MD, MS,* Christina S. Boncyk, MD,* Deborah J. Culley, MD,† Lee A. Fleisher, MD,‡ Jacqueline M. Leung, MD, MPH,§ David L. McDonagh, MD,‖ Tong J. Gan, MD, MHS, FRCA,¶ Matthew D. McEvoy, MD,# and Timothy E. Miller, MB, ChB, FRCA,** for the Perioperative Quality Initiative (POQI) II Workgroup

Achievements

- Awareness
  - Other colleges
  - National projects (PQIP, etc)
- New status for Specialty
  - Academic appointments, etc
- Perioperative Medicine Leads
- Shared Decision Making
- Prehabilitation

- Pathway/Guideline development
  - Anaemia
  - Diabetes
  - Frailty
  - Preop exercise
- Improving outcomes
  - Research
  - QI
- Various services springing up



McEvoy *et al. Perioperative Medicine* (2016) 5:3
DOI 10.1186/s13741-016-0028-1

Perioperative Medicine

RESEARCH Open Access

A perioperative consult service results in reduction in cost and length of stay for colorectal surgical patients: evidence from a healthcare redesign project

Stier *et al. Perioperative Medicine* (2018) 7:13
https://doi.org/10.1186/s13741-018-0090-y

Perioperative Medicine

RESEARCH Open Access

Anesthesiologists as perioperative hospitalists and outcomes in patients undergoing major urologic surgery: a historical prospective, comparative effectiveness study

Gary Stier[1], Davinder Ramsingh[2*], Ronak Raval[2], Gary Shih[2], Bryan Halverson[2], Briahnna Austin[2], Joseph Soo[2], Herbert Ruckle[3] and Robert Martin[2]

Abstract

Background: Perioperative care has been identified as an area of wide variability in quality, with conflicting models, and involving multiple specialties. In 2014, the Loma Linda University Departments of Anesthesiology and Urology implemented a perioperative hospitalist service (PHS), consisting of anesthesiology-trained physicians, to co-manage patients for the entirety of their perioperative period. We hypothesized that implementation of this PHS model would result in an improvement in patient recovery.

Methods: As a quality improvement (QI) initiative, the PHS service was formed of selected anesthesiologists who received training on the core competencies for hospitalist medicine. The service was implemented following a co-management agreement to medically manage patients undergoing major urologic procedures (prostatectomy, cystectomy, and nephrectomy). Impact was assessed by comparisons to data from the year prior to PHS service implementation. Data was compared with and without propensity matching. Primary outcome marker was a reduction in length of stay. Secondary outcome markers included complication rate, return of bowel function, number of consultations, reduction in total direct patient costs, and bed days saved.

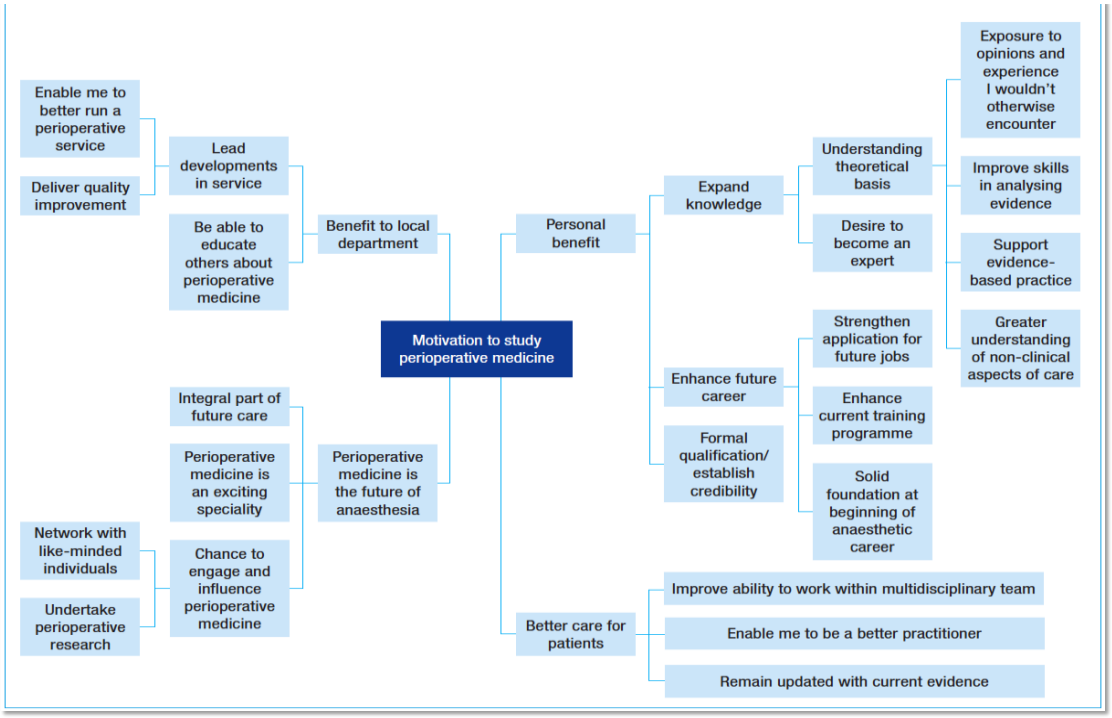
Results: Significant reductions in length of stay ($p < .005$) were demonstrated for all surgical procedures with propensity matching and were demonstrated for cystectomy and nephrectomy cases without. Significant reductions in complication rates and ileus were also observed for all surgical procedures post-PHS implementation. Additionally, reductions in total direct patient costs and frequency of consultations were also observed.

Conclusions: Anesthesiologists can safely function as perioperative hospitalists, providing appropriate medical management, and significantly improving both patient recovery and throughput.

Early adopters of perioperative medicine: who are they and what motivates them?

British Journal of Hospital Medicine, November 2017, Vol 78, No 11

- Young
  - Median age 33.
- 75% trainees, 23% Consultant/SAS
- 75% anaesthetists, rest- surgeons, geriatricians, physicians, nurses
- 4 themes identified



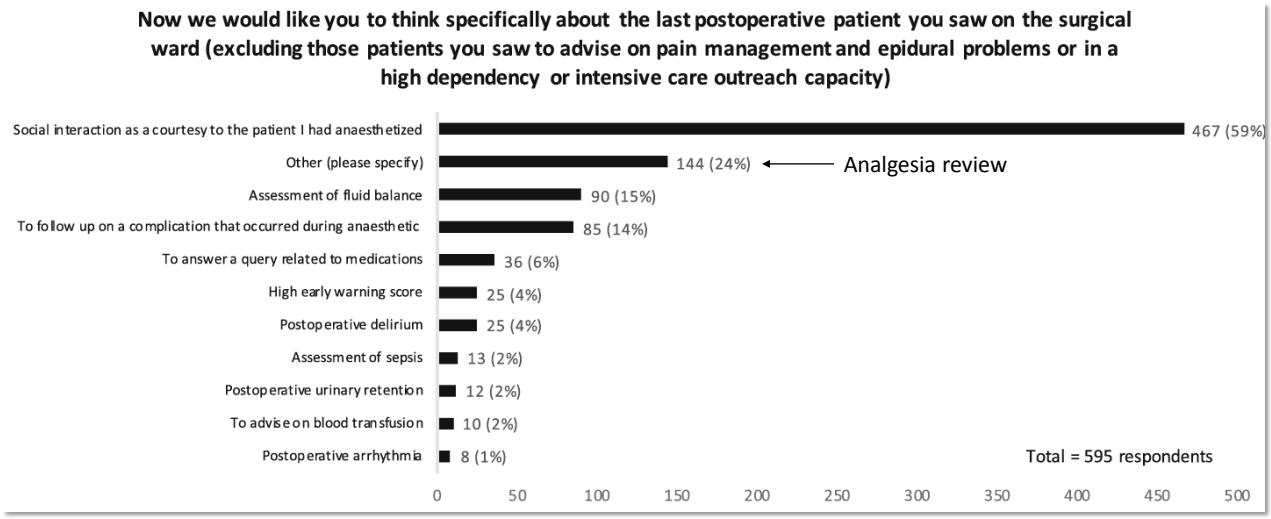
Perioperative Medicine in Action

www.futurelearn.com/courses/perioperative-medicine

Challenges

- Still some way to go before universal acceptance.

- 758 respondents (60:40 Cons/trainee split)
  - 4.5% of the registered 16744 anaesthetists
- 64% consider themselves a ‘perioperative doctor’
- 78% believe anaesthetists ‘uniquely placed’ to lead development of POM



Attitudes to POM- 758 respondents

- 26% agreed/strongly agreed they were confident to optimize medical comorbidity- crucially 47% disagreed/strongly disagreed
- 51% believe current training in POM is inadequate
- “Anaesthetists do not want to practice perioperative medicine”
  - 9% strongly agree, 31% agree

Challenges/Work in progress

- Still some way to go before universal acceptance.
- Turf war?

Perioperative Medicine

MRCP v. FRCA

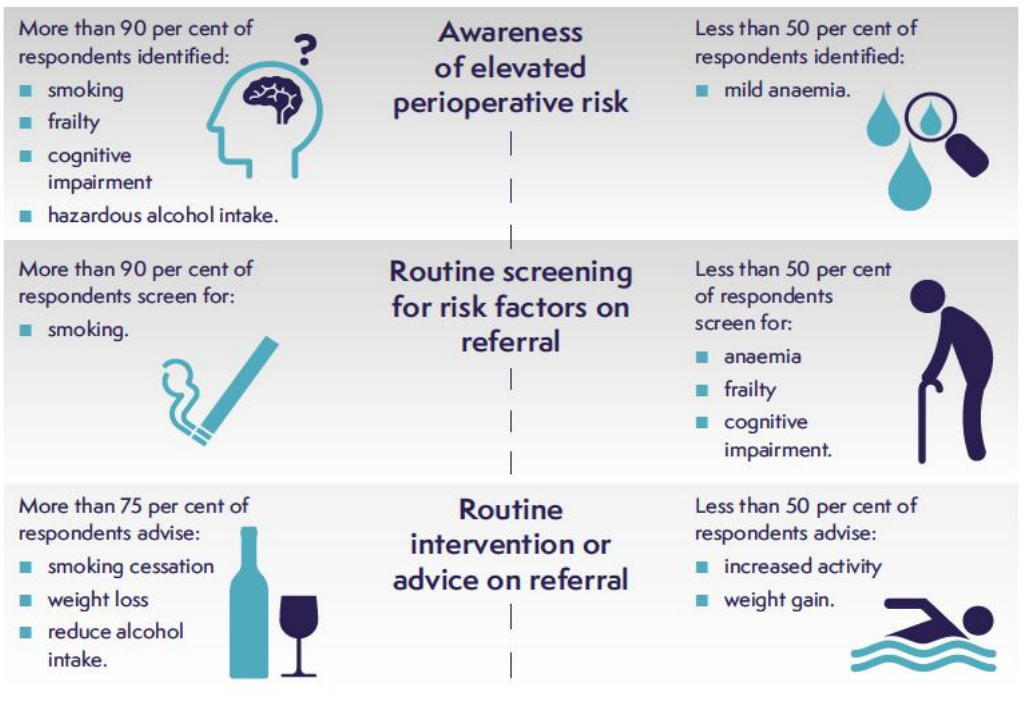
- Comorbidity management
- Complication management
- Drug knowledge
  - Confidence to tweak meds
- Discharge planning
- Better MDT experience
- Better knowledge of long term outcomes

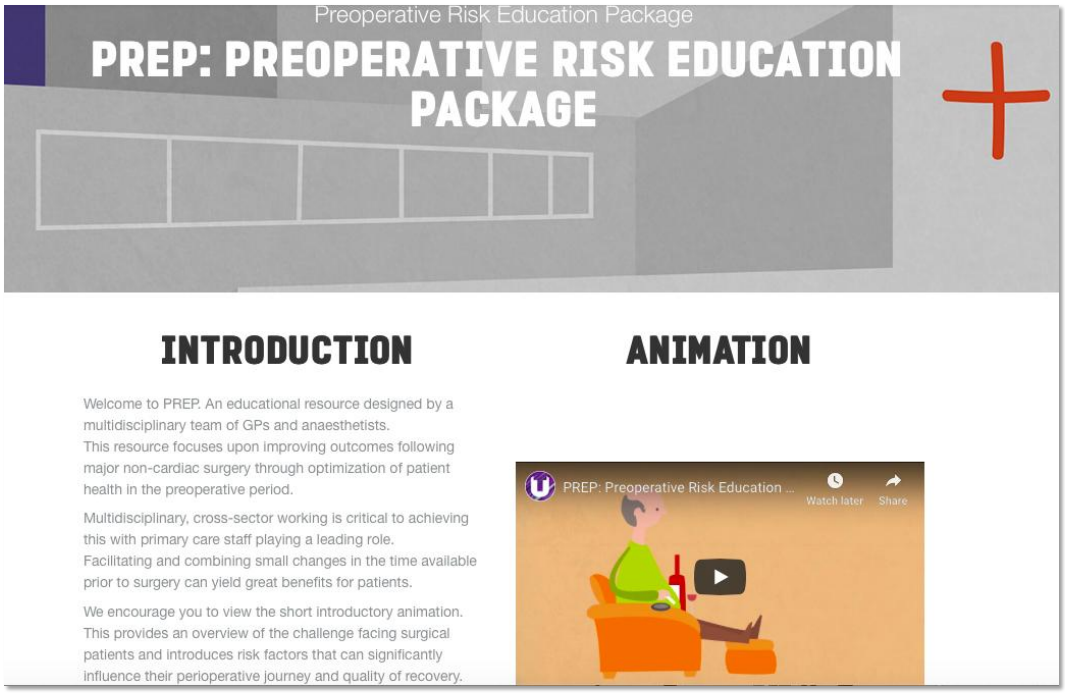
- Cardiorespiratory physiology
- Complication prevention
- Drug knowledge
- Surgical knowledge
- Better concept of periop risk?
- Advanced analgesic techniques
- Technology adoption

v. FRCS?

Challenges/Work in progress

- Still some way to go before universal acceptance.
- Turf war?
- Proper integration with Primary Care





Preoperative risk evaluation in Primary Care- survey of knowledge and attitudes

- ***'Fascinating… it will influence my behaviour.... never thought to advise preop exercise. It makes sense!'***

- ***I'm going to say to my patients, 'you do realise that the stress of this is equivalent to running a marathon- we need to start getting you into shape to help it go smoothly. What do you think we need to do to help you be as well as you can be for this?'***

- ***'Don't start chucking more work at under-resourced primary care!'***

Challenges/Work in progress

- Still some way to go before universal acceptance.
- Turf war?
- Proper integration with Primary Care
- Lack of time/resources in current job plans
  - Use existing business cases

Centre for Perioperative Care

- Centre for Perioperative Care
- Multi-Specialty

The Centre for Perioperative Care (CPOC) is delighted to announce the appointment of Consultant Physician, Dr Jugdeep Dhesi, and Consultant Surgeon, Mrs Scarlett McNally as its new Deputy Directors.

What will CPOC do?

The new Centre for Perioperative Care aims to:

- improve quality of care
- empower patients
- support the workforce
- influence policy
- harness digital technology
- lead on research and innovation.

Postoperative Critical Care?

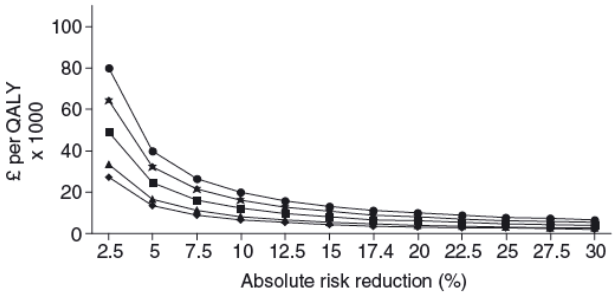
Cost effectiveness of adult intensive care in the UK

S. Ridley[1] and S. Morris[2]

1 Consultant in Anaesthesia and Intensive Care, Glan Clwyd Hospital, Rhyl, Denbighshire LL18 5UJ, UK
2 Reader, Health Economics Research Group, Brunel University Uxbridge, Middlesex UB8 3PH, UK

Anaesthesia, 2007, **62**, pages 547–554

- Incremental cost per QALY of ICU v no ICU
- Data taken from previous reviews of ICU rationing
- Cost per QALY = £7010



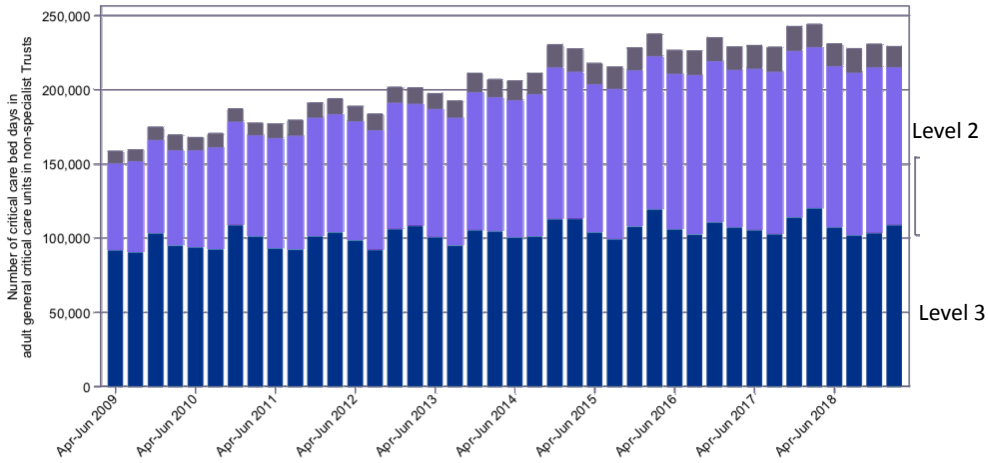
The Impact of Postoperative Intensive Care Unit Admission on Postoperative Hospital Length of Stay and Costs: A Prespecified Propensity-Matched Cohort Study

Anesthesia & Analgesia: 2019 ;129(3), 753-761

- Cohort of 3500 major surgery patients propensity matched to 23 periop variables but with different discharge destinations- ward or ICU
- *"In patients with an unclear indication for postoperative critical care, intensive care unit admission may negatively impact postoperative hospital length of stay and costs."*
- Conversely- 'genuine' need for ICU= reduced costs and length of stay.

FICM Enhanced Care Review

1. **Critical care bed days 2009-2019 split L2/L3 - quarterly**



Enhanced Care

GUIDANCE ON SERVICE DEVELOPMENT IN ACUTE CARE

VERSION FOR OPEN CONSULTATION: NOVEMBER 2019

Faculty of Intensive Care Medicine/Royal College of Physicians London
Enhanced Care Working Parties 2019

Executive Summary

Enhanced Care is a relatively new concept. It can act as a bridge between critical care and normal ward care and takes different forms. It is an efficient way to utilise resources and may result in improved quality of care, reduced cancellation of elective surgery and provide cost savings. This document provides guidance for the development of Enhanced Care based on current knowledge and expertise. It is not a substitute for High Dependency Care but fills a gap allowing patients to be managed safely in an appropriate environment dependent on their needs. It facilitates access to Critical Care teams for enhanced advice and support, but not delivery of, Enhanced Care for the benefit of patients.

Summary

- Perioperative Medicine is not for everyone.
- It's not the same as anaesthesia.
- It is improving patient care and outcomes though.
- Postoperative Critical Care is not the right environment for elective patients

Perioperative Medicine in Action- 27th April