

Perioperative care pathways

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Perioperative challenge

12.5 million operations
/ year in the UK
82% of this is elective
surgery

10% of the annual NHS
budget

Record high waiting lists
- Autumn 2023 the
waiting list for elective
surgery = 7.77 million
people

Why should we be involved perioperatively?



Poor pain control post operatively

11% severe pain in the 1st 24hrs post op
37% moderate pain in the 1st 24hrs post op
BJA 2016; 117: 758–766



Chronic Post Surgical Pain (CPSP)

Pain lasting more than 3 months after surgery (ICD 11,
Pain 2019; 160: 45-62)
Median incidence 20-30% at 12 months
Varies with type of surgery
EJA 2015; 32: 725-34



Persistent Post Operative Opioid Use (PPOU)

Opioid use more than 3 months after surgery
6-10% of opioid-naive patients
35–75% of patients with previous opioid exposure
Anesthesia and Analgesia 2019; 129: 543–52. 24

Persistent Postoperative Opioid Use

Each year in the United States, over 50 million surgeries and procedures are performed. Persistent postoperative opioid use (PPOU) has become a major concern for individuals, communities, and society.

Definition

No consensus on a definition of PPOU



How many opioid scripts?

For how long after surgery?



Incidence*

All surgical patients who were opioid naïve preop



Certain types of surgery + opioid naïve patients

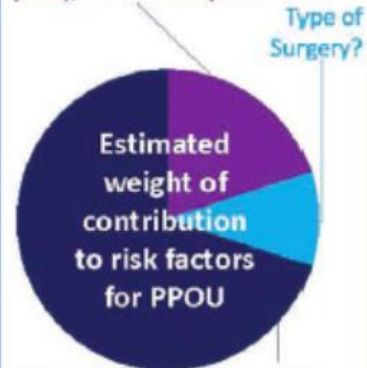


Certain types of surgery + preop opioid use



Risk Factors

Systems Factors: prescribers, policy, healthcare system



Patient history: preop opioid use, anxiety, depression, substance abuse, preoperative painful conditions, etc.

*reported incidence from current literature; but should be noted that exact definitions of PPOU varied between studies.

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- Anesthesia and Analgesia 2019; 129: 543–52. 24

Main risk factors



Pre-existing chronic pain



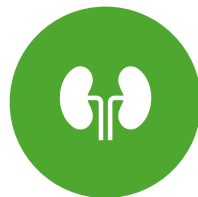
Pre-existing opioid use



History of anxiety / depression



Pain catastrophising



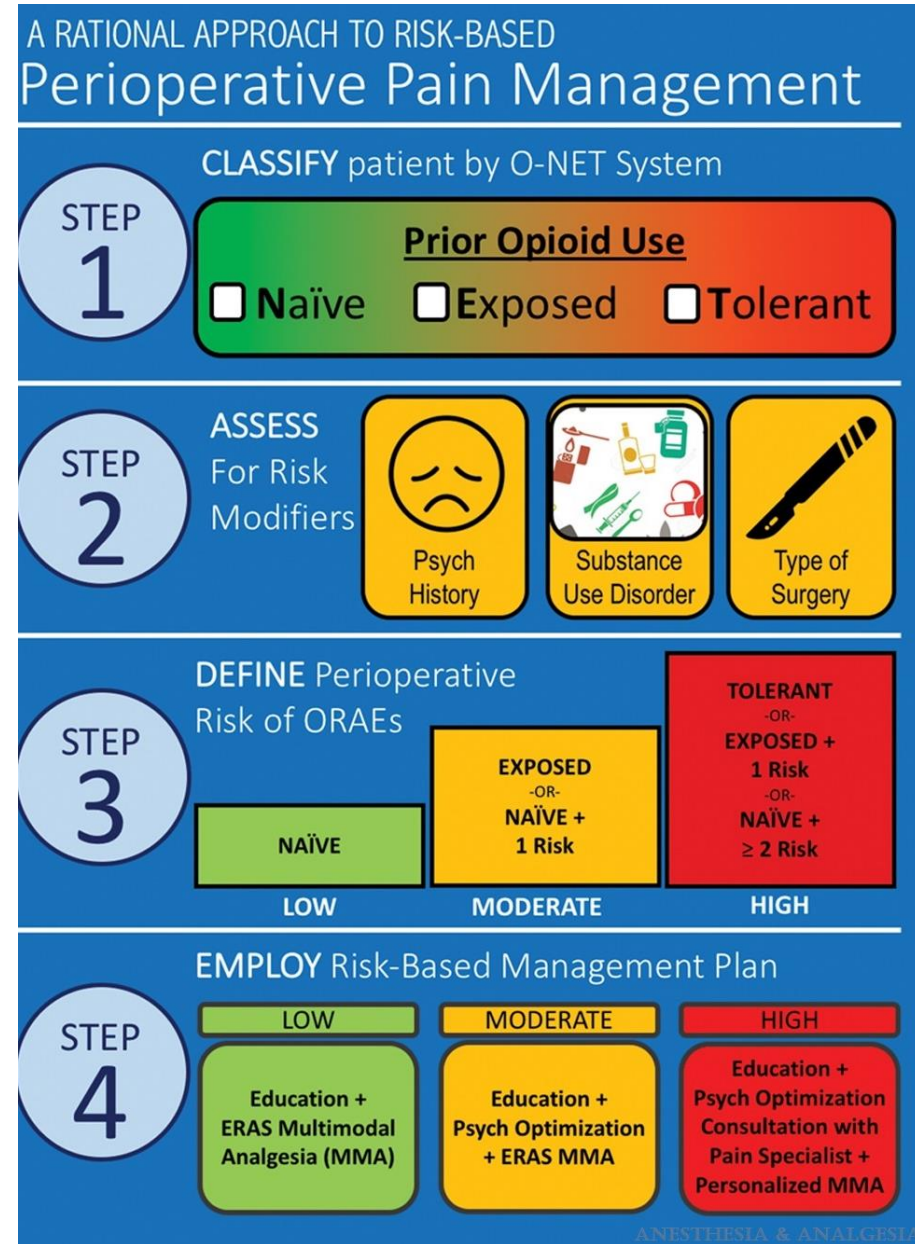
Type of surgery e.g. limb amputation, TKR, sternotomies



Severe pain post operatively

Edwards et al, Anesth Analg 2019

Risk stratification



Pre op LTHTR

Four pre op questions done on the ePR by the pre op nurses to identify high risk patients:

- History of chronic pain?
- Oral morphine equivalent of > 60mgs / 24hrs?
- Does the patient have excessive fears or worries about pain post-op? (“catastrophising”)
- History of anxiety and depression? (if yes alone doesn’t populate the inpatient pain work list)

Via the surgical team / pre op

- Specific operations eg limb amputations, scoliosis surgery

Potential Interventions

Pre op interventions

- **Education**
- **Inpatient pain team review** – telephone, face to face
- **Specialist chronic pain services** eg opioid optimisation, pain management
- **Psychology input** – telephone, face to face

Alert the anaesthetic team to high-risk patients

- Multimodal analgesia
- Regional anaesthesia

Post op in hospital interventions

- **Inpatient pain team review**
- Inpatient pain team **psychology** review

Post discharge interventions

- **Transitional pain service** – high risk patient follow up
- Chronic pain team referral > 3-6 months persistent pain

All patients need education and management of expectations pre op

Videos

British Pain Society
Leaflet / QR codes

Linking into surgery
school

Education for pre op
and anaesthetic teams

Education

British Pain Society Patient Leaflet – available as a free download



Managing pain after your surgery

This leaflet explains what you can do to prepare for going home after surgery and to help your recovery. It describes the medicines used to reduce pain, and how to use them safely while you recover.

PAIN[®]

Can perioperative psychological interventions decrease the risk of postsurgical pain and disability? A systematic review and meta-analysis of randomized controlled trials

Putu G. Nadinda^{a,b,*}, Dimitri M.L. van Ryckeghem^{a,c,d}, Madelon L. Peters^a

Psychological interventions significantly reduced:

Acute pain

Disability

CPSP

Interventions delivered after surgery more effective than before

Interventions delivered by a psychologist more effective than those delivered by another healthcare provider

Need for more research to determine which specific type of intervention the most beneficial

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<https://doi.org/10.1177/2049463720926212>



Article

The role of the psychologist in the inpatient pain service: development and initial outcomes

**Chandran Jepegnanam, Eleanor Bull , Sujesh Bansal, David McCarthy, Maureen Booth,
Elizabeth Purser, Tecla Makaka, Gemma Shapley, Jo Cooper, Jill Probert, and Zoey Malpus**

Fewer admissions

Fewer bed days than the control group

**Using NHS figures for admission and excess bed day costs, equates to a
potential difference in inpatient treatment costs of £528,969**

Chronic and complex
pain workload of
inpatient pain services
(CHIPS) – a national
audit - Preliminary
analysis of a complete
dataset.
Dr Mark Rockett et al

Aw publication

- “Adding a psychologist to an inpatient pain service may result in a clinically significant saving of approximately 960 bed days a year per hospital. Potentially, this represents a gross saving of £315,000 per annum”

Post operative markers for intervention post discharge

Patients that are referred multiple times to the inpatient pain team

Patients that are highly distressed about their pain post operative

Patient on high dose opioids at discharge especially MR opioids (which should be avoided in acute pain anyway)

The Toronto General Hospital Transitional Pain Service: development and implementation of a multidisciplinary program to prevent chronic postsurgical pain

Post discharge – Transitional pain service

Katz et al 2015

Toronto Transitional Pain Service:

“Transitional pain care is focused on treating patients who are at risk of transitioning from acute to chronic pain after surgery with the aim of preventing the development of CPSP, persistent opioid use, and related disability”

Referral criteria

How to guide
available on
their web site

Referring Guidelines

Table 2. Referring guidelines for admission to the TPS at Toronto General Hospital as outlined by Katz et al. ⁴⁷.

Pre-operative “pain alert”
<ul style="list-style-type: none">• Pre-surgical chronic pain• History of drug abuse• Currently on opioid, methadone, or buprenorphine maintenance therapy
Severe postsurgical pain
<ul style="list-style-type: none">• Prolonged Acute Pain Service stay• Surgical patients with repeat Acute Pain Service consultation• Medically stable postsurgical patients with complex pain problems that prevent discharge
High postsurgical opioid consumption
<ul style="list-style-type: none">• Consumption of > 90 MME/day (MME = morphine milligram equivalents)• Methadone or buprenorphine patients without a community pain specialist• Patients discharged with a prescription for a long-acting opioid• Interventional postsurgical procedures (e.g., stump catheters postamputation)
Emotional distress
<ul style="list-style-type: none">• Depression• Anxiety• Pain catastrophizing• Other psychosocial concern(s) identified by questionnaires or Acute Pain Service/Transitional Pain Service member

For additional details please refer to:

Katz J, Weinrib AZ, Clarke H. Chronic postsurgical pain: From risk factor identification to multidisciplinary management at the Toronto General Hospital Transitional Pain Service. *Canadian Journal of Pain*. 2019;3(2):49-58. doi:10.1080/24740527.2019.1574537

National Standards Current and pending

Anaesthesia Clinical Services Accreditation (ACSA) – The 2023 standards include pre operative identification of patients at high risk of pain complications and suggest interventions. This is a level 1 standard (mandatory).

Association of Anaesthetists Great Britain and Ireland (AAGBI) consensus statement for the perioperative management of pain complications – accepted for publication

Guidelines for the management of patients at high risk of pain related complications perioperatively from **The Royal College of Anaesthetists** via Faculty of Pain Medicine (FPM) with representatives that include The Royal College of Surgeons, Centre for Perioperative Care (CPOC) and The British Pain Society – aiming for publication early 2025

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Any
questions

