

Thank you for attending our latest PQIP webinar where the focus was the management of perioperative pain. We had some brilliant presentations highlighting the latest from both PQIP and the perioperative pain sphere which fostered great questions and discussion – find the questions asked with our responses below!



The webinar can be viewed on demand [here](#).

## Perioperative Pain Questions

### What is the association between DrEaMing and pain scores?

DrEaMing (Drinking, Eating and Mobilising) after surgery is an essential care process, championed by PQIP, evidenced to support patients recover quicker and with fewer complications ([Oliver et al. 2022](#)). Patients with moderate to severe pain are less likely to DrEaM within 24 hours of major surgery which puts them at risk of a prolonged length of stay and complications – both situations patients are keen to avoid. Pain or fear of pain are recognised barriers to patients mobilising postoperatively.

Severe postoperative pain is common, unpleasant, and avoidable with up to 18.4% of the PQIP cohort experiencing severe pain within 24 hours of surgery ([Armstrong et al, 2023](#)). It is also associated with a negative patient experience, delayed return to normal function, and the development of prolonged postsurgical pain.

The Fourth PQIP Report noted that patients undergoing vascular or orthopaedic surgery experienced more severe pain on day one post-surgery compared to in recovery. This could represent the phenomenon of rebound pain that may occur following the offset of neuroaxial techniques and peripheral nerve blocks. To address this complex issue locally requires collaborative multidisciplinary team input to audit the current data for day one pain scores and review current processes of care in the management of these patient groups.

The main goals on day one following surgery to optimise a patient's recovery, are for the patient to be able to Drink, Eat and Mobilise. Adequate postoperative pain management is essential to achieve this. Although the nuance of anaesthetic and surgical technique is an important element to consider in perioperative pain management, our global focus should be on how best support a patient to full recovery without complications in a timely manner.

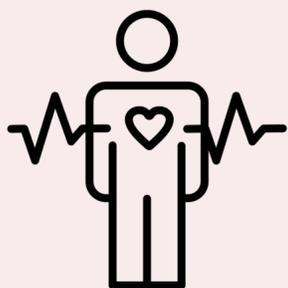


**I think in the UK, it is going to be difficult to avoid single-shot regional block to prevent rebound pain though.**



**Great report but most of these high-risk factors were identified in previous studies. Any interventions such as continuous nerve block infusions that might provide lower D1 pain scores present in your data?**

Achieving this lies not in the nuance, but in the complex processes and pathways of care supporting that patient throughout the perioperative pathway. If your local trust is set up to deliver continuous nerve block infusions, then this may be beneficial to certain patient and surgical cohorts. However, if the processes are not in place to ensure the optimum care of catheters and to support patients to mobilise with wound catheters in situ, then single shot techniques may be preferable. For your perioperative team to address this complex issue, your local teams need to understand if pain is a problem on day one after surgery for patients receiving a regional technique. It is also essential to understand your local pathways, including what patient education around their recovery and pain is provided preoperatively, and what support is available to patients after discharge.



Research by PQIP found that high input of preoperative education around what to expect on each day of their recovery may help patients with their expectations of pain on day one and provide them with the tools to manage their own pain, such as feeling empowered to ask for pain relief before they mobilise and understanding why mobilising is important for their recovery. Day case patients may benefit from having a designated contact that they can reach if support is required in the early days following surgery.

**Great presentations, along these lines regarding were there institutional differences in pain, and what impact does where the surgery take place have on predicting pain? DGH vs specialist vs tertiary centre. Vs regional differences...**

Great question! Tertiary centres have more complex cases, more trauma and bigger pain services so it's not comparing like with like. Regional and socioeconomic differences in pain scores for comparable hospitals would be of more interest.

Given that improving longer term pain and functional outcomes includes pre-optimisation and intensive input for some patients after surgery and even after discharge, the funding implications to the NHS are huge. Some trusts may be able to provide a full transitional pain service staffed with pain specialists, clinical psychologists and physiotherapists, but the reality is that the majority of inpatient pain services are resource poor (Rockett et al., Anaesthesia 2017).

Pain catastrophising is a negative mental state highlighted in the context of actual or perceived pain and is a powerful predictor of poorer pain outcomes.

**Do you think post op pain contributes to increased anxiety when they go home. From an anecdotal point of view a lot of patients I speak to on this study and the VITAL study report high anxiety but they also have pain still 30 days after surgery**

Postoperative pain and anxiety are complex issues. There are multiple psychological factors known to correlate with short and long term post operative pain, including anxiety and depression (Ip H et al Anaesthesiology 2009). We know that post-operative patients in pain have high anxiety scores relative to patients without pain, which may impact on their recovery (Rockett et al BJA 2013). Pain catastrophising is a form of anxiety specific to pain which is characterized by the tendency to magnify the threat value of pain, to be unable to stop ruminating about pain and to feel helpless (Arendt-Nielsen, L. Frontiers in Psychology 2020). It is not surprising that pain catastrophising prevents DrEaMing and is one of the clearest psychological predictors of poor pain outcomes (Keogh, E. Eur J Pain 2010).

Psychological characteristics change over time, and it may be the change in catastrophising that occurs during the perioperative period and after discharge that is the best predictor of persistent pain (Speed, T.J. Pain Medicine 2021). Patients who don't cope well in hospital with increasing anxiety and distress are more likely to have worse long-term outcomes. Therefore, identifying patients with increasing anxiety and distress is an important factor that may help reduce longer term pain issues.

**Would you use the word PAIN or rather DISCOMFORT - to set expectations preop? Clinicians have got quite strong views on both words... Does it make a difference how you word it?**

Medical language and communication are essential considerations when educating patients preoperatively about their perioperative journey and recovery to ensure patients understand what to expect and to demystify their recovery pathway. Although patients do not like the terminology pain and prefer the term discomfort, it is important to be clear about what a patient is going to experience. If pain is to be expected, then informing a patient that they will experience pain means they understand that this is a normal part of the surgical journey. It has been demonstrated that pre-op education may reduce pain scores, opioid use and duration of pain (Holman J, Orthop Trauma 2014; Yajnik M et al, Patient Educ Couns. 2019). By setting expectations around pain and anticipated recovery, patients will be less fearful when pain is experienced and will be more self-efficacious at driving their pain management and recovery goals.



**How have epidural pathways/regimes changed to allow DrEaMing in those select pathways?**

**Our trust has moved away from epidural towards intrathecal morphine + rectus sheath, are you staying we should use epidural instead of spinal more??**

**So if epidural anaesthesia is the best analgesia post-op, are we denying patients the best treatment by insisting they mobilise ASAP and therefore administering other analgesic methods to facilitate this?**

The DrEaMing research paper (Oliver et al. 2022) found that epidural use was associated with a reduced likelihood of DrEaMing within 24 hours of surgery. However, we know that severe pain is also associated with not DrEaMing, and that epidurals are associated with a lower risk of severe pain on Day 1 after surgery. An epidural may be the best analgesia in patient groups undergoing specific procedures. However, they carry the risk of tethering patients to bedspaces, reducing their ability to mobilise.

Again, teams should consider the anaesthetic analgesia technique used but not focus purely on this element. We currently do not have the evidence to prove that one analgesic technique is better than the other as this would be a difficult metric to tease out from the complexity of patient and surgical care, and organisational factors. Mobilising within 24 hours postop is a core part of supporting optimal recovery, so consider if your patients are currently achieving this and if not, why not. Key to supporting patients undergoing major surgery to DrEaM is how your institution manages wound catheters and epidurals and the processes/care pathways that are in place. Teams which are consistently supporting their patients with thoracic epidurals to mobilise within 24 hours of major surgery, have proactively collaborated to co-design new standardised pathways that are now embedded in their clinical care. These protocols enable physiotherapists and nurses to safely assess and optimise patients before mobilising, such as pain scores, postural blood pressure, motor function, and therefore feel empowered to mobilise patients before medical instruction on ward round which facilitates DrEaMing.

### Perioperative Pain Risk Score Questions

#### Would the identification of modifiable risk factors occur at surgery booking time with surgeons or at anaesthetic pre-op assessment clinic? Is there a best timing?

As outlined in the new NHS Elective Recovery plan, patients should undergo early screening, risk assessment and health optimisation at the earliest point where surgery is contemplated (such as at the point of referral from primary care, or at first review in surgical clinic). Referrals to surgery and preoperative assessment clinics should use a “fitness for surgery” approach, detailing patient’s significant medical comorbidities and medications, physical fitness (functional capacity), and opportunities for optimisation (such as smoking, obesity, nutrition and alcohol). Many of the risk factors for being a higher risk patient are synonymous with the predictors for acute severe pain and should be identified early in the perioperative pathway to enable optimisation. Areas that may not be addressed, particularly when considering longer term outcomes are significant pre-operative opioid use, pre-existing chronic pain and patient reported psychometric risks such as anxiety and pain catastrophising. These essential elements of patient-centred care around pain are likely to be highlighted during shared decision-making conversations and during the process of informed consent. It may be that these conversations need to occur earlier in your local perioperative pathway to ensure they are not missed.

#### Baseline opioid usage – in pre-analysis did you have a minimum oral morphine equivalent (OME) or were any opioid/dose included?

Within the PQIP database, opioid usage preoperatively is recorded as an all or nothing element with no OME recorded. In the new RAFT POPPY study (see below) will be addressing the issue of perioperative pain and function in detail.

#### Does PQIP document acute modified release opioid use postoperatively and is there anything in the data to suggest worse outcomes?

As explored in Dr Armstrong’s research, preoperative opioid use is part of the dataset, however the study does not currently specifically assess use of modified release opioids postoperatively. However, this was the subject of a recent systematic review published in Anaesthesia in July by Liu et al., which did identify a higher incidence of adverse events (particularly respiratory impairment) and worse pain control compared with immediate release opioid use following surgery. The faculty of pain medicine guidance on the use of opioids in the perioperative period also advises against the use of modified release opioids for acute pain, citing the short term risks but also the increased risk of inadvertent persistent post-operative opioid use (Srivastava et al BJA 2021).



Access the Predicting Severe Postoperative Pain Paper via the QR code!

### Opioid Stewardship

#### Purdue pharmaceuticals has been sued successfully in the USA for OxyContin. Why do we use oxycodone in the UK?

Immediate release oxycodone can be a useful adjunct for postoperative pain management in the context of a multimodal strategy where opioids are required – for example in patients with renal impairment or where there is intolerance to other opioids. Much of the evidence for harm is related in particular to modified release oxycodone (marketed as OxyContin), which is specifically associated with an increased risk of long-term opioid dependence (see, for example, the editorial by Levy and Mills, 2019, in the British Journal of Anaesthesia). This risk should be balanced against the evidence of poorer post-operative pain control with modified release opioids (Liu et al., 2023, Anaesthesia), as well as the increased logistical complexity of administering oxycodone compared to Oramorph 10mg/5mL, as the former is a higher schedule drug and therefore is more burdensome for nurses to administer. Beyond any intrinsic issue with oxycodone, this may impact the ability of patients to obtain prompt analgesia when required post-operatively.

#### Post-surgical discharge opioid prescription, how many days opioid is the patient sent home with and what do they do if pain persist after 7 days? What is the GP supposed to do?

Great question. The Faculty of Pain Medicine has an extensive “Opioids Aware” resource that has essential reading and support for prescribers of opioids that covers aspects of acute and longer-term prescribing for pain. As already mentioned, an essential component of patient pain management is the education they receive about postoperative pain before surgery. Expectation management around postoperative pain is essential for patients to cope and manage their pain once discharged. Patients also need clear education and guidance around the use and risk of opiates after surgery, and why they are not continued indefinitely but have a stop date.

The recommendation from the faculty of pain medicine (ratified by the royal college of general practitioners) is for 5 days strong opioids, and not to re-prescribe beyond 7 days without reassessment by a GP (Srivastava et al BJA 2021). There is good evidence that we over-prescribe strong opioids at discharge and that a much lower opioid dose or opioid free approach results in no worsening of outcomes but a lower incidence of opioid side effects after discharge (Fiore J Lancet 2022).

### The POPPY Study



Patient reported  
Outcomes, postoperative  
Pain and Pain relief in  
daY case surgery

The POPPY study is a national trainee led prospective multi-centre mixed methods observational cohort study investigating patient reported outcomes in quality of recovery, postoperative pain and pain relief in adults undergoing day case surgery in the UK. It will include all adult patients who are having day case surgery (excluding overnight or 23 hour stay) requiring an anaesthetist to be present for the case. The study will not include paediatric cases, diagnostic procedures (e.g. radiology, endoscopy), minimally invasive (e.g. day case cardiology procedures), obstetric procedures and ophthalmic procedures. The study being mixed methods will involve the collection and analysis of both quantitative and qualitative data



Find out more: <https://www.rafrainees.org/raft-4-poppy>

### Other useful Resources:

Faculty of Pain Medicine – Opiate Aware Campaign: <https://www.fpm.ac.uk/opioids-aware>

DrEaMing paper: [https://www.bjanaesthesia.org/article/S0007-0912\(22\)00146-5/fulltext](https://www.bjanaesthesia.org/article/S0007-0912(22)00146-5/fulltext)

Predicting severe pain after surgery paper: <https://associationofanaesthetists-publications.onlinelibrary.wiley.com/doi/full/10.1111/anae.15984>