



Editorial

A new national quality indicator reflecting pain relief in the PACU has been launched and initial results show the positive performance of French teams



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Postoperative pain remains largely under treated. This has been shown repeatedly by surveys performed in various countries [1,2]. In a recent meta-analysis, for example, it was shown that less than 15% of patients have their pain adequately relieved during mobilisation for the first 24 hours after surgery [3]. Unfortunately, this has not changed very much over the last 20 years [4] despite many efforts, including improvement in the quality of research, guideline production [5] and audits [6]. Audits indeed show a great variability in the use of multimodal analgesia [7] or in prescription of postoperative opioids [8]. These deficits in practice patterns and in patients' outcomes are not specific to postoperative pain management but are observed in various aspects of medical practice [9] and changes are needed.

Meissner et al. suggest several ways to improve postoperative management [10]. First, they call for development of procedure-specific protocols as it is likely that they would be more adapted and better applied [11]. It is also likely that development of Acute Pain Services would be helpful by providing advices from local experts and feedback from audit results [12]. A special emphasis should be put on enhanced recovery after surgery programmes (ERAS) as they would be likely to fail if patients remaining in pain since they would not be able to mobilise as quickly as expected. An additional tool that might have a leverage effect would be the reinforcement of training in both undergraduate and postgraduate training. In the US, a recent survey showed that many topics included in the International Association for the Study of Pain core curriculum received little or no coverage and pain education is limited, variable, and often fragmentary [13]. Patients' involvement in their own care is more and more thought to be of value, not only to highlight the concept of autonomy but also to increase their role in the decision process as end-results of care might be better with increased empowerment. For example, when patients'

engagement is increased, ERAS programmes are thought to work better and patients feel more secure and prepared for surgery [14].

Finally, an additional tool that may help improve practice is the monitoring of physicians, hospital activity and quality of care. In some countries, including France [15], this can be combined with public reporting of hospital results as a complementary incentive to improve performance [16]. Implementation science is the science that aims at promoting the uptake of evidence-based information data into clinical practice [17]. Successive steps are necessary to obtain adequate system performance and quality [18]. The model describing these cognitive and behavioural steps can be summarised by the 4 As rule. Healthcare providers must first be Aware of the guidelines; they must then Agree with the guideline's recommendations, and then they must locally Adopt the guidelines and assure guideline Adherence. An additional step is measurement and diffusion of results since it appears that providers are very often unaware of the global quality of the system in which they work and generally believe that at their individual level, they provide (almost) perfect care.

The French National Authority for Health (Haute Autorité de santé), which aims at improving quality of healthcare in France, launched a national framework of quality indicators in 2008 [19]. This framework allows data collection of quality indicators in the routine. Various medical specialties were involved initially, including anaesthesia and the first topic explored was the quality medical record [20]. The number of indicators increased in the following years, by involving more specialties and increasing the number of indicators in each medical field.

In anaesthesia, a single quality indicator was initially defined and monitored during the first eight years [20], and was dedicated to assessing the quality of the anaesthesia record (pre, intra and postoperative chart) using criteria that were defined in collaboration with the national bodies of the specialty. After progressive improvement of results obtained with this indicator, which increased from 67 to 84 points between 2008 and 2016, it was decided in 2013 to introduce an additional measurement of anaesthesia performance in France. Again, the various bodies involved met again and finally chose to address an indicator assessing pain in the PACU.

Acute pain after surgery is of paramount importance and pain should be controlled immediately after surgery, preferably in the PACU. During this lapse of time, pain is under the control of

anaesthetists and this means that an indicator assessing pain in this period would be a specialty-directed indicator. Acute pain (and also in the PACU) is usually measured using numerical data, which facilitates recording, traceability and calculations. Pain recording and treatment in the PACU is done over a short period of time (usually less than two hours), which should facilitate the analysis of the patients' files, even if not recorded in a computerised record system. As PACU is a high intensity unit, stakeholders are more numerous than in wards and can be expected to provide more precise care and patients' assessments. If pain is not well controlled in the PACU, it is difficult to expect that analgesia would be of high quality on the ward, which means that patient's recovery will be impaired and satisfaction would be limited. In other words, controlled pain in the PACU is not only an indicator of both professional and organisational performance but also a patient-reported outcome.

In short, two indicators regarding pain were developed by the French National Authority for Health in collaboration with the French Society of Anaesthesia and Intensive Care Medicine: one process indicator, which can be defined as the rate of patients for whom monitoring of pain using a pain scale was performed at least twice during their stay in the PACU (at admission or as soon as possible and at discharge) and an outcome indicator, which measures the rate of patients with no or low pain at discharge from the PACU. Two series of measures have already been implemented (data: years 2013 and 2015, collection and analysis: years 2014 and 2016). For the most recent assessment (data 2015), more than 50,000 patients' files were randomly extracted from 969 hospitals. For the process indicator, results of the last campaign have been released recently publicly [21] and for healthcare professionals and every hospital, results are available on a specific platform used for data collection [19]. Regarding the first indicator, results show that although a wide variability exists between healthcare institutions, patients undergo at least two pain assessments (recorded in the patient's file) in 73% (0%–100%) of cases (median 80%, IQR 60–80%) and for 13% of patients no pain score results could be found in the PACU chart. Regarding measurement, the two most used tools were the visual analogue scale and the numerical pain scale, each being used in nearly one third of the time. An important result is that a substantial improvement (+13 points) has been noted between the two measurement periods (2015 versus 2013).

When one considers the outcome indicator, i.e. patient's discharge with no pain or a low pain score, the audit showed a mean rate of 80% (0%–100%). The rate increased by 12 points when compared to the previous assessment period in 2014 (data 2013) (median 86%, IQR: 71–94%). In 45% of files, analgesic drug administration in the PACU was documented. This rate was reached considering that absence of measurement was equal to a high pain. When excluding records in which no pain assessment was found, the rate increased to 96% of patients leaving the PACU with low or no pain.

Improvement is still necessary and the first obvious change to obtain is to minimise the wide variability observed between institutions which contrasts with the overall positive mean results. Targeting institutions in which results for processes and outcomes are lower than the mean is necessary. In addition, results show that 4% of patients are authorised to be discharged from the PACU with pain that could be qualified as severe or unbearable. Even more surprisingly, in 13% of these files, analgesic drug administration could not be documented in the patient's chart. Efforts must also address the assessment of pain in the PACU. As a consequence, the HAS will suspend the outcome indicator and will keep on monitoring the process indicator.

Although results of the process indicator have been available for free on the internet site of *scope santé* for anyone interested, it is

obvious that releasing the information to the stakeholders wasn't done with enough strength and that the vast majority of professionals is not aware of the results related to their quality indicators, including results at the national or local level. One goal of this commentary is to promote dissemination of audit results and feedback related to this outcome indicator relevant for anaesthesia providers. It has indeed often been demonstrated that timely report of data is an important factor that can change behaviour and facilitate adherence to guidelines [22]. Another goal is to pay tribute to the professionals for the good results that have been obtained, i.e. contrary to what is often seen when audits of healthcare practice are performed, results of this nationwide audit have shown that pain management in the PACU is usually of adequate quality in French institutions.

Finally, it is interesting to report on these data because, to our knowledge, these two indicators are not published in the literature and have not been used before in any other audit system. In the review by Meissner et al. [10] dedicated to quality indicators for acute pain, assessment of PACU pain and treatment is not described. We believe that it could be useful to add this indicator to existing criteria as pain starts early after surgery. Delaying its treatment is unacceptable not only because effective treatments exist [23] but also because pain in the PACU may be the first step to severe and prolonged postoperative pain, patient dissatisfaction and chronic pain.

Disclosure of interest

The authors declare that they have no competing interest.

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