



## Editorial comment

## Postoperative pain documentation 30 years after

Michele Curatolo\*, Debra Gordon, Gregory W. Terman

Department of Anesthesiology and Pain Medicine, University of Washington, Seattle, USA



This issue of the *Scandinavian Journal of Pain* contains a review by Heikkilä and co-workers on postoperative pain documentation [1]. Their systematic search and appraisal yielded 10 out of 2209 articles which they integrated into a qualitative review. The primary finding is sobering: all 10 studies reported that the quality of postoperative pain documentation did not meet acceptable standards.

The authors are to be commended for undertaking this project and their efforts to report in detail the outcomes of the studies analyzed. However, some caveats apply when interpreting their results. Most of the studies were retrospective and included important weaknesses such as lack of specification of the sample size (in one study) and unclear duration of auditing and number of investigators (in half the studies). Five studies were conducted in the USA, four in different countries outside Europe and only one in Europe (Sweden); five of the studies were published by the same group, making the generalizability of the results questionable. As expected, there was a large heterogeneity in the auditing tools used in the different studies, making data synthesis a challenging task. Nonetheless, despite the limitations, the Heikkilä and co-workers' review gives opportunity for reflection and raises important questions.

### 1. Pain assessment mostly not documented after surgery

An initial concerning finding was that pain management was not documented at all in 35% of the records on the first postoperative day. Further, and amazingly, pain medication was also not documented in 53.7% of the records. On the second postoperative day, only 46% of patients' documentation included pain assessment, with almost a complete lack of pain assessment documentation on the third postoperative day. As stated above, it is hopeful that these data do not reflect the true average quality of documentation around the world – in different countries, health care systems and hospital settings. At the least however, they do suggest that inadequate documentation is common.

### 2. Does pain documentation lead to better pain management?

Admittedly, there is no assurance that excellent pain documentation translates into excellent pain care. Indeed, data from the international acute postoperative pain registry – “Pain-Out” – found no association between complete pain assessments (according to defined ward policies) and improvements in patient treatment outcomes [2]. The reason for this disconnect is not certain. One could argue that many pain assessments lack the necessary elements or precision to help guide clinical decision making. For example, do documented pain intensity ratings represent pain at rest or pain with movement and are the side effects of pain treatment and the impact on physical function from pain and pain treatment also recorded? In addition, staff may simply fail to review documentation when updating pain treatment plans or view the documentation as a nuisance rather than a help and document inconsistent, incomplete or wrong information. As such merely documenting pain-related variables are not a guarantee for improved outcomes. A noteworthy cautionary tale from the U.S. experience reinforces this fact. One of the most common elements of documentation assessed in pain assessment is pain intensity.

### 3. Pain intensity as a “fifth vital sign”: unintended adverse effects?

During the last decade a coordinated attempt to improve assessment and documentation of pain was implemented by incorporating pain intensity documentation into the Joint Commission's national hospital accreditation standards. Campaigns by the American Pain Society and others prompted making pain a “fifth vital sign”, as a means to encourage doctors and nurses to listen to their patients and assess their pain. Ironically, these recommendations are now thought to have contributed to the opioid epidemic now sweeping the United States [3]. The standards require accredited health care facilities to recognize the right of patients to appropriate assessment and management of pain; assess pain in all patients; record the assessment in a way that facilitates regular reassessment and follow-up; educate patients, families, and providers; establish policies that support appropriate prescription or ordering of pain medicines; include patient needs for symptom control in discharge planning; and collect data to monitor the appropriateness and effectiveness of pain management. However, many clinicians

DOI of refers to article: <http://dx.doi.org/10.1016/j.sjpain.2015.12.010>.

\* Corresponding author. Tel.: +1 206 5432568.

E-mail address: [curatolo@uw.edu](mailto:curatolo@uw.edu) (M. Curatolo).

jumped to the conclusion that pain intensity had to literally be documented each time vital signs were recorded and in effect chased pain ratings with escalating opioid doses. It has to be stressed that the information gained by documenting pain intensity has to be used in the context of the complexity of pain management, keeping in mind not just pain related goals but those of goals of functional recovery and safety.

#### 4. Benefits of better pain documentation

Despite the aforementioned limitations of pain documentation leading directly to improved pain care, no one would argue against the importance of pain documentation for treating patients and Heikkilä and co-workers thoroughly discuss the presumed advantages to an extent that leaves us little to add [1]. Rather, in conclusion we would like to briefly discuss some of the barriers that account for inadequate documentation, with the help of its historical context.

#### 5. History of acute pain services and perioperative medicine

In 1988, Ready et al. published the first experience with an acute pain service, implemented at the University of Washington [4]. The paper prompted an editorial comment by Dr. Saidman, editor-in-chief of the journal, emphasizing the beginning of a new era in the role of anesthesiologists in perioperative care [5]. The model proposed by Ready et al. was followed by many others. The initial Australian experience in acute pain services (in a teaching hospital) was published in 1990 [6]. In Europe, acute pain services were implemented at the University Hospitals of Oslo and Bern in 1990–1992 under the leadership of the editor-in-chief of this journal [7] and these services later served as models for recommendations on how to implement and organize acute pain services [8].

In short, the notion that acute pain services can only function properly with continuous nurse education and documentation protocols is as old as the existence of acute pain services. The necessity of continuous nurse education and the creation of documentation protocols was emphasized in all early descriptions of initiating acute pain services by pioneers in the field [4,6,7,9]. Why is documentation still an issue after almost 30 years history of the acute pain service?

Apparently, the perspective of a fundamental role of anesthesiologists outside the operating room that was applauded by Dr. Saidman [5] has not always been followed by taking overall responsibilities. If anesthesiologists are responsible, as they are, for acute pain services, their role must go beyond the clinical management of postoperative pain. As pointed out by Dr. Saidman in his editorial, the involvement of anesthesiologists in postoperative pain management was not new: the novelty introduced by Ready et al. was instead the creation of a structured service that made it possible to translate findings of laboratory and clinical research efficiently into safe and effective clinical practice [5].

#### 6. Importance of educating nurses and all stakeholders in effective and safe perioperative care

Many of papers reviewed by Heikkilä and co-workers recommend nursing education as a means to improve documentation. However, education rarely changes practice and is often considered the weakest form of quality improvement intervention. In our own attempts to improve nursing documentation, repetitive

educational efforts, changes in daily bedside flowsheets, direct and extensive leadership involvement in the form of continuous bedside coaching, combined with timely and persistent audit and feedback and clear accountability and alignment with goals, has been necessary to produce substantial improvements – even imperfect as they are. Communication and follow-up with all stakeholders, including nursing managers, nursing directors, bedside nurses, and other leaders within the organization as well as external stakeholders is essential.

The acute pain service clearly has a responsibility of nurse education and the creation of documentation protocols. It can be argued that acute pain services are responsible only for a subgroup of postoperative patients – those outside the normal practice and experience of the surgical team. Nonetheless, in this case the exceptions do indeed help prove the rule – as education around pain assessment, management and documentation of the most difficult patients can certainly lead to anesthesiologists having a substantial impact on the quality of postoperative care more generally.

#### 7. Documentation of pain and function necessary for improved postoperative outcome

A final obvious barrier to proper documentation is the limitation of resources. Inadequate staffing and sheer quantity of nursing duties can lead to suboptimal documentation. Regardless, it is important to point out that documentation protocols, if implemented correctly, are potential time saving instruments. Lack of documentation can itself waste time and generate unnecessary costs. For example, deficits in appropriate documentation can lead to time-consuming searches for causes of problems and misguided interactions with patients, family members and other providers involved in patient care.

One of the noticeable findings of Heikkilä and co-workers is that departments that endorsed quality improvement programme, compulsory education and annual monitoring of documentation provided better documentation than other departments of the same hospital [1]. Whether adopting these programmes leads to increased or decreased overall costs remains unknown. Similarly, it is not yet certain that these practices always improve patient care. Nonetheless, it is safe to say that poor documentation practice is incompatible with safe and effective best practices in acute pain management.

#### References

- [1] Heikkilä K, Peltonen LM, Salanterä S. Postoperative pain documentation in a hospital setting: a topical review. *Scand J Pain* 2016;11:77–89.
- [2] Zaslansky R, Rothaug J, Chapman CR, Backstrom R, Brill S, Fletcher D, Fodor L, Gordon DB, Komann M, Konrad C, Leykin Y, Pogatski-Zahn E, Puig MM, Rawal N, Ullrich K, Volk T, Meissner W. Pain out: the making of an international acute pain registry. *Eur J Pain* 2015;19:490–502.
- [3] Campbell JN. The fifth vital sign revisited. *Pain* 2016;157:3–4.
- [4] Ready LB, Oden R, Chadwick HS, Benedetti C, Rooke GA, Caplan R, Wild LM. Development of an anesthesiology-based postoperative pain management service. *Anesthesiology* 1988;68:100–6.
- [5] Saidman LJ. The anesthesiologist outside the operating room: a new and exciting opportunity. *Anesthesiology* 1988;68:1–2.
- [6] Macintyre PE, Runciman WB, Webb RK. An acute pain service in an Australian teaching hospital: the first year. *Med J Aust* 1990;153:417–21.
- [7] Breivik H, Höglström H, Curatolo M, Weiss S, Zbinden A, Thomson D. Developing a hospital-wide postoperative pain service. *Acta Anaesthesiol Scand* 1993;37:223.
- [8] Breivik H, Curatolo M, Niemi G, Haugtomt H, Kvarstein G, Romundstad L, Stubhaug A. How to implement an acute postoperative pain service: an update. In: Breivik H, Shipley M, editors. *Pain – best practice and research compendium*. Oxford: Elsevier; 2007. p. 255–70.
- [9] Rawal N, Berggren L. Organization of acute pain services: a low-cost model. *Pain* 1994;57:117–23.