

Letter to the Editor

Is Minister De Block blocking our blocks?

A regional anesthesia perspective on the new bill for a comprehensive and prospective compensation for integral patient care in Belgium

B. VERSYCK (* **), P. VAN HOUWE (***), M. VAN DE VELDE (****), S. COPPENS (****), M. BREEBAART (*****)

Dear Editor,

On the 28th of April 2015 dr. De Block, Minister of Social Affairs and Health, presented her plan to reform the Belgian hospitals. This plan consists of multiple initiatives including a comprehensive change of hospital funding. The proposed funding reform will split the patient population receiving hospital care into three clusters: low-, medium- and high-variable care. The basic principle for the first cluster, low-variable care, is that the hospital receives a prospectively determined budget per APR-DRG (All Patient Refined Diagnosis Related Groups, a classification system) for the integral medical patient care during the entire hospitalization for all medical professionals combined, irrespective of the actual medical procedures and services provided (1). This system would replace the current fee-for-service mechanism. In the proposed draft legislation, the low-variable care will encompass 32 APR-DRGs, which represents about 25% of the hospital activities and 12% of all medical honoraria in Belgium (2). However, a simple ministerial decision can increase and expand the number of APR-DRG's at any time.

We, the authors, do not contend or oppose the introduction of mechanisms that aim to reduce variability in healthcare fees or initiatives to manage the overall healthcare costs. However, the current draft bill has too many drawbacks and we fully support the comments and recommendations as presented by the Belgian Professional Association of Specialists in Anesthesia and Resuscitation (BSAR-VBS/APSAR-GBS) and the Society for Anesthesia and Resuscitation of Belgium (BVAR-SARB) (3). In this article, we provide a perspective on the proposed legislation from a regional anesthesia point of view, which can complement the views from the BSAR-VBS/APSAR-GBS and BVAR-SARB.

A focus on budget rather than on care: a decrease in regional anesthesia as part of multimodal analgesia?

Contrary to other countries, the proposed system for Belgian hospitals starts from a budget rather than a treatment plan (4). Indeed, the Belgian minister gives a budget for each APR-DRG based on the median treatment cost in the last term. In the short term such budget-orientated-system rewards hospitals that are cost effective and/or efficient as they get a cash bonus. However, for the next term the overall median cost will be lower and hence all hospitals will receive less funding, potentially resulting in an unwanted rat race.

We strongly challenge the budget calculation due to two main reasons. First, the report of the Belgian Healthcare Care Knowledge Centre (KCE) indicates that the cost calculation is not based on a representative sample of real costs, as there is no national collection of patient-level cost data. Hence the validity of the prospective budget is questionable at least. Secondly, the budget calculations are based on data up to 2012, which could result in budgets based on outdated practices (4). For example, a periodic review of obstetric anesthesia in Belgium revealed a number of regional anesthesia changes in practice (5).

Barbara VERSYCK, M.D.; Patrick VAN HOUWE, M.D.; Marc VAN DE VELDE, M.D. Ph.D. EDRA; Steve COPPENS, M.D.; Margaretha BREEBAART, M.D. Ph.D.

(*) Faculty of Medicine and Health Sciences, University of Antwerp, Antwerp, Belgium

(**) Department of Anesthesiology, Radboud University Medical Center, Nijmegen, The Netherlands

(***) Department of Anesthesiology, GZA Sint-Augustinus, Wilrijk, Belgium

(****) Department of Anesthesiology, University Hospitals Leuven, Leuven, Belgium

(*****) Department of Anesthesiology, University Hospital Antwerp, Edegem, Belgium

We believe that in the profession of anesthesia it is hard to cut costs and it is dangerous to start a rat race, as perioperative safety and patient well-being is the core of our job. Regional anesthesia that complements general anesthesia or regional analgesia (e.g., epidural for vaginal birth) is in that sense not essential in all cases. Therefore, it is plausible that in a climate of cost cutting, regional anesthesia as a part of multimodal analgesia will be omitted to save budget for the bare necessity. This statement is strengthened by the fact that while there is a clear cost focus, the policy does not measure or enforce patient comfort or pain levels in any way (¹).

A focus on short-term rather than long-term benefit: an underestimation of the investments in regional anesthesia?

As stated earlier, the minister orientates her policy on a budget cap for 32 APR-DRGs that should encompass low-variable care. The policy uses the hospitalization as the time horizon to determine budget. Such orientation with scarce resources can result in perverse decisions as the policy forces practitioners to make short-term trade-offs rather than focusing on long-term benefits.

We argue that the primary choice for anesthesia and analgesia should not be the most cost efficient hospitalization. For example, a comparative cost analysis of general anesthesia versus brachial plexus block¹ for hand surgery showed a cost disadvantage of the block during the hospitalization (6). This conclusion is supported by another cohort study and underlines that especially in short procedures, a brachial plexus block is more expensive than general anesthesia in orthopedic and trauma patients (7). While general anesthesia might be the cheaper option for the overall hospitalization, patients receiving the brachial plexus block experience significant less pain (85% vs 43%) and require significant less antiemetic medication (62% vs 12%) (6). Furthermore, the regional anesthesia technique cannot only improve patient outcomes in terms of acute postoperative pain but also in terms of persistent postsurgical pain (8) and hence could reduce the total cost over longer periods of time. Therefore, it is not surprising that already in 1973, 68% of anesthesiologists preferred regional

(¹) The use of the brachial plexus block serves solely as an example as the bill does not (yet) include surgery of the upper extremity. This block is described as it is one of the best-studied blocks from a cost perspective, which is the primary scope of the bill.

anesthesia to general anesthesia for procedures on themselves or on family members (9). We can draw similar conclusions for the wider scope of the profession of anesthesiologists such as postsurgical patient-controlled analgesia algorithms using intravenous, epidural or peripheral nerve approach compared to on-demand postoperative nurse-administered intramuscular opiate-injection (10). Such shifts to opioids can also have wide societal impact as illustrated by the ongoing US opioid epidemic (11). The big question now is what President Trump and his administration choose to do next. The scale of the epidemic is not in doubt according to the US Center for Disease Control and Prevention (CDC). Nonetheless, such perioperative choices and benefit captures might not be possible due to the shortsighted cost-orientation of this proposed bill.

A focus on general care rather than specialism: jack-of-all-trades but no master of regional anesthesia?

The proposed legislation has no mechanism to ensure that specialists such as anesthesiologists maintain ownership of their (sub-)specialism. In light of this letter, this implies that any medical doctor can provide regional anesthesia after poor training or even without adequate qualification.

Regional anesthesia, in particular ultrasound guided regional anesthesia, is a complex skill that requires formal training followed by on-the-job practice (12). We can only applaud practitioners learning and adopting regional anesthesia techniques as adoption and practice is not incentivized by financial gain or budget ownership in the current fee-for-service mechanism. In fact, as we outlined above, it can be a financial disadvantage though being a sign of high professional standards. However, with the proposed legislation it is not unlikely that regional anesthesia might be performed by other specialisms solely to not involve a specialist (e.g., anesthesiologist) due to financial constraints.

Given the reflections presented above, we can only endorse the opposition by the BSAR-VBS/APSAR-GBS and BVAR-SARB to the hospital funding reform policy. Furthermore, it is plausible to state that the specialism of regional anesthesia and hence its practitioners, will be cannon fodder in the reform due to its “not essential for the treatment”, “potentially more expensive in short term” and “anyone can perform it” status. We are confident that any policy not addressing these issues will result in adverse side effects in the short (e.g., increase in PONV and complications) and the

long term (e.g., presence of persistent pain) for our patients.

- Barbara Versyck is PhD Candidate in the field of regional anesthesia
- Patrick Van Houwe is medical head of the anesthesiology department at GZA Sint-Augustinus hospital
- Marc Van de Velde is medical head of anesthesiology department at UZ Leuven and treasurer of the Belgian Association of Regional Anesthesia
- Steve Coppens is director of regional anaesthesia at UZ Leuven and board member of the Belgian Association of Regional Anesthesia
- Barbara Breebaart is vice-president of the Belgian Association of Regional Anesthesia

Bibliography

- 1 Maggie De Block. *Hervorming van de ziekenhuisfinanciering - Wet betreffende de gebundelde financiering van de ziekenhuisactiviteiten*. vol. 2017. n.d.
- 2 *Forfaitaire honoraria voor laagvariabele zorg, een ILLU-SOIRE RATIONALISERING?* ARTS-SPEC., 2017:10.
- 3 Belgian Professional Association of Specialists in Anesthesia and Resuscitation, Society for Anesthesia and Resuscitation of Belgium. Letter to the Minister of Social Affairs and Health 2017.
- 4 Fabienne van Sloten, Rob van den Oever, CM Directeur Gezondheidsbeleid CM Stafmedewerker R&D. *De metamorfose van de ziekenhuissector*, 2016.
- 5 Versyck B, Van Houwe P. *Survey of obstetric anesthesia practices in Flanders – 10 year update*. ACTA ANAESTHESIOL. BELG., **67**, 101-11, 2016.
- 6 Chan VW, Peng PW, Kaszas Z, Middleton WJ, Muni R, Anastakis DG, et al. *A comparative study of general anesthesia, intravenous regional anesthesia, and axillary block for outpatient hand surgery: clinical outcome and cost analysis*. ANESTH ANALG., **93**, 1181-4, 2001.
- 7 Schuster M, Gottschalk A, Berger J, Standl T. *A retrospective comparison of costs for regional and general anesthesia techniques*. ANESTH ANALG., **100**, 786-94, 2005.
- 8 Wu CL, Raja SN. *Treatment of acute postoperative pain*. THE LANCET, **377**, 2215-25, 2011.
- 9 Katz J. *A survey of anesthetic choice among anesthesiologists*. ANESTH ANALG., **52**, 373-5, 1973.
- 10 Fitzgibbon DR, Ready BL, Ching JM. *Intramuscular opioid injections: a step in the wrong direction*. ANESTHESIOL J AM SOC ANESTHESIOL., 91:891-891, 1999
- 11 Godlee F. *What we must learn from the US opioid epidemic*. BMJ, 359, j4828. doi:10.1136/bmj.j4828, 2017.
- 12 Herring AA. *Bringing Ultrasound-guided Regional Anesthesia to Emergency Medicine*. AEM EDUC TRAIN., **1**, 165-8, 2017.