Feedback and Benchmarking Improves Management of Post-operative Pain: QUIPS, a Nationwide Project

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Introduction:

Surveys, worldwide, show that the quality of acute pain management is not satisfactory despite availability of guidelines and advanced pain management techniques. Methodologies for Quality Improvement (QI) including feedback and benchmarking provide a practical approach to stimulate improvement in many fields of medicine. This was the premise for establishing “Quality Improvement in Postoperative Pain” (QUIPS), a German national feedback and benchmarking project (www.quips-projekt.de). It collects data on structure; process; and outcome quality of postoperative pain treatment and provides web-based online feedback to participating hospitals.

Methods:

Data on treatment and outcomes of pain is collected from adult patients on the first postoperative day. Outcome items are obtained in a standardized procedure using a modified Brief Pain Inventory.

A “Best Clinical Practice” module allows “Learning from the Best” by presenting pain management concepts from sites with outstanding outcomes.

Results:

Feasibility and effectiveness in improving outcome quality were demonstrated in a pilot. Pain intensity decreased in 4 of 6 hospitals (see Fig. 5).

In 2006, the German Societies of Anaesthesia and Surgery chose the project as a nationwide QI initiative. To date 104 hospitals contributed data from >96,000 patients. A fee of 1000 Euro/year/hospital finances the project. Intensive care and paediatric surgery modules are being developed. Means of all parameters show statistically significant differences between hospitals with “Worst Pain” differing most (see Fig. 6).

Maximum pain intensity since surgery was rated as mild (NRS 0-3) by 32.7%, as moderate (NRS 4-6) or severe (NRS > 6) by 37.4% and 29.9% of patients from 2007 to May 2009 (N=37703), respectively. Also, surgical disciplines show significant differences when compared with regard to pain intensity (see Fig. 7).

Discussion:

QUIPS, a benchmark project that feeds back patient-reported outcomes on postoperative pain management to hospitals, is successfully implemented and disseminated in Germany. The feedback motivates hospitals to participate and collect high-quality data, despite the need to pay a fee and that participation is voluntary. Most parameters seem to have adequate sensitivity to detect differences between hospitals. The large registry allows analysis of pain management in real-life situations and identification of best practices. This is, thus, a valuable addition to traditional EBM- and guideline-focused QI initiatives. For more information see also www.pain-out.eu.

References:


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PAIN-OUT has collected over 3000 cases in 9 European countries so far (France; Germany; Israel; Italy; Romania; Spain; Sweden; Switzerland; UK). Feedback is already available on the project’s benchmarking website (see Fig. 9).

Extensive validation of the outcome questionnaire and its translations into national languages is currently ongoing.