

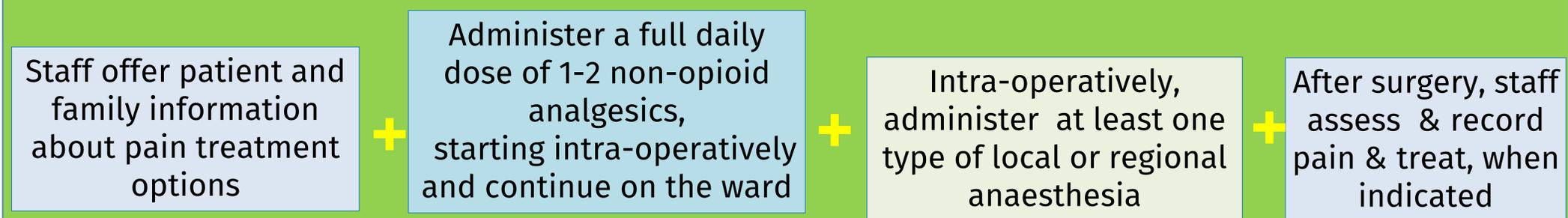
THE PERIOPERATIVE PAIN MANAGEMENT BUNDLE IS FEASIBLE: RESULTS FROM A MULTI-CENTER CROSS-SECTIONAL STUDY FROM THE PAIN OUT REGISTRY



Dusica Stamenkovic,¹ Philipp Baumbach,² Dragana Radovanovic,¹ Milos Novovic,¹ Nebojsa Ladjevic,¹ Emilija Dubljanin Raspopovic,¹ Ivan Palibrk,¹ Dragana Unic-Stojanovic,¹ Aleksandra Jukic,¹ Radmilo Jankovic,¹ Suzana Bojic,¹ Jasna Gacic,¹ Ulrike Stamer,³ Winfried Meissner,² Ruth Zaslansky²

¹ PAIN OUT network in Serbia | ² Dept Anaesth & Intensive Care, Jena Uni Hospital, Germany | ³ Dept Anaesth & Pain Medicine, Bern Uni Hospital Switzerland

The PERIOPERATIVE PAIN MANAGEMENT BUNDLE was associated with significantly less pain after surgery



What is a bundle? 1

- A small set of evidence-based interventions, for a defined patient population and care setting.
- When implemented together, outcomes will be significantly better than when they are implemented individually or not at all.
- Bundle elements are presented so they are descriptive rather than prescriptive, allowing for local customization and tailoring to patient's needs.
- This is not a 'one size fits all' protocol!

Aims of study?

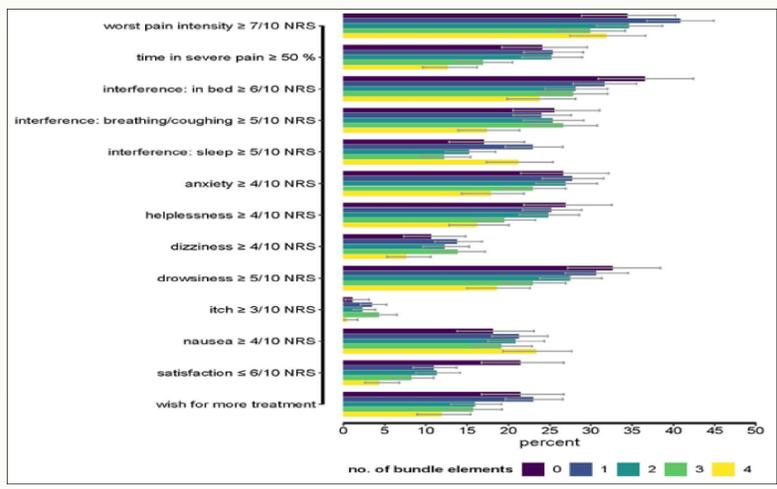
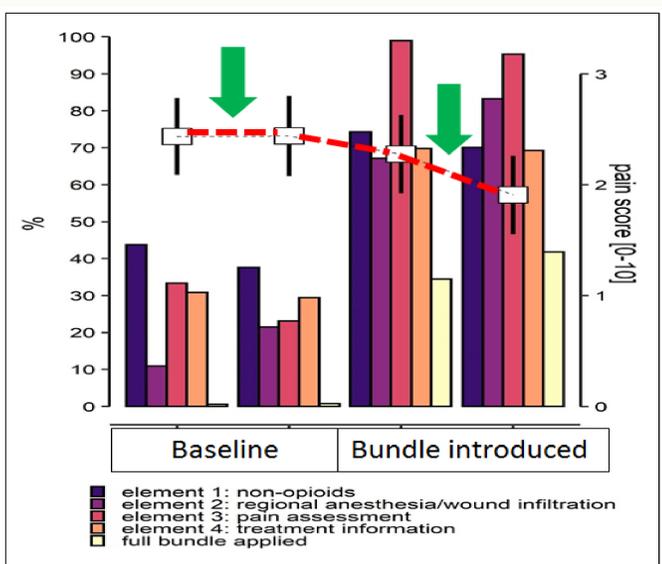
- A 2-year, pre- post - quality improvement project in 10 hospitals in Serbia
- Would staff be able to implement the bundle in 5 surgical (orthopedic/general/cardiac/OGBYN/urology) disciplines?
- Would there be an association between treatment with the bundle and better patient-reported outcomes?

Methods

- PAIN OUT, an international perioperative pain registry provided tools for collecting data about pain-related patient reported outcomes and management.
- Regression models analysed the association between bundle implementation and a multidimensional Pain Composite Score, assessing pain intensity, interference and side-effects.

Results

The project was carried out between Jan 2018-Dec 2019. Finding from 2,354 patients, from 13 surgical wards, were included in the analysis..



- Implementing the bundle (vs. not) was associated with a significant reduction of 0.3 (95%CI: 0.2 – 0.4) standard deviations in the **Pain Composite Score** (p < 0.001, a small-to-medium effect size). See the line graph, above.
- All bundle elements increased from baseline vs after the bundle was introduced. The percent of patients receiving the full bundle increased significantly (p<0.001) from 1.5%, (n=19/1,285) at baseline to 37.5% (n=401/1,069) . See bar graphs, above.

- Patients receiving all bundle elements (yellow bars) consistently reported better outcomes in individual patient reported outcomes compared to patients receiving fewer bundle elements.
- Surgical discipline had no effect on the pain composite score in this cohort.

Reference [1] Resar et al. Using Care Bundles to Improve Health Care Quality. IHI Innovation Series white paper. [online serial] 2012;

Conclusions

The bundle was accepted by anaesthetists, surgeons and nurses. They found that it was simple to implement, even in busy wards, its components easy to remember and it could be adapted to the budgets and resources of all the participating hospitals.