## Patient Blood Management: transfusion appropriateness in the post-operative period

Di Bartolomeo E, Merolle L, Marraccini C, Canovi L, Berni P, Guberti M, Mazzi A, Bonini A, Romano N, Magnani A, Pertinhez TA, Baricchi R. *Blood Transfus*. 2019 Nov;17(6):459-464.

## BACKGROUND

Within the context of Patient Blood Management (PBM) policy for the peri-operative period, the transfusion medicine unit of our institution adopted a series of strategies to support and enhance red blood cell (RBC) transfusion best practices. This study aimed to evaluate the appropriateness of RBC transfusion therapy in the post-operative period, before and after starting a multifactorial PBM policy.

### MATERIALS AND METHODS

A 2-phase observational study was conducted on patients who underwent major surgery. The study was designed as follows: 3 months of preliminary audit, followed by multifactorial PBM policy, and a final audit. The policy comprised seminars, teaching lessons, periodic consultations and the insertion of Points of Care. RBC transfusion appropriateness was evaluated in both audits.

# RESULTS

The preliminary audit, performed on 168 patients, showed that 37.7% of the patients were appropriately transfused. The final audit, performed on 205 patients, indicated a significant increase of RBC transfusion appropriateness to 65.4%.

### DISCUSSION

In our experience, our multifactorial PBM policy improved the RBC transfusion appropriateness in the post-operative period. We believe that our multifactorial PBM policy, which comprises the insertion of Points of Care, supported the healthcare workers in the transfusion decision-making process. This enhancement of transfusion appropriateness implies clinical and managerial advantages, such as reduced transfusion-related risks, optimisation of health care resources, and reduction in costs.