

The importance of implementing a Transfusion Adjustment Programme in hospitals at the height of the COVID-19 epidemic

- ***The MAPBM (Maturity Assessment Model for Patient Blood Management) project makes it easier for hospitals to adjust transfusions and is the key to properly managing hospital blood reserves at a time when donations are falling sharply as a result of measures to prevent the spread of COVID-19***
- ***In five years, this project, promoted by the Hospital del Mar Medical Research Institute, has already reached around sixty hospitals in Spain***
- ***This success demonstrates the feasibility of implementing the model and making it a tool for improving both patient safety and outcomes, according to a study just published in the journal Blood Transfusion***
- ***Hospital del Mar stands out in this field and has been awarded at the annual meeting of the hospitals participating in the project as the center without cardiac surgery with the best results***

Barcelona, November 27th 2020. - The **MAPBM** (*Maturity Assessment Model for Patient Blood Management*) **project** is a useful tool that helps hospitals evaluate and develop their programmes for managing the blood of each patient (better known as PBM or patient blood management). This has been highlighted in an article published in the journal *Blood Transfusion*, led by doctors from Hospital del Mar and researchers from the Hospital del Mar Medical Research Institute (IMIM).

PBM programmes are a set of therapeutic strategies, based on scientific evidence, aimed at improving the patient's condition prior to the surgical procedure, with particular focus on anaemia, minimising bleeding during surgery, and preventing or avoiding blood over-transfusion. They also have a direct impact by reducing the use of hospital blood reserves.

The application of Patient Blood Management models has been recommended by the World Health Organisation since 2010 and by the European Union since 2017, and is especially important at the current time, as the COVID-19 pandemic has led to a drastic reduction in donations and a decrease in reserves. Indeed, leading international experts in this field have appealed for models of this kind in an article published in the journal *Anesthesia & Analgesia*. In Spain, this sentiment has been echoed in the *Journal of Healthcare Quality Research*, with regard to health management and policy proposals that promote the development of PBM.

Nearly 200,000 episodes analysed

To facilitate the monitoring and internal evaluation of PBM programmes in centres, since 2015, the MAPBM evaluation model has been providing them with scores that allow them to chart their performance in this field. As pointed out by Dr. Elvira Bisbe, a consultant in the Anaesthesiology Service at Hospital del Mar, a researcher in the Perioperative Medicine and Pain Research Group at the Hospital del Mar Medical Research Institute (IMIM), and the main author of the article, "***This allows them to assess how well they are doing and provides them with comparative data on each procedure so that they can identify where improvements need to be made, and link this to clinical results such as mortality and patient stays in hospital.***"

So far, 59 hospitals in Spain have joined the project, with other countries showing an interest in the results obtained. Nearly 200,000 episodes of 70 measures based on the structure of the centres, 14 key PBM performance indicators (KPIs), and another 7 for results have been analysed. These are applied to 6 common surgical procedures, total knee arthroplasty, total hip arthroplasty, colon and rectal cancer surgery, heart valve surgery, hip fracture, and gastrointestinal bleeding. This allows the recommendations for the management of patient blood

to be transferred to a series of key indicators that facilitate the implementation of improvements in hospitals.

Furthermore, the current pandemic situation caused by COVID-19 has created an environment where applying these practices has become even more relevant. **"PBM and the MAPBM project are essential in COVID-19 times, due to the decreased number of donations, which makes the proper use of blood in hospitals crucial"**, explains Dr. Bisbe, who stresses that this involves a scarce and incredibly valuable resource with a limited storage life.

In fact, the Hospital del Mar has been awarded in the annual meeting of the participating hospitals in the *Maturity Assessment Model in Patient Blood Management (MAPBM)* project, held this November 27 virtually, in the category of Hospital without Cardiac Surgery with the best results in the MAPBM index, organized by the MAPBM Research Group and Vifor Pharma.

Reference article

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Other materials

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Further information

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