

THE IMPACT OF A SURGICAL GEOLOCATION SYSTEM ON HUMANIZATION AND HEALTHCARE MANAGEMENT

Julio César Moreno Alfonso¹, **Esther Comajuncosas Pérez**¹, Ada Molina Caballero¹, Belén Montoro Sánchez², Alberto Pérez Martínez¹

¹Hospital Universitario de Navarra. Department of Pediatric Surgery. Pamplona; Spain

²Hospital Universitario de Navarra. Children's operating room and outpatient surgery. Pamplona; Spain

OBJECTIVE: Describe a **geolocation system** in the operating room and analyze its impact on humanization and healthcare management.

METHODS



1. Wearing the **wristband** upon arrival at **admission**

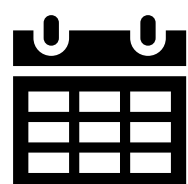


2. **Bluetooth** connection to a series of beacons (Angle of Arrival) distributed at different points along the surgical pathway.

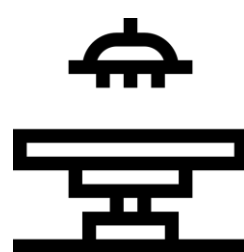
- ❖ **Location** updates.
- ❖ **Real-time information** on screens for healthcare **staff and family** members (personalized QR code).

- **Entrance** to the operating room
- **Start** of the procedure
- **End** of the procedure
- Exit to the **recovery unit**

RESULTS



**NUMBER OF
PERFORMED
SURGERIES**



**AVERAGE
OPERATING ROOM
TURNOVER**



**TIME BETWEEN
PROCEDURES AND
OPERATING ROOM
OCCUPANCY**



- ❖ Identification of weaknesses in the surgical process.
- ❖ Reduction of anxiety among family members regarding the surgery.

CONCLUSIONS

- It is a tool that could **reduce parental anxiety** by providing up-to-date, real-time information on the status of the procedure, as well as **improving operating room performance and utilization** by identifying potential areas for improvement during data analysis.