

FROM GLOBAL AUDIT TO TARGET SAFETY : RATIONALISING THE USE OF BLUE DYES IN A REGIONAL HOSPITAL CENTER

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WHY WAS IT DONE ?

Medical dyes are widely used in **surgery** and **diagnostics**. They were often grouped as **"the blues"**, without distinction between:

- Specific **indications**
- Regulatory **status**
- **Authorised** uses



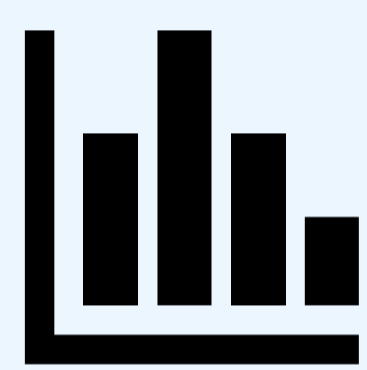
This confusion, shared by **prescribers** and **pharmacists**, led to:

- **Off-label** use
- Avoidable **costs**
- **Risk** to patient safety

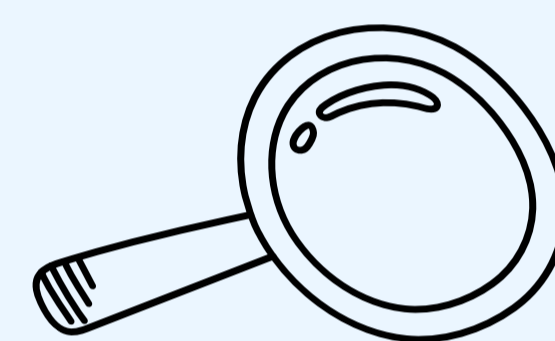


To evaluate **compliance** and the **pharmaco-economic** impact of **dye use**, identify **off-label** practices, harmonise usage, optimise formulary management, and reinforce **patient safety**.

HOW WAS IT DONE ?



PHARMA® data (2024)
↓
Cost & volume analysis



Compliance mapping by indication & ward
↓
Identification of high-risk dye



→ Development of 8 good-use
→ Stock and allocation review
→ Pharmacist training

WHAT WAS ACHIEVED ?

2024 baseline data:

36 hospital wards → 8 200 units consumed
⇒ **86 000 € annual dye expenditure**

Blue dyes: 1 300 units ⇒ 46 000 €
53% of annual dye budget

Methylene blue antidote: 70 units ⇒ 16 000 €
✗ 70% off-label use
(Authorised exclusively for methemoglobinaemia)



Post-intervention impact:

✓ **70% → 0% Off-label methylene blue use**

✓ **100%** pharmacist-validated dispensations
⇒ 67 validated cases since March 2025

⚡ **25% reduction** in annual dye budget

✓ Audit **confirmed appropriate** use of 5 dyes
Patent blue remains under review.

WHAT IS NEXT ?

- **Continued** monitoring of dye compliance
- Extension of governance model to **broad-spectrum antibiotics**

This structured pharmaceutical governance approach is now **embedded in practice**.



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