

Comparative analysis of anaesthesia report and medication reconciliation in an orthopaedic surgery department



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Introduction

For seven years, the orthopedic surgery department (OSD) has benefited from the **Best Possible Medication History** (BPMH). The BPMH aim was to assist surgeons to maintain good prescribing practices. However, they still preferentially used **anesthesia report** (AR) to prescribe.

Purpose

The main purpose of this study was to identify **unintended medication discrepancies** (UMD) between BPMH and AR regarding their type, number and clinical impact.

Method Comparaison **BPMH** AR It is a prospective study of 2 months including all hospitalized patients An anesthetist in OSD and having a BPMH with at least assessed their Low All discrepancies were one treatment line. clinical impact classified as Moderate undocumented (UMD) Serious

Results

 \square Population : patients = 98

	Mean ± sd
Age (years)	$72,1 \pm 14,3$
Number of treatment line	$6,7 \pm 3,5$
Length of stay (days)	$9,7 \pm 6,3$
Admission type (elective/emergency)	50/48

32% of the BPMH were available within 24 hours following patient admission-and **69**% within 48 hours.

□Classification and clinical impact of UMD

AR: 533 treatment lines BPMH: 658 treatment lines 260 UMD for **72** patients (**73,5%**)
UMD mean = 2,7/patient

	Low	Moderate	Serious
Omissions	102	38	12
Posology differences	16	17	3
Missed Posology	17	6	6
Addition	15	7	_
Others	7	10	4
Total	157 (60%)	78 (30%)	25 (10%)

The mainly concerned therapeutic classes were:

nervous system (35%),

✓ alimentary tract and metabolism (27%)

✓ cardiovascular system (18%)

Conclusion

This study highlights the fact medication reconciliation at admission has an **important clinical impact** in a surgery unit. The AR remains mainly used by the surgeons to establish prescriptions because of its generally **earlier availability**. However, our results suggest the need to proceed to the medication reconciliation process reengineering **to improve the collaboration between pharmacist and anesthetist**.