COM22-59855 – Determination of ions in paediatric NPI bags using a microwave plasma atomic emission spectrometer: not so easy for the pharmacist!

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INTRODUCTION

Routine determination of Na and K ions in NPI bags using **a microwave plasma atomic emission spectrometer, the MP AES 4210**, for the past 3 years.

Objective: Implementation of a **questionnaire** to be completed by the pharmacist to monitor use, identify and quantify the nature of the problems encountered by users

MATERIAL & METHOD

Distribution of a **questionnaire** to be completed daily by the pharmacist or intern for 25 days over a period of 5 weeks.

It lists:

- ☑ *the number of samples to be analysed*
- ☑ *the number of samples rewrapped*
- ☑ *the number of bags redone*
- ☑ *whether the help of another person was necessary*

DISCUSSION - CONCLUSION

Reliable results but complex use of the MP AES

→ **Additional costs** for the service and **disorganisation** of the team during **breakdowns**

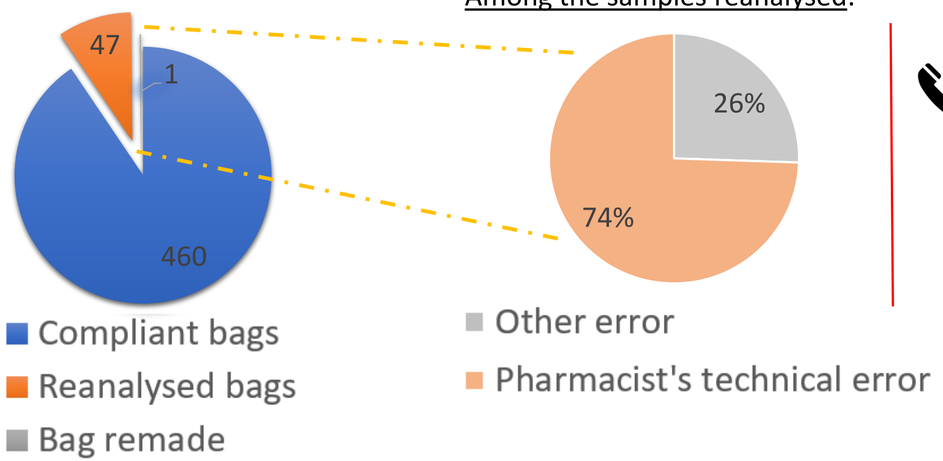
→ Need to write **quality documentation resources**: autonomy and serenity of the user for the management of problems

→ With 3 years' hindsight, identification and resolution of numerous problems → project to **create a decision tree**

RESULTS

Four pharmacists and one newly trained intern completed the questionnaire.

Bag compliance (n = 508):



Help requested from the referring pharmacist
Internal: 6 calls
Pharmacist: 1 call

Number of breakdowns during the study: 2 → 25 bags were destroyed due to a lack of analysis at a cost of **1250€.**

1st breakdown = breakdown of the nitrogen generator.

2nd breakdown = clogged sampling probe → the preventive action of cleaning the probe every 6 months had not been carried out by the biomedical staff.