



ECAMET

European Collaborative Action on
Medication Errors and Traceability



European Alliance for
Access to Safe Medicines

Preventing Medication Errors Across European Hospitals to Protect Patient Safety

Launch of the White Paper on
Medication Errors and Traceability

Tuesday 22nd March 2022





Independent pan-European not for profit organisation* dedicated to protecting patient safety by ensuring access to safe medicines – falsified medicines awareness & legislation/safer use of off label medicines/medication errors/nanomedicine regulatory clarity

* EU Transparency registry Identification number:861368611058-84





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Medication errors causing great patient harm

- WHO says **all medication errors are potentially preventable**.
- Globally, the cost associated with medication errors has been estimated at **USD42bn annually** or almost 1% of total global health expenditure.
- Clinical evidence shows that the introduction of **traceability systems** in hospitals produces a significant reduction in medication errors, as well as improving the efficiency and quality of care of nursing staff.
- An overall **medication error reduction of 58%** was recorded in a Boston metanalysis.
- The EMA state that the medication error rate in the hospital setting varies from between 0.3% and 9.1% at prescription initiation and between 1.6% and 2.1% at the dispensing stage.
- In a 2017 UK study calculated **237 million medication errors in one year** in its hospitals,
- In Spain, the *Study on Hospitalisation-Related Adverse in Hospitalised Patients* was 8.4%, with the most frequent adverse event being medication errors, which accounted for 37.4% of the total.



ECAMET Alliance objectives

- Produce a **Call for Action** to raise awareness amongst EU institutions and Member States
- **Provide clear clinical evidence** from international scientific associations to develop a set of regulations and a call for action to allocate funding to minimise medication errors across hospitals in Europe.
- A comprehensive hospital-based survey amongst hospital pharmacists, designed in close liaison with the ECAMET Scientific Committee, to **understand the current hospital practices and plans for the future.**



ECAMET Alliance



The Intensive Connection



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Scientific Committee

The EAASM is grateful for the support and commitment that has been offered by the **ECAMET Scientific Committee** whose names follow:

Clinical oncologist: **Ruth Garcia Vera**, ECO Foundation (Excellence and Quality in Oncology)

Hospital pharmacists: **Olga Delgado**, Spanish Society of Hospital Pharmacy (SEFH) and **President Carla Mendes Campos / Dra. Marisa Caetano** of the Portuguese Hospital Pharmacists Association (APFH)

Clinical intensive care specialist for adults: **Ricard Ferrer**, European Society of Intensive Care Medicine (ESICM)

Clinical intensive care specialist for paediatrics: **Professor Dick Tibboel**, European Society of Paediatric and Neonatal Intensive Care (ESPNIC)

Patients' groups representative: **Kaisa Immonen**, European Patient's Forum (EPF)

Specialist nurse: **Ber Oomen**, European Specialist Nurses Organisation (ESNO)

Private hospital representative: **Paul Garassus**, European Union of Private Hospitals (UEHP)

Medication safety representative: **María José Otero**, Instituto para el Uso Seguro de los Medicamentos (ISMP-Spain)

Patient Network representative: **Bettina Ryll**, Melanoma Patient Network Europe

Coordinator of the ECAMET Alliance: **Mike Isles**, European Alliance for Access to Safe Medicines (EAASM)



Pan-European Survey on Medication Errors



AGENDA

- 1 – HOSPITAL BACKGROUND INFORMATION
- 2 – MEDICATION ERRORS (MES) AND PREVENTABLE ADVERSE EVENTS
- 3 – INFORMATION SYSTEMS
- 4 – UNIT DOSE MEDICATION SYSTEMS
- 5 – PHARMACY INVENTORY SYSTEMS
- 6 – FUTURE
- 7 – CONCLUSIONS

ECAMET survey results



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SAMPLE DISTRIBUTION

COUNTRY DISTRIBUTION

Belgium	10
France	42
Germany	40
Hungary	6
Ireland	4
Italy	42
Netherlands	10
Poland	20
Portugal	36
Spain	41
Sweden	5
Switzerland	12
UK	40
*Private Hospitals (UEHP)	9
TOTAL	317

(*) European Union of Private Hospitals (UEHP)

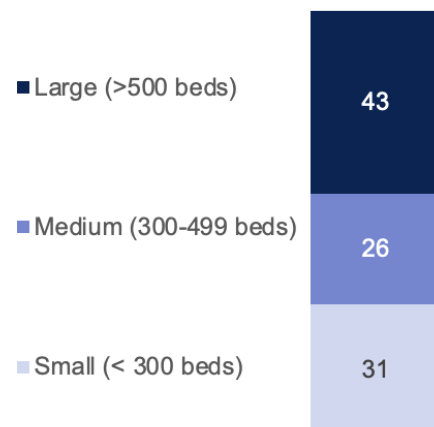
1. In what country is your hospital based? Base: total sample (317)



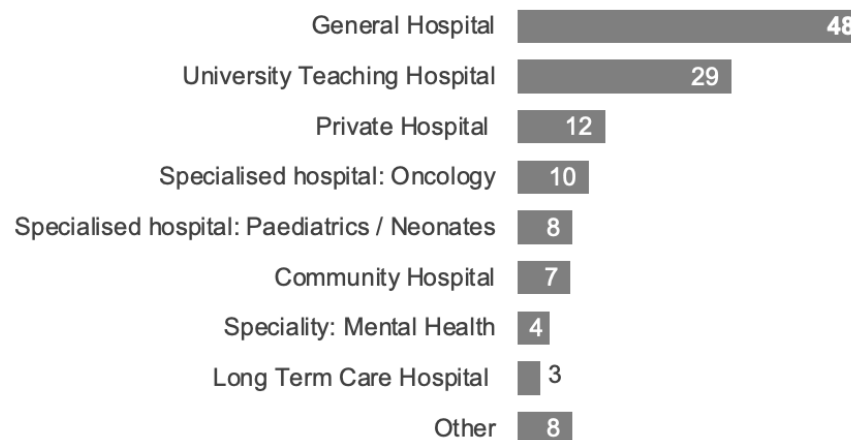
HOSPITAL TYPE AND SIZE

- Figures expressed as a % -
Multiple answers can be given

SIZE OF HOSPITAL (ACCORDING TO # OF BEDS)



TYPE OF HOSPITAL (Multiple answers)



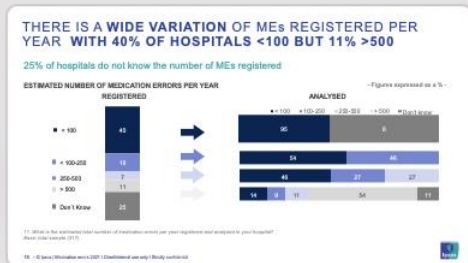
2. If you were to count all of the hospital beds that come under your hospital's responsibility (include networks/buildings) what would that number approximately be? / 3. Please describe the type of hospital you work in. Please indicate more than one description if it clarifies the type of hospital.
Base: total sample (317)



1



7



13

AGENDA

- 1 - HOSPITAL BACKGROUND INFORMATION
- 2 - MEDICATION ERRORS (MEs) AND PREVENTABLE ADVERSE EVENTS
- 3 - INFORMATION SYSTEMS
- 4 - UNIT DOSE MEDICATION SYSTEMS
- 5 - PHARMACY INVENTORY SYSTEMS
- 6 - FEATURES
- 7 - CONCLUSIONS

HOSPITAL BACKGROUND INFORMATION

1

13 country reports

1 Private hospital report

8 translation reports

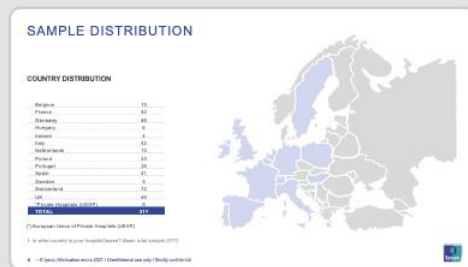
1 oncology report

1 ICU report

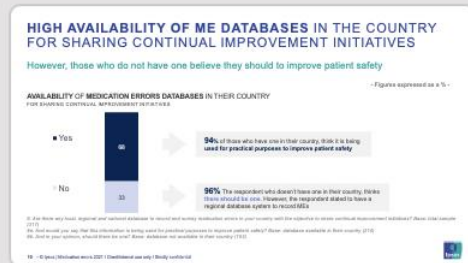
1 consolidated report

14

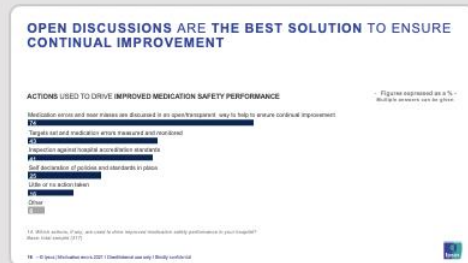
15



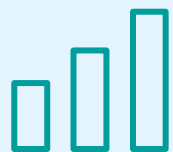
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10



16



Medication Errors

- **Whilst 82% hospitals are accredited 13% do not include MEs.**
- **Most hospitals do routinely record MEs for sharing continual improvement initiatives but very few are available to the public.**
- ME databases are not present in all countries but respondents believe there should one for sharing continual improvement.
- **There is a wide variation of MEs registered per year with 40% of hospitals <100 but 11% >500. 25% were unable to estimate the number of MEs**
- Most MEs are centrally tracked (but 14% do not routinely track MEs) and most centres use MEs & AEs data monitoring as a root cause analysis to resolve incidents as well as investigated at regular quality meetings.
- MEs mainly occur at administration (29%) and electronically prescription stages (21%).
- **Environmental, staffing or workflow problems are the main cause of MEs.**
- **Open discussions are the best solution for continual improvement. 56% of hospitals have a trained HCP to detect MEs and enhance patient safety.**



Information Systems

- **Nearly all hospitals have an electronic medical record (EMR) system although not available for all patients, and only 51% of them have it integrated with primary care**
- Nearly all hospitals have an electronic prescribing system (EPS) but electronic prescriptions are not available for all patients.
- EPSs are variably integrated with other systems and would benefit from more integration with clinical decision support systems.
- **Electronic prescriptions are not always validated by a pharmacist.**
- EPSs are mainly integrated with electronic medical records and pharmacy dispensing systems.
- Automated drug cabinets are not widely available with central Pharmacy and ICU having the highest availability.
- **Not all hospitals (66%) implement nursing standard operating procedures for aseptic or injectable preparation on the wards.**



Technology

- **Most do not have an electronic system for monitoring administration.**
- **Bar coding to verify drug selection prior to dispensing or refilling automated cabinets is low.**
- Electronic bar code / electronic system for checking patient and medication and IV dose are not widely available
- Only 19% of infusion medication is prepared in central pharmacy.
- **Double nurse check when electronic checking systems are not available is not fully implemented but is highest in central pharmacy.**
- Very limited availability of near-miss infusion medication errors tracked via DERS and infusions not monitored from a central location.
- **42% of hospitals do not have unit dose medication systems.**
- Manual shelves and counts and information systems are mostly used to manage pharmacy inventory.
- Only 25% have central pharmacy robots.



Future

- **Electronic prescription, ME surveillance and bar code medication administration systems are the most important areas to reduce MEs**
- Most pharmacists believe there are important areas to improve in order to reduce MEs (e.g. digitalisation, improvements in specific hospital areas, medication management, training and increased staffing and quality).
- **Funding, human resources and lack of trained staff are the main barriers for implementing these improvements.**



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REDUCTION OF MEDICATION ERRORS

Research with Chief Hospital Pharmacists in Europe

IPSOS
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NEWS

BREAKING NEWS · 22nd March 2022

Launch and publication of WHITE PAPER ECAMET – THE URGENT NEED TO REDUCE MEDICATION ERRORS IN HOSPITALS TO PREVENT PATIENT AND SECOND VICTIM HARM

[Read more](#)

NEWS · 18th February 2022

EVENT: Preventing Medication errors across European hospitals to protect patient safety: Launch of the White Paper on Medication Errors and Traceability – 22 March 2022

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 European Alliance for
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Call to Action

1. Include medication safety in:

- the Pharmaceutical Strategy for Europe
 - the EU general pharmaceutical legislation
 - Europe's Beating Cancer Plan
- ...through medication traceability systems in a healthcare setting to minimise medication errors.

2. Prioritise strategic investments in medication traceability systems in the EU4Health program to minimise medication errors.

3. Foster the development and implementation of ECDC guidelines and key indicators on medication errors in EU healthcare settings.

4. Facilitate the systematic exchange of best practices between healthcare providers both at European and national levels to reduce medication errors in healthcare setting.



THANK YOU!

Do not hesitate to stay in touch with us:

- Mike Isles (mike.isles@eaasm.eu)
- Laura Cigolot (laura.cigolot@eaasm.eu)

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