

Medication Without Harm



WHO Global Patient Safety Challenge

Pharmacovigilance Systems

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WHO Programme for International Drug Monitoring

How it started



Thalidomide 1961



WHO Programme for
International Drug
Monitoring (PIDM)
1968

- World Health Assembly Resolution 16.36
- INVITES Member States to arrange for a systematic collection of information on serious adverse drug reactions observed during the development of a drug and, in particular, after its release for general use.

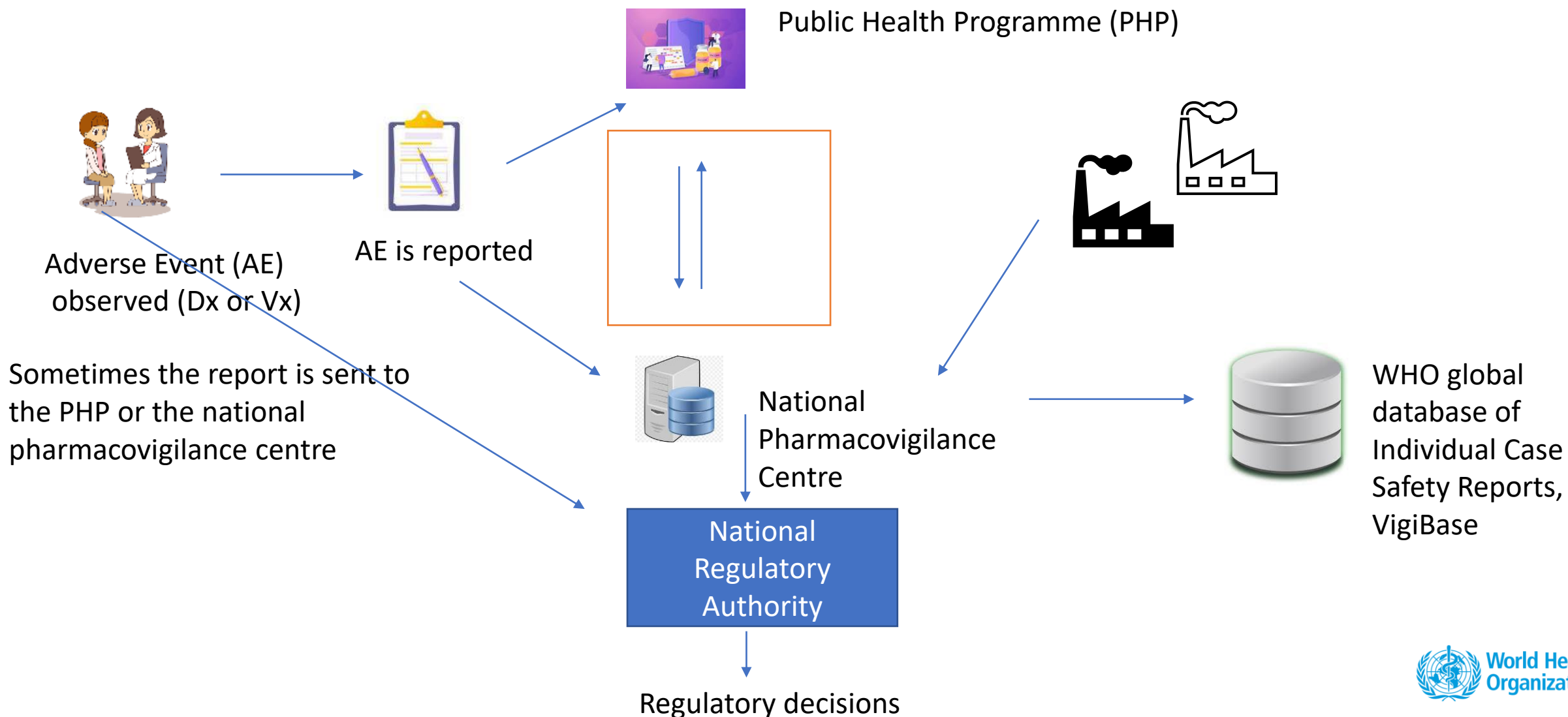
Over 170 countries and territories are part of the WHO Programme for International Drug Monitoring (as full or associate members)

WHO Programme for International Drug Monitoring



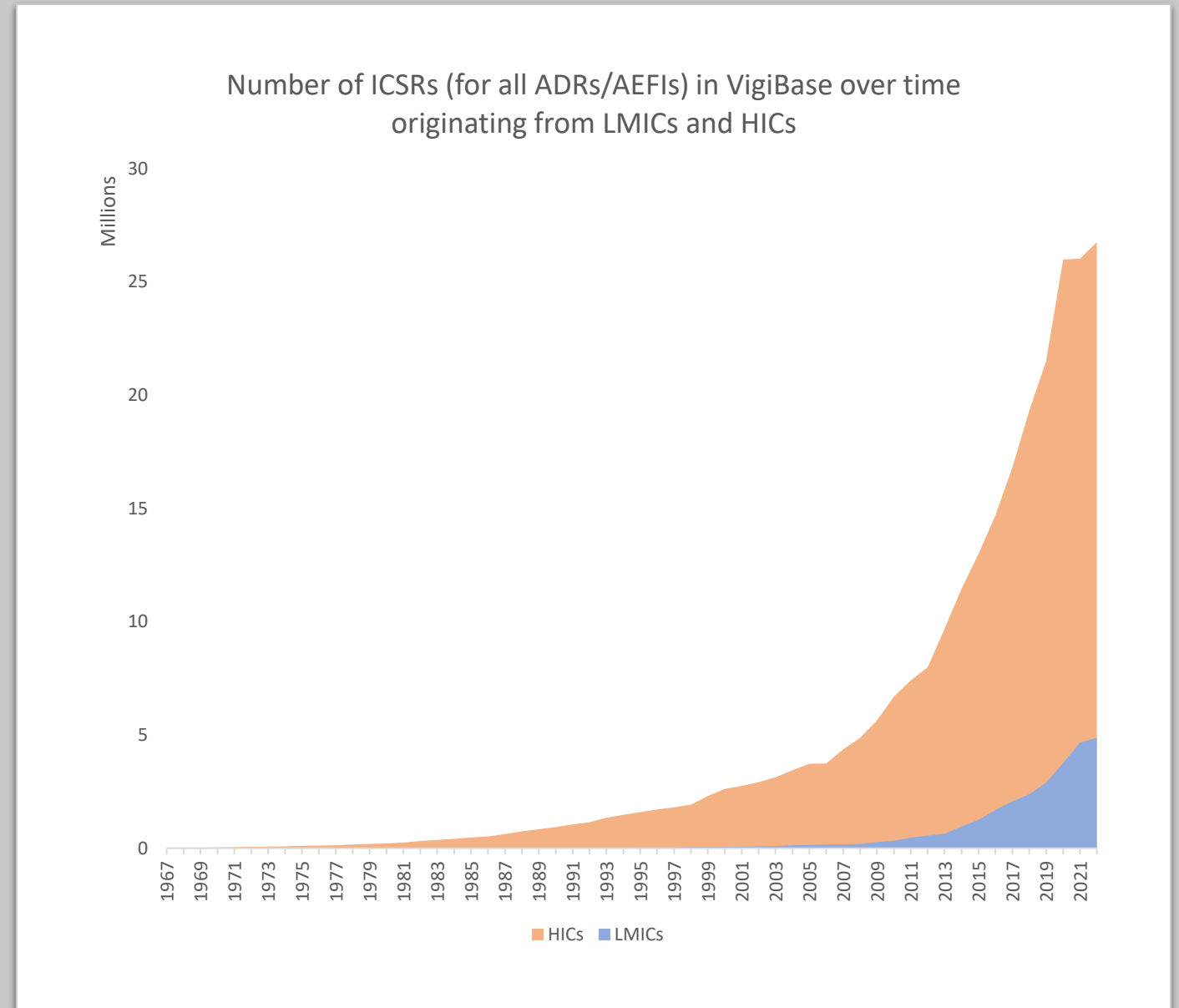
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Pharmacovigilance data flow: how it works in a country

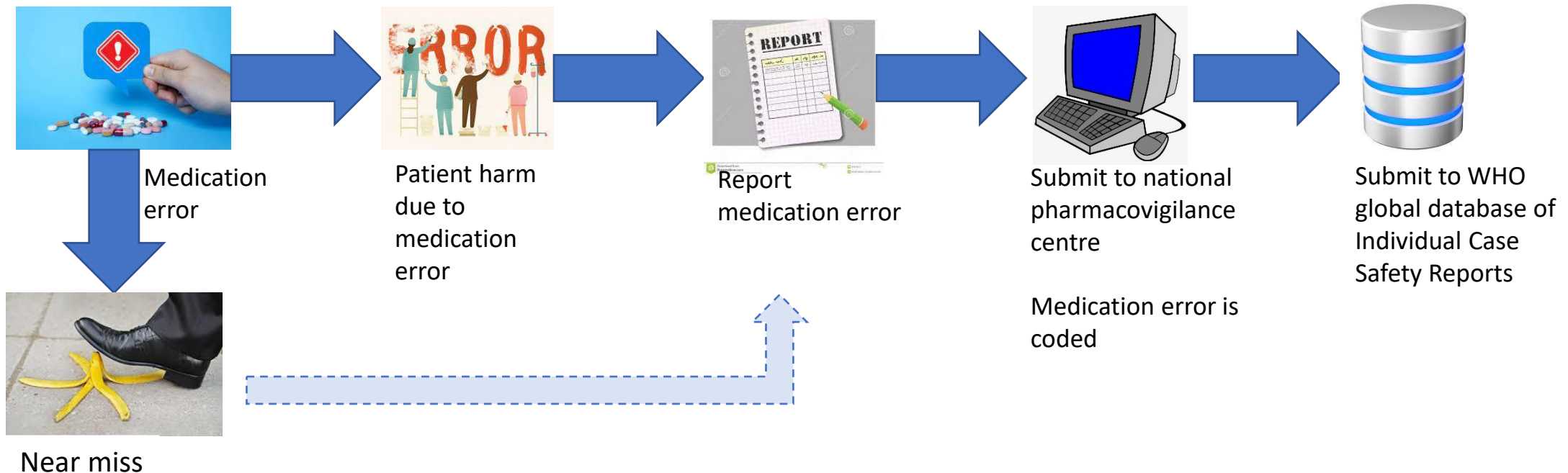


VigiBase: WHO global database of individual case safety reports

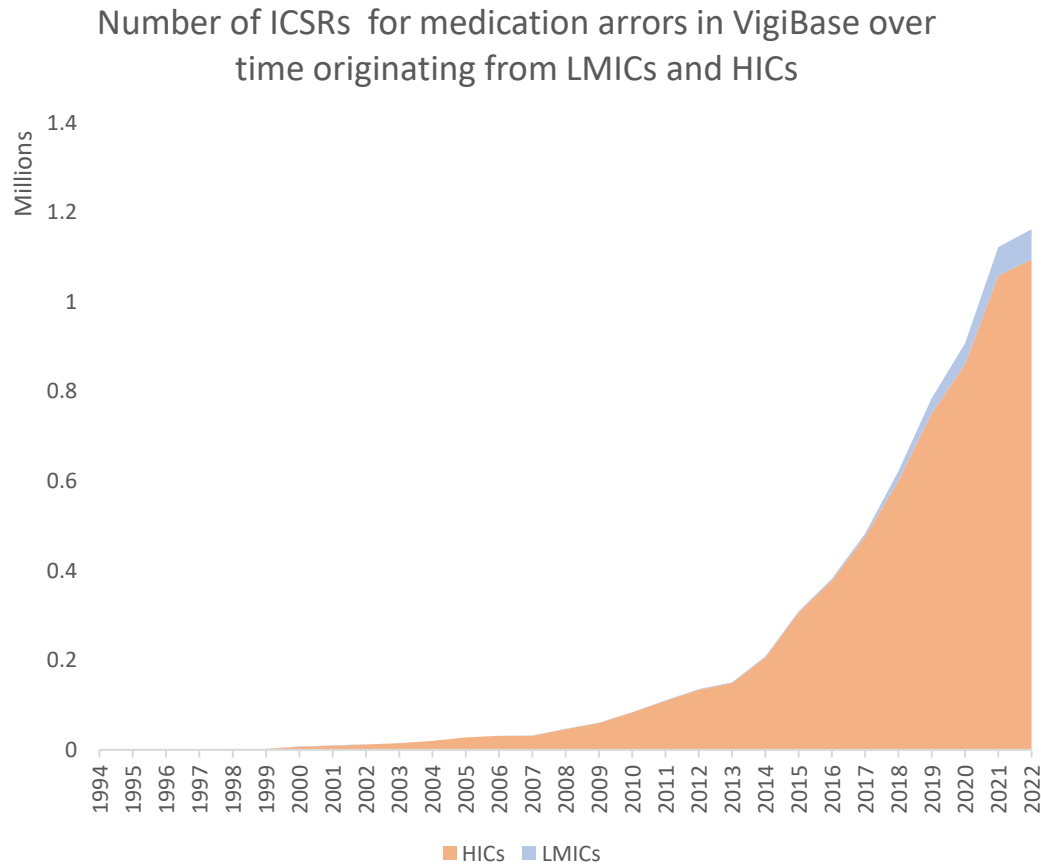
- Contains over 30 million reports of adverse drug reactions/adverse events following immunization
- Currently 152 countries and territories contribute to the database



How reports of medication errors reach the WHO database of Individual Case Safety Reports, Vigibase

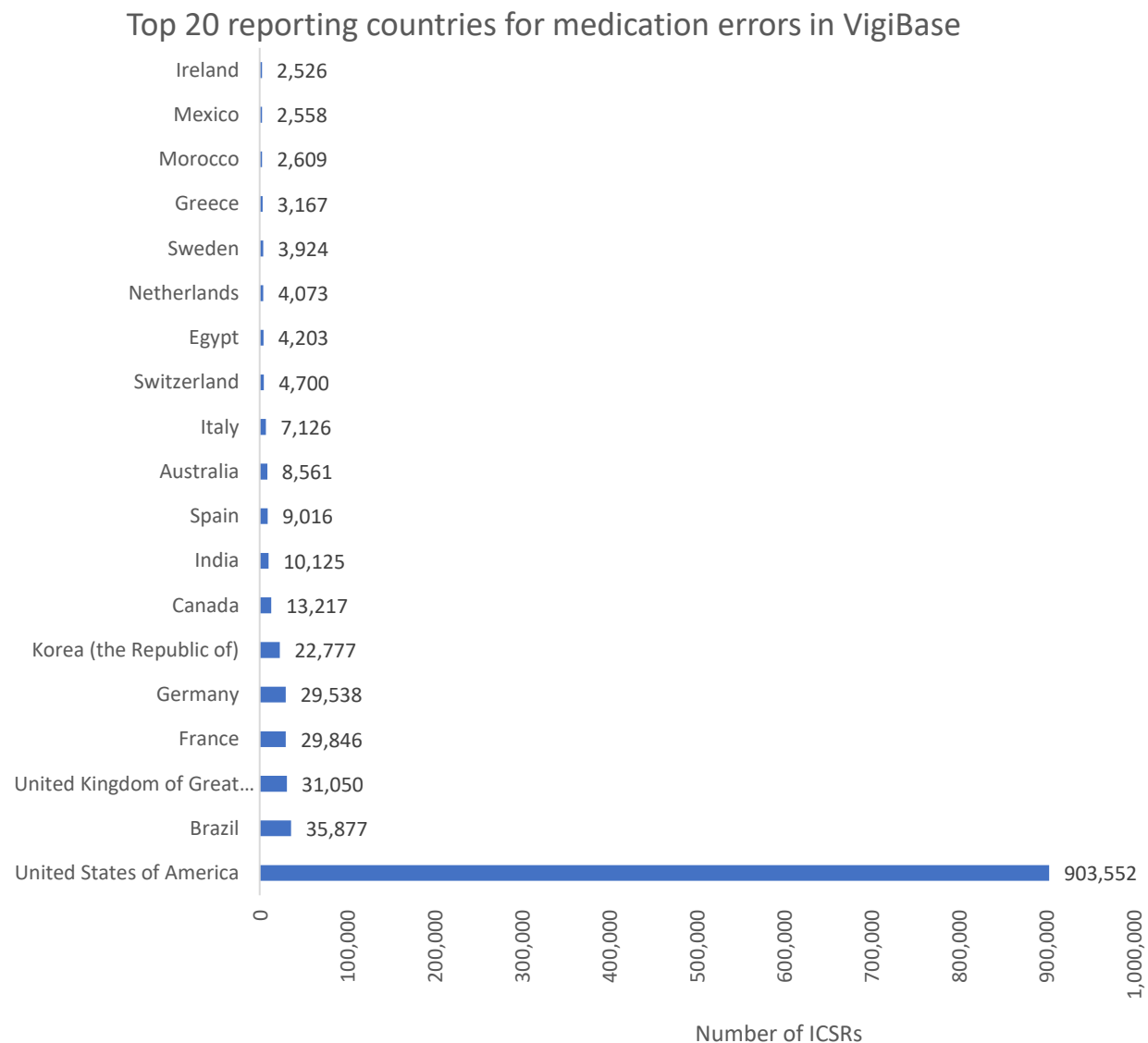


Number of ICSRs with a medication error in Vigibase



- A total of 1,162,041 ICSRs reporting a medication error in Vigibase (4% of all ICSRs)
- Reports originate from 107 countries
- 6% of ICSRs for medication errors originate from LMICs

Reports of medication errors in Vigibase: Originating countries – top reporting countries

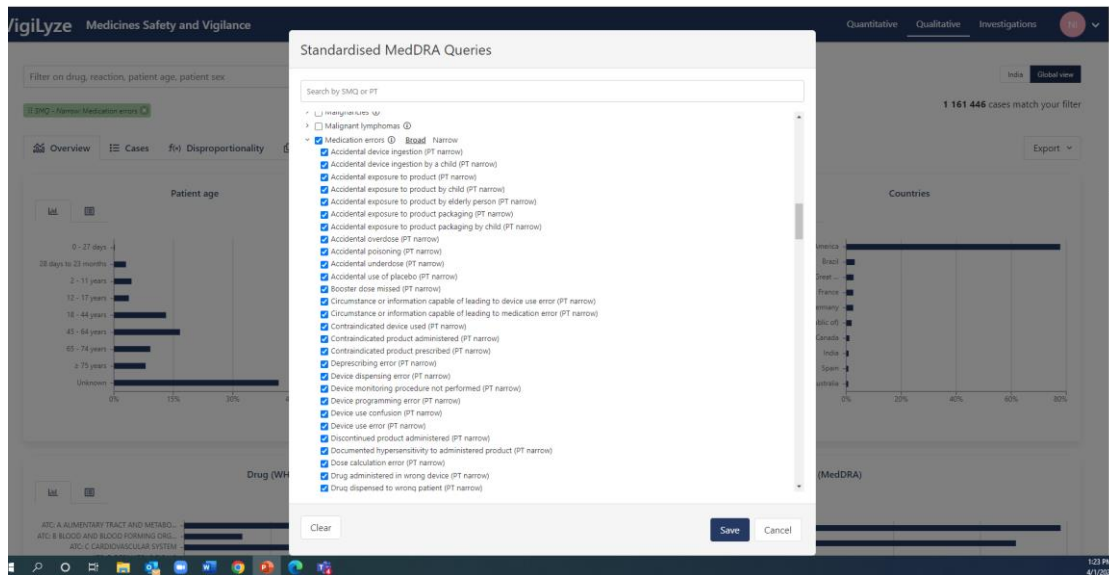


MedDRA Dictionary

- Medical Dictionary for Regulatory Activities
- The International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) developed MedDRA
- A rich and highly specific standardised medical terminology to facilitate sharing of regulatory information internationally for medical products used by humans.
- Translated in many languages
- Standardised MedDRA Queries: SMQs: validated, pre-determined sets of MedDRA terms grouped together after extensive review, testing, analysis and expert discussion. There is an SMQ related to medication errors.

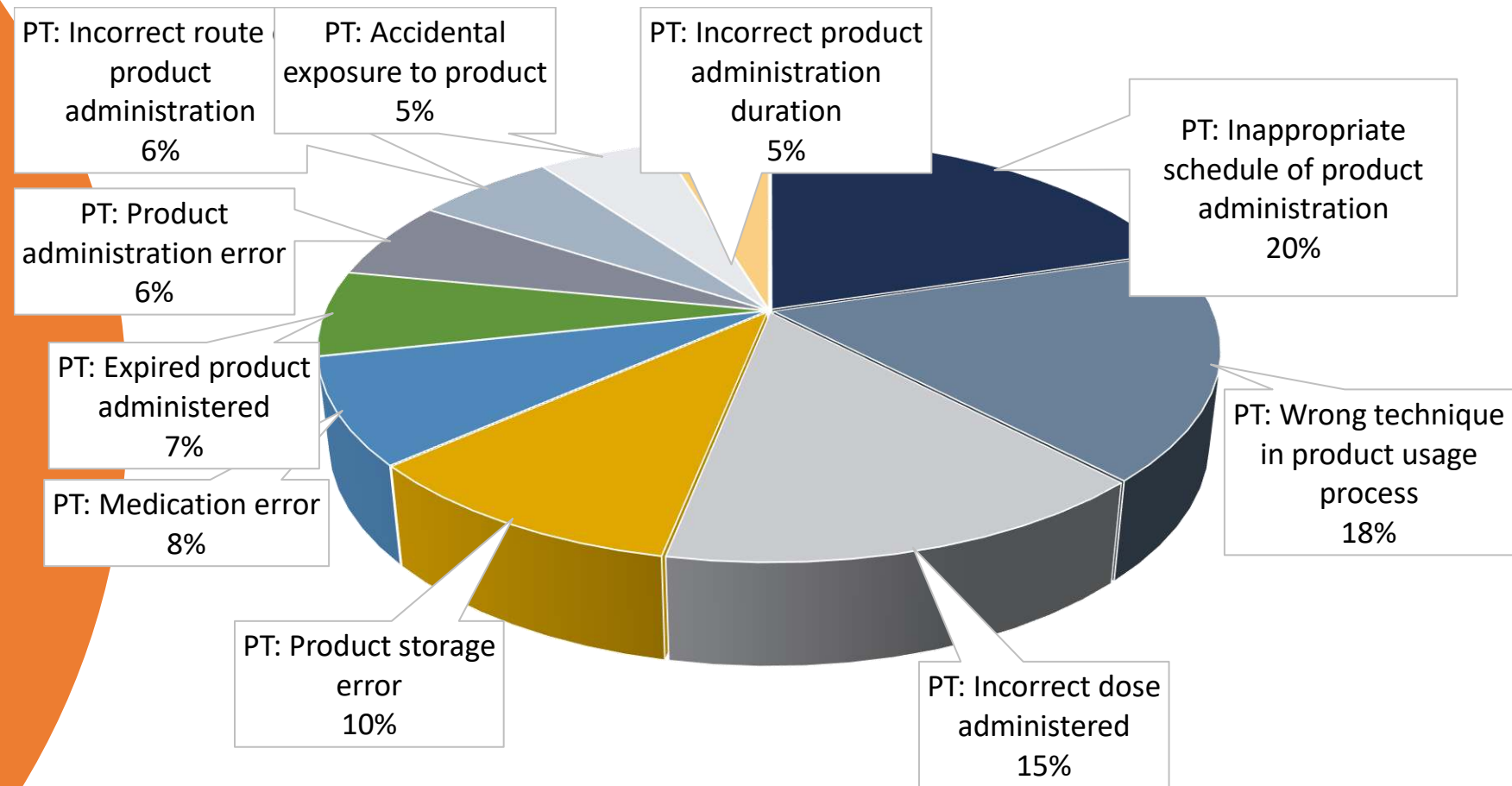
Standard MedDRA Queries (Narrow): Medication errors

Over 90 preferred terms in
Narrow SMQ for
medication errors



- ✓ Medication errors ⓘ Broad Narrow
 - ✓ Accidental device ingestion (PT narrow)
 - ✓ Accidental device ingestion by a child (PT narrow)
 - ✓ Accidental exposure to product (PT narrow)
 - ✓ Accidental exposure to product by child (PT narrow)
 - ✓ Accidental exposure to product by elderly person (PT narrow)
 - ✓ Accidental exposure to product packaging (PT narrow)
 - ✓ Accidental exposure to product packaging by child (PT narrow)
 - ✓ Accidental overdose (PT narrow)
 - ✓ Accidental poisoning (PT narrow)
 - ✓ Accidental underdose (PT narrow)
 - ✓ Accidental use of placebo (PT narrow)
 - ✓ Booster dose missed (PT narrow)
 - ✓ Circumstance or information capable of leading to device use error (PT narrow)
 - ✓ Circumstance or information capable of leading to medication error (PT narrow)
 - ✓ Contraindicated device used (PT narrow)
 - ✓ Contraindicated product administered (PT narrow)
 - ✓ Contraindicated product prescribed (PT narrow)

Most frequently reported Medication error, preferred MedDRA term in VigiBase



Tools exist,
but are we
using them
optimally?

- We know that many ME occur – but all are not reported to the WHO global database
- How do we link patient safety and PV databases so that
 - A global repository of MEs to help study:
 - types of medication errors
 - products prone to medication errors
 - mitigation strategies that are needed
 - the impact of the strategies: trends over time

Acknowledgements

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Thank you

<https://www.who.int/teams/regulation-prequalification/regulation-and-safety/pharmacovigilance>