On Post-Market Surveillance and Market Vigilance

Panel: Post-Market Surveillance – Regulators' Role and Private Sector Stakeholder Perspectives

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Monitoring quality, safety, and performance of medical devices

After a product is placed on the market, its risk/benefit profile can be impacted by:

- Inherent product variability
- Usability
- Environment
- Unforeseen medical device failure; or
- Misuse.

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Post-market surveillance for a malaria RDT

- Suspect substandard malaria RDT
  - False positive results
  - Patients retested with another brand of mRDT and found negative
- Action by authorities:
  - Specific lot number was quarantined nationwide
  - Microscopy or presumptive treatment
  - Facility manager notified the manufacturer

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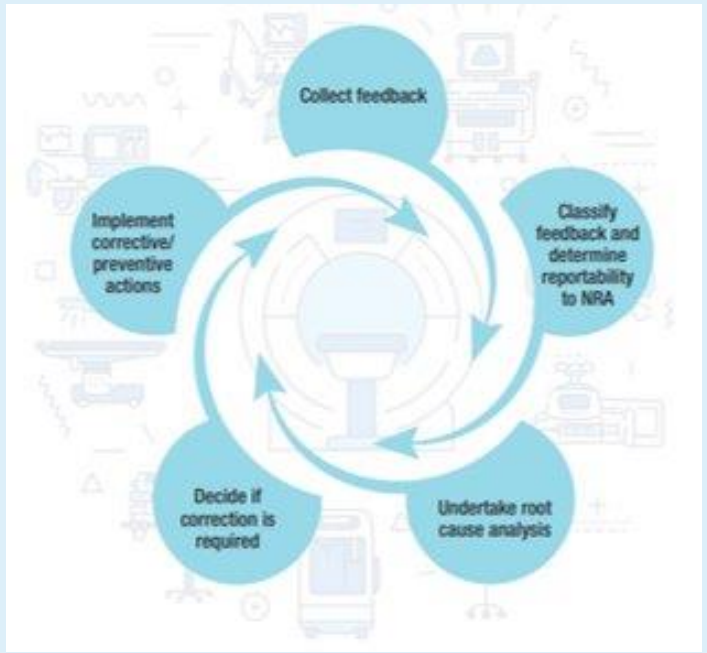
Post-market surveillance expectations of manufacturers

- Post-market surveillance - is the process conducted by the **manufacturer** to **collect and analyze experiences** with a product on the market.
- Manufacturers should have a PMS plan to:
  - Consider all **user feedback** (complaints, technical support callouts, maintenance, etc.)
  - Review **scientific literature** and other information sources
  - Review **production** records,
  - Conduct **post-market performance follow-up**
  - Etc.
- Determine if an incident/event is **reportable to any regulator**
- Undertake a **root cause analysis**
- Decide on any **correction** (repair, modification, adjustment, relabelling, destruction or inspection (including patient monitoring) of a product without its physical removal to some other location); and/or
- Decide on any **corrective or preventive action** (to eliminate the cause of detected nonconformity or undesirable situation or identify opportunities for improvement before a problem is identified)



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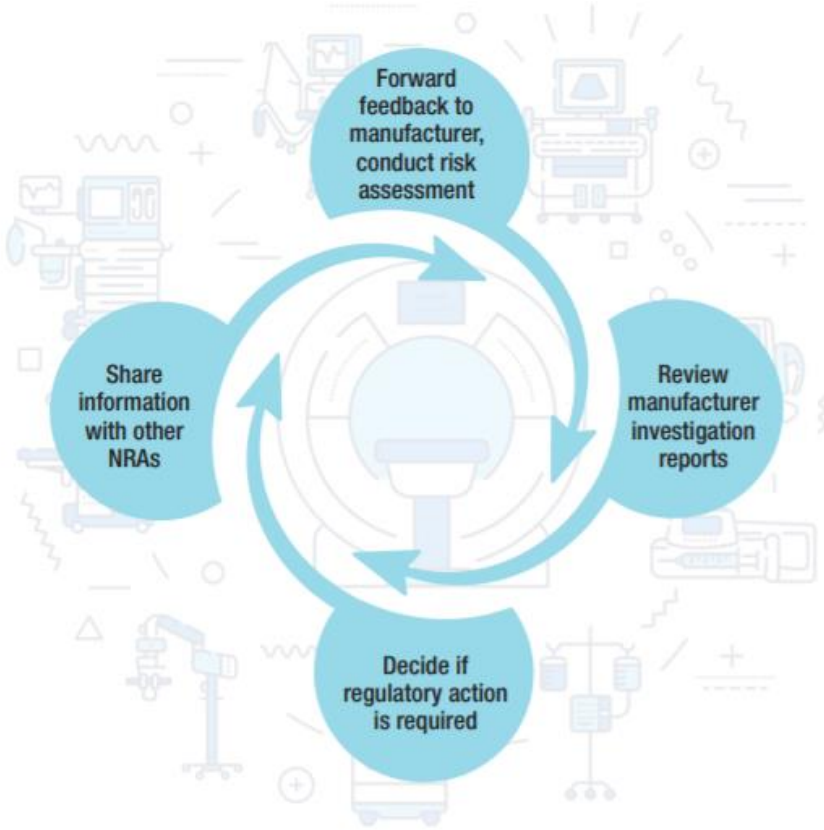
Role of regulators vis à vis post-market surveillance

- Forwards user feedback to manufacturer
- Reviews manufacturer investigation reports
- Reviews manufacturer field safety corrective actions
- Oversees testing
- Decides if regulatory action is needed
- Shares information with other NRAs
    - Maintains public repository of field safety notices



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Reviewing manufacturer investigation report

- Manufacturer conducted investigation
  - Sent investigation report to NRA
- Root cause analysis
  - Tested retained samples of affected lot – **all compiled with specifications**
  - Reviewed complaint record for affected lot – **no other complaints**
  - Review all complaints for the product – **no other complaints**
  - Reviewed batch manufacturing records for affected lot – **no deviations or nonconformances**

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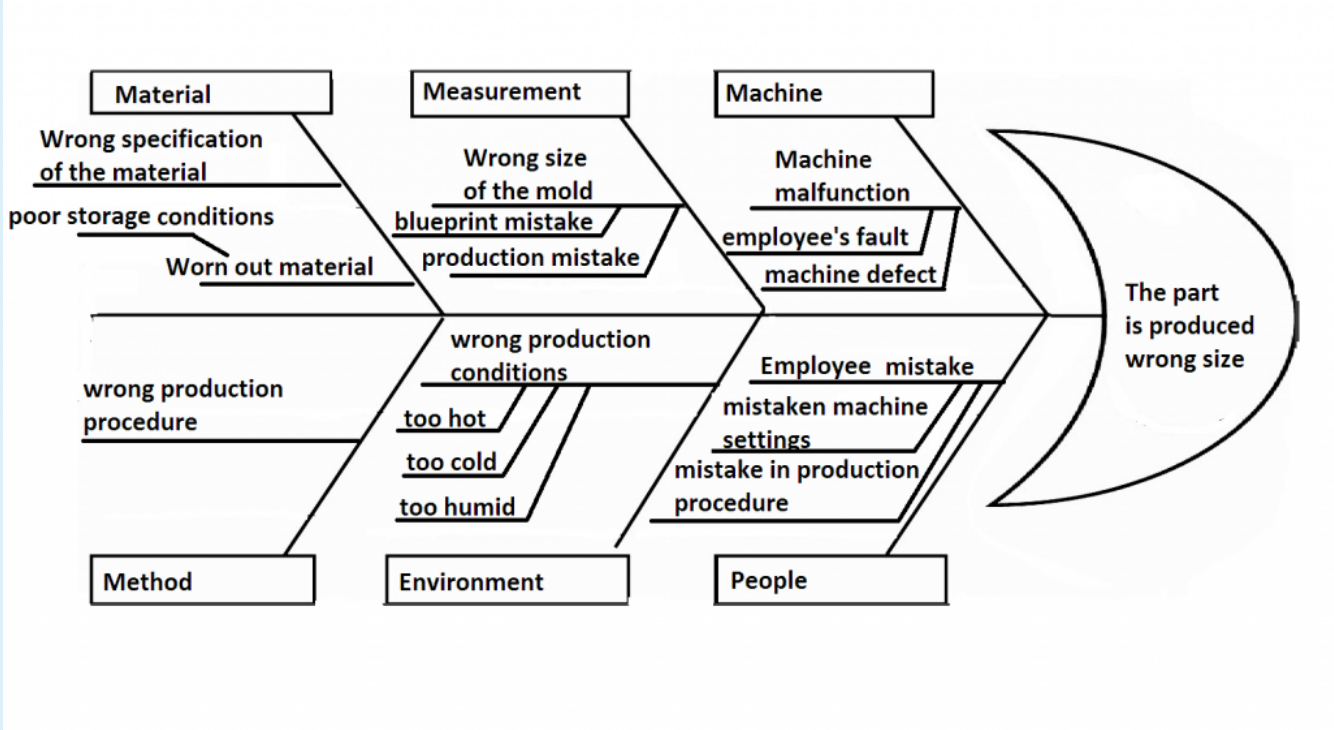
What should regulators look for?

- Manufacturer investigation should contain:
  - Root cause cause analysis (how/why did this happen)
  - Analysis regarding related areas (is this same issue occurring elsewhere)
  - Scale and scope of issue
- Manufacturer should use documented procedures and tools
  - Fishbone diagram, etc



What should regulators look for?

Testing retained samples of affected lots

- What specimens were used?

Final QC lot release panel, or
Specific investigation panel,
Capillary or venous whole blood

- What was the acceptance criteria?

Same final QC lot release, or against IFU claims

- Any physical inspection of components

Specimen transfer devices, buffer vials

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Closing out an incident

- Observations can’t be replicated by the manufacturer
  - Manufacturing defect could be ruled out
  - Then what is probable root cause?
- Role of reliance
  - If another regulator reviewed the same investigation report
  - Sharing field safety notices
- Risk assessment (severity vs occurrence)
  - Not all sites affected , restricted to one lot?
  - Best case scenario
    - Over treatment – give empirical treatment, give treatment to false positives
  - Worst case scenarios
    - Under treatment – if no testing then no treatment (risk of death
    - Testing services for malaria were interrupted

- IMDRF N43 terminology
  - Annex A - Medical Device Problem
  - Annex G - Medical Device Component
  - Annex E - Health Effects - Clinical Signs and Symptoms or Conditions
  - Annex F - Health Effects - Health Impact

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WHO normative guidance

- Covers all medical devices, including IVDs, without prejudice to national legislation
- Describes
  - **Post-market surveillance** activities for manufacturers
  - **Feedback** procedure for users (rather than just complaints and adverse events)
  - **Market surveillance** activities for regulators
- Reflects international standards/guidance
  - ISO/TR 20416:2020 Medical devices — Post-market surveillance for manufacturers
  - IMDRF/AE WG/N43 Terminologies for Categorized Adverse Event Reporting (AER): terms, terminology and codes

https://www.who.int/health-topics/substandard-and-falsified-medical-products#tab=tab_1

Link to WHO guidance here

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Thank you

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