EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

Measures of impact of pharmacovigilance processes (3.3)

Session 4 - Reports from breakout sessions: gaps and observations

Workshop: Measuring the Impact of Pharmacovigilance Activities
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Session 3.3 Topics

1. **Challenges of measuring impact of new pharmacovigilance processes**
   Judith Sanabria, Biomedical Research Institute, University Hospital of Malaga

2. **Measuring impact: a review of survey studies to evaluate the effectiveness of additional risk minimisation measures in Europe**
   Nawab Qizilbash, Oxon Epidemiology

3. **Measuring time from identification of a new risk to regulatory action with focus on signalling tools and processes**
   Amie Goulbourne, Biogen

4. **The risks of asthma therapy as assessed from real-life data: ASTRO-LAB & SNIIRAM**
   Eric van Ganse, Red Cross Hospital Lyon Cedex

Challenges of measuring impact of signal detection

Questions

- Is it possible/or needed to focus on measuring the impact in certain type of adverse drug reactions (ADRs)…?
- Do some ADRs require more attention than others, e.g. type A vs. B reactions

Challenges

- Risk analysis: risk identification from different perspectives, different definitions, access to clinical data to be collected
- Risk quantification: incidence, drug prescription, drug dispensing
- Evaluation of risk/benefice balance

Recommendations

- Systematic protocols, analysis of signals, consensus on terminology and level of evidence, standardised electronic data
- Promote well-designed studies, personalised data, international collaborations
- Measure time lag between signal recognition and regulatory action

Measuring impact: a review of survey studies to evaluate the effectiveness of additional risk minimisation measures in Europe

Question

- Review of available studies in EU PAS Register – review of 10 surveys

Challenges

- Variability in study design, conduct and reporting
  - Rates: participation, receipt, knowledge, behaviour, usage
  - Sampling
  - Country selection
  - Validation of questionnaires
  - Designs: lack of clinical & safety outcomes
  - Selection bias of studies? (→ EMA / Companies)
  - Assessment, criteria for success & thresholds

Recommendations

→ Additional guidance document on conduct and reporting to improve quality and consistency (→ ENCePP SIG):

- Conduct → Methodological standards
- Reporting → Standardisation of terminology and presentation

Measuring time from identification of a new risk to regulatory action (1)

Questions

- What are the tools available to reduce this time
- How to balance speed, quality and quantity of information

Challenges

Quality of initial spontaneous reports may be limited

Challenges:

- To improve data quality improved over time
- To explore alternative sources of data
- Technology supporting data collection & analysis, statistical and visualisation tool
- Use of medical judgment and appropriate expertise (clinical and public health)
- Clear processes for decision making, including roles and responsibilities

Measuring time from identification of a new risk to regulatory action (2)

Recommendations

Focus on most meaningful data

- Statistical and visualisation tools
- Use technology
- Clarify roles and responsibilities

- Risk assessment as quick as possible
- High quality data essential
- Use of alternative data sources, lab data, epidemiology, clinical studies, large data collection systems, which may improve quality and reduce time
- Processes need to be simple and clear
- One assessment for all regions to avoid delays in requirements and assessment

Example: risks of asthma therapy as assessed from real-life data: ASTRO-LAB & SNIIRAM

Question

- How to identify inappropriate patterns of use as a determinant of adverse reactions
- Use of population-based electronic health records

Challenges

- Identification of patient clusters based on patterns of use of therapy
- Safety signal due to inappropriate patterns of use of therapy
- Measure of patients behaviours and PROs
- To distinguish the roles of HCPs and patients to improve use of therapy
- EU assessment of national clinical practices

Recommendations

- Moving out of signal detection to optimal use of a drugs (benefits)
- Real time monitoring of a drug, based on population database (SNIIRAM)

Discussion

What processes do we need to evaluate?

Five years after new pharmacovigilance legislation, need to collect data on effectiveness of RMPs, outcomes of signals, outcomes of educational material, outcomes of PASS.

However, regulators often look at products once at a time, because data are not organised in a way that they allow to evaluate how the system works.

Standard model of product delivery: different processes with different goals and methods:

- Exchange of information
- Change peoples' beliefs
- Change behaviours, and what actions need to be taken
- Reduce prescription?

Discussion

Selection of processes:

- Those that are most burdensome
- Those with highest impact on public health
- Expert opinion (feasibility)

Pharmacovigilance is also a subset of health care, which is more disease specific; both aspects (product-specific vs. disease specific) should be combined (also allows evaluation of unintended effect);

- Need for general framework; ultimate test is RCT as there is an intervention

- Learn from other fields of research, e.g. public health/policy evaluation

Discussion

Example: should we evaluate usefulness of PASS studies?

What is the objective, complexity of processes, templates, “invisible actions”?

- First question is feasibility in terms of sample size, data are not structured, different health systems; sometimes PASS are not performed because they are not feasible;
- Goal of PASS is to reduce uncertainty and exclude risk of a certain magnitude, not specifically to take a decision: however there should assurance about the quality of the study protocol;
- Take advantage of different health care systems, to build on expertise available in different countries;

- Different types of PASS
  - PASS to investigate safety issues: should be focussed on specific objectives
  - Surveys of physicians (effectiveness of risk minimisation): validity of results?

Discussion

Example: Spontaneous reporting

- Evaluation should also consider the alternatives, e.g. using health insurance data
- Need to identify the most appropriate tool for the specific safety issues
- Importance of population surveillance
- Consider different types of reports (solicited vs. spontaneous)

Example: Registries

- Many product registries have been shown to be associated with problems (e.g. recruitment), therefore alternative methods need to be identified