ENCePP

Checklist of Operational research Standards

ENCePP Plenary, 18 September 2009

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ENCePP WG
"Research standards & guidance"

Chair: Gonzalo Calvo Rojas

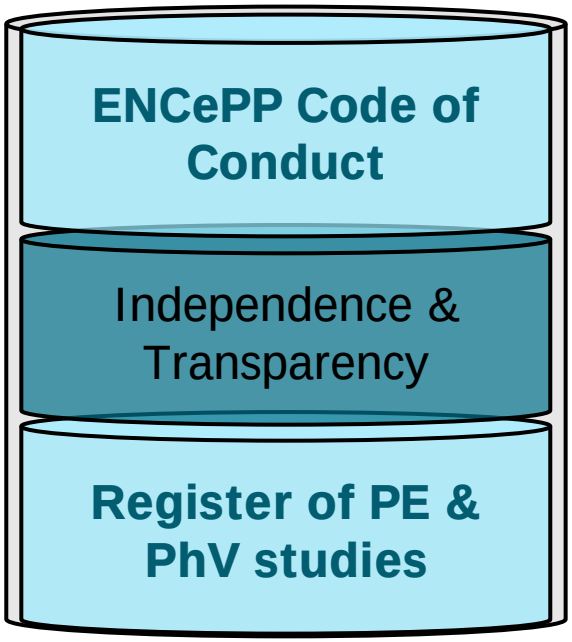
Mandate

- Identify areas in which standards (quality, operational, methodology, ethics, publication, communication, etc.) relevant for ENCePP activities are needed.
- Develop standards and guidances as appropriate according to network's requirements.
- Disseminate and promote implementation of new and existing standards.
- Explore the merits of developing an accreditation system and its methodologies.
- Identify the training needs for the implementation of the ENCePP standards.
- Dissemination including input to the design of the ENCePP-EMEA web page.
- The objectives of this working group are to improve the quality of ENCePP activities and will be carried-out in cooperation with the relevant learned societies.

Database of Research Resources

Centres – Data sets

ENCePP Studies



ENCePP WG
"Research standards & guidance"

- Subgroup 1: Operational Research Standards (ORS), *Chair: Bert Leufkens*
- Subgroup 2: Existing Recommendations & Guidelines, *Chair: Susanna Perez-Gutthann*

- Main activities in 2009
  - Develop the Checklist of ORS
  - Further develop the Inventory of PE Guidelines (general application as well as more specific)

Existing PE Guidelines

Objective

- To identify and compile existing Guidance in the field of PE & PhV which could be used to provide recommendations on specific aspects of study development and conduct
- The Inventory should include information about the origin of the Guideline, its availability, and a short description

Result

- Inventory of 13 Guidance documents identified by the group as relevant
- Review of the Guidelines by individual members of the group

Existing PE Guidelines

Next steps

- Further structure and populate the Inventory
- Eventually match the existing guidance with the need for guidance and identify gaps
- Development of summary recommendations for each domain of study development and conduct
  - link to appropriate existing guidance
  - development of new guidance according to the needs

⇨ Next meeting: 13 November 2009

Checklist of ORS – Scope

- All types of **PE and PhV studies**, with an emphasis on non-interventional Post-Authorisation Studies.
- **"ENCePP studies"** (mandatory)

Checklist of ORS – Objectives

- Provide for high level information on whether accepted standards and good practice are addressed in the study protocol, in a simplified and condensed way.
- Enable easy tracking of the location in the Study Protocol where the ORS are addressed
- Promote the application and implementation of the agreed ORS.

History of the Checklist of ORS

- Step 1: Identify key areas and methodological aspects to be considered when conducting PE & PhV research
  - Review of 4 selected publications (real-life examples)
    ⇨ List of key points
- Step 2: Develop draft Checklist of ORS
  - Agree on scope & purpose
  - Translate key point into sections & questions

Application & Compliance

- Complete & sign Checklist (Declaration of honour)

- Submit together with Study Protocol before the study commences

Checklist of ORS

11 Sections

1. Research question
2. Study population
3. Study design
4. Data sources
5. Exposure ascertainment and measurement
6. Endpoint definition and measurement
7. Biases and effect modification
8. Analysis plan
9. Quality assurance
10. Interpretation and validity, implications for B/R
11. Ethical issues

1. Research question

	Yes	No	Page Number(s)
1.1 Does the formulation of the research question clearly explain why the study is conducted? (e.g. to answer an important public health concern, a risk identified in the risk management plan, an emerging safety issue)	☐	☐	
1.2 Does the formulation of the research question specify: 1.2.1 Target population (or relevant subgroup) 1.2.2 Hypotheses to be tested (if appropriate, otherwise statement that there is no a priori hypothesis) 1.2.3 Primary endpoints 1.2.4 Dose-dependent or duration-dependent response 1.2.5 Main statistical parameter(s) (e.g. incidence rate, relative risk).	☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐	

Comments:

Next section

2. Study population

	Yes	No	Page Number(s)
2.1 Is the source population described?	☐	☐	
2.2 Is the study population described in terms of: 2.2.1 Age and gender 2.2.2 Country of origin 2.2.3 Method of identification (any inclusion/exclusion criteria or event used to sample the study population from the source population) 2.2.4 Disease/indication 2.2.5 Co-morbidity	☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐	

Comments:

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3. Study design

	Yes	No	Page Number(s)
3.1 Is the choice and rationale of study design explained? (e.g. cohort, case-control, RCT, others)	☐	☐	

Comments:

Next section

4. Data sources

	Yes	No	Page Number(s)
4.1 Does the protocol describe the data source(s) used in the study for the ascertainment of: 4.1.1 Exposure (e.g. pharmacy dispensing, GP prescribing, claims data, self-report, face-to-face interview, etc) 4.1.2 Endpoints (e.g. clinical records, laboratory markers or values, claims data, self report, patient interview including scales and questionnaires, vital statistics, etc) 4.1.3 Covariates (e.g. age, sex, clinical history, co-morbidity, co-medications, etc.)	☐ ☐ ☐	☐ ☐ ☐	
4.2 Does the protocol describe the information available from the data source(s) on: 4.2.1 Exposure (e.g. date of dispensing, drug quantity, dose, number of days of supply prescription, daily dosage, prescriber) 4.2.2 Events (e.g. date of occurrence, multiple event, severity measures related to event)	☐ ☐	☐ ☐	
4.3 Is the coding system described for diseases/events (e.g. ICD-10, MedDRA) and exposure? (e.g. ATC for medicines)	☐	☐	

Comments:

Next section

5. Exposure ascertainment and measurement

	Yes	No	Page Number(s)
5.1 Does the protocol describe methods to be used for the identification and measurement of exposure?	☐	☐	
5.2 Does the protocol discuss the validity of exposure measurement? (e.g. precision, accuracy, prospective or retrospective ascertainment)	☐	☐	
5.3 Is exposure classified according to time windows (e.g. current user, former user, non-use) or biological mechanism of action?	☐	☐	

Comments:

Next section

6. Endpoint definition

	Yes	No	Page Number(s)
6.1 Is the choice of endpoint(s) under investigation described in terms of rationale in relation to the study hypotheses?	☐	☐	
6.2 Does the protocol describe methods to be used for the identification and measurement of endpoints(s)?	☐	☐	
6.3 Does the protocol discuss the validity of event measurement (e.g. precision, accuracy, sensitivity, specificity, positive predictive value, prospective or retrospective ascertainment)?	☐	☐	

Comments:

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7. Biasis and effect modification

	Yes	No	Page Number(s)
7.1 Does the protocol provide a list of potential confounders and modifiers, and a rationale thereof?	☐	☐	
7.2 Does the protocol describe methods for addressing: 7.2.1 Selection biases 7.2.2 Information biases 7.2.3 Potential confounders 7.2.4 Potential effect or risk modifiers	☐ ☐ ☐ ☐	☐ ☐ ☐ ☐	

Comments:

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8. Analysis Plan

	Yes	No	Page Number(s)
8.1 Is a calculation of the sample size provided?	☐	☐	
8.2 Is statistical power calculated according to different assumptions for patient recruitment and results?	☐	☐	
8.3 Does the plan explain the choice of the measure(s) of effect? (e.g. RR/OR, deaths per 1000 person-years, absolute risk, excess risk, incidence rate ratio, hazard ratio, number needed to harm (NNH) per year)	☐	☐	
8.4 Does the plan include measurement of absolute effects?	☐	☐	
8.5 Is the choice of statistical techniques explained in the plan?	☐	☐	
8.6 Does the statistical plan explain how confounders and interactions will be dealt with?	☐	☐	

Comments:

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9. Quality Assurance

	Yes	No	Page Number(s)
9.1 Does the protocol provide information on the software and IT environment (incl. database maintenance and anti-fraud protection)?	☐	☐	
9.2 Are methods of quality assurance described?	☐	☐	
9.3. Does the protocol adequately describe and or reference quality issues related to the actual data source?	☐	☐	

Comments:

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10. Interpretation and validity; implications for B/R

	Yes	No	Page Number(s)
10.1 Are potential weaknesses of the study described as regards:			
10.1.3.Data sources	☐	☐	
10.1.2 Internal validity (extent to which the potential biases have been dealt with, power of study)	☐	☐	
10.1.3 External validity (e.g. usefulness and generalisability of the study)	☐	☐	
10.2 Are the implications of the study for benefit-risk assessment of the medicines discussed?	☐	☐	

Comments:

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11. Ethical issues

	Yes	No	Page Number(s)
11.1 Does the protocol address potential ethical issues?	☐	☐	
11.2 Has the protocol been assessed by an ethical committee?	☐	☐	n/a

Comments:

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Next steps

Today !	• Agreement on core elements of the Checklist of ORS by ENCePP Plenary
October 2, 2009	• Deadline for comments
October 12, 2009	• Revised Checklist to be published at ENCePP web page for consultation
November 13, 2009	• Additional comments discussed by WG1 and endorsed by ENCIAG
December 11, 2009	• Final checklist approved by ENCEPP Plenary