MINUTES

EUPHORIC work-in-progress meeting

BARCELONA, 11 APRIL 2007

Participants:
MB: Torre Marina – Istituto Superiore di Sanità (ISS), Rome (Italy)
AB: Labek Gerold – EFORT-EAR Innsbruck Medical University (EAR), Innsbruck (Austria)
AB: Jaume Marrugat and Roberto Elosua – Institut Municipal d'Investigació Mèdica (IMIM), Barcelona (Spain)

Note: MB: Main Beneficiary, AB: Associated Beneficiary

The aims of the meeting were to define the organization of both pilots (orthopaedics and cardiovascular) as well as the final products and work packages and look for possible integrations.

Marina Torre started the meeting by thanking Jaume Marrugat who has accepted the responsibility of organizing the pilot phase of the cardiovascular section of the study for the EUPHORIC investigators. She gave a short presentation of the comments sent by the EU Commission about the First Interim Report and stressed the need for EUPHORIC to be part of a network that cooperates with other projects related to indicators (ECHI, OECD, WHO).

Great importance has to be put on the dissemination of the results through several ways:
- translation in different languages of the leaflet already published on the website
- writing a brochure and a set of leaflets concerning the main results of the project adapted for the target groups (policy makers, physicians, citizens)
- putting documents on the website
- conferences
- deliverables for key persons in Europe (cooperation with ECHI for the dissemination (target: national or local health authorities), scientific societies (target: physicians (EFORT for orthopaedics, ECS for cardiovascular(??)).

Gerold Labek described the structure of the orthopaedics pilot in terms of methodology and possible results (see detailed files)

Jaume Marrugat described the hypotheses for the design of the cardiovascular pilot and its possible structure.
The objective of the task will be: to define as simply as possible the indicators of quality of health care in cardiovascular diseases at country and hospital levels. These indicators are expected to stem from routinely obtained information for administrative purposes. Real-life data from existing population-based registers will be used to validate the former. The comparison will be established in terms of procedure-use and outcome rate by procedure benchmarking (interquartile and 5^{th} and 95^{th} percentiles will be provided for hospitals and countries). On the other hand, a function for the selected outcomes will be adapted for each selected procedure adjusted for severity, age, sex, comorbidity and hospital and country characteristics. With a multilevel general multiple linear regression model they will determine the highest outcome rate expected in the worst and best patient profile.

A general work plan in this section should include the following activities:
1. Choosing diseases
2. Selecting procedures to assess
3. Selecting suitable outcomes
4. Selecting potential confounders
    a. Country level
    b. Hospital level
5. Population register data analyses

6. Administrative data collection and linkage
7. Comparison of results from 5 and 6.

Some agreements were reached:

1. Based on the responses to the questionnaires sent to the partners and the literature revision made, acute coronary syndrome (ACS) seems to be the easiest **cardiovascular disease** to assess.
2. Regarding ACS, all types of myocardial infarction (MI) i.e., q-wave and non-q-wave-on discharge include the most accurate and standardized **diagnosis**.
3. The selected **procedures** are: A) during the 28 days after admission for an MI: revascularization (thrombolysis, primary and overall percutaneous intervention (PCI) - including stenting with or without eluting drugs), coronary angiography use, and B) at whatever moment after an initial acute event coronary artery bypass grafting (CABG).
4. The indicators of quality include **use rate of procedures** and **in-hospital and 6-month mortality after their use**. They represent a hard standardized end-point that can be easily retrieved from death certificate-based registers in the context of administrative data collection and linkage.
5. We will use recent (after the year 2000 to prevent problems with obsolete definitions that excluded troponin values) existing international databases corresponding to myocardial infarction registers. We will invite EHS-ACS investigators, MASCARA, and other national registers to contribute to the analyses with their data.
6. The country level basic indicators should include: total population, population density, PCI/10,000 inhabitants, CABG/10,000 inhabitants, medical doctors/10,000 inhabitants, CCU/10,000 inhabitants, cardiologists/10,000 inhabitants, admissions for MI/10,000 inhabitants, age-standardized CHD mortality rate, average income.
7. The hospital level characteristics will include: proportion of non-q-wave MI patients, delays between symptom onset and admission and from admission to revascularization, coronary care unit existence, catheter laboratory existence and cardiovascular surgery department existence in the hospital.
8. The administrative data that needs to be collected will be: number of MI patients admitted in hospitals of each country, number of primary PCI, total number of PCI, total number of CABG. Number of deceased in-hospital patients and 6 months after any of the above events or procedures.
9. We will describe the outcome (event) rate by month up to 12 months after the MI onset of symptoms within the population registers. This is to ascertain the best length of follow-up for quality control.
10. We shall list the necessary tasks to be completed and identify those that can be accomplished by each partner.
11. We agreed to consider the following recommendations:
    a. Monitoring medication prior to death or index event as a proxy of previous disease.
    b. Registering the delays between symptom-onset and admission and from admission to revascularization for ACS-MI patients as routine administrative data.

TASKS

1. Literature review (update) rebuilding a background for each disease, procedure, outcome and indicator
2. Selection of diseases
3. Selection of procedures
4. Selection of outcomes
5. Analysis plan of the population register data
6. Analysis plan of the administrative data
7. Selection of administrative data to be collected
8. Definition of the structure and contents of the administrative database
9. Identification and summarization of the population register data (EHS-ACS, MASCARA, BLITZ,…)
10. Definition of the structure and contents of the population register data
11. Model adjustment of the register data
12. Collection of administrative data

13. Analysis of the register data according to the analysis plan.
14. Analysis of the administrative data and comparison with the register data results.
15. Preparation of the report on the results and RECOMMENDATIONS to the administration and health professionals.
16. Preparation of a general purpose brochure (for the population and technicians).
17. Preparation of a booklet with the results and recommendations aimed at health authorities and health professionals.
18. Posting the results on the website.
19. Distribution of the brochures and booklets.

Final remarks:
The first deliverable will be sent to the EU Commission in the latest version that all of the partners received on April 6. Any amendments to the contents of the deliverable will be considered as a further elaboration of the data collected during the survey and will be included in the pilot.
The list of 54 indicators will also be submitted to ECHI.
The pilot will produce a list of confounding factors prepared by Jaume Marrugat (cardiovascular) and Gerold Labek (orthopaedics).
Future work will be organized on two levels: general and detailed.
The general level, relevant to the "indicator development", will consider the writing of some reports:

1) A deliverable collecting all the detailed sheets that describe the indicators (see as an example the DEASL report). This report will be considered as a complement to the first deliverable and will be used to put detailed information about each indicator on the website.
2) A deliverable relevant to the information collected through the hospital discharge records in the participant countries
3) A deliverable relevant to the methodologies that can be implemented to consider risk adjustment.

The detailed level, relevant to "indicators implementation", will focus its activities on the two pilots (orthopaedics and cardiovascular).
Furthermore a report concerning cancer incidence, mortality and survival in the participant countries will be written up as a part of the cooperation between EUPHORIC and EUROCARE.
Emphasis has been placed on the need to have available linkage with mortality registers.

It has been proposed to organize a workshop at the beginning of 2008 addressed to all of the statisticians participating in the project in order to share experiences and methodological approach in the field of outcome research.

The meeting ended at 16:30.

Partner participation in the tasks defined for the cardiovascular section of the EUPHORIC project

TASK	Partner 1	Partner 2	Partner 3	Partner 4	Partner 5	Partner 6	Partner 7	Partner 8	Partner 9	Partner10
Literature review (update) and rebuilding a background for each disease, procedure, outcome and indicator										
Selection of diseases										
Selection of procedures										
Selection of outcomes										
Analysis plan of the population register data										
Analysis plan of the administrative data										
Selection of administrative data to be collected										
Definition of the structure and contents of the administrative database										
Identification and summarization of the population register data (EHS-ACS, MASCARA, BLITZ,…)										
Definition of the structure and contents of the population register data										
Model adjustment on the register data										
Collection of administrative data										
Analysis of the register data according to the analysis plan.										
Analysis of the administrative data and comparison with the register data results.										
Preparation of the report on the results and recommendations										
Preparation of a general purpose brochure (population).										
Preparation of a booklet with the results and recommendations aimed at health authorities and health professionals.										
Posting the results on the website										
Distribution of the brochures and booklets										
Preparation of papers for publication										