

 <p>EU NETWORK OF EXPERTS ON NEWBORN SCREENING</p>	<p><b>Evaluation of population newborn screening practices for rare disorders in Member States of the European Union</b></p>	
<p><b>Consensus Workshop of the EU Network of Experts on Neonatal Screening 20-21 June 2011 Batiment Jean Monnet, Room M4 Rue Alcide de Gasperi, Plateau de Kirchberg - Luxembourg (LU)</b></p>		
<p><b>Workshop Conclusions</b></p>		

This document reports the main discussion points raised during the meeting discussion. It will not report punctual amendments to the Tender deliverables, i.e.: the Current Practice Report and the Expert Opinion Document, since amendments have been incorporated into the documents on screen during the meeting or noted for later consideration and the resulting documents are circulated separately.

## **Discussion and approval of the Current Practice Report**

The **main discussion points** raised were:

1. *Some formulations in the questionnaires are ambiguous*: it was observed that some answers may imply a different understanding of the question by different respondents; in the case of mandatory screening (the question could be interpreted either as mandatory offer of the service or as mandatory participation), ambiguity has been reduced by comparing answers to different questions. For other replies it was agreed that it is not necessary to go back to respondents, but that this experience should be taken into consideration in case that a subsequent survey is launched.
2. *A request to present data more soundly*: the debate developed on the fact that the report should give a sound picture of the situation in EU and that data should be as accurate as possible, since policy decisions may be taken on the basis of the information contained in the Report. Appropriate consideration should be given also to the time and effort dedicated by the respondents to provide data and by EUNENBS experts to validate data and revise the documents. It should be acknowledged that data quality depends on the information sources and that the information collected with the tender survey is rarely contained in validated official documents and is often resulting from personal experience. The process devised for data collection and validation, however, reduced the uncertainties which are intrinsic to this kind of investigations.
3. *A request to elaborate data as medians and median absolute deviations in addition to means and standard deviations*: During the discussion of tables presenting summary statistical data, it was considered that, in principle, the averages across diseases should be better omitted and that summary statistics should present also medians and related measures of variability rather than

only means and standard deviations. It was agreed that it will be carried out on those tables where additional information would be reasonable.

4. It has been observed that *summary statistics* do not provide actual information on the situation in different countries. While non aggregated data are contained in rather massive appendixes, which are not suitable for most target users, it has been recognized that non aggregated data would be of high interest for a selection of diseases.
5. *Recommendations which are not supported by evidence*: It was observed that some recommendations do not have a support from data collected with the survey. Indeed the recommendations are also resulting from debates raised during the tender meetings and in some cases they are based on common sense and widely shared views of the expert community. It is recognized that they may not apply to all and each situation (e.g.: each disease or panel of diseases).

Pending the amendments resulting from the discussion, including punctual observations that are not mentioned in this summary, the Current Practice Report was considered approved. The document amended after the observations raised in the meeting will be circulated to the meeting participants for their information.

### **Discussion and approval of the Expert Opinion Document**

6. *Role of the EU NBS body*: With reference to the EU NBS body, the concern was expressed that it may be a new source of expenses. It was clarified that, within the recently approved directive on cross-border health care, EU Member States have envisaged the establishment of a body for health technology assessment, dealing with the different disciplines also necessary for neonatal screening (NBS); it could be possible that the assessments for NBS are carried out within this body by an *ad hoc* committee. It was proposed that it could also manage a central database with information on results and operating aspects of the NBS systems of the EU Member States, which could produce evidence for advice. While there might be reasons for an EU database, overlaps with other international initiatives, such as the Region 4 Genetics Collaborative<sup>1</sup>, should be minimized. Mr. Montserrat highlighted that EU actions will be approved at political level only if there is enough evidence that they will result in some economic benefit. Clarifications were also asked on the aim of the future EU policy on NBS: harmonize or just share procedures; the balance between these two aims is matter of policy negotiations: however, the elements of the NBS system that may receive benefits from EU actions should be identified and communicated, possibly accompanied by economic evaluation, to the policy makers.
7. *The Wilson and Jungner criteria*: The point has been raised that making reference to W&J criteria does not take into account the many changes occurred in science and technology (multiplex detection; higher accuracy in screening and diagnosis due to gene technologies advances). NBS offers an opportunity for laboratory testing at a very low price; however, including the possibility of observing non-intended findings. In spite that many committees for NBS assessment claimed to use additional criteria, it has been noted that the several sets of criteria used refer strongly to W&J criteria.
8. *Evidence for NBS assessment*: The debate developed on the fact that with rare diseases it is difficult to get evidence based on Randomized Control Trials and the need for allowing the use of available evidence has been recognized.

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<sup>1</sup> <http://region4genetics.org/>

9. *Treatment (and benefits)*: the participants recognized that the concept of treatment should be extended. It should not be interpreted just as therapeutic drug use and should include the patient management. Moreover, although the benefit for the child is essential, the benefits for the family (and therefore indirectly for the child) should also be considered. In USA the benefits for the family and the society have been added to the benefit for the child. Regulations of these matters are different among EU countries. In the UK, information on carrier status is sought deliberately in no screening programmes. A WHO conference to discuss the evolution from W&J criteria may be mature.
10. *Communication of findings*: every effort should be made at screening stage to limit the observation to the intended targets of the test. Reporting abnormal findings at late stages of the process should be regulated; their communication should take place only within genetic counseling sessions so that the implication of a diagnosis can be explained appropriately. In principle, communication of findings which are difficult to interpret should be avoided. Currently however there are countries where reporting of unintended findings is regulated in different ways.
11. *Private offers for screening tests*: while patients would not support the ban of screening tests not included in the public neonatal screening system but offered by private companies, it is important to keep in mind that screening is a not only a test but a programme including treatment and management. Measures should be taken to discourage commercial screening or to make commercial screening to comply with the recommendations and/or criteria which are applied to the public NBS system.
12. *Information to prospective parents at preconception stage*: some discussion took place regarding the possibility to provide information at preconception stage on the features and benefits of neonatal screening. Indeed, preconception could be the right time for the prospective parents to focus on the information given regarding neonatal screening.

Pending the amendments resulting from the discussion, including punctual observations that are not mentioned in this summary, the Expert Opinion Document met the consensus of the participants. The document amended after the observations raised in the meeting will be circulated to the meeting participants for their information.

### **Discussion on barriers and scope of an EU policy on neonatal screening**

Summarizing the information obtained with the survey and the discussions at the meeting, it has been agreed that a number of barriers and opportunities should be taken into account regarding the development of EU policies. Main barriers regard: the possibility to define a common set of disorders, due to the heterogeneity of country situations in terms of organizational arrangements, human and infrastructural resources, and sustainability of costs; the lack of evidence for the development of agreed quality operations and standards; differences in approaches and regulations concerning communication of information other than for the newborns' benefit. The regulation on informed consent is rather homogeneous, although current practice can be rather different; remarkably, the opt-out possibility for the parents is offered in almost all countries. On the other hand, the opportunities for an EU policy on neonatal screening reside in the possibility of: networking centers of expertise at all steps of an NBS programme; facilitating patients' long-term follow up and databases with subsequent increased knowledge on the disease and health care services; better quality control and quality assurance, by means of cooperation in training of specialists, improving communication after diagnosis and empowerment, programme (cost-)

effectiveness assessment and improvement. Similar references to W&J in current NBS will also provide the opportunity for a common decision-making framework, which can be partly carried out sharing expertise at EU level, thus with reduced costs. It was observed that heterogeneity among countries, although may hinder the development of common policies and practices, may offer additional invaluable opportunities for research by comparing features and results of different approaches.

### **Conclusions, next steps and tasks**

It has been noted that it is the first time that experts from the 27 EU member states and other countries with political relations with the EU meet to discuss on neonatal screening. The documents prepared provide a good information basis for shaping policies in this area. Mr. Montserrat (EC) announced that the European Commission intends to present the tender deliverables at the next EU Committee of Experts on Rare Diseases scheduled for the second half of October 2011 and to meet with EUNENBS again next year. The purpose will be the transposition of these documents into a legal document, likely a EU Council Recommendation. Mr Margetidis (EAHC) stated that this survey is a baseline and that likely it will be repeated periodically. Some refinement is still needed to help experts to go through the data. Mr. Vittozzi (tender coordinator) thanked all participants as well as all respondents and experts who contributed to the preparation of the documents for their active commitment in this project and closed the workshop.

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