

# First Meeting Maputo, 26 to 28 April 2011.

Recommendation R004/01/2011

## Recommendation on reliability of data from EPI and epidemiological surveillance of vaccine preventable diseases

#### **Preamble**

- A. CoPI found that there are serious problems of data quality, both the EPI coverage rates (calculated and reported using the Health Information System SIS), and the epidemiological data related to some vaccine preventable diseases. In certain cases, reported data are so unreliable that international agencies tend to only accept data of vaccination coverage obtained through sample surveys, carried out correctly.
- B. CoPI considers that it may be accepted the fallacious justification that the data without credibility are the consequence of difficulties in calculating the population denominators by the National Institute of Statistics (INE).
- C. Many of these problems with the EPI data (obtained from the SIS) and those of the Epidemiological Surveillance Subsystem (SSVE), identified by national and international assessments indicate clearly that the problems in collecting and processing data result from lack of training, demotivation, lack of understanding of the purpose of collecting and processing the data, since it doesn't exist a widespread practice of using data and indicators as management tools at local level. In other cases, the unreliability of the data results of incompetence, negligence and even fraudulent actions by health workers involved in these tasks.
- D. CoPI also considers that the data from the Health Information System (SIS) and SSVE are of great importance for the management of EPI and that there is always a need to analyze the rates of EPI coverage in coordination with the morbimortality data of EPI target diseases.
- E. Meanwhile, COPI also found that there are efforts underway to improve the quality of the SIS and of the implementation of mechanisms for quality control. Nevertheless, there are still several problems in collecting, processing and analyzing EPI data (obtained though the SIS) and those of the SSVE and it is still necessary to improve considerably the quality control mechanisms.

### Operative paragraphs

#### Thus, COPI recommends:

- The strengthening of training programs and pre-service and in service training of health professionals involved in collecting and processing data from EPI (obtained through SIS) and those of SSVE and that such training should be of adequate quality;
- 2. The strengthening of the activities of surveillance, monitoring and periodic evaluation of SIS and SSVE, including the revision and adaptation of existing supervision strategies and of the present instruments for supervision, monitoring and evaluation;
- 3. Promotion and advocacy towards creating a culture of using information and evidence in decision-making at all levels, particularly at the district level;
- 4. Strengthening the use of data and indicators at different levels, as management tools;
- 5. The development and consolidation of retro information, at all levels as a factor that contributes to the improvement of EPI data (obtained through the SIS) and those of SSVE and especially for achieving significant improvement in decision making at different levels of the National Health Service;
- 6. The implementation at all levels, of the approach of integrated disease surveillance and response (VIDR), as a guarantee of accurate, harmonized, and timely data;
- 7. The effective implementation and regular review of tools for collecting and processing data from the EPI (through the SIS) and those from the SSVE;
- 8. The spread of information and exigency of utilization of the instruments and mechanisms of SIS and SSVE by all health workers involved, in order to ensure greater reliability of the EPI and epidemiological surveillance data;
- 9. The development of models for epidemiological surveillance reports, simple and suitable for the different levels, with clear and pragmatic operational recommendations;
- 10. The harmonization of data collected and the integrated analysis of data at different levels of the National Health Service, in order to eliminate disparities in data from different sources, at the level of SIS and SSVE;
- 11. The creation of accountability mechanisms in the entering, collection and analysis of data from SIS and SSVE in order to contribute to the identification of training needs for progression or non-progression in career and possibly for punishing those involved in acts of negligence and / or generation of fraudulent data;

- 12. The inclusion, in the current instruments used in the system of supervision and performance appraisal of workers involved in EPI and SSVE, of aspects that will allow for responsibility for eventual fraud and / or negligence and which enable to detect and neutralize the incompetence;
- 13. The institutionalization of mechanisms to control data quality, at all levels, from the collection, transmission and processing of EPI (through the SIS) and SSVE data;
- 14. Strengthening of the unit / sector of quality of EPI, defining a quality policy, a quality program and an implementation plan for quality management systems.

Finally, COPI recommends that, up to the end of 2012, a study should be carried out (including a situation analysis) on the information technologies to be used for entering and processing data at different levels, in order to harmonize the programmatic tools with the architecture of SIS, thus assuring the maintenance of the general framework of the SIS.

At last, COPI decided to create a subgroup composed of the following members: Moshin SIDAT, Eusébio MACETE, Betuel SIGAÚQUE, Eduardo SAMO GUDO Jr. and Lorna GUJRAL, for developing recommendations in a forthcoming meeting of the CoPI, with the following mandate:

- Advise on the strengthening and expansion of the current Epidemiological Surveillance System, including on the establishment of a hierarchical network of laboratories of epidemiological surveillance so as to include vaccine preventable diseases recently introduced or to be introduced in future.
- ▶ Explore the possibilities, from the bioethical point of view, of the use of samples preserved in "biobanks" for the epidemiological investigation of vaccine-preventable diseases.

## **Monitoring Indicators**

- Number of regular training programs and pre service and in service training programes
  of health professionals involved in collecting and processing data from the EPI (obtained
  through the SIS) and the SSVE;
- **→** Evaluation reports indicating adequate quality of such training programs;
- ➤ Evidence of enhanced activities of surveillance, monitoring and periodic evaluation of SIS and SSVE.
- → That current strategies and the existing instruments for supervision, monitoring and evaluation have been review and tailored to the needs;
- ➤ Existence of objective data indicating the process of creating a culture of using information and evidence in decision-making, at all levels, particularly, at the District level;
- ➤ Evidence of a change on the sense of the use of data and indicators at different levels, as management tools;
- → Evidence of consolidated mechanisms of retro information and that they have contributed to the improvement of EPI (obtained through the SIS) and SSVE data and

- especially to improve the decision-making at the different levels of the National Health Service;
- → Existence of objective evidence of the implementation, at all levels, of an integrated approach of disease surveillance and response system (VIDR), as a guarantee of accurate, harmonized and timely information;
- ➤ Evidence that the instruments for collecting and processing data from the EPI (through the SIS) and from SSVE have been implemented effectively and have been regularly reviewed;
- → Evidence that the instruments and mechanisms of SIS and SSVE have been disseminated to all health workers involved and that they are being used by them in order to ensure greater reliability of the EPI and epidemiological surveillance data;
- → Evidence of the use of report templates simple and suited to different levels and that they contain clear and pragmatic operational recommendations;
- ➤ That mechanisms to harmonize data collection and its integrated analysis, at different levels of National Health Service, have been implemented and that, by this way, disparities in the data from several sources, at the level of SIS and SSVE have been eliminated;
- → That mechanisms of accountability have been established on the entering, collection and analysis of data from SIS and SSVE, in order to contribute to capacity building, for career development and eventually for the punishing of those involved in acts of negligence and / or generation of fraudulent data;
- → That have been included in the existing instruments of the system of supervision and performance appraisal of workers involved in EPI and SSVE aspects that enable to establish responsibility for possible fraud and / or negligence and that allow to detect and neutralize the incompetence;
- → That have been institutionalized data quality control mechanisms, at all levels, from the collection, transmission and processing of EPI data (through the SIS) and those of the SSVE;
- ➤ Evidence of strengthening of the unit / sector of quality of EPI and that have been defined a quality policy, a quality program and an implementation plan for quality management systems.
- → That, by the end of 2012, a study has been conducted (including situation analysis) on the information technologies to be used for entering and processing data at different levels, in order to harmonize the programmatic tools with the architecture of SIS, thus assuring the maintenance of the general framework of the SIS;
- → That in a forthcoming session of the CoPI, the working subgroup has submitted recommendations on the strengthening and expansion of the current Epidemiological Surveillance System and about the possibilities, from the bioethical point of view, of the use of samples preserved in "biobanks" for epidemiological investigation of vaccine preventable diseases.