External Evaluation of the National Immunisation Programme in Bosnia and Herzegovina

Partners:
UNICEF, Bosnia and Herzegovina
WHO, Bosnia and Herzegovina
Canadian Public Health Association
Federal Ministry of Health, Federation of Bosnia and Herzegovina
Ministry of Health and Social Welfare, Republika Srpska
Federal Public Health Institute, Federation of Bosnia and Herzegovina
Public Health Institute, Republika Srpska
A. BACKGROUND AND PURPOSE

Note:
This draft paper outlines the terms of reference for the planned external evaluation of the National Immunisation Programme including Expanded Programme Immunisation (EPI) project. It has been drafted with contributions from all of the partners involved and will be further modified in consultation with the selected consultant and partners in the evaluation. The evaluation will take place in September/October 2000.

Problem addressed

Before the war, the Bosnia and Herzegovina immunisation programme was a focus of intensive efforts in the Bosnian health services during the period of former Yugoslavia. The Bosnia and Herzegovina followed a different vaccine schedule than did most countries in the West. There was a pronounced emphasis in the Bosnia and Herzegovina on a lengthy list of contraindications to vaccination, often resulting in children falling behind in their immunisation schedule. Also, the other constraints noticed within immunisation programme were lack of functional monitoring and supervision system at the national level and the low quality of cold chain storage facilities.

Despite these barriers to immunisation, health authorities were capable to meet the immunisation needs of children throughout the country. The coverage levels reported by the Ministry of Health in pre war period were high (>80%), and coverage levels reported by Public Health Institute for each of the vaccines provided by the national immunisation programme DPT1, OPV2, measles, BCG3 have exceeded 80% almost every year.

In 1997 a several key changes were implemented that sought to strengthen the operation and effectiveness of the national immunisation programme and bring its policies and processes closer to international standards. The WHO immunisation schedule was adopted, the cold chain storage system was strengthened, and the official list of contraindications to immunisation was drastically reduced.

The number of cases of polio, diphtheria, tetanus and pertussis were reported more than 10 years prior to the war, which suggest a high level of coverage. The war and its negative impact changed the situation dramatically. During 1993-1994 the number of reported cases of pertussis was 287. Tetanus was reported as 5-10 cases per year. Immunisation rates declined precipitously from above 80 per cent before the war to 30 per cent during wartime and back up to over 80 per cent. (December, 1999*)

As a consequence of recent war conflict in the region, Bosnia and Herzegovina is faced with great number of refugees children from former Yugoslav republics, internally
displaced children and returnees. Their overall immunisation coverage is likely to be very poor.

**Objectives**

In order to achieve 90% of measles vaccination coverage and 90% immunisation coverage for the other diseases: tuberculosis, diphtheria, pertussis, tetanus and poliomyelitis among children under 5 year and for tetanus among mothers UNICEF initiated implementation of Expanded Programme Immunisation (EPI) in Bosnia and Herzegovina in 1993.

The partners in the project are UNICEF, Federal Ministry of Health, Ministry of Health and Social Welfare of Republika Srpska, Federal Public Health Institute and Public Health Institute of Republika Srpska.

Project objectives are:

1. Increase the accessibility and use of routine immunisation services especially for children under six years of ages, and to increase the immunisation coverage rate
2. Health centres fully equipped in order to improve the quality of immunisation services
3. To strengthen management for EPI at central and local level
4. Raise public awareness among parents on necessity of immunisation

**Strategy**

We note below the strategies developed for each of the objective given above. These were decided in consultation with all partners and after looking at various options:

**Objective 1**

Increase the accessibility and use of routine immunisation services especially for children under six years of ages, and to increase the immunisation coverage rate.

- Routine immunisation has been supported and organised in all health centres in Bosnia and Herzegovina. For rural and remote area UNICEF supported MoHs to organise the mopping campaign.
- In order to immunise children against polio UNICEF together with WHO has supported MoHs to organise and conduct sub-nationals immunisation days (1996/97 and 1999/2000).

**Objective 2**

Health centres fully equipped in order to maintain and improve the quality of immunisation services

- Rebuilding the cold chain in Bosnia and Herzegovina is a costly and complex process. More than one million of the dollars were invested in building and maintaining a high-quality cold chain for immunisation. This included central cold room store, refrigerators (with temperature monitors) in most health centres, cold boxes and vaccines carriers to deliver vaccines through outreach activities.
- Vaccines (OPV, BCG, DT, DPT, TT and measles) and consumable material needed for EPI implementation such as syringes, cotton wool and alcohol was provided by UNICEF and distributed to health centres through MoHs and PHIs.
Objective 3
To strengthen management for EPI at central and local level

- Health workers were supported via seminars and regular workshops provided by local professionals in the area of newest information on management for EPI at central and cantonal level. EPI seminars have been focused on decreasing orders of unneeded vaccines, to curb wastage, to optimise timely immunisation of children, to avoid missed opportunities, maintaining a high level of community mobilisation for EPI activities, and make the best use of scarce human and transportation resources.
- Regular supervision meetings with staff and experts from PHI were also organised.
- Exchange visits for epidemiologists between different locations.
- Education material such as booklets was prepared for doctors and nurses

Objective 4
Raise public awareness among parents on necessity of immunisation

- To convenience population that immunisation is important for their children., UNICEF has supported the Ministries of Health to use the media to sensitisce communities. One key element is to obtain a strong political commitment in favour of immunisation activities. UNICEF has active contacts with political leaders of the two entities and kept repeating the important messages of child survival.
- Education material such as leaflets, posters, immunisation calendars, was prepared for parents.
- A TV spot was developed

Purpose of the evaluation

The main areas we would like the evaluation to focus on are:

- To assess the current status of a variety of important factors related to the delivery of vaccine services (vaccine supply, staffing of immunisation services, knowledge of service providers, vaccine handling and administration techniques, vaccine storage, and cold chain)
- To recommend way for improvement of immunisation services quality and how improvement can be sustained for the future
- To develop or update national immunisation plans for introduction of new vaccines and new technologies and how it could be sustained
- To strengthen and improve the national immunisation surveillance of vaccine preventable diseases

The evaluation report will be used by:

- Government (to advise overall country immunisation policy specially regarding introducing of new vaccines, education of health workers, for planning of immunisation services including government participation for EPI, and sustainability of the project, existing sites for advocacy purposes)
- UNICEF (for future planning of the project, advocacy and for fundraising)
- Donors (for feedback about project activities, advocacy and fundraising)
- Public Health Institute for information and awareness raising

External Evaluation of the National Immunisation Programme in Bosnia and Herzegovina

November 2000
Local health workers can use them for assessing day to day operations and resource management in their area of responsibility

**Scope:**
The evaluation should assess the National Immunisation Programme including existing project against country needs; country policy and immunisation practice and the existing national multiyear plan. Reference should be made to emerging European trends in the area of immunisation with particular reference to the issue of government funding of immunisation services.

**Duration**
The duration of an assessment will be allocated as follows:

- ¼ of the time for team planning for data collection (Step3)
- ½ of time for data collection (Step 4)
- ¼ of time for analysis, reporting and development of recommendations to government authorities and other

**Assessment team**
Participation on the assessment team means taking part full time in all steps of the assessment – preparation, data collection, analysis, developing recommendations, and reporting.

**Composition of evaluation team**

<table>
<thead>
<tr>
<th>Position</th>
<th>Background</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Two international consultant</td>
<td>Epidemiologist( immunisation) and/or health systems planners</td>
</tr>
</tbody>
</table>

**B. EVALUATION METHODS**

**Note**
This outline has been largely drawn from the WHO Immunisation Services assessment Guidelines (Methodology Booklet 1 and 2). It has been modified for use with UNICEF in Bosnia and Herzegovina.

**Assessment approach**
The assessment methodology is based on the concepts below. The focus is on performance.

Performance is the measure of quality, efficiency, and impact in this methodology. Questions like the following are to be asked and answered: Is the target population being
immunized? Are children returning for second and third doses? Are health workers using safe practices? If not, what is impeding performance?

The assessment focuses on the service delivery level, and problems found there are traced to the level of their origin.

Performance problems are initially investigated at the service delivery level. The team tracks problems that do not have strictly local causes to the next level and keeps tracking them upward through the system until their origin is found.

The assessment process involves the people who know what the problems are and who will participate in implementing the solutions.

Recommendations too often leave the country with the external consultants. Change will take place only if the people who know what the problems are and who implement solutions are engaged in problem identification and problem solving.

Immunization operations, the health system, and the external environment are included.

Immunization services are provided in a context consisting of the health system and the external environment. Because this context influences who receives immunizations and how they are provided, the assessment methodology examines the context as well as the services.

The box on the next page describes the three components.

Assessment Components

1. Immunization operations

Immunization service delivery: the strategies and activities involved in giving vaccinations.
Disease surveillance: measurement of disease incidence, record keeping, and reporting; laboratory testing.
Logistics: delivery of vaccines and other equipment to the place of use, transport, cold chain, and waste disposal.
Vaccine supply and quality: forecasting vaccine needs, procurement of vaccines, vaccine utilization monitoring.
Advocacy and communications – immunization education and promotion, social mobilization, advocacy.

2. Health system. The activities that primarily promote, restore, or maintain health, including:
Policy making, regulation, standard setting.
Planning.
Management of health services – including organization, direction, coordination within the health system, and supply.
Management of human resources – selection and assignment of personnel, education and training, monitoring of performance, supervision.
Information management.
Coordination with sectors and stakeholders outside of the health system and with development partners.
Evaluation.
Financing – budgeting, identifying funding sources, collecting revenues, tracking expenditures.

3. **External environment refers to the elements outside of the health system that have an impact on services. These include:**

Forces and trends – geographic, political, economic, social, and technological, e.g., macro-economic reforms, increased pressure for economic self-sufficiency, decentralization.

Expectations and needs of stakeholders, including:
The public
Politicians
Development partners
Competitors and collaborators, e.g., private practitioners or the education sector

**Composition of the evaluation team**

The two international evaluators will have between them the following skills and experience:
extensive knowledge of immunisation services and critical thinking skills that will enable them to find “the problems behind the problems”.
Evaluation of immunisation activities
Knowledge about Eastern European immunisation systems
Excellent knowledge of English, writing and communication skills

Others members of the team could be epidemiologists, health systems planners, and health financing experts. Such specialists should be assigned to the team that focuses on investigating the sub-national level.

Overall co-ordination will be via the steering committee national Interagency Co-ordinating Committee (ICC) or its equivalent. Additional input will be provided from a variety of sources to support the evaluation:
Project Manager: Selena Bajraktarevic. Coordination of evaluation process and selection and recruitment of consultants
WHO technical support and assistance
PHIs: Logistic Support including arranging hotel accommodation, office space, translation as required, and transport.
Government Officials (Federal MoH and Ministry of health and social welfare of Republika Srpska, PHI in Federation and Republika Srpska) briefing, policy advice and interviews

**Assessment schedule**

The two weeks assessment in a country is scheduled as follows:

<table>
<thead>
<tr>
<th>Assessment schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sunday</strong></td>
</tr>
<tr>
<td>Planning</td>
</tr>
<tr>
<td>(Step3)</td>
</tr>
<tr>
<td>Free day or travel</td>
</tr>
<tr>
<td>or travel</td>
</tr>
<tr>
<td>Team members will need approximately three days to learn what the government expects from the assessment, review information on immunization operations and the health system, and become familiar with the assessment methodology. The agenda for three days of preparation should include at least the topics shown in the table below.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome and introductions</td>
</tr>
<tr>
<td>Explanation of the terms of reference</td>
</tr>
<tr>
<td>Briefing on country immunization operations and health system *</td>
</tr>
<tr>
<td>Description of the assessment booklets and assessment methodology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of priority problems</td>
</tr>
<tr>
<td>Selection of first level of sub-national areas, e.g., regions or cities, if not already done so by advance team</td>
</tr>
<tr>
<td>Review of data collection process (Step 4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review of special issues</td>
</tr>
<tr>
<td>Preparation of sub-teams for data collection</td>
</tr>
<tr>
<td>Travel preparations</td>
</tr>
</tbody>
</table>

*Briefing on country immunization operations and health system*
The steps of the assessment process

The Assessment Methodology, Booklet No. 1, includes a complete description of each step.

**Step 1: Initiating the assessment**
The Ministry of Health, through the Inter-agency Co-ordinating Committee (ICC) or its equivalent, initiates the assessment, states its purpose, and prepares a terms-of-reference or similar document to guide the assessment.

**Step 2: Compilation of basic information**
Designated national members of the assessment team, e.g., immunisation services managers and a local WHO staff member, compile information about immunisation operations, the health system, and the external environment in which the health system operates before other members of the team (international and national) join them.

Following information should be collected:

**Basic information.** The entire team will need information on immunization operations, the health system, and the political, economic, and social environment in which immunization services are provided. The advance team should collect this information during this step and present it as part of the orientation in Step 3. Booklet 2, Part 1 lists topics on which information is needed.

**Key indicators.** The advance team should also collect data on indicators of effective performance.

As with the basic information, the advance team should not conduct new studies, but only collect data that are available in existing documents. In Step 3, the entire team will decide whether and how any gaps will be filled.

**Materials.** The whole team will need to review plans, reports, and other publications about the country’s immunization operations and health system. National plans, budgets, policy documents, standards, and guidelines for the health system and immunization services should be included in the “assessment library” and copied when necessary for individuals and sub-teams.

Of major importance are recent reviews, evaluations, and studies. These will shed light on problems that others have identified, which the team may investigate further to determine the extent to which they still exist.

**Step 3: Identifying additional data needs; planning data collection**
In a central location, the team meets and:
Reviews the information compiled in Step 2.
Assesses the country’s performance on specific indicators.
Identifies the areas of inquiry on which to focus.

*External Evaluation of the National Immunisation Programme in Bosnia and Herzegovina*

November 2000
Decides what additional information they need in each level, how to investigate possible problems, and how to verify the accuracy of data.
Sets priorities for data collection and decides where to go, from whom to collect, how, and when.
Selects areas for assessment.

**Step 4: Data collection**
Teams collect data, beginning their intensive investigation at the service delivery level and tracking problems through the system as indicated.

**Step 5: Data analysis**
Teams share interim findings on national level at the service delivery, further define problems, and discuss solutions. When data have been collected at lower levels, team members meet entities representatives at the central level to discuss findings and reach conclusions.

**Step 6: Recommendations and planning**
Assessment teams together with ICC participate in recommending solutions to problems, determining their feasibility, and planning strategies for their implementation. The team prepares a report and debriefs national officials.

**Step 7: Implementation**
Health system officials responsible for immunization services, managers at implementation level, and if applicable development partners are jointly responsible for monitoring plan implementation.

If a proposed innovation is being assessed, the team will need information about its characteristics, such as, in the case of a new vaccine, its formulation, vial sizes, storage requirements, and immunization schedule.

**Project documents**
Project proposals (years 1, 2 and 3 of project)
Multiyear national immunisation plan
UN Common Country Assessment 2000 (will be ready in September 2000)
National immunization policies and operational guidelines.
WHO recommended policies e.g., *Immunization policy*, WHO/EPI/GEN/95.03 Rev. 1.
Information on any proposed innovation.
National plan for health system, for immunization operations.
Health system budget, immunization budget.
Reports of reviews, evaluations, assessments of immunization operations conducted in last three years, e.g., cold chain or surveillance studies.

**UNICEF documents**
*External Evaluation of the National Immunisation Programme in Bosnia and Herzegovina*
November 2000
Building of national capacity

An important component of the project will be to build and enhance national capacity in the area of immunisation, particularly introducing of new vaccines within vaccines schedule, and therefore the evaluation team will also be expected to:

Present preliminary findings at national? Entity round table
Prepare a summary of the report suitable for parents and newspapers
Conduct limited media interviews
Ensure report is suitable for the UNICEF Web site

DELIVERABLES

Project Report in English
Professional publication to be identified

FINANCIAL REQUIREMENTS:

Salaries (lump sum)
Per diems
Travel
Logistics PHIs