

TERMS of REFERENCE

International Consultant to Work on Weighting and Costing DRGs and other Hospital Services

Background

The Republic of Serbia has received a loan from the International Bank for Reconstruction and Development (IBRD) in the amount of 29.1 million € for the implementation of the Second Serbia Health Project (SSHP).

The objective of the Project is to contribute to improving the efficiency and quality of the health system through: (i) strengthening health financing, purchasing, and maintenance systems; (ii) strengthening quality improvement systems and management of priority non-communicable diseases.

The activities that are financed by the SSHP are structured into several components: (1) Improvement of Health Financing, (2) Efficient Purchasing of Pharmaceuticals and Medical Products, (3) Strengthening of Quality of Service Delivery and (4) Monitoring, Evaluation and Project Management.

The activities under component 1 of the SSHP (Improvement of Health Financing) are directed at supporting improvement of the quality, efficiency and transparency of the Health Insurance Fund (HIF) financing for primary care and hospitals. Furthermore, the project will finance training, goods and equipment to support design and implementation of the incentives and oversee results; initial piloting of the quality improvement grants scheme to primary health care centers; and support upgrades of the information technology capacity to improve financial reporting and performance monitoring at central, hospital and primary levels. The activities under this component are structured into the following subcomponents: (1) Support Hospital Financing Reform, and (2) Strengthening Primary Health Care Financing.

Key issues

The Health Insurance Fund (HIF) is the main purchaser of the health services in Serbia with the Ministry of Health (MoH) playing the lead role in health policy and the National Institute of Public Health (IPH) responsible for planning, environmental health and monitoring. Hospitals in Serbia are currently paid on the basis of historical, line-item budgets, that do not encourage cost-containment or efficient use of resources. The HIF has begun transition to performance-based financing for acute inpatient care using the Australian Diagnosis Related Groups (DRGs) system, to promote greater efficiency for acute care in hospitals. An initial pilot in 2008 was successful and further work was focused on adapting coding procedures for the Serbian context, capacity building and updating bylaws. The MoH approved regulations requiring hospitals to begin reporting on acute care hospitalization cases based on Australian Classification of Health Interventions (ACHI) and ICD-10 starting in January 2014. Since June 2017, MoH, HIF, and IPH started with piloting of DRG payment system in 14 hospitals (out of 57 acute care hospitals in Serbia) with continual analysis and consultations with key stakeholders. Piloting process comprehended changes in reporting and e-invoicing systems,

and introduction of the step-down costing methodology for the allocation of hospital costs to cost centers.

Based on pilot results from January 2018 HIF has started with additional payments of 14 pilot hospitals according to their DRG performance. Key challenges, which remained to be overcome, are strengthening of the reporting system, and quality of data. In 2019, a new model of payment was introduced for 57 acute care hospitals with defined quality indicators, which accounts for 5% of the hospital's total budget.

AR-DRG cost weights were used for the Piloting and initial parallel budgeting. Serbia wants to develop its own cost weights fully compliant with Serbian context and to design costing methodology for future revisions of the cost weights. Besides that, the step-down costing methodology for the allocation of hospital costs to cost centers needs to be refined.

Objectives

The main objectives of this assignment are:

- 1) Support to the MoH, HIF and hospital management in the development of comprehensive activity based costing methodology for the allocation of hospital costs to cost centers and the development of the methodology for cost analysis for hospital care and to provide guidelines, knowledge and skills for hospital managers in developing efficiency measures that hospital can use in monitoring and controlling operational costs.
- 2) Support to the MoH, HIF and IPH in the development of Serbian DRG cost weights and calculation of the DRG base rate, as well as the pricing of “non-DRG” hospital services.
- 3) Support to the MoH, HIF and hospital management in in the development of the budgeting, planning, and forecasting tools and hospital efficiency-cost control measures.
- 4) Training of MoH, HIF, IPH, and hospital management in healthcare financial management and use of the new provider payment instruments.
- 5) Support to the MoH, HIF and IPH with the further development of the methodology for the analysis and benchmarking of the financial performance of hospitals.

Scope of Work

The Consultant will be responsible for the following tasks:

- Analysis of the data collected from hospitals through e-invoicing system and their possible use for the implementation of the activity based costing and for the allocation of hospital costs to cost centers.
- Functional specification for Activity-Based Cost Data Collection software development.

- Identify possible needs in adjusting the cost accounting data collection arrangements in the hospitals to ensure reliability and validity of the collected data for further application to DRG cost weights calculation and “non-DRG” hospital services pricing.
- Develop comprehensive activity based costing methodology for the allocation of hospital costs to cost centers and develop methodology for cost analysis for hospital care and provide guidelines, knowledge and skills for hospital managers in developing efficiency measures that hospital can use in monitoring and controlling operational costs.
- Develop comprehensive activity based costing methodology for the calculation of the Serbian DRG cost weights and calculation of the DRG base rate, as well as the pricing methodology for “non-DRG” hospital services. Provide knowledge transfer related to costing and pricing methodologies to the MoH, HIF and IPH.
- Calculate Serbian DRG cost weights and DRG base rate, as well as the prices for “non-DRG” hospital services.
- Support to the MoH, HIF and hospital management in in the development of the budgeting, planning, and forecasting tools and hospital efficiency-cost control measures.
- Support to the MoH, HIF and IPH with the further development of the methodology for the analysis and benchmarking of the financial performance of hospitals.
- Conduct trainings for MoH, HIF, IPH, and hospital management in healthcare financial management and use of the new costing tools.
- Perform any other appropriate tasks determined by Coordinator of Component I, PCU Coordinator and/or officials of the Ministry of Health.

Duration of the assignment

The consultant would provide services for 12 months from the date of signing the contract.

Deliverables

Fulfillments of the objectives of the SSHP project are the expected outcomes of the activities of this consultant. More specifically, expected outcomes are the following:

- **Report 1** - submitted no later than 15 days after the beginning of the Consultant’s work. There is previous Report (Costing activity-based hospital services, International experience, Final cost centers for hospital products and their Application in Serbia) that has already been conducted, prepared by another consultant. The MoH expects review of said Report by the Consultant which can be, eventually, accepted as a baseline for further activities.

In addition to above analysis, Report 1 to be prepared by the Consultant, should include, review of the data collected from hospitals in 2018 and 2019. The data provided should be used as a basis for recommendation regarding (i) the implementation of the activity based on costing for DRG and “non-DRG” hospital services; and (ii) on the allocation of hospital costs to different cost centers. In this regard the Consultant may suggest new approach suitable to the country and propose detailed plan of work. The Consultant will develop Functional specifications for Activity-Based Cost Data Collection software development.

- **Presentation 1** – delivered no later than 30 days after beginning the work. This presentation will provide to the Steering Group and consultants of the component 1 the key content laid out in Report 1.
- **Report 2** - submitted no later than 60 days after beginning the work. This report will present a fully developed activity based costing methodology for the allocation of hospital costs to cost centers and methodology for the calculation of the Serbian DRG cost weights and calculation of the DRG base rate, as well as the methodology for the pricing of “non-DRG” hospital services. It will also provide guidelines for hospital managers in developing efficiency measures that hospital can use in monitoring and controlling operational costs.
- **Presentation 2** – delivered no later than 70 days after beginning the work. This presentation will summarize Report 2 for the Steering Group and other stakeholder audiences, to be identified by the Steering Group, to solicit feedback and generate buy-in for the costing methodologies.
- **Conduct a 2-day trainings** of the MoH, HIF, IPH and hospital management in the new concept of the costing, budgeting, planning, forecasting and hospital efficiency-cost control measures, including up to 5 future trainers (total number of participants – at least 150 persons, maximum number of participants per each training cycle – 25 persons, location to be determined by the PIU).
- **Report 3** - no later than 180 days after beginning the work. This report will present proposed Serbian DRG cost weights, DRG base rate, and “non-DRG” services price list. It will also present simulation of the hospital budgets based on the proposed DRG and “non-DRG” prices.
- **Presentation 3** – delivered no later than 190 days after beginning the work. This presentation will summarize Report 3 for the Steering Group and other stakeholder audiences, to be identified by the Steering Group, to solicit feedback and generate buy-in for the Serbian DRG cost weights, DRG base rate, and “non-DRG” services price list.
- **Report 4 (Final Report)** - submitted no later than 210 days after beginning the work. This report will present the finalized Serbian DRG cost weights, DRG base rate, and

“non-DRG” services price list. The report will include annexes with the costing methodologies and description of the computation of all parameters. Report 4 will be accompanied by a finalized slide deck (updating Presentations 2 and 3).

Reporting requirements

Consultant is obliged to report to the Coordinator of Component I (improvement of health financing), PCU Coordinator/Deputy PCU Coordinator and Ministry of Health officials. All reports should be submitted in Serbian and English in the Word format. The Consultant is responsible for the translation of all reports.

Qualifications and requirements

- University degree in the field of medical science, health economics, health service management
- Minimum four (4) years of work experience in financial department of health care institutions using DRGs
- Knowledge of Serbian health system and health care financing system would be an asset
- Knowledge of Australian Refined – Diagnosis Related Groups
- Good command of written and spoken English language
- Computer literacy (MS Office, Internet)
- Previous experience in projects financed by the World Bank or the EU would be an advantage
- Knowledge of Serbian language would be an asset