

Terms of Reference

THE REPUBLIC OF TAJIKISTAN MINISTRY OF HEALTH AND SOCIAL PROTECTION OF THE POPULATION MATERNAL AND CHILD HEALTH INTEGRATED CARE PROJECT (G0627-TAJ)

PILOT CASE-BASED FINANCING FIRM (Package no. CS07)

I. BACKGROUND

The Republic of Tajikistan received a grant from the Asian Development Bank (ADB) for the implementation of the Maternal and Child Health Integrated Care Project in Tajikistan. The Maternal and Child Health Integrated Care Project will help address key issues affecting Tajikistan's health sector, such as inadequate funding, outdated infrastructure and health facilities, as well as lack of qualified medical professionals and healthcare providers, especially in rural areas.

Ministry of Health and Social Protection of the Population of the Republic of Tajikistan (MOHSPP) is the Executing Agency (EA) of the Project. Project Administration Group (PAG) is established for implementation of the project. The role of the PAG is to manage day to day implementation of project activities including operational and budget planning, recruitment and deployment of national and international Consultants, procurement of works (construction and rehabilitation of health care facilities) and goods (medical and non-medical equipment), monitoring and evaluation of project progress, analysis of issues to identify need for action, and reporting to the Project Director and MOHSPP.

II. OBJECTIVES OF THE ASSIGNMENT

The objective of this consultancy is to support the MOHSPP and MOF in the development / improvement of the case-based financing methodology to ensure budget calculation and financing effectiveness of the integrated MCH health system and pilot the case-based financing mechanism at project district hospital(s).

III. SCOPE OF THE ASSIGNMENT

The consultant firm will perform the following tasks in close coordination with key stakeholders:

1. Design the Case-based Financing System

- Support MOHSPP and MOF in the design of a case-based financing scheme for inpatient MCH services.
- Assist in the revision/adjustment of the regulatory framework for government approval of the case-based financing pilot.
- Develop phased implementation plan for the introduction of the case-based financing pilot in project target districts.

2. Facilitate the Introduction of a Virtual Salary Calculation System

- Develop / revise / adjust instructions for salary calculation in case-based financing pilot regions

- Analyze and present / discuss results of the virtual salary calculation system for case-based financing pilot regions to key stakeholders.
 - Develop and revise, when necessary, M&E framework for the salary calculation system of case-based financing
- 3. Ensure Development and Implementation of the Information System to track case-based financing and financing of referral services**
- Develop unified information system / database for registration and tracking of services financed through case-based financing including referral cases
 - Develop indicators for monitoring of compliance with referral and counter referral pathways
 - Design data input forms, analytical framework, and reporting forms
 - Develop technical specifications for computer equipment required to improve communication between referring health facilities, local government financial department, MOF, MOHSPP
- 4. Provide Guidance and Technical Support during all phases of the case-based financing pilot system implementation**
- Regularly monitor implementation of the case-based financing system in pilot districts and ensure revision/adjustment as needed
 - Present results to the MOHSPP, MOF, Local Governments, Partners, etc.
- 5. Train Hospital Staff in the Application of the Case-based Financing System**
- Train hospital management teams in application of case-based financing principle
 - Build capacity of health personnel, data input operators, statisticians, accountants, and economists, in applying the case-based information system.
 - Train MCH health workforce in application of software for the improvement of compliance with referral and counter-referral pathways

IV. DELIVERABLES

All reports and minutes are to be submitted as follows: 2 copies to EA/PAG and 1 copy to ADB. All reports are also to be submitted electronically, as email attachments in pdf format to all concerned persons. All reports shall be issued in English and Russian or Tajik.

- (i) Inception Report to be submitted no later than 4 weeks after contract commencement; the report shall include review of the case-based financing concept design and recommendation for its development
- (ii) Report 1: Design of the case-based financing system:
 - Report on recommended revision/adjustment of the regulatory framework for case-based financing
 - Approved concept document on case-based financing
 - Revised/adjusted regulatory document(s) for government approval on the case-based financing pilot (if needed), with phased implementation plan for introduction of the case-based financing pilot in project target districts
 - Report and data analyses for MOHSPP and MOF about introduction of the virtual case-based financing pilot.

- (iii) Report 2: Introduction of the virtual salary calculation system for case-based financing report
 - Report on the revision/adjustment of the instruction for salary calculation in case-based financing pilot districts
 - Report on results and analysis of introduction of the virtual salary calculation system for case-based financing in pilot districts
 - M&E framework for the salary calculation system for case-based financing
- (iv) Report 3: Development and implementation of the information system to track case-based financing and financing of referral services
 - Terms of References for case - based financing and referral information system.
 - Standard data input and reporting forms for referral and financing information system
 - Technical specifications for ICT equipment
 - Referral and financial information system software
- (v) Report 4: Guidance and technical support during all phases of the case-based financing pilot
 - Set of indicators for monitoring of the implementation of the case-based financing pilot
 - Monitoring reports on implementation progress and challenges
 - Reports on presentations of results to (workshops with) the MOHSPP, MoF, Local Governments, Partners, etc.
 - Workshop agenda
 - List of participants
 - Power Point Presentation on results of the case-based financing
 - Summary of issues discussed and follow-up actions
- (vi) Report 5: Training in application of the case-based financing system
 - Capacity building plan
 - Training curriculum and materials
 - ✓ Training of hospital management teams, accountants, economists
 - ✓ Training of MOHSPP, MOF, Local legal authority staff
 - ✓ Coaching on work and support in budget preparation and execution
- (vii) Report 6: Training in using the financial/statistical information system (data entry and analysis)
 - Capacity building plan
 - Training curriculum and materials
 - ✓ Training of health personnel, statisticians in filling data registration forms,
 - ✓ Training of data input operators, statisticians in applying the system,
 - ✓ Training of hospital management teams, statistician, accountants, economists
 - ✓ Training of MOHSPP, MOF, Local executive bodies staff in applying system, reporting, monitoring of the system.

V. REQUIREMENTS

- The Consultants shall work directly with related units of the MOHSPP, Health providers and development partners in close interaction with relevant staff of the Project Administration Group (hereinafter – the PAG) and consultants working on the MCH referral system development.
- The Consultants shall be accountable directly to the PAG Manager.

- Produced reports shall contain information on progress achieved, findings identified, and recommendations on improving the processes with specification of sources of materials. Reports on results of Consultant's work shall be agreed with officials in charge appointed by the MOHSPP). The timeframe for reconciliation of reports commented by the Client is 15 working days.
- Design and implementation plan of the case-based financing system should be mutually agreed by the MOHSPP and MOF

VI. QUALIFICATION REQUIREMENTS

Code	Position	Qualification and Experience	Key Tasks and Outputs	PM
CS07-1	Lead Health Care Financing Specialist	<p>Advanced (university) degree in Finance and Economics, Health Economics, Health Policy, Public Financial Management or similar field.</p> <p>Experience in health budget planning and monitoring of budget execution.</p> <p>Experience in developing materials for and in conducting competency-based training.</p> <p>At least 10 years of experience with the development and implementation of health care financing reforms.</p> <p>Excellent writing, analytical and interpersonal skills, ability to lead a team of experts..</p> <p>Excellent knowledge and skills in using spread-sheet software (EXCEL, ACCESS).</p> <p><u>Specific Experience</u></p> <p>Experience in the development of health financing and health care specifically with case based and per capita fee systems activities related to data and information management systems to support claims and payment of provider processes;</p> <p>Track record in managing operations and coordinating people, agencies and resources through a task network (this Consultant should</p>	<ul style="list-style-type: none"> - Design of the case-based financing system - Support MOHSPP and MOF in the design of a case-based financing scheme for in-patient MCH services - Assist in the revision/adjustment of the regulatory document for government approval of the case-based financing pilot - Develop phased implementation plan for the introduction of the case-based financing pilot in project target districts - Design and develop specific tasks for national health financing specialist - Facilitate the introduction of a virtual salary calculation system for case-based financing in pilot districts - Develop / revise / adjust instructions for salary calculation in case-based financing pilot districts - Design the case-based financing system - Analyze and present / discuss results of the virtual salary calculation system for case-based financing pilots to key stakeholders - Develop and revise, when necessary, M&E framework for the salary calculation system of case-based financing - Design and develop specific tasks for the information system to track case-based financing and financing of referral services - Define data to be recorded in the unified information system database to allow for the analysis of case-based financing and referral services - Participate in the design of the data input forms, analytical framework, and reporting forms 	11

Code	Position	Qualification and Experience	Key Tasks and Outputs	PM
		<p>be able to provide a range of services);</p> <p>At least 10 years of experience in developing health services budget calculation methods and related guidelines, training modules, monitoring and evaluation tools</p>	<ul style="list-style-type: none"> - Provide guidance and technical support during all phases of the case-based financing pilot - Regularly monitor implementation of the case-based financing pilot in target districts and support revision/adjustment as needed - Present results to the MOHSPP, MOF, Local Governments, Partners, etc. - Train staff in budgeting and the application of the case-based financing system - Train hospital management teams, accountants, economists in - Train MOHSPP, MOF, Local legal authority staff - Coach during day-to-day work and support budget preparation and execution 	
CS07-2	Software Architect and Information Technology - International Expert	<p>Master's degree in computer science or engineering</p> <p>Medical background is highly desirable</p> <p>Proven experience in software engineering and/or software development</p> <p>At least 10 years of experience in data management / database development and archiving, including use of web-enabled platforms and common statistical analysis tools</p> <p><u>Specific Experience</u></p> <p>Ability to develop software in C# or other programming languages</p> <p>Experience in designing interactive applications</p> <p>Experience with test-driven development</p> <p>Ability to document requirements and specifications</p> <p>experience related to design and implementation of national health information systems, working with governmental organizations and/or international development cooperation programs</p>	<ul style="list-style-type: none"> - Ensure development and implementation of the information system to track case-based financing and financing of referral services - Develop unified information system / database for registration and tracking of services financed through case-based financing and of referral services - Design / develop data input forms, analytical framework and reporting forms - Develop technical specifications for computer equipment required to improve communication between referring health facilities, local government's financial department, MOF, and MOHSPP; - Work closely with Health financing international consultant and Health financing national specialist on specific tasks to track case-based financing and referral services - Set up environment for software developers including source code management system - Manage the implementation of the system in the production environment - Manage the lifecycle of the software; - Follow-up with programmers, testing specialists and database developers - Assure software maintenance; collect feedback from end users; create new requirements based on the feedback from the users. Manage the software update lifecycle. 	5

Code	Position	Qualification and Experience	Key Tasks and Outputs	PM
		<p>Excellent knowledge of relational databases, SQL and ORM technologies (Entity framework, Hibernate)</p> <p>Experience in developing web applications using at least one popular web framework (ASP MVC, etc.)</p>		
CS07-3	Software Quality Assurance – International Expert	<p>Advanced degree in computer science or engineering.</p> <p>Medical background is highly desirable</p> <p>Proficient in C#, with a good knowledge of its ecosystems</p> <p>Familiarity with the .NET framework</p> <p>Excellent knowledge of test management software and SQL</p> <p>Excellent communication skills</p> <p>Analytical mind and problem-solving attitude</p> <p>At least 10 years of experience in software quality assurance and testing</p> <p><u>Specific Experience</u></p> <p>Proven experience as a QA tester or similar role</p> <p>Experience in project management and QA methodology</p> <p>Ability to document and troubleshoot errors</p> <p>experience in programming web applications using the C# and ASP.NET;</p> <p>familiarity with Agile frameworks and regression testing is a plus.</p> <p>experience working with governmental organizations or programs in the development of software and database management systems</p>	<ul style="list-style-type: none"> - Ensure development and implementation of the information system to track case-based financing and financing of referral services - Revise and assess database for registration and tracking of services financed through case-based financing and of referral services - Revise and assess current and newly developed data registration forms, analytical framework, and reporting forms - Revise and assess the technical specifications for computer equipment required to improve communication between referring health facilities, local government's financial departments, MOF, and MOHSPP - Work closely with Health financing international and Health financing national specialists regarding the specific tasks to track case-based financing and financing of referral services - Develop testing plan. Select the appropriate testing methodology for the organization of the testing. - Perform unit and integration testing of the software components during the development of the software; apply tests proposed by the software developer; - Perform user acceptance test of the software. - Perform unit, integration and acceptance testing of the software new releases. 	3.7
CS07-4	Health Care Financing	Advanced (university) degree in Finance and Economics or similar field;	<ul style="list-style-type: none"> - Assist International Lead Health Care Financing Consultant in the design the case-based financing system 	12

Code	Position	Qualification and Experience	Key Tasks and Outputs	PM
	Specialist (National)	<p>At least 10 years of professional experience in management / health economy / health care financing</p> <p><u>Specific Experience</u></p> <p>Basic knowledge of health budget planning and health financing;</p> <p>Knowledge in medical services cost construction and price calculation methods,</p> <p>Experience in developing analytical studies/ reports, and in data collection;</p> <p>Experience in data analysis, modeling and budget calculations</p> <p>Communication skills and ability to work in a team;</p> <p>Knowledge and skills in working with standard software applications</p> <p>Experience in per capita financing;</p> <p>Experience in conducting trainings related to finance and budgeting for at least 3 years;</p>	<ul style="list-style-type: none"> - Support International Consultant in the understanding of the local specific context, for better design of the case-based financing of the in-patient MNCH services - Assist International Consultant in the revision/adjustment of the regulatory document for government approval of the case-based financing pilot - Collect data based on forms prepared by International Consultant; analyze and evaluate data and send results to International Consultant. - Facilitate the Introduction of the virtual salary calculation system for case-based financing in pilot districts - Provide necessary information and documents on current salary calculation system and special regulations in calculation of hospital staff wages; - Collect data based on forms prepared by International Consultant, collect, analyze, and evaluate data and send results to International Consultant - Participate in every stage of development of the information system to track case-based financing and financing of referral services - Participate in the testing of the information system, verify input of financial data, automatic calculations, financial parts of reporting forms - Provide guidance and technical support during all phases of the case-based financing pilot - Regularly monitor implementation of the case-based financing system - Conduct visits to pilot districts and ensure quality of data provided in the forms - Support International Consultant and if necessary to present results to the MOHSP, MoF, Local Governments, Partners, etc. - Coaching and on-job support to the hospital staff in application of case-based financing principle, regulations, data transition, etc. 	PM
CS07-5	Software Developer	<p>Bachelor's degree in computer science or engineering.</p> <p>Good understanding of object-oriented programming</p>	<ul style="list-style-type: none"> - Ensure development and implementation of the information system to track case-based financing and financing of referral services 	10

Code	Position	Qualification and Experience	Key Tasks and Outputs	PM
		<p>Understanding of fundamental design principles behind a scalable application</p> <p>Creating database schemes that represent and support business processes</p> <p>Familiarity with various design and architectural patterns and with Microsoft SQL Server</p> <p><u>Specific Experience</u></p> <p>Experience in programming web applications using C# and ASP.NET</p> <p>Basic understanding of Common Language Runtime (CLR), its limitations, weaknesses, and workarounds</p> <p>Implementation of automated testing platforms and unit tests</p> <p>Proficient understanding of code versioning tools such as Git, SVN, and Mercurial</p> <p>Familiarity with continuous integration</p> <p>Experience working with governmental organizations or programs in the development of software and database management systems</p>	<ul style="list-style-type: none"> - Assist with the development of a unified information system/database for registration and tracking of services financed through case-based financing and of referral services - Support design / development of data input forms, the analytical framework and reporting forms - Work closely with the health care financing international consultant and health care financing national specialist regarding specific tasks - Support the development of the software application based on the software requirement specification document, provided by the International Software Architect & IT Expert. - Develop the database structure for the software. - Install the system in the development and testing environment. - Perform testing of the system. Reveal bugs and errors. - Develop the unit and integration tests of the system. Apply fixes to the system. - Implement required changes in the software application based on the changed requirements during the maintenance period. 	
CS07-6	Software Quality Assurance	<p>Bachelor's degree in computer science or engineering.</p> <p>Proficient in C#, with a good knowledge of its ecosystems</p> <p>Familiarity with the .NET framework</p> <p>Working knowledge of test management software and SQL</p> <p>Excellent communication skills</p> <p>Analytical mind and problem-solving attitude</p> <p><u>Specific Experience</u></p> <p>Proven experience as a QA tester or similar role</p>	<ul style="list-style-type: none"> - Ensure development and implementation of the information system to track case-based financing and financing of referral services by assisting International Software Quality Assurance expert - Revise and assess database for registration and tracking of services financed through case-based financing and of referral services - Revise and assess current and newly developed data registration forms, analytical framework, and reporting forms - Revise and assess the technical specifications for computer equipment required to improve communication between referring health facilities, local government's financial departments, MOF, and MOHSPP 	10

Code	Position	Qualification and Experience	Key Tasks and Outputs	PM
		<p>Experience in project management and QA methodology</p> <p>Ability to document and troubleshoot errors</p> <p>experience in programming web applications using the C# and ASP.NET;</p> <p>familiarity with Agile frameworks and regression testing is a plus.</p> <p>experience working with governmental organizations or programs in the development of software and database management systems</p>	<ul style="list-style-type: none"> - Work closely with Health financing international and Health financing national specialists regarding the specific tasks to track case-based financing and financing of referral services - Develop testing plan with International Software Quality Assurance expert. Select the appropriate testing methodology for the organization of the testing. - Perform unit and integration testing of the software components during the development of the software; apply tests proposed by the software developer; - Perform user acceptance test of the software. - Perform unit, integration and acceptance testing of the software new releases. 	

International Specialists Experience in the Region / Language Proficiency

- (i) Experience in implementing health financing reforms in transition economies and specifically in former Soviet Union countries;
- (ii) Proficiency in English language is essential;
- (iii) Proficiency in Russian language would be an advantage.

National Specialist language proficiency

- Language skills: Russian, Tajik, knowledge of English is welcome

VII. CLIENT'S INPUT

Client will provide the following inputs, project data and reports to facilitate preparation of the Proposals:

- a. Project Administration Manual
- b. Infrastructure Development Program prepared by TRTA
- c. Technical Assistance Feasibility Study
- d. RRP and all linked documents