बी.पी. कोइराला मेमोरियल क्यान्सर अस्पताल



भरतपुर, चितवन

दररेट (Quotation) पेश गर्ने सम्बन्धी सुचना वेभसाइटमा प्रकाशित मितिः २०८२/०४/२९

यस बी.पी. कोइराला मेमोरियल क्यान्सर अस्पतालको लागि आवश्यक पर्ने HIMS and EMR Software खरिद गर्ने प्रयोजनको लागि लागत अनुमान र TOR को तयारीको लागि तपिसल बमोजिमको न्यूनतम मापदण्ड सिहतको पर्ने HIMS and EMR Software को सम्बन्धित योग्य ईच्छुक तथा योग्य फर्म/कम्पिन मार्फत विस्तृत प्राविधिक तथा आर्थिक प्रस्ताव तपिसल बमोजिमका कागजातहरु संलग्न गरि ७ (सात) दिनिभन्न इमेल मार्फत bpkmchprocurement@gmail.com /bpkmchhospital@gmail.com वा सोझै अस्पतालमा पेश गर्नुहुन यो सुचना प्रकाशीत गरिएको छ। थप जानकारीको लागि अस्पतालको सम्पर्क गर्न सिकने छ।

तपसिल

संलग्न गर्नुपर्ने आवश्यक कागजात

- मु.अ.कर दर्ताको प्रमाणपत्र
- फर्म/कम्पनि दर्ताको प्रमाणपत्र नविकरण समेत
- आ.व. २०८०/०८१ को करचुक्ता प्रमाणपत्र
- दररेट पेश गरेको निवेदन
- फर्म/कम्पनिको अनुभव प्रमाणित गर्ने कागजात

<u>Terms of Reference (ToR) for Procurement Consulting Services for the Design, Implementation, Training, and</u>

Maintenance of an (EMR) Hospital Management Information System

1. Background

B.P. Koirala Memorial Cancer Hospital (BPKMCH), located in Bharatpur, Chitwan, Nepal, is one of the country's leading cancer treatment centers. Established in 1995 with support from the Chinese government, it is named after Bishweshwar Prasad Koirala, a prominent Nepalese political leader and social reformer. BPKMCH was developed as a national cancer center with a mission to provide accessible, affordable, and comprehensive cancer care to the people of Nepal and neighboring regions.

BPKMCH offers Comprehensive cancer treatment services that includes medical oncology, radiation oncology, surgical oncology, palliative care, and preventive oncology services. It is also actively involved in cancer research and works to promote cancer awareness, education, and early detection programs throughout Nepal. The hospital is a hub for cancer specialists, researchers, and healthcare providers and serves as a training and education center in oncology.

In addition to its healthcare services, BPKMCH collaborates with international and national organizations to develop its capabilities in cancer research, training, and advanced treatment modalities. The hospital is crucial in addressing Nepal's cancer burden, providing both advanced medical care and support services for cancer patients and their families.

2. Objectives

The purpose of this procurement is to implement a complete Hospital Management Information System (HMIS) across the hospital to make all administrative, clinical, and operational processes fully digital and easy to manage. This will help the hospital improve efficiency, accuracy, and patient care by streamlining workflows, reducing manual effort and costs, and enabling better decision-making and resource management.

3. Scope of the services

It covers the end-to-end design, deployment, training, and ongoing support required for successful implementation and sustainable operation of a modern, integrated Hospital Information System (HIS). The scope is designed to ensure that the hospital achieves streamlined workflows, improved patient care, operational efficiency, and compliance with applicable standards and regulations.

Highlighted Features

- **ICD-11 Compliant**: Supports the latest International Classification of Diseases (ICD-11) for accurate and standardized clinical coding.
- **VAPT Compliant**: Secured with Vulnerability Assessment and Penetration Testing (VAPT) to ensure system resilience against cyber threats.
- **SNOMED CT Compliant**: Enables standardized clinical terminology for structured documentation and interoperability.
- LOINC Compliant: Integrates Logical Observation Identifiers Names and Codes (LOINC) for consistent lab and diagnostic data.
- **HIPAA-Compliant Cloud System**: Ensures patient data privacy and security as per HIPAA standards on a cloud-based infrastructure.
- **Patient Portal**: Offers patients secure access to medical records, appointments, prescriptions, and billing.
- **Mobile App**: User-friendly mobile application for both patients and providers to access healthcare services on the go.
- **Real-Time Dashboard**: Provides live operational and clinical insights across departments for informed decision-making.
- **Physician Management**: Enables configuration and maintenance of doctor profiles, schedules, specializations, and availability for streamlined clinical operations.
- **Custom Print Templates**: Supports customizable print formats for prescriptions, discharge summaries, and other clinical documents.
- Al-Powered Speech-to-Text in EHR: Enables clinicians to dictate and transcribe case notes directly into the electronic health record.
- **Medical Device Integration**: Interfaces with lab equipment, radiology machines, and glucose meters for real-time data capture (Listing all available devices).
- Role & Rights-Based Access Control: Ensures secure access to modules and data based on user roles and responsibilities.

- WHO-Based Assessment Sheets: Predefined WHO clinical assessment templates for doctors and nurses based on user profiles.
- Mobile/Tablet App with Micro-DICOM Viewer: Allows doctors and patients to view radiology images conveniently on mobile or tablet devices.
- Radiology Image Comparison Tool: Facilitates side-by-side comparisons of radiological images for diagnostic accuracy.
- Queue Management System: Streamlines patient flow and reduces wait times through automated queue handling.
- **Multi-Lingual Support**: Interface available in Unicode Nepali languages for user-friendly access across diverse regions.
- **Tele consultation and home services**: Enables virtual consultations through video/audio with integrated appointment booking, e-prescriptions, and remote service scheduling, including home sample collection, nursing visits, and diagnostics.(API Integration)
- Radiology Report Comparison: Allows side-by-side comparison of two radiology reports to assess
 patient progress and identify clinical changes over time.
- **Visitor/Attender/Gate Pass Module**: Generates and manages passes for visitors, attendants, and external personnel with access control.
- Modification as per our requirement without any additional cost.

अतिरिक्त सर्तहरु:-

- १. सम्झौता पश्चात Software जडानको क्रममा Specification मा उल्लेख भए वमोजिम प्रयोगकर्ताको आवश्यकता अनुसार सामान्य थप घट भएमा सम्वन्धित आपुर्तिकर्ताको दायित्व हुनेछ ।
- २. सम्झौता पश्चात Software को Trial Version यस अस्पतालमा प्रयोग गर्न सिकनेछ ।
- ३. यस अस्पतालमा संचालनमा रहेको HMIS modules (Registration, Billing, LAB & Pharmacy) संग प्रस्तावित System Solution integrate हुन अनिवार्य रहेको छ ।
- ሄ. The proposed system must be integrated in such a way that the Registration, Billing, LAB & Pharmacy, Nursing, Discharge Summary, Emergency modules should be able to exchange the data and place request for LAB and Pharmacy unanimously.
- 5. Warranty must be minimum 2 years.
- ९. स्पेशिफिकेशन वमोजिमको सफ्टवयेर जडान पश्चात अस्पतालको सम्बन्धित प्राविधिकहरुलाई आवश्यकता बमोजिम User Training, User Manual प्रदान गर्नु पर्ने छ ।

4. Liability of Supplier/Developer

The document will be accepted by the Current Hospital Software vendor or else a well-known Software Development Company. Proof of qualification should comprise the following documents if the software vendor is other than the current hospital software vendor.

- **191.** The software company needs to be Certification in ISO standards or relevant credentials.
- 19.2 Minimum of 5 years of experience in the field of HealthCare System Solutions
- **19.3** Bidders must have successfully implemented HMIS System Solutions at least 2 Central level Hospital or 100 bedded Hospital, minimum 5. Implementation at 200+ bedded hospital will be an added advantage. All the list of Hospital clients with work complete or the references letter from 3 hospitals (minimum of 100+ bedded occupancy hospitals).
- 19.4 Bidder must be IRD approved Software Company. And software VAPT Testing certificated had to be done.
- **19.5** An original copy of the official document concerning the registration of the business as a Software Development Company.
- **19.6** List of Hospital clients with work complete or the references letter from 3 hospitals (minimum 5 number of Machine Interface, Auto Analyzer).

5. Warranty period

The warranty period shall be a minimum of 2 (Two) year after the Software installation. It will be the responsibility of the supplier to rectify as quickly as possible at free of charge all the faults and defects occurring during the warranty period.

6. Training

The Consultant shall arrange training for all concerned Hospital staff on the operation of hospital software.

7. Data and Information:

The hospital will provide the data and information about the service that the hospital will provide in the future. Based on the information and future need, the consultant should design and develop the software which will excellently manage the Hospital Management Information System.

8. Report and Time Schedule:

The Consultant should provide a report after the installation and operation and training of the software. The Hospital should ensure that the related staffs of the hospital are able to operate all features of the Hospital Management Information System independently. Arrangement of expert's service, while any problem occurs in software operation at any time, should be made by the consultant as after-sale service.

B.P. Koirala Memorial Cancer Hospital

Bharatpur, Chitwan

Estimated Cost for Consulting Service for development, installation, and training for

EMR HMIS Software

S. No.	Descriptions	Cost for Development & Implementations
1	Online Appointment	
2	Online lab report- Mobile and Web	
3	Dynamic QR Payment Module Integration with HMIS Software	
4	Government Health insurance Management System	
5	Social Security Fund Management System	
6	Paying Clinic Management System (Extended Health Service/EHS System)	
7	Queue Management System	
8	Inventory Management System (Additional Features) Integrated with PAMS V2	
9	Asset Management System	
10	Clinical Information System EMR	
	10.1. OPD Clinical Information System: EHR for OPD patients	
	10.2. In-Patient Clinical Management System: EHR for in-patients	
	10.3 OT Management System	
	10.4 Emergency Patient Management System	
11	Personal Information Management System	
12	Payroll Management System	
13	Integrated Accounting Management System	
Service	Enhancements Modules	
14	Radiology Reporting System (Text Base)	
15	Open-Source PACS (Picture Archiving and Communication System) Integrations with Radiology System	
16	Machine Interfacing	
17	Managerial information system (MIS) Dashboard	
18	Radiation Oncology Department	
19	Library Management System	
	Gross Total	