



## **Kathmandu University-Integrated Rural Development Project/**

### **Nepal Technology Innovation Center**

#### **Call for Research Proposal for Smart Health Program**

**Call Published date: 14 September, 2022**

**Deadline: 29 September, 2022**

#### **Background:**

Smart Health in our context is defined as the subset of digital health that enables data-driven approaches for decision-making for healthcare providers and individuals. In recent years, the health sector in Nepal has made significant advancements on the policy front (formulation of eHealth policy, digital health road maps), and adoption and implementation of various digital health. However, data use and adoption of data-driven approaches in Nepal are almost non-existing. Hence, the program aims to improve the situation through

1. Development of Smart Health Platform to facilitate secure data exchange of health information enabling data-driven decision making.
2. Capacity development to improve quality of care and facilitate health research through enabling data use.

The program aims to achieve these through developing and implementing the Smart Health Platform, which will be based on local needs, adopting existing tools and as per international standards.



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## Scope of work

The scope of work includes amongst others, the following tasks. It will be completed using a combination of desk reviews, interviews with key stakeholders, field visits, and a national workshop with digital health consortium members.

### Work Package 1: Baseline / Context Analysis

- Carry out a mapping exercise of existing digital health tools and platforms being used in Nepal from the government sector, private sector, development partners and academia (including but not limited to EMRs/EHRs, mHealth platforms, health data analytics platform, bioinformatics tools)
- Review soundness of digital health platforms and tools (use of health data standards or terminologies, interoperability approaches etc.)
- Identification of challenges for existing tools and platforms (Most popular used)
- Identification of key stakeholders and formation of smart health consortium
- Identify readiness of stakeholders (specifically academia) to participate on health research networks

### Work Package 2: Smart-Health Platform system implementation plan

- Formulate or adopt architecture development methodology
- Identify gaps in software, hardware and human resource requirements to develop, maintain and implement proposed systems.
- Identification of tools that can be utilized to create a Health Technology Stack utilizing SMART-ON-FHIR or a similar approach.
- Prepare system development plan and implementation monitoring plan.

### Work Package 3: Monitoring of Development and Validation (procurement process)

- Procurement plan preparation
- Identify the appropriate company for the development



- Monitoring of the development

Work Package 4: Deployment, Testing and Validation

- Deployment, testing and validation plan preparation based on the area identified by Health sub-working group
- Training
- Testing (security acceptance test-SAT, Final acceptance test -FAT) and Validation of the system developed

**Deliverables**

WP	Deliverable Code	Deliverable
1	D1.1	Smart Health consortium formation and workshop
1	D1.2	Baseline/Content Analysis Report: Report on findings of the work undertaken in Part 1 of the scope of work above
2	D2.1	Smart Health platform architecture
2	D2.2	Smart Health platform development and implementation plan: A detailed report as per part 2 of the scope of the work.
3	D3.1	Procurement documents and
3	D3.2	Contracts with company
3	D3.3	Platform development
4	D4.1	Deployment plan
4	D4.2	Test and validation report

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### Qualifications and Experiences:

1. The team, group, lab or companies which have experience in working in the field of health/biomedical informatics, computer sciences, health/hospital administration or public health with related filed expertise.
2. The priority will be given to applicant having experience in supporting the design and rollout of digital health platforms with health data and exchange standards.

### Core Technical Competencies:

- Experience in working with HL7, FHIR and SMART-ON-FHIR and other standard medical terminologies/ontologies
- Familiar with health and other policies which have an impact on digital health
- Experiences in knowledge graphs is desirable

### Terms and Conditions

1. Proposal support fund and details are presented below:

Category	Details
Total Support Fund	Up to NRs. 5 million
Support Period	2022.10~ 2023.06 (9 months)

2. Proposal document having signed on each page by authorized personnel must be submitted not later than 29 September, 2022 until 12:00 PM, local time. The document received later than the above-mentioned time and date will not be considered. Electronic submission must be done through email at [ntic@ku.edu.np](mailto:ntic@ku.edu.np) on or before 12 PM on 29 September, 2022. Proposal received after this deadline will be rejected.
3. If the last date of submission falls on a Government/Kathmandu University holiday, then the next working day shall be considered as a deadline.



4. Costs incurred for preparation of applications and site visits are to be borne by the applicant.
5. KU-IRDP/NTIC reserves the right to accept or reject any or all applications, cancel the process and reject all proposal applications without assigning any reason whatsoever. The applicant shall have no right to claim any cost associated with the preparation of proposal document under such circumstances.
6. In any case of dispute in the unit cost and fund flow between two parties, the final decision will be taken as per the KU policy. In such cases, KU policy will be prevalent.

**For Further Information**

**Email Address: [irdp@ku.edu.np](mailto:irdp@ku.edu.np) , [ntic.ku.edu.np](mailto:ntic.ku.edu.np)**

