TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANTS/ CONTRACTORS

Title:		Type of Engagement	Workplace of Consultant:
Digital Health Strategy Consultant		☒ Consultant (International)	Freetown, Sierra Leone

Background:

Digital technologies and improved data capacity are important catalysts for accelerating achievement of the 2030 SDG3 targets. Actionable and relevant data is the foundation to monitor progress toward the 2030 SDGs, while harmonized digital systems optimize the health system to deliver quality, coverage, and equity of health services. Digital systems can catalyze a necessary transformation in the health system addressing ongoing data gaps and persistent health system challenges to facilitate a more resilient, person-centered, and responsive health system.

Digital innovations at community and primary health facility level can be useful for strengthening the linkages with, and use of, formal health services, while also supporting the institutionalization and strengthening of the community health system. The term "digital health", which includes both mHealth and eHealth, describes the general use of information and communication technologies (digital, mobile and wireless) to support achievement of health objectives. Some successful examples include stock management tracking, electronic decision support tools for health workers, health worker communication and performance feedback, targeted messages and service delivery to clients, citizen-based reporting for increased accountability, and data storage, aggregation, and visualization do drive action/response.

While most countries have achieved some level of digitalization of health system functions, some struggle with the implementation of several pilots which often are not designed for scale, using systems architecture that lack interoperability, sometimes using non-validated solutions, and which often do not have a sustainable financial or technical support model to allow for scale-up. This has resulted in highly fragmented and uncoordinated implementation of small-scale pilots with various tools and software solutions (often targeting the same health workers), failure to feed data into health management information systems (HMIS) or to address the system problems or Ministry of Health needs.

Purpose and objectives:

This role will focus on providing support to Sierra Leone as follows:

1) Technical and coordination support for operationalities of the Digital Health coordination Hub at DPPI, Ministry of Health to support the implementation of the costed National Digital Health Road Map in Sierra Leone.
2) Update the existing national HIS strategy in view of alignment with national Health Digital Healthy Strategy and the Roadmap.
3) Technical support to MoHS for the implementation and evaluation of EMR and implementation of recommendations proposed in the evaluation.
4) Technical support to MoHS, in close collaboration with relevant partners for the development of a geospatial database linking PHU master facility list (MFR), Community Health Worker (CHW) master list and community coordinates; and the creation of a registry that hosts CHW master list.
5) Technical support on the development of e-CHIS that that is interoperable with DHIS-2, CHW Performance Management System and Incentive Payment Mechanism (using mobile money).
6) Technical support in the implementation DIPC Digital Health project especially on scale-up e-SMT, emergency preparedness digital solutions & Digital Health capacity building project.

This will include engaging with UNICEF Sierra Leone Country Office, WHO, MOHS, and other in-country stakeholders in implementation of Digital Health Road map, update/development of HIS strategy, e-CHIS, and evaluation of EMR.

Cross cutting to the objectives, the support should entail:
1) Documentation and dissemination of the processes and lessons learned to develop the digital health models and implementation plans in the future.
2) Capacity building to empower MOHS staff for continuous policy and programme improvements through transfer of skills, trainings, and webinars.

The consultant will ensure that existing digital health solutions, where appropriate, are leveraged in a way that is consistent with UNICEF's guidance, such as the [digital health and digital engagement guidance](#) for COVID-19 preparedness and response, to improve future emergency preparedness and response.

Methodology and Technical Approach

Over 11.5 months the consultant will work with the UNICEF country office, MOHS, and WHO leveraging their expertise in the local context, partnerships, and organizational plans/strategies.

The main results will be:
1. Coordination & stakeholder engagement: Digital Health Coordination Hub, under the DPPI, is revitalized and effectively coordinating the Digital Health Road map implementation with strong stakeholder engagement harnessing increased donor interest in the digital health space. The Coordination Hub will be able to coordinate by MOHS in-house capacity after six months of consultancy.
2. Planning and capacity building: Update the Health Information strategy and Digital Health competency capacity building for Health workers.
3. Technical support and advice: Provide technical assistance in the EMR evaluation and implementation of recommendations, development of e-CHIS & a national geo-referenced CHW master list hosted in a registry and e-SMT.

The consultant will be embedded/based in the Directorate of Policy, Planning and Information of the Ministry of Health and Sanitation (MoHS).

Specific Tasks of the Consultant

Under the overall guidance of the Senior M&E Specialist of the MoHS Directorate of Policy, Planning and Information and the Research and Publication Specialist (DPPI) and direct supervision of the UNICEF Health Specialist (System Strengthening), the contractor will perform the following tasks:

Deliverable 1: A review of existing EMR applications conducted, and the current EMR guideline updated

In Sierra Leone, patient records are predominantly paper- based. There are a handful of EMR projects initiated by different partners. The consultant is expected to be an active player co-leading the assessment of pros & cons of existing EMR initiatives in the country, considering the affordability, efficiency, and sustainability. Thereview of existing EMR applications thoroughly assessed their functionality and usability. The updated guidelines will ensure that the EMR applications meet the evolving needs of healthcare providers and improve patient care.

Activities will include:
•   Under leadership of MOHS, UNICEF Sierra Leone EMR consultant will work to determine modalities for selecting a National EMR system, manage and coordinate EMR deployment at all levels, monitor and evaluate EMR deployment, propose set of recommendations for harmonizing EMR scale up.
•   Update the National EMR guideline based on recommendations.
•   Review new EMR projects to ensure alignment with the National Digital Health Vision and EMR Guideline.
•   Identify organizational, social, legal, technical financial factors that might inhibit the transition from paper-based system to EMR.

Deliverable 2: Update the existing Health Information Strategy

Sierra Leone's five year National HIS strategy expired in 2021. MOHS has requested that UNICEF update the strategy for a 3–5-year period in line with current developments, increased use of technology in data, emergency preparedness and the need for interoperable data systems. The consultant will.
•   Conduct a situational update on HIS landscape including Stakeholder and SWOT analysis.
•   Engage partners through consultation process in the HIS strategy.
•   Finalize the document and ready it for dissemination.

Deliverable 3: Technical support in the implementation of DIPC Digital Health project particularly in capacity building on Digital Health Core Competencies and e-SMT scale up is fully implemented

Based on the Digital Health landscape a targeted, practical, and sustainable health workforce training and capacity development programme for priority digital health competencies leveraging a low dose high frequency approach with on-site coaching support and use of digital learning platforms for self-directed learning reinforcements. Institutional contract is being processed to develop an audio-visual material to guide the capacity building. The consultant will work with the contractor to:

On capacity building
- • Ensure key competencies are integrated
- • Quality of the content reflects the needs identified during the land scope assessment
- • The capacity building activities effectively implemented as required standard and frequency
- • Assess the impact of the capacity building on their knowledge and skill

On e-SMT:
- • Provide training on use of e-SMT
- • Monitor usability levels in project areas

Deliverable 4: Digital Health Coordination unit at DPPI, MOHS is capacitated to become fully operational coordinating the implementation of the Digital Health Roadmap 2023-2025.

Costed digital health road map for Sierra Leone is developed with technical and financial support of UNICEF. The implementation of the road map underpins a strong coordination body to harmonize and align digital health activities for effective and efficient implementation. Activities will include:

- • Co-lead the coordination unity for six months and gradually hand over the coordination role to MOHS
- • Ensure the digital health governance structures is fully functional and is in line with the road map and strategy
- • Engage partners who are supporting the implementation of the road map to convene regularly to discuss successes, challenges and thereby ensuring for harmonizing and alignment of Digital Health.
- • Support MOHS/ DPPI in developing concept notes and presenting evidence to potential donors to improve resource mobilization
- • Monitor the operationalization a national digital health strategy * DH road map, while ensuring strong ownership of the MoHS and engagement of all relevant stakeholders throughout the implementation process.

Deliverable 5: Implement & update a georeferenced CHW master list hosted in a registry, and support e-CHIS initiative

Sierra Leone is currently operationalizing the revised national CHW policy (2021), which aims to strengthen the linkage between CHWs and the PHUs, increase the proportion of female CHWs, prioritize hard-to-reach communities, integrate vertical programmes, and strengthen performance management system. With support from partners, UNICEF and other partners, the MoHS has initiated the process of: i) developing a geo-referenced CHW master list, which will be linked to a georeferenced PHU master facility list and a national settlement database to allow geospatial analysis of CHW distribution; and ii) developing a CHW registry. The consultant, serving as a UNICEF's technical focal point on this ongoing Collaboratory work, is expected to provide substantial technical inputs to the process, bridging the programmatic needs and technological solutions. The consultant is also expected to further provide technical assistance to the MoHS in designing a e-Community Health Information System(e-CHIS) to effectively measure and manage individual CHW performance through DHIS2 platform, which will be linked to the incentive payment. Activities will include:

- • Work closely with CHW Geo-spatial Working group (MoHS Directorate of Policy Planning and Information (DPPI), Directorate of Primary Health Care (DPHC), Global Fund, UNICEF, and other partners) to implement the updating of a geo-referenced CHW master list linked to PHU master facility list including community coordinates
- • Work closely with MoHS and UNICEF CO staff to design e-Community Health Information System (e-CHIS) that is interoperable with DHIS 2 and other relevant data systems.
- • Work closely with MOHS and partners to start piloting e-CHIS

Expected Deliverables	
Deliverables	**Due Date/Duration**

Deliverable 1: A review of existing EMR applications conducted, and the current EMR guideline updated	20 days
Deliverable 2: Update the existing Health Information Strategy	35 days
Deliverable 3: Technical support in the implementation of DIPC Digital Health project particularly in capacity building on Digital Health Core Competencies and e-SMT scale up is fully implemented	25 days
Deliverable 4: Digital Health Coordination unit at DPPI, MOHS is capacitated to become fully operational coordinating the implementation of the Digital Health Roadmap 2023-2025.	80 days
Deliverable 5: Implement & update a georeferenced CHW master list hosted in a registry, and support e-CHIS initiative	75 days

Deliverable 6: Documentation submitted on processes and lessons learnt. *Across all key deliverables and submitted end of assignment* (as described above)
   - Monthly technical report with supporting documentation
   - Final technical report with supporting documentation
	10 days
	
	At the end of every month
	
	End of assignment

7. Other technical support and advice	As needed
8. Final technical report with supporting documentation	End of assignment
Total number of working days	245 days (over a period of 11.5 months)

- **Management, Organization and Timeframe**

  The consultant will be based in Sierra Leone and will be required to travel to the field as needed. As travel dates and locations will be decided by UNICEF and partners as project progresses, UNICEF will arrange all travel for the consultant as needed.

  The position will be managed and supervised by the UNICEF Health Specialist (HSS) and DPPI Senior M&E and Research and Publication Specialists. The consultant will provide monthly updates on the activities implemented and deliverables achieved. The fees of the consultant will be processed by UNICEF with submission of his/her progress report of deliverables certified by the supervisors.

  The duration of the consultancy is 245 days.

UNICEF recourse in case of unsatisfactory performance: Payment will only be made for work satisfactorily completed and accepted by UNICEF.

Budget Year:	Requesting Section/Issuing Office: *Health & Nutrition Section*	Reasons why consultancy cannot be done by staff:	
Consultant Sourcing: ☒ International ☐ National ☐ Both **Consultant Selection Method:** ☒ Competitive Selection (Advertisement/Desk Review/Interview		**Request for:** ☒ New Consultancy	
Supervisor:	**Start Date:** *15ᵗʰ September, 2023*	**End Date:** *31ˢᵗ August 2024*	**Number of Days (working):** *245 days*

Child Safeguarding

Is this project/assignment considered as "Elevated Risk Role" from a child safeguarding perspective?

☐ YES   ☒ NO   If YES, check all that apply:

Direct contact role   ☐ YES   ☒ NO

If yes, please indicate the number of hours/months of direct interpersonal contact with children, or work in their immediately physical proximity, with limited supervision by a more senior member of personnel:

Child data role   ☐ YES   ☒ NO

If yes, please indicate the number of hours/months of manipulating or transmitting personal-identifiable information of children (name, national ID, location data, photos):

More information is available in the Child Safeguarding SharePoint and Child Safeguarding FAQs and Updates

Work Assignment Overview			
Task/Milestone	**Deliverable/Output**	**Timeline of completion of deliverable**	**Estimated Budget (***Professional fee only)* **for each deliverable**
Deliverable 1: A review of existing EMR applications conducted, and the current EMR guideline updated	Sierra Leone MOHS EMR guideline updated	November 15, 2023 (20 days)	
Deliverable 2: Update the existing Health Information Strategy	HIS strategy 2023-25 updated	December 31, 2023 (35 days)	
Deliverable 3: Technical support in the implementation of DIPC Digital Health project particularly in capacity building on Digital Health Core Competencies and e-SMT scale up is fully implemented	Digital Health Core Competencies implemented e-SMT uptake increased and scaled up	January 31, 2024 (25 days)	
Deliverable 4: Digital Health Coordination unit at DPPI, MOHS is capacitated to become fully operational coordinating the implementation of the Digital Health Roadmap 2023-2025.	MOHS's Digital Health Coordination Unit is fully operational implementing the road map plans	May, 1,2024 (80 days)	
Deliverable 5: Implement & update a georeferenced CHW master list hosted in a registry, and support e-CHIS initiative	Updated a georeferenced CHW master list hosted in a registry. e-CHIS system designed, and piloting initiated	August 15, 2024 (75 days)	
Deliverable 6: Documentation submitted on processes and lessons learnt. *Across all key deliverables and submitted end of assignment* (as described above) - Monthly technical report with supporting documentation - Final technical report with supporting documentation	Monthly technical report and documentation Final technical report and documentation	August 31, 2024 At end of contract (10 days)	

Provide other technical support and advice related to digital health	As needed	As needed	
Terms of Payment	☒ Monthly payment, upon completion of each deliverable (*according to monthly schedule agreed for that month with UNICEF supervisor*) ☐ Payment, upon completion of all deliverables at the end of assignment. ☐ Fee advance, percentage (up to 30 % of total fee)		
Minimum Qualifications required: ☐ Bachelors ☒ Masters ☐ PhD ☐ Other An advanced university degree is required in Health informatics, digital innovation, Public Health or relevant field.	Knowledge/Expertise/Skill required At least 7 years of professional experience. Proven experience in the mHealth field – especially on the deployment of information systems and mHealth solutions, such as decision support and client communication tools. Significant experience in providing technical assistance and thought leadership surrounding the design and implementation of digital health for system strengthening. Significant experience with project management and proven ability to translate complex ideas from various areas into unified, clear guidance is a must. **Additional Experience and Knowledge:** ▪ Excellent written and verbal communication skills ▪ Experience working in, designing, or deploying digital health solutions in/for low-resource settings ▪ Extensive experience working with the mHealth/eHealth community ▪ Knowledge and experience in community health/primary health care programmes is essential ▪ Experience designing and supporting digital health projects with Government (esp. Ministries of Health) ▪ Knowledge and experience with DHIS2, OpenMRS, iHRIS, OpenHIE, MoTECH, CommCare, OpenSRP, NIS etc ▪ Familiarity with open-source technology ▪ Experience with processing large amount of information and synthesizing it ▪ Ability to work in a team and in a diverse work environment. ▪ Knowledge of United Nations – particularly UNICEF – processes and work streams is an asset **Languages:** Fluency in English		
Administrative details: Visa assistance required: ☒ Transportation arranged by the office: ☐	☐ Home Based ☒ Office Based: If office based, seating arrangement identified: ☒ The principal Consultant seat is agreed to be at MOHS DPPI with regular visit to UNICEF office. IT and Communication equipment required: ☒ Internet access required: ☒		

Costs indicated are estimated. Final rate shall follow the "best value for money" principle, i.e., achieving the desired outcome at the lowest possible fee. Consultants will be asked to stipulate all-inclusive fees, including lump sum travel and subsistence costs, as applicable.

Payment of professional fees will be based on submission of agreed deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the consultant

Individuals engaged under a consultancy or individual contract will not be considered "staff members" under the Staff Regulations and Rules of the United Nations and UNICEF's policies and procedures and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants and Individual Contractors. Consultants and individual contractors are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.