



Terms of Reference for Consultancy to Create Blueprints for a Digitalized Primary Health System with a Strengthened Connection to the Community Health Program

A. Summary

These terms of reference provide the background to the recruitment of a consultant to provide technical leadership for developing a situational analysis and system blueprint for the expansion of client-centered, digitally enabled health systems, strengthening the connection between the community health system and primary health care units in Zanzibar. They also define the background of the project, period of performance, scope of work, expected deliverables, and qualifications for the consultant. This consultancy will be led by the Ministry of Health, Social Welfare, Elderly, Gender and Children (MOHSWEGC), directed by the Digital Health Strategy Technical Working Group (TWG), and closely supported by D-tree International, a digital global health organization committed to improving access to high quality healthcare by integrating digital technology solutions into health systems in innovative and effective ways.

B. Background

To date, significant progress has been made in the establishment of Zanzibar's community health system, Jamii ni Afya, which supports 2,300 community health volunteers (CHVs) to support all families in Zanzibar through household-based service delivery. CHVs are equipped with digital tools that support their work and generate data for system-wide decision making. In light of this progress, the government has committed to a digital health strategy and investment roadmap specifying the need to strengthen digital-first initiatives at the community and primary health facility levels. These efforts are aimed at further solidifying the relationship between the community and primary health facility levels, and even more critically, improving the quality of care delivered at both levels by all providers. The drive to achieve these ambitious goals is propelled by the success of Jamii ni Afya and realization that digital health is critical to strengthen health systems in Zanzibar.

Jamii ni Afya is the Zanzibar government's digitally enabled community health program which is advancing the goals and objectives of Zanzibar's Community Health Strategy, 2019-2025, primarily by empowering local CHVs to meaningfully engage directly with their communities. At its core is a customized digital tool built with the Community Health Toolkit platform that aids CHVs in health promotion and education, screening for danger signs, coaching, referrals, and follow ups, while providing real-time performance and health outcome data to supervisors and managers at the community, district, and national levels. By the end of 2021, Jamii ni Afya will be supporting 2,300 CHVs and 100% of the population.

As Jamii ni Afya scales and matures, we will be further strengthening the broader primary health system, including developing linkages between communities and primary health care facilities, (PHCUs) and supporting high-quality, client-centered care at the facility level. For example, when CHVs detect antenatal danger signs (e.g., vaginal bleeding, headache, swollen feet), they refer clients to health facilities for targeted care. In the next phase, we expect to see data from those visits be shared with health facilities, and when the client receives facility-based care,

expect data from that visit to reach the CHV to aid in appropriate follow-up care. This bi-directional feedback will help to improve continuity and quality of care.

The ongoing success of this program is vital in the government's continued commitment to advance digital-first solutions at the community and primary care facilities. The MOHSWEGC with support from D-tree International is seeking a consultant to lead the development of a high-level blueprint for an integrated digital primary healthcare system to strengthen linkages between community and primary health care facilities and to improve the quality of care delivered at primary health facilities in Zanzibar. The consultant will undertake efforts to understand the primary health landscape in Zanzibar, and will subsequently provide recommendations on the integration of the existing community-based system to primary healthcare clinics.

C. Period of Performance: 1 July 2021 - 31 December 2021

D. Management and location of consultant: The consultant will receive close technical guidance from the Digital Health Strategy TWG and work under the supervision of D-tree's Jamii ni Afya's program team. The consultant will ideally be based in Zanzibar for the period of performance, but this is not required. A qualified applicant can conduct the majority of the work remotely with a proposed/agreed-upon number of intensive trips.

E. Description of Services to be provided

- 1. Conduct and report on a detailed situational analysis of the primary healthcare system structure in Zanzibar. (approx. 1 month)** This situational analysis will document the current system holistically and identify key areas that can be strengthened to result in more efficient care coordination and quality facility-based care provision. This process should largely focus on the existing primary health care system (including both public and private institutions), namely quality of care at PHCUs; health worker training, motivation, and supervision; systems-level gaps in referral completion (e.g., connection between PHCUs and community-level care and electronic medical record coordination); community-based follow-up; movement of clients among health care providers; timeliness of facility-based service access; and quality and appropriateness of facility-based care. This work will entail discussions with government officials (e.g., ICT and HMIS units within the MOHSWEGC), vertical programs that offer services through facilities, Digital Health Strategy TWG, Community Health TWG, health care providers, CHVs, community members, and potentially other stakeholders. As such, the consultant must have a demonstrated track record in respectfully conducting key informant interviews in Swahili, and facilitating focus group discussions in Swahili, in parallel with reviewing policy and guidelines (e.g., Digital Health Strategy) that govern primary health care delivery and digital health strategy.
- 2. Prepare a system blueprint for strengthening the connection between the community and facility and improving the quality of facility-based care. (approx. 5 months)** This work will lead to the creation of a blueprint outlining the development and deployment of a digital system at PHCUs that supports the creation and sharing of client cases among relevant community-level providers and facilities (both public and private), and allows for real-time monitoring of service provision quality. The PHCU digital system will be designed to improve the quality and efficiency of health service delivery and data collection, facilitate the provision and exchange of patient information, and foster communications across health facilities and between

community-based providers and their clients.

The consultant will prepare a system blueprint that will serve as guidance for strengthening different components of multi-level care coordination and facility-based service provision using a human-centered, client-first approach, in alignment with internationally-recognized digital development principles. This blueprint will serve to communicate the system vision, describe the system configuration, how its components fit together and how they will interface with other relevant systems. The blueprint will define the scope for a subsequent requirements analysis and development phase, and should be created with participation of relevant stakeholders identified in the situation analysis. It is critical that the blueprint consider local contextual factors including, but not limited to, health system, culture, technological infrastructure, and human resources. The consultant will additionally need to provide a system specification reflective of contextual factors, companion resources, and a proposed implementation roadmap for successful integration.

- *System specification:* While conducting the situational analysis, the consultant will be identifying opportunities to strengthen care coordination between CHVs and the PHCUs, evaluating the potential for a widely-distributed electronic medical record (EMR) system, and identifying areas of growth for quality care provision at the facility level. Additionally, the consultant will become intimately familiar with the government's digital health strategy and roadmap, and progress achieved to date. To successfully integrate the primary healthcare service delivery points and rapidly improve facility-based care provision, in addition to the system blueprint, D-tree will require system specification that will govern any digital system expansion outlined in the system blueprint. Details could include, but are not limited to: quality of care indicators; feedback mechanisms for clients; system recommendations to accommodate patient load at health facilities; electronic clinical support tools to address skills and knowledge levels of healthcare providers; EMR recommendations; and technical resource availability in Zanzibar (e.g., network capacity, device specifications, etc.).
- *Companion Resources:* An integral part of fully realizing a stronger connection between community-level services and facility-level services will be understanding the patient or client's point of view, from seeking out health services, to receiving them, to being monitored thereafter. To this end, the consultant will develop client journey maps detailing clients' understandings of care and resource access, as well as *service* blueprints for respective journey maps and client goals associated with these journeys. The consultant will also compare illustrative *actual* client journeys to *ideal* client journeys, highlighting any differences and suggested areas for intervention, and noting what is realistically deliverable by primary health care facilities and what must be done at higher-level care facilities. These journey maps should also take primary health care provision from private providers into consideration. Additionally, the consultant is welcomed to suggest and/or provide additional ancillary resources to aid the eventual design and implementation of this effort.
- *Proposed implementation roadmap:* Understanding the significant complexity of this undertaking, the consultant's expertise will be needed to develop a roadmap for design, testing, and implementation of the blueprint including an estimate of required cost, resources, and key stakeholder involvement. The consultant should ensure that this roadmap fits within the Digital Health Strategy through collaboration with the Digital Health Strategy and Community Health TWGs.

F. Expected Deliverables

1. Situational analysis including: core problems underpinning efficient primary care coordination and high-quality facility-based care provision; gaps in PHCU information systems; existing information systems at various levels of public health facilities for both electronic and paper-based systems; recommendations for systems-level care coordination and service provision quality improvement
2. System blueprint which include: system specification with a complete, high-level description of hardware, software and other infrastructure to strengthen primary care coordination; requirements for system(s) to identify gaps in quality care provision and provide feedback to PHCUs to service provision improvement; client journey maps and service blueprints; roadmap for implementation; recommendations for integration into national-level digital systems

G. Consultant Responsibilities

1. Conduct all activities of the consultancy and submit quality and agreed deliverables according to predetermined and agreed-upon schedule;
2. Collaborate closely with D-tree International and the Digital Health Strategy TWG in all activities; and
3. Incorporate input and feedback from Community Health TWG.

H. Digital Health TWG responsibilities

1. Ensure the objectives for the consultancy are accurately articulated to all relevant stakeholders;
2. Make available all relevant background documentation to the consultant;
3. Be available for frequent in-person consultations and meetings throughout the process;
4. Review of draft documents from the consultant and provide timely feedback to the consultant; and
5. Approve the final deliverables.

I. Other Stakeholder responsibilities

1. *MOHSWEGC ICT unit*: Provide consultant access to current system architecture, data sharing and storage protocols, and other similar information;
2. *MOHSWEGC Digital Health Strategy TWG*: Facilitate communication with CHVs, PHCU staff, private care providers, and local pharmacies to obtain timely responses to inquiries from the consultant on current status of the primary health care system
3. *Other MOHSWEGC divisions*: Be available to consultant for in-person consultations and meetings; and
4. *Other implementing partners*: Contribute vertical program digital tools to the consultant in order to fully map out the full digital ecosystem.

J. Minimum qualification and experience requirements

The consultant should have the following qualifications:

1. Advanced University degree holder in a relevant field (i.e., public health, community health and development, digital design);
2. At least 5 years of professional experience in service design and human-centered design for systems strengthening;
3. Demonstrated deep expertise in human-centered design, service design, digital health, and experience contributing to driving program strategy;
4. Experience developing client journey maps and digital system blueprints;
5. Experience in identifying issues in primary healthcare quality and providing digital-first recommendations for mitigation;
6. Knowledge of health systems including community health programs in East Africa is required. Experience in Tanzania and Zanzibar is an added advantage;
7. Familiarity with digitally-driven comprehensive health systems, Zanzibar's primary healthcare structure, and health systems strengthening is ideal;
8. Ability to work independently and in teams within a multicultural environment;
9. Excellent analytical, conceptual, communication and writing skills;
10. Excellent command of English, both written and oral;
11. Fluency in Swahili required; and
12. Familiarity with the Zanzibar health system preferred.

K. Application instructions

Qualified individuals should submit a cover letter, CV, proposed detailed work plan (with budget and timeline), and methodology to tor-2021-05@d-tree.org by 30 June 2021.