

# Prioritization & Optimization Analysis (POA): a tool for deploying healthcare workers according to data-driven analysis and prioritization of needs

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Proposal Status: Postponing for Future Calls for Proposals

## Executive Summary

Touch Foundation is proposing to partner with Digital Square to further improve the Prioritization and Optimization Analysis (POA) tool and transform it into a Global Good.

POA is a Human Resources for Health (HRH) planning tool developed by Touch Foundation that allows Governments in resource-constrained countries to optimize the allocation of healthcare workers given supply and financial constraints in order to improve a population's access to skilled health services. POA uses WHO's Workload Indicators of Staffing Need (WISN) outputs and does not require any additional data collection, effectively magnifying the impact of WISN by providing a dynamic tool that supports decision makers throughout the entire HRH planning process at both national and local levels.

Touch developed POA through a close collaboration with the Tanzanian Ministry of Health, Community Development, Gender, Elderly and Children (MOH) and the other national and local government stakeholders involved in the HRH process. POA is designed to be used by any Government that uses WHO's WISN (currently 16 countries in Sub-Saharan Africa).

## Consortium Team

Touch Foundation is an NGO with offices in New York and Mwanza, Tanzania, with 13 years of experience implementing sustainable programs in Tanzania. Touch's senior program team has backgrounds in management consulting, clinical medicine, and public health. We prioritize key areas of intervention and design programs based on robust needs analyses and first-hand collaboration with our local partners. Valerio Parisi, Director of Programs at Touch and former management consultant at A.T. Kearney, will be leading the proposal development.

POA was developed by Touch Foundation with support from USAID and has been implemented across Tanzania in collaboration with USAID's Public Sector Systems Strengthening (PS3) program led by Abt Associates. Our partner Johnson & Johnson is currently supporting us to further develop the POA software suite.

Within this RFP process, Touch is also looking for partners that can provide technical expertise on digital development and health data systems.

## Project Description

### Background

POA is a data-driven approach to optimize HRH planning and deployment based on need, in countries with a deficit in their current healthcare workforce and limited resources.

The POA tool was developed by Touch Foundation in 2015 to assist the Government of Tanzania in HRH planning nationally. POA builds upon WHO's WISN method, which calculates the required number of healthcare workers (HCWs) based on workload at each facility. POA improves the WISN process by layering a priority ranking onto each HCW needed across the country (WISN stops at facility level). This enables the government to assign the limited workers available to the most urgent postings given budget and supply constraints. POA does not require any additional data that is not already



collected for WISN ensuring no additional burden on implementers.

POA was adopted as an official HRH planning tool by the Government of Tanzania in 2017. Touch implemented POA in six regions of Tanzania in collaboration with USAID's PS3 program. POA is currently being used to deploy 3,000 new healthcare workers in FY18.

POA was developed in alignment with the Digital Development principles:

Design with the user: Touch designed and tested POA in collaboration with the WISN task force from the Tanzanian MOH and is continually updating it based on feedback from key stakeholders.

Understand the existing ecosystem: Touch developed POA after 11 years of experience in addressing HRH challenges in Tanzania in collaboration with government and local partners.

Design for scale: POA was designed as an "add-on" to WHO's WISN and does not require additional data or information. As such, POA is efficiently scalable to any country that uses WISN.

Build for sustainability: POA was designed to simplify the activities of decision makers and support the current HRH planning process. As such, stakeholders are incentivized to continue using POA as it decreases their workload and provides them with data to back up their decisions.

Be data driven: POA utilizes patient statistics at facility level already available through HMIS and HRH current data available from HRHIS or payroll systems. The use of data to assign healthcare workers to each facility increases the perceived value of health data collection systems among users and functions as an added incentive for more accurate data collection and reporting.

Open standards: We are currently migrating POA into an open source platform (e.g. DHIS2).

Reuse and improve: POA is built upon and enhances the impact of WHO's WISN without requiring additional data collection.

Address privacy and security: POA does not collect individual data of healthcare workers.

Be collaborative: The implementation of POA is currently being driven by a multi-partners effort, including the Tanzanian MOH, USAID and the PS3 program.

### Current Activities

While continuing to support the Government of Tanzania and USAID/PS3 roll-out of POA across the entire country, Touch is partnering with Johnson & Johnson and local software developers (e.g. College of ICT of the University of Dar es Salaam) to integrate POA into the current health IT systems in the country and develop a software suite to include enhanced user interface and reporting functionalities, user manuals and training materials. We are currently exploring software development within DHIS2 (an open source platform used in more than 45 countries) to ensure interoperability with current Tanzanian IT systems and enable easy replication across borders.

### Proposed Activities for Digital Square Partnership

Touch proposes to partner with Digital Square to ensure POA progresses substantially along the Global Goods Maturity Model and becomes a resource for Governments and the global health community to make data-driven decisions and develop HRH plans according to the actual needs and priorities of a country.

POA is well-positioned to become a Global Good as it is built upon an established and widely used tool such as WHO's WISN and does not require additional data collection. As countries continue to implement WISN to determine the actual shortage of HRH according to measured workload at facility level, POA increases the impact of WISN by providing an easy



to use, straightforward list of healthcare workers prioritized by need. POA effectively transforms WISN's snapshot of the overall HRH need into a dynamic tool that can be used by Governments and development partners throughout the entire HRH planning process at both national and local levels. As POA has been developed in close collaboration with the Tanzanian MOH, it is built around the end user with the purpose of supporting decision makers throughout their existing HRH planning process.

Although POA is currently being implemented in Tanzania and used by local government authorities with the support of Touch Foundation and PS3, it is at a "low maturity" stage in the Global Goods Maturity Model, as it is utilized in only one country, the source code is not widely available publicly, community support mechanisms for software development and maintenance are not set up, and comprehensive technical documentation is currently under development.

Touch is requesting access to Digital Square investments and expertise to address the following priorities for POA:

1. "Support the community and ecosystem of resources (improved documentation, tutorials, etc.) needed to facilitate the adoption and use of a digital health software tool":
  - As Touch is currently developing an improved POA within an open source platform (e.g. DHIS2), we will need to access resources and expertise within the global digital health community to develop a community of software developers and power-users around POA to make it adaptable to different country environments, stimulate adoption, and develop additional functionalities.
  - Touch is also requesting resources to expand documentation produced for Tanzania implementation and adapt to global users, standardize and streamline POA implementation guidelines and manuals, and collect and codify lessons learned to support cross-border replication
2. "Support ongoing development of features of a digital health software tool which are identified as priorities through existing robust community led processes":
  - Through a stronger engagement with the health software community, Touch is looking to identify and develop additional features to improve POA's impact across borders and leverage POA's full potential (e.g. expanding POA into a "one-stop" HRH planning tool to include HR posting functionalities and optimize deployment of individual healthcare workers based on preferences, or using POA across sectors for education and agriculture HR planning).