

A.2 Scope of Work

Background

Digital Square is a partnership of the world's leading digital health experts from 40+ organizations working together with countries to strengthen digital health systems. In pursuit of our Mission: *connect health leaders with the resources necessary for digital transformation*, Digital Square offers a new way to invest in digital health—providing a space where countries and members of the global community can gather to think big and do good, together. By convening government officials, technological innovators, donor and implementation partners, and others across borders and boundaries in the Digital Square, we can grow possibility into reality by focusing on our common goal: **connecting the world for better health**. Digital Square works in three key ways:

Digital Square works in three key ways:

1. **Co-investment:** We coordinate investments in digital health to maximize the impact of every dollar spent.
2. **Global goods:** We scale tools and technologies that can be adapted to different countries and contexts.
3. **Digital market readiness:** We create digital market readiness by building capacity with governments, local technology developers, and health workers.

Pursuant to point 2 listed above, Digital Square would like to support strengthening of OpenMRS.

Objective

The Digital Square investment will be used to bring together a dedicated, community squad comprised of subject matter experts, technical architects, developers, and implementers to collaborate on a proof-of-concept solution for patient-level monitoring that is appropriate and scalable for low and middle income countries (LMICs). This squad will coordinate and collaborate as needed with other Notice D award recipients and communities, such as Bahmni and OpenHIE, to ensure that OpenMRS' point-of-service solution can be integrated into an end-to-end indicator reporting solution.

Where possible, OpenMRS will leverage existing work done for related modules, such as DHIS integration module, the case-based reporting module, the new FHIR module, etc. OpenMRS will ensure that the technical solutions contribute to achieving the OpenMRS community's technical visions for FHIR, ETL, and reporting. As work in these areas progresses within the community, OpenMRS' Technical Action Committee will work with the "PLIR Squad" and other squads working on related scopes to exchange plans, progress, coordinate work, and collaborate as needed.

Activities

- Objective 1: Develop a proof of concept which supports the calculation of the TX_PVLS indicator.
 - Activity 1.1: Use community forums to bring together a small team of subject matter experts and business analysts to define the initial scope and identify existing work to leverage.
 - Activity 1.2: Establish a project page on the OpenMRS Wiki with documented roles, responsibilities, and communication channels to be used during the project period.
 - Activity 1.3: Define proof of concept testing/validation
 - Activity 1.4: Identify and document the relevant concepts in a standardized terminology to be used for data capture.
- Objective 2: Build a proof of concept that supports exporting the necessary data for the measure calculation to a standard format e.g., a CSV or a FHIR bundle.
 - Activity 2.1: Define the architectural design of the module based on the FHIR R4 standards.
 - Activity 2.2: Export the data from OpenMRS for consumption by a tool (i.e.: mediator) capable of calculating the TX_PVLS indicator on the basis of the data.
- Objective 3: Build the capability for reading a FHIR Measure resource for the TX_PVLS indicator
 - Activity 3.1: Setup a proof of concept FHIR Measure resource to be consumed by OpenMRS
 - Activity 3.2: Consume the FHIR Measure resource and generate the corresponding patient-level output in the standard format used in Objective 2.
 - Activity 3.3: Adapt the FHIR interfaces of OpenMRS to support the overall workflow.
 - Activity 3.4: Contribute to FHIR profiling activities as relevant.
 - Activity 3.5: Feedback insights or suggestions for improvements to relevant organizations.

PATH and Subrecipient anticipate staffing of this engagement is as follows:

PATH		
Name	Title/Team	Project responsibilities
Carl Leitner	Technical Director	<ul style="list-style-type: none">● Provide technical oversight and ensure alignment with initiative objectives.

Jackie Clark	Project Administrator Officer	<ul style="list-style-type: none"> • Receive deliverables and provide feedback on financial deliverables within 5 business days • Coordinate subrecipient payments
Jenny Thompson	Technical Program Officer	<ul style="list-style-type: none"> • Review deliverables and provide feedback technical deliverables within 5 business days. • Schedule meetings and monitor activity progress.
Carl Fourie	Senior Technical Advisor	<ul style="list-style-type: none"> • Provide QA via testing workflows and reviewing documentation as needed
Caitlin Bowman	Program Assistant	<ul style="list-style-type: none"> • Provide administrative support for subaward implementation

Subrecipient		
Name	Title/Team	Project Responsibilities
Jennifer Antilla	OpenMRS Community Manager	Provide grant management and administration; coordinate community engagement; provide squad support; communications
Grace Potma	OpenMRS Product Manager	Provide overall product management; organize and lead squad; monitor and report on progress
Christine Gichuki	Quality Assurance Lead	Provide QA guidance and support
TBD	OpenMRS Fellows	Provide technical direction to PLIR squad; engage with implementations to contribute to and adopt outputs of the fellowship project; keep abreast of and apply relevant standards, technologies, and frameworks; build proof of concepts and capability for reading FHIR measure resources
N/A	OpenMRS Technical Action Committee	Provide subject matter expertise, technical guidance and direction to PLIR squad

Timeline

PATH and Subrecipient will work diligently to maintain this schedule, but both parties acknowledge

that the actual schedule may differ. Significant delays impacting the deliverable schedule (A.4) will require an amendment

Objective/Activity	Q1			Q2			Q3			Q4			Output
	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	
Objective 1: Develop a proof of concept which supports the calculation of the TX_PVLS indicator.													
Use community forums to bring together a small team of subject matter experts and business analysts to define the initial scope and identify existing work to leverage.													PLIR Squad Meeting Notes
Publish a Patient Level Indicator Reporting Project page on the OpenMRS Wiki													Published PLIR Project Page
Define POC testing/validation													POC testing/validation plan
Identify the relevant concepts in a standardized terminology to be used for data capture.													PLIR Squad Meeting Notes Concepts published on PLIR Project Page
Objective 2: Build a proof of concept that supports exporting the necessary data for the measure calculation to a standard format e.g., a CSV or a FHIR bundle.													
Define the architectural design of the module based on the FHIR R4 standards.													Design Forum session PLIR Squad notes
Export the data from OpenMRS for consumption by a tool capable of calculating the TX_PVLS indicator on the basis of the data.													Source code published on GitHub Updates posted on OpenMRS Talk, Digital Square blog, OpenMRS blog.
Objective 3: Build the capability for reading a FHIR Measure resource for the TX_PVLS indicator													
Setup a proof of concept FHIR Measure resource to be consumed by OpenMRS													PLIR Squad Meeting Notes
Adapt the FHIR interfaces of OpenMRS to support the overall workflow.													PLIR Squad Meeting Notes

A.3 Budget

	Qty	Unit (Days, Mos., Trips, Etc.)	Unit Amt (US\$)	No. of Units	Total (US\$)
Personnel					
OpenMRS Community Manager	1	Months	\$ 660	12	\$ 7,922
OpenMRS Product Manager	1	Months	\$ 833	12	\$ 10,000
Quality Assurance Lead	1	Months	\$ 1,118	3	\$ 3,354
TOTAL: PERSONNEL					\$ 21,276
Travel and Transport					
International and Regional Air Travel					
SME/Business Analyst - TBD to Maputo for OMRS Implementer's Meeting	1	RT	\$ 2,000	1	\$ 2,000
SME/Business Analyst - US to TBD for OpenHIE Meeting	1	RT	\$ 2,000	1	\$ 2,000
<i>SUBTOTAL: International/Regional Transportation</i>					<i>\$ 4,000</i>
International/Regional Per Diem					
SME/Business Analyst - TBD to TBD for OMRS Implementer's Meeting	5	Days	\$ 236	1	\$ 1,180
SME/Business Analyst - US to Malawi for OpenHIE Meeting	5	Days	\$ 236	1	\$ 1,180
<i>SUBTOTAL: International/Regional Per Diem</i>					<i>\$ 2,360</i>
<i>SUBTOTAL: International Travel</i>					<i>\$ 6,360</i>
TOTAL: TRAVEL, PER DIEM & TRANSPORT					\$ 6,360
Other Direct Costs					
OpenMRS Fellowship Stipends	1	Months	\$ 2,100	12	\$ 25,200
OpenMRS Fellowship Stipends	1	Months	\$ 1,150	12	\$ 13,800
TOTAL: OTHER DIRECT COSTS					\$ 39,000
TOTAL DIRECT COSTS					\$ 66,636

A.4 Payment and Deliverable Schedule

Deliverable Description	Reporting Period	Due	Payment Amount (if applicable)
Objective 1 Deliverables <ul style="list-style-type: none"> ● PLIR Squad meeting notes ● PLIR Squad Project Page ● Concepts published on PLIR Project Page ● OpenMRS blog post Objective 2 Deliverables <ul style="list-style-type: none"> ● PLIR Squad notes 	July-September 2020	30 September 2020	
Quarterly Progress Report including community engagement and key feedback received from the community	1 July - 30 September 2020	15 October 2020	
Quarterly Financial Report	1 July - 30 September 2020	30 October 2020	As invoiced
Objective 2 Deliverables <ul style="list-style-type: none"> ● Design Forum session ● PLIR Squad notes ● Source code published on github ● OpenMRS and Digital Square blog post 	1 October - 31 December 2020	31 December 2020	
Quarterly Progress Report including community engagement and key feedback received from the community	1 October - 31 December 2020	15 January 2021	
Quarterly Financial Report	1 October - 31 December 2020	29 January 2021	As invoiced
Objective 3 Deliverables <ul style="list-style-type: none"> ● PLIR Squad notes ● Design Forum session 	1 January - 31 March 2021	31 March 2021	
Quarterly Progress Report including community engagement and key feedback received from the community	1 January - 31 March 2021	15 April 2021	
Quarterly Financial Report	1 January - 31 March 2021	30 April 2021	As invoiced
Objective 3 Deliverables <ul style="list-style-type: none"> ● PLIR Squad notes ● FHIR Measure resources published on the PLIR Project Page ● OpenMRS blog post ● Digital Square webinar 	1 April - 30 June 2021	30 June 2021	

Final Technical Report including	1 July 2020 - 30 June 2021	30 June 2021	
End-line maturity matrix evaluations		30 June 2021	
Final Financial Report	1 July 2020 - 30 June 2021	16 August 2021	As invoiced

A.5 Financial Report Form

Subrecipient: OpenMRS
Subagreement Number: AID.2134-XXX-SUB
Period of Performance: From: Start Date To: End Date
Invoice Period: From: To:

	A	B	C	D	E
	Current Funding	Expenses this Invoice Period	Total Expenses Previous Invoice Periods	Total Expenses	Budget Balance
Cost Reimbursable items	(USD)	(USD)	(USD)	(B+C)	(A-D)
Personnel & Fringe	\$6,000				
Travel	\$6,000				
Consultants	\$54,000				
Other Direct Costs					
TOTAL COST (Up to)	\$66,000				

Status of Cash on Hand	
Payments Received to Date	
Total Expense (D)	
Remaining Balance	

Status of Interest Earned	
Previous Total Interest Earned	
Interest Earned this Period	
Total Interest Earned to Date	

By signing below the Subrecipient Certifies:

That payment of the sum claimed under the cited Subagreement is proper and due and that appropriate refund to PATH will be made upon request by PATH in the event of misrepresentation and/or nonperformance, in whole or in part, under the Subagreement or for any breach of the terms of the Subagreement; and

That information in the Financial Report is correct and such detailed supporting information as PATH may require will be furnished to PATH on request.

Sign: _____ Date: _____
Print Name: _____
Title: _____

A.6: Narrative Report Templates

Global Good Monthly
Report template.docx

Global Good
Quarterly Report tem

Global Good Final
Report template.docx