





# Implementation Roadmap:

Inventory Management implementation at Secondary Facilities of Khyber Pakhtunkhwa

December 2019

## **USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM**

**Procurement and Supply Management** 

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# **Background**

Graduating Khyber Pakhtunkhwa healthcare to next level, Honorable Minister and Secretary Health have decided to digitize Secondary Healthcare medicines' stores with the support of USAID funded, Global Health Supply Chain Program, Procurement and Supply Management (GHSC-PSM) project, implemented by Chemonics International Inc. GHSC-PSM project had already successfully implemented inventory management application at four pilot districts of Khyber Pakhtunkhwa: Charsadda, Lakki Marwat, Mohmand and Swat. Inventory Management application includes but not limited to batchwise stock visibility, warehouse management, stock alerts / notifications, stock issuance to facilities / wards and real time analytics and dashboards for evidence-based decision making.



With reference to the meetings held with the Health Minister, KP and Secretary Health on Sep 17 and 25, 2019, respectively, GHSC-PSM was requested to provide technical assistance to the Department of Health, Khyber Pakhtunkhwa for devising province-wide inventory management plan accounting for the secondary healthcare inventory (medicines) digitization including software, hardware and capacity building.

# **Proposed Implementation Plan**

For province-wide inventory management implementation, phased wise approach is proposed.

**Phase-I**: In first phase, inventory management application will be implemented at 29 district stores and 227 secondary health facilities, including Newly Merged Districts (NMD). KP citizens will be able to check medicines' stock at any specific secondary health facility and can register a grievance, using webpage or mobile app, in case non-availability of essential medicine at any secondary health facility. Webpage and App will also provide functionality to view the status of the grievance for complainer.

Considering, high number of inventory transactions at medicine stores, barcode reader is proposed at each Secondary Healthcare medicines' store which is the most viable and efficient method for fast transaction recording (medicines receive and issue). For capacity building and training. First phase will be implemented in one calendar year after PCI and financial approvals.

**Phase-II**: In second phase, secondary healthcare wards will be digitized with electronic services and medicines record (ESMR). In this phase, each ward will be able to record medicines' consumption specific to a disease. ESMR data will provide the actual base for scientific forecasting and quantification. And same data will also be used for strategy development, planning and optimized procurement. After the successful implementation of phase-I, phase-II will be implemented in one year.

GHSC-PSM will provide technical assistance for Inventory Management software, its deployment, master trainers training and implementation

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Inventory Management			Months																						
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Primary Health	Training																								
Facilities	User creation																								
	Implementation																								

# **Estimated Costing Requirements**

Costing requirements have been computed for 227 secondary health facilities and 33 district stores (including NMD) with split cost of software, hardware, internet and HR. Estimated PKR 96.15 Million would be required for complete implementation. GHSC-PSM project shall provide free of cost Inventory Management software and technical assistance for its implementation. For better and smooth implementation two dedicated consultants are proposed for six months duration. Considering power outages in Khyber Pakhtunkhwa, Laptops are proposed with one-year warranty (replacement) along with licensed operating system and anti-virus for minimum two years.

Barcode scanners (Bar and QR) are proposed for efficient working and data quality. Like Laptops for Barcode scanners, one-year full warranty (replacement) is proposed. Current Inventory Management implemented in Charsadda, Mohmand, Lakki Marwat and Swat district stores are hosted at National Telecommunication Corporation (NTC) datacenter. For sustainability and cost saving, it is proposed that IM should be hosted at KP IT Board datacenter. If KITB does not provide hosting services, approximately PKR 5M is added in the cost. For any system implementation, training is integral part and hence in addition to 30 provincial users, cost of training for two resources from each facility is mentioned in the costing sheet.

Category	Description	Quantity	Per Unit Cost	One Time / Recurring	PKR Million	Details				
	Software IM - Web	I	0	OT		Chamanias will anavida Tashnisal				
Software	Software IM - Mobile App	I	0	OT	-	Chemonics will provide Technical				
	Consultants	2	300,000	RC (6 Months)	3.60	Assistance and Management				
	Laptops	300	200,000	OT	60.00	* I Year full Warranty				
Hardware & Service	Barcode Scanners	300	50,000	ОТ	15.00	* Licensed Operating System & Antivirus for minimum 2 years for sustainability. * 40 Spare Laptops for stock				
	Server / Hosting	I	5,000,000	ОТ	5.00	If KITB provides hosting, this cost can be cut				
	Internet	227	2,000	RC	10.90	Two Years				
HR	Training	550	3,000	ОТ	1.65	Two resources from each facility plus 30 additional resources				
	Note: Calculations based									