

DEPARTMENT OF **H**EALTH AND **S**OCIAL **A**FFAIRS

FSM National Government Capitol Street, P.O. Box PS 70 Palikir, Pohnpei 96941

Federated States of Micronesia

Tel: (692) 320-2619/2872/2643. E-mail: health@fsmhealth.fm. Fax: (691) 320-5263

March 25, 2021

BID ANNOUNCEMENT Laboratory Information Systems

I. Purpose

The FSM DHSA is issuing this Request for Proposal (RFP) with the purpose of soliciting sealed proposals, through competitive negotiations, for the software and implementation of a laboratory Information System to support clinical and public health laboratories in Yap, Chuuk, Pohnpei and Kosrae. The ideal LIS will be purpose built for the management of all aspects of clinical and public health testing and that is in compliance with International Standards for LIS and that is interoperable with other Health Information Systems.

II. Background

Each FSM state hospital houses a laboratory that performs both clinical diagnostic and public health testing in the following disciplines:

Hematology, Chemistry, Serology, Microbiology, pre-transfusion Testing, blood donor Services, Histology and cytology. In addition, food safety testing is performed in the National Laboratory in Kolonia, Pohnpei. The LIS will be installed in the 5 laboratories

FSM is pursuing accreditation for ISO 15189, Laboratory Quality Management Systems, and thus the LIS should be compliant with these standards. These standards require fully documented traceability throughout the sample analysis process – from initial electronic test ordering, through sample receipt and preparation for testing, the analytical phase, and finally to the post analytical phase with reporting of authorized results with standard interpretive comments and patient reference ranges. User permissions must be clearly defined so that users to maintain patient privacy and confidentiality. A series of management reports will be required periodically to manage laboratory performance and to provide for analyses of testing information.

III. Terms of Reference

	Function	Description
	Patient Master Index	For capturing demographic data. Must have separate fields for family name and given name/s
	Order entry	free text patient comments supported, internal messages supported, alert on duplicate orders, order and patient download via Interface to EHR, specimen barcodes generated at order entry, batch order entry or down load from CSV file
	Specimen management	can capture specimen collection date and time, specimen receipt in lab date and time, refine check in list display by status (specimen to be collected or collected), option to access specimen rejection function (record why specimen rejected)
	Manual Result Entry	Provision for manual result entry

	Patient Reports	Able to process results in multiple formats such as numerical, textual and graphical; automatic flagging of abnormal results; automatic delta checking per test based on values determined by user; option for rules-based auto-verification; panic results notification supported
	Result Delivery	report delivery options should include – local/remote printing, email, web access, electronic transmission to host
	Result Enquiry	cumulative and graphical results supported. Can search for result by several criteria including; name, source, date range, medical records number, accession number, test or profile code
	Management Reports	turn-around-time and tests exceeding target turn-around-time; new, pending, completed and rejected specimens or tests; workload statistics across departments
	Sent Out Test Management	registration of send outs, generation of send out order list (ideally can be used as shipping manifest list); support scan of lab report from outside laboratory and save PDF image of lab report into database
	Microbiology module	able to record all observations – media results, direct examinations, AST results. Sample and media labels can be printed, quick access to patient's previous results. Infection control reports: organism versus specimen type, organism versus location, organism versus patient, sensitivity summary, antibiotic for one organism
2	Anatomical Pathology System	Full word processor capabilities, pre-formatted templates, support entry of diagnostic codes (e.g., ICD 10), scanned images and diagrams can be incorporated into reports
	Blood Donor Management	Comprehensive donor and blood product management system comprehensive registration of donors, including donor alerts and history display of existing donor blood group and cross check results when entering blood group results approval; of results for screening or immune screening ability to accept a donated blood pack into inventory with full details fully detailed management reports on donor listing blood inventory management with traceability of a blood product
	Pre transfusion testing	Comprehensive result entry including delta checks on blood grouping Visible display of patient details including ABO/Rh type at point of query Validation checks on expired blood, blood group compatibility



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		Auto-inventory update when blood products issued to a patient Labels, transfusion records able to be printed at time of product dispensing
	Audit Trail	To allow for periodic review of data integrity
	Multi-site Configuration /	System able to be networked to exchange data with other LIS
	Networking	instances
		Secure transmittal and receipt between LS instances
		A system that can run on Windows 2012 server or newer
		Web interface is preferred
	Additional Functions	Quality Control
		Reagent Inventory Management
		Rule Engine
		Work Area Manager
3	Interoperability	Must be able to be integrated with FSM's Electronic Health
		Records System. The system should have Application
		Programming Interface or other standard communication
		protocols to enable LIS/EHR interface
		Host interfacing should conform to HL7 and ASTM protocols
	Training and Technical Support	On Site competency-based training for at least 50% of users
	βαρροιτ	24/7 technical support should be available
	Instrument Interface	While instruments are changed periodically, the current list of
		instruments to be interfaced includes:
		Ortho Vitros 350
		Pentra 60C + Biomerieux Mini Vidas
		Cepheid GeneXpert GXIV DCA 2000+
		Clinitek/Clinitek Status Plus urine analyzer
		Urocheck 120
		Abbott i-STAT
		Abbott ID NOW
		Hemocue
		Cobas C111, C311
		Sysmex SX1000i, KX21N, CA620, XN450
		Triage Meter Pro
		BD Veritor Plus
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IV. Evaluation of Bids

- 25 points will be awarded if the bid demonstrates the ability to meet all terms of reference in group1.
- 25 points will be awarded if bid demonstrates the ability to meet all scope of work in group 2.
- 25 points will be awarded if bidder agrees to meet all deliverables in group 3.
- 25 points will be awarded if bidder has prior experience and technical expertise in developing similar work requested in this bid.

V. How to Submit Bid

Interested bidders must email a bid to the address below. <u>In the submission, there must be clear indication of cost for carrying the work in this announcement.</u> The Department reserves the right to deny review of bid.

Secretary

Department of Health and Social Affairs

P.O. Box PS-70

Palikir, FM 96941

Email: health@fsmhealth.fm

VI. Closing and Review Date

The Department will review the bids on April 30, 2021 and if no award is made, the bid will remain opened until filled.

Signed:

Marcus H. Samo Acting Secretary Date: 03/25/2021