REQUEST FOR PROPOSALS (RFP)

REPLACEMENT OF ELECTRONIC DISEASE REPORTING INFRASTRUCTURE (EDRI) AND SURVEILLANCE WORKFLOW ENHANCEMENTS

ISSUE DATE: SEPTEMBER 21, 2021

RESPONSE DUE DATE: OCTOBER 22, 2021 REPLY TO NAME: ARIANA HOLLAND EMAIL: aholland@fphnyc.org

RELEASED BY

Fund for Public Health in New York City 22 Cortland Street, 8th Floor, Suite 802 • New York, NY 10007 Phone: (646) 710-4860 • Fax: (212) 693-1856 • <u>www.fphnyc.org</u>

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SECTION I: SUMMARY OF THE REQUEST FOR PROPOSALS

This Request for Proposals (RFP) is issued by the Fund for Public Health in New York City (FPHNYC), on behalf of the New York City Department of Health and Mental Hygiene (DOHMH), to solicit proposals to enhance and replace the Division of Disease Control's (DDC) Reporting Central and ETQ systems.

A. RFP Timetable

Request for Proposals (RFP) Release	September 21, 2021
Deadline for Written Questions	September 29, 2021 at 11:59 p.m. EST
Q&A Posted	October 11, 2021
Proposal Package Due	October 22, 2021 at 11:59 p.m. EST
Funding Notification	November 10, 2021

B. Applicant Eligibility

Proposers must adhere to the following minimum requirements:

- Be based in the U.S.;
- Be available to provide services remotely within the U.S. and visit the Health Department's offices in New York City for in-person meetings as needed to accomplish the tasks required under the Scope of Work.
- Have a minimum five (5) years of experience with project management, data cleaning and standardization, interoperability standards, and data exchange technologies and services including XML.
- If awarded, agree to enroll as a City of New York approved vendor; and
- Demonstrate that necessary insurance coverage, including Commercial General Liability and Worker's Compensation, is in place from the start of the contract.

In addition, preference will be given to:

- Minority and Women Business Enterprises (M/WBE).
- Vendors with knowledge of HL7 standards and an understanding of public health surveillance.
- Vendors with experience working with Maven Disease Surveillance & Outbreak Management System.
- Vendors with experience replacing systems similar in size and scope to this RFP.

C. Anticipated Funding and Payment Structure

It is anticipated that one applicant will be selected to provide the services specified in this RFP. DOH will award up to \$6,350,000 for a multi-year license and professional services to the selected contractor. The payment structure of the contract awarded from this RFP will be one hundred percent (100%) deliverables based.

Please note: Year 1 contracts will align with the Department of Health and Mental Hygiene's fiscal year which ends on June 30, 2022. Provided satisfactory performance, organizations will be asked to renew contracts for years 2 and 3. Any extensions will be contingent upon the following: availability of funds, continued need for services, approval by DOHMH, and satisfactory contractor performance.

D. Funding Term

It is anticipated that all contract deliverables will be completed by July 2023. However, DOHMH reserves the right, prior to award, to revise the length of the project term.

E. Submission Instructions

The deadline for submission is October 22, 2021 by 11:59 p.m. Eastern Standard Time (EST). Proposals must be submitted via email to <u>aholland@fphnyc.org</u> and include the title of the solicitation "**EDRI Replacement RFP**" in the subject line. Any proposals received after the due date and time will be considered nonresponsive. A proposal checklist is provided below.

All responses must be in Adobe Acrobat PDF file format.

F. RFP Inquiries, Written Question and Answers

All questions and requests for clarification about this RFP must be submitted in writing to <u>aholland@fphnyc.org</u> with a subject line of "**EDRI Replacement RFP**." Any questions received after the deadline may not be answered. Phone calls will not be accepted.

The Q&A will be posted at: https://www.fphnyc.org/get-involved/rfps/

G. FPHNYC Procurement

FPHNYC reserves the right to revise any part of the RFP at any time before the submission deadline date if necessary. These revisions will be addendums to the RFP and posted on the FPHNYC website: www.fphnyc.org. Proposers are responsible for checking the website frequently to remain informed about the procurement process. Each Proposer must amend its RFP package as necessary. Failure to acknowledge any addendum will result in disqualification of the proposal.

Proposals selected for review must follow the instructions in this RFP, provide the information required in the response package, and include all of the required attachments (signed and dated) by the Proposer's representative with legal authority to submit a proposal on behalf of the entity. The successful bidder will be required to agree to the General Terms and Conditions contained in the Fund for Public Health in New York City's contract and comply with all applicable federal and state laws and policies.

SECTION II: SCOPE OF SERVICES

A. Project Background

The Division of Disease Control (DDC) at the New York City Department of Health and Mental Hygiene (NYC DOHMH) is responsible for the identification, surveillance, treatment, control and prevention of infectious diseases in NYC. The Division is composed of five bureaus: Bureau of Communicable Disease (BCD), Bureau of Immunization (BOI), Bureau of Hepatitis, HIV, and Sexually Transmitted Infections (BHHS), Bureau of Tuberculosis Control (BTBC), and the Public Health Laboratory. Surveillance teams across the DDC bureaus collectively monitor and investigate over 90 reportable infectious diseases to detect, characterize, and respond to public health needs.

DDC continuously updates its systems, databases and infrastructure in order to improve the completeness of data and ensure efficient response to emergent infectious agent threats (e.g., COVID-19, Zika virus). DDC is embarking on an initiative to replace its current data standardization and cleaning processes to accommodate future surveillance needs and address existing issues that were highlighted during the COVID-19 and other past communicable disease emergencies. The agency is looking forward to implementing a cloud product that can help modernize the entire technical infrastructure and that is scalable, flexible and meets federal standards on health interoperability.

In its current state, DDC's Electronic Disease Reporting Infrastructure (EDRI) works to transform disparate data sources into a common schema, classify diseases, perform record matching and enrichment, and standardize and route data to disease registries for public health action. DOHMH is seeking an experienced vendor to implement a new tool to perform these functions as well as accommodate upcoming surveillance needs that require high volumes of messages and support for document standards such as the HL7 CDA R2 for electronic case reporting and Fast Healthcare Interoperability Resources (FHIR). While the decision has already been made to replace EDRI, DDC is also willing to consider replacing additional upstream applications if the new chosen product is able to accommodate our requirements.

B. Project Scope of Work

Tasks/Deliverables:

- 1. Project management and documents
 - Project Charter
 - Project Schedule and detailed project milestones
 - o RACI Document
 - Communication Plan
 - Weekly project status reports (through project completion)
 - o Risk Management Plan
 - Performance Reports including Risk and Issue Logs
- 2. <u>Requirements Documents</u>
 - o Requirements Gathering Methodology Document
 - Business Requirements Document
 - o Detailed Functional Requirements Document
 - Fit-Gap Analysis Document
 - o Detailed Technical, Security and Infrastructure Requirements Document
 - o Cloud Review Documentation
 - Solution Architecture Plan

3. Quality Assurance (QA), Control and Testing

- Quality Assurance Plan
- o Deliverable and Project Quality Standards Document
- Test Scripts and Results
- 4. Infrastructure Set-up
 - Design and topology diagrams
- 5. Design and Implementation
 - Detailed Design Document
 - Data Dictionary
 - Configuration and/or Customization Specification Document
- 6. Integration
 - o Interface Integration Design Documents
- 7. <u>Training</u>
 - Training plan for DOHMH staff
 - Training schedule
 - Train-the-Trainer sessions
 - Training videos (with content grouped by system functionality, data workflows, and user roles)
 - Web-based user manual and job aids
 - Preferably accessible through the application
- 8. User Acceptance Testing (UAT)
 - o Testing plan
 - o Test scripts
 - Defects tracking log plan

- Fully functional environment (similar to production)
- Defects have been identified, corrected, re-tested, and accepted by DOHMH teams

9. Change Management and Quality Assessment

- o Change management plan
- Change request document

10. Migration

- o Data migration plan
- Migration scripts
- o Migration data dictionary

11. Deployment

- o Deployment plan
- o Go-Live Document to track: Tasks, Resources, Dates for deployment
- Final code drop

12. Post-Production

- Post-production plan
- o Plan to transition from old system
- Log of defect corrections

Additional Tasks:

- 1. Review and validation of the surveillance data processing requirements as well as gathering of detailed requirements for upstream systems, if necessary
- 2. Presentation of implementation strategy to stakeholders and gathering of sign-off
- 3. Implementation of a new solution to:
 - Handle multiple message formats and increased data volume to accommodate new sources of health information and improve outbreak response activities
 - Efficiently process and import data into Maven for analysis and case management, as well as prioritize messages based on relevant disease or data source
 - Allow complex rule creation and management
 - Support laboratory and provider onboarding workflows
 - Provide front end user interface to add/edit/update data elements, configure alerts and notifications, and define user roles and permissions
 - Select reports for reprocessing in the case of failure or new information as well as data handling rules to process reports that are not initially sent to the surveillance system
 - o Expand and automate system to map RHIO data into the surveillance system
 - Better match facilities and specimens
 - Integrate surveillance system with PHL Laboratory Information Management System (LIMS) for faster interchange of PHL laboratory results for notifiable diseases, including COVID19 results, and Whole Genome Sequencing (WGS)

- Incorporate accession information from the PHL LIMS into an automated process
- Integrate with the Citywide Immunization Registry (CIR) for immunization information
- Obtain jurisdictional laboratory tests electronically and setup process for interjurisdictional bidirectional electronic notifications from Maven
- Implement a mechanism to extract PDF attachment from HL7 messages stored in SIMPL and PHL databases, process and integrate to Maven
- Audit all stages of data processing
- Provide an analytics dashboard
- Easily map new diagnostic and laboratory codes
- Provide access to the back-end database and/or provide interface to pull data as required
- Agree to and configure software/platform in accordance with DOHMH's cloud security requirements (as may be provided in DOHMH's cloud service agreement or other agreements for the selected contractor's services) for cloudhosted products/services. DOHMH would like to include artificial intelligence, machine learning and predictive analysis capabilities within the new product(s.)
- The product should also display a dashboard indicating system performance.
- 4. Migration of data and user accounts from EDRI to the new solution
 - To ensure continuity of surveillance work, some data must be moved to the new system from EDRI
 - Will likely include patient data, schedules, samples, projects, test methods, tests, QC codes, reference tables, and reports
 - Requirements gathering will determine the amount of historical data to be migrated
- 5. Cyber Command and IT Security Deliverables
- 6. DOHMH IT Audit Deliverables
- 7. QA and Performance Testing Plans and Deliverables
- 8. UAT Test Plans and Deliverables
- 9. Deployment and Monitoring of Solution in Post-Production Phase
- 10. Creation of Training Materials and Conduct Presentations
 - Create training materials for internal users of the new systems and/or processes, including presentations that can be recorded
 - Document work for those who will help to maintain the system in the format required by DOHMH IT
 - Conduct training sessions for users
- 11. Support and maintenance

Staffing:

The vendor will be required to assign a Project Manager to the project who will act as the main liaison with DOHMH and be fully engaged in day-to-day management of the project. The vendor's project team will also include Business Analyst(s,) Solution Architect(s), Change Management Analyst/Trainer(s) and all other relevant technical resources. Estimated necessary technical resources will include developers, integration specialists to advise on workflow infrastructure, and a database administrator.

Security and Compliance Requirements:

The vendor will be responsible for ensuring that all business, technical, security and audit requirements are met following Division of Information Technology (DIT) project implementation standards, policies and procedures. This requires following NYC's Department of Information and Telecommunications (DoITT) Software Security Assurance Program (SSAP) and working with Citywide Cybersecurity to assess vulnerabilities of proposed software.

Deliverable	Minimum Required Activities	Required Documentation	Proposed Date of Completion
	1. Provide professional services to		
	DOHMH from a dedicated, qualified, and	1. Project Charter	
	appropriately sized team.	2. Project Schedule	
	2. Complete the full life cycle of project	3. RACI Document	
	management.	4. Communication Plan	
	3. Lead the full implementation by	5. Status Reports	
	initiating, planning, executing, controlling,	6. Risk Management Plan	
1. Project	and closing the project.	7. Performance Reports	
Management and	4. Ensure that all success criteria are	including Risk and Issue	Months
Documentation	defined and met to achieve project goals.	Logs	1 - 23
		1. Requirements	
		Gathering Methodology	
		Document	
	1. In collaboration with key stakeholders,	2. Business Requirement	
	document detailed requirements that will	Document	
	meet needs described in the Scope of	3. Functional	
	Services of the RFP.	Requirement Document	
	2. Document all integration, reports, and	4.Fit-Gap Analysis	
	regulatory requirements, etc.	Document	
		5.Detailed Technical,	
		Security and infrastructure	
		Requirements Document	
		6.Cloud Review	
2. Requirements		Documentation	
Gathering and		7.Solution Architecture	Months
Documentation		Plan	1 - 6

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		Months
	3. Test Scripts and Results	1 - 20
cluding setting up integration of	1. Infrastructure design	
mponent systems, devices and firewalls.	and topology diagram	
Implement all security standards as		
fined by NYC Cyber Command and		Months
		1 - 8
ž	1. Detailed Design	
	Document	
Design and implement a system that will	•	
		Months
-		4 - 6
	•	
	0	Month 8
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Des ferrer all an energy (maining a stimited		
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-	e	Months
ers, train-the-trainer, etc.		16-20
	-	
Provide working UAT application in a	<u> </u>	
parate environment that would support all	•	
oduction-sized system testing and	Log plan	
gressing testing for migrations and		
grades.	corrected, retested and re-	
Provide a process to establish and record	accepted environment	
defects found during UAT.	with full functionality -	
Correct, retest and re-accept all software	similar to production	
fects during UAT and prior to Production	environment	Months
ployment.		14-20
	fined by NYC Cyber Command and DHMH IT Security. Design and implement a system that will bet the needs described in Scope of rvices of the RFP. Implement all interfaces, components, PIs, etc. Perform all necessary training activities ch as development of a training plan, run assroom train-the-trainer sessions and end er training, create online and/or webinar ining, create user manuals and job aids. aining should include administrators, end ers, train-the-trainer, etc. Provide working UAT application in a parate environment that would support all oduction-sized system testing and gressing testing for migrations and grades. Provide a process to establish and record defects found during UAT. Correct, retest and re-accept all software fects during UAT and prior to Production	surance (QA) and control plan. Ensure that all quality, technical, security d regulatory standards are being met. Perform all nuit, integration, and QA ting for the entire implementation. Design and implement, in collaboration the DOHMH Network Technology am, all necessary environments Luding setting up integration of mponent systems, devices and firewalls. Implement all security standards as fined by NYC Cyber Command and DHMH IT Security. Design and implement a system that will et the needs described in Scope of rvices of the RFP. Implement all interfaces, components, Pls, etc. Perform all necessary training activities ch as development of a training plan, run ssroom train-the-trainer sessions and end er training, create online and/or webinar ining, create user manuals and job aids. aining should include administrators, end ers, train-the-trainer, etc. Provide working UAT application in a parate environment that would support affects found during UAT. Correct, retest and re-accept all software fects during UAT and prior to Production

9. Change Management and Quality Assessment	 Provide a process to establish and record all defects found during UAT and change requests in the new system. Correct, retest and re-accept all software defects during UAT and prior to Production deployment. Correct defects found post-deployment on a priority basis. Implement and manage the project change control process. 	 Change Management Plan Change Request Document 	Months 18-20
10. Migration	1. Review and migrate legacy data from current LIMS module, including all schedules, samples, projects, test methods, tests, QC codes, and reports.	 Migration Plan Migration Scripts Migration Data Dictionary 	Months 18 - 20
11. Deployment	 Deploy new system into production. Perform all necessary tasks for deployment. Manage the deployment plan for all applicable environments. Perform all necessary deployments to environments including development, staging, UAT, training, pre-production and production. 	 Deployment/Run-Book Plan Go-Live Document tracking all tasks, resources and dates for deployment Final code drop, if applicable 	Month 20
12. Post Production	 Implement the post-production and transition plan. Correct defects found post-deployment on a priority basis. 	 Post-production Plan Transition Plan Log of Defect Corrections 	Months 20 - 21

C. General Program Assumptions

Contractor Assumptions:

- Contractor will perform the required work both onsite and offsite. For onsite work,
- Contractor will follow all City-wide, NYC DOITT and NYC DOHMH IT policies, procedures and standards,
- Contractor will work at DOHMH's central office, located at 42-09 28th Street, Long Island City, New York. Work schedules will be in accordance with DOHMH's project schedules and deadlines.
- Contractor will not infringe or otherwise violate any patents, copyrights, trade secrets, licenses, or other rights of any third party.
- Prior to using any new or different software and/or equipment to provide the Scope of Work, Contractor will verify that its software and/or equipment (a) are consistent with and interoperate successfully with DOHMH's technology architecture, information technology and information technology standards; (b) have been properly installed; (c) are operating in accordance with its specifications; (d) are performing their intended functions in a reliable manner; and have been properly documented; and time being of the essence, Contractor

shall promptly provide such services and materials as may be required to replace, repair or correct any defects or warranty non-conformities in the Scope of Work.

- Prior to beginning work, the Contractor will provide to DOHMH the names of a dedicated Project Manager, a dedicated Business Analyst and a dedicated Solution Architect. It is the assumption that these individuals will remain on the project until completion. Any changes to the Project Manager and/or Business Analyst must be agreed to by DOHMH.
- DOHMH and Contractor will work together to determine an appropriate schedule for weekly project status reports and monthly steering committee status reports.
- Contractor will provide the template for weekly status and steering committee reports.

DOHMH Assumptions

- DOHMH will be the sole owner of all source code and any software which is developed for use in any application software provided to DOHMH as a part of this contract.
- DOHMH will designate 1 or 2 project sponsors who have authority to make all decisions regarding the project and who can sign off on all deliverables.
- DOHMH stakeholders will participate in project tasks and contribute to project deliverables per the levels of effort documented in the Project Charter to be approved by DOHMH during project initiation.
- The DOHMH project sponsor will review all deliverables within ten (10) business days of submission and accept them or request changes/edits. If changes/edits are requested, the Contractor must resubmit the deliverable with recommended changes within five (5) business days to DOHMH. DOHMH will review the updated deliverables within five (5) business days of resubmission for acceptance or request modifications.
- DOHMH will provide all required access to systems and data to Contractor so long as, Contractor abides by the terms and conditions of the Data Use and Non-Disclosure Agreement, DIT Confidentiality Agreement, and DDC Confidentiality policy. Otherwise, DOHMH will revoke all access to systems and data.
- DOHMH will provide Contractor with the latest set of current, as-is documentation in electronic format.
- DOHMH will provide administrative support to accommodate building access, workspace for onsite resources, and coordination of conference room facilities or remote access where appropriate.

Important Information:

Applicants are required to review, and are requested to have their legal counsel review, Attachment 1, "Standard Clauses for FPHNY Contracts", as the Proposer must be willing to enter into an Agreement, without change or amendment to the terms of Attachment 1, should the Proposer be selected for contract award. By submitting a response to the RFP, the Proposer agrees to comply with all the provisions of Attachment 1.

SECTION III: FORMAT AND CONTENT OF THE PROPOSAL

Instructions: The items contained in this section must be included in the Bidder's proposal to meet the minimum requirements for evaluation. The sections must be in the order described and written in a straightforward and concise manner. Proposals will be evaluated based on their content, not length.

Respondents must carefully examine all requirements stipulated in this RFP and respond to each requirement in their proposal.

A. Proposal Format Requirements

- Font: 12 point Times New Roman Spacing: Optional (single spaced or greater)
- Pages: Numbered (exclusive of title page and table of contents)
- Margins: 1 inch
- Paper: 8 ½ x 11
- File Format: PDF format

B. Proposal Content

In detail, using the guidance outlined below, describe the Proposer's qualifications, capacity, and proposed plan for evaluating DDC's current surveillance workflow and implementing the new infrastructure, as described on the Section II: Scope of Services above.

1. Vendor Proposal Form

The Vendor Proposal Form (Attachment A) transmits the Proposer's Proposal Package to FPHNYC. An official authorized to bind the proposer must sign the Vendor Proposal Form.

2. Applicant Eligibility Questionnaire

The Applicant Eligibility Questionnaire (Attachment B) certifies that the Proposer meets the minimum mandatory requirements stated in this RFP.

3. <u>Technical Proposal</u> Below is a listing of the technical information to be provided by the Proposer.

- 3.1 Proposal Summary: Provide a summary (no more than 1 page) of the important features of the proposal, including the Proposer's understanding of the issues.
- 3.2 Table of Contents: Provide a table of contents with page numbers for the materials contained in the Technical Proposal.
- 3.3 Qualifications and Experience: Describe the successful relevant experience of the Proposer, each proposed subcontractor, if any, and the proposed key staff in providing the work described in Section II: Scope of Services. Specifically address the following:
 - 3.3.1 Demonstrate the Proposer's relevant qualifications and experience in the last five (5) years both for the firm as a whole, for each key staff person and, if applicable, each subcontractor the Proposer intends to assign to the effort required for the proposed services.
 - 3.3.2 Provide a narrative description of the Proposer's demonstrated ability to provide a high level of project management, data standardization, and interoperability expertise to ensure that all requirements are met as described herein. Site specific examples and provide a synopsis of five (5) completed projects over the past five (5) years to include the project scope, methodologies employed, and challenges with respect to meeting the project requirements. The Proposer should cite specific examples of services provided for projects of similar scope and complexity.

3.3.3 Provide a synopsis of the scope of any similar project(s) conducted by the firm as a whole and/or in which proposed key personnel participated.

In addition:

- 3.3.4 Attach an Organizational Chart
- 3.3.5 Attach resumes and/or qualifications for each proposed key staff person.
- 3.3.6 Provide at least two references for the proposer and, if applicable, each subconsultant.
- 3.3.7 Attach client list with name, address, contact name, and telephone number of all subscribers to similar contracting services. If possible, list clients within the New York metropolitan area.
- 3.4 Organizational Capability:

Demonstrate the Proposer's organizational capability to perform the work described in Section II Scope of Services. Specifically address the following:

- 3.4.1 The Proposer's staffing capacity, including: (1) the number of full-time people currently employed by the firm, (2) the projects on which the firm is currently working, (3) future projects to which the firm is committed. All project information shall include the dollar value of the contract, as well as the schedule.
- 3.4.2 Provide a projection of how this project will affect the Proposer's current workload and standby capability. Specifically cite any ongoing jobs and demonstrate that they would not impact the proposer's capability to successfully implement this project.
- 3.4.3 Provide a description of the organization and management structure. Identify how the organization carries out mission-essential and other support tasks, define operational procedures, provide a description of how the organization improves its mission, and how decisions are managed.
- 3.4.4 State whether there are any pending legal proceedings to which the Proposer and any of its subsidiaries are a party to, of which any of their property is subject and any proceedings known to be contemplated by governmental authorities. If so, describe the nature and circumstances of the pending proceeding in detail.

In addition:

- 3.4.5 Attach a copy of the proposer's latest annual financial report, audit report, or most recent federal tax return with all schedules and sub-schedules.
- 3.5 Proposed Approach:

Present a detailed description of how the Proposer will accomplish the tasks described in the Scope of Services. Specifically address the following:

- 3.5.1 Describe the Proposer's solution and demonstrate that it will effectively meet the goals and objectives set forth in this RFP by providing:
 - A description of the proposed solution to meet the goals set forth in this RFP.
 - A narrative overview of the capabilities of the Proposer and key personnel, and of the methodology to be employed in meeting the objectives of the RFP.
 - A project description including tasks and proposed time frame for startup of the operation, and delivery of services.

- A narrative overview of the proposed interaction between the Proposer, FPHNYC and DOHMH with respect to managing projects as described herein.
- Specific descriptions of workflow processes, management and control procedures, and client communications procedures, Contractor management procedures, project scheduling and reporting procedures, and detailed descriptions of the workflow methodologies to be employed from the Project Kickoff and requirements gathering through Project Closeout.
- 3.5.2 Describe and demonstrate the effectiveness of the Proposer's plan for managing and implementing these services.
- 3.5.3 Describe and demonstrate the effectiveness of the methods of quality control the proposer will utilize. The Proposer should cite specific examples of quality control methods employed on projects of similar scope and complexity.

3.6 Proposer Exceptions:

Define any exceptions taken to the requirements of the RFP, including general provisions for Service Contracts. <u>The exceptions shall be included in a separate section of the Technical Proposal and clearly identified as such</u>.

4. Price Proposal

The Price Proposal Form shall be utilized by the Proposer for the submission of the Price Proposal.

- 4.1 The Price Proposal Form (Attachment C) shall be signed by an authorized officer of the firm and adhere to the following:
 - All fees shall be fully burdened ("Fully Burdened") and shall include, but not be limited to, all management, supervision, labor, material, supplies, consumables, repair parts, and equipment necessary to provide the applicable services. Likewise, the Fully Burdened fees shall include, but not be limited to, all payroll, statutory payments such as Social Security and Worker' Compensation, fringe benefits, Contractor overhead and expenses, travel time, and Contractor profit necessary to complete the services pursuant to the terms of the subsequent Agreement. All documents and reports requested regarding this RFP, including but not limited to contract documents, reports, service reviews, cost estimates, distribution reports, quality control reports, price proposals shall be provided at no additional cost to DOHMH. The Contractor shall be required to keep its submission of pricing data current until the Agreement has been completed. If the Contractor refuses to submit the required data to support price, the ACCO shall not accept the price.
 - Funding should be allocated to increase staff capacity/size.
 - The Proposer shall submit an all-inclusive Fixed Burdened rate per title hour to furnish all labor and materials required to complete the work.
 - Except for Prevailing Wage rates, prices must remain fixed for the term of this contract including optional years.
 - Except for Prevailing Wage rates, all prices shall not be subject to any additions, markups, percentage multiplier, or cost of living increases.

- The Proposer shall provide a mark-up rate percentage for subcontracting services. Said mark-up rate shall be Fully Burdened in accordance with the provisions herein.
- Funding will not be allocated for office supplies, rent, or activities outside the scope of this RFP.
- All costs associated with the successful implementation of deliverables and services will be all inclusive and comprehensive; costs will include, but not be limited to, travel, insurance, supplies, etc.
- The selected contractor will provide to DOHMH any component of any Work Product, deliverables, or the materials or methodologies used by the selected contractor in providing the services under the agreement.
- All deliverables under this contract will be "works-for-hire" and will be the sole property of DOHMH.
- The deliverables will not infringe or otherwise violate any patents, copyrights, trade secrets, licenses, or other rights of any third party.
- The build out of additional functionality and services and the renewal of costs including licenses is contingent on the availability of future funds.
- Prior to using any new or different software and/or equipment to provide the Scope of Services, the selected contractor will verify that its software and/or equipment (a) are consistent with and interoperate successfully with DOHMH's technology architecture, security and information technology standards; (b) have been properly installed; (c) are operating in accordance with its specifications; (d) are performing their intended functions in a reliable manner; and (e) have been properly documented; and time being of the essence, the selected contractor shall promptly provide such services and materials as may be required to replace, repair or correct any defects or warranty non-conformities in the Work Product or deliverables.
- Prior to the issuance of a contract, DOHMH may require that, as applicable, additional relevant service delivery requirements not included here must be agreed upon. These requirements may pertain but not be limited to privacy, confidentiality, and data use.

NOTE: No price information should be disclosed in the Technical Proposal; proposals will be evaluated for technical viability before cost is considered.

5. Acknowledgment of Addenda

The Acknowledgment of Addenda Form (Attachment D) serves as the Proposers' acknowledgment of the receipt of addenda to this RFP, which may have been issued by FPHNYC prior to the proposal due date and time, as set forth in Section I.

C. Proposal Package Contents

The Proposal Package email should contain the following materials. Proposers should utilize this section as a "checklist" to assure completeness prior to submitting their proposal.

- □ Vendor Proposal Form Attachment A
- Applicant Eligibility Questionnaire Attachment B
- □ Technical Proposal:
 - □ Table of Contents
 - □ Proposal Summary (1-page limit)
 - □ Qualifications and Experience
 - Organization Chart
 - Resumes and/or Description of Qualifications for each proposed key staff person
 - □ Client list with name, address, contact name, and telephone number of all subscribers to similar contracting services. If possible, list clients within the New York metropolitan area.
 - □ Organizational Capacity
 - □ Audit report, latest annual financial report, or most recent federal tax return with all schedules and sub-schedules.
 - □ Proposed Approach
 - □ Proposer Exceptions
- □ Price Proposal:
 - □ Price Proposal Form Attachment C
 - □ Acknowledgement of Addenda Attachment D
 - Doing Business Data Form Attachment E
 - Notarized Iran Divestment Act Compliance Rider for New York City Contractors Attachment F

Section IV. Proposal Evaluation and Contract Award Procedures

All proposals accepted by FPHNYC will be reviewed to determine responsiveness to the requirements of this RFP. Proposals that are determined to be non-responsive will be rejected. The Evaluation Committee will evaluate and rate all remaining proposals based on the Evaluation Criteria prescribed below. DOHMH reserves the right to conduct site visits and/or interviews and/or to request that Proposers make presentations and/or demonstrations as DOHMH deems applicable and appropriate.

Although discussions may be conducted with Proposers submitting acceptable proposals, DOHMH reserves the right to award contracts on the basis of initial proposals received, without discussions; therefore, the Proposer's initial proposal should contain its best technical and price terms.

A. Proposal Evaluation Criteria

The criteria, and the relative weight of each, that will be utilized to evaluate proposals are:

a.	The quantity and quality of the Proposer's successful relevant qualifications and experience with project management, data cleaning and standardization, interoperability standards, and data exchange technologies and services	30%
b.	Proposer's demonstrated level of organizational capability and capacity and the proposed project team	20%
C.	Proposer's demonstrated quality of proposed approach and methodology and the approach to modifications to scope of services	30%
d.	Proposer's pricing	20%

B. Selection Process

- 1. The Evaluation Committee will evaluate proposals and rank Proposers by technical merit and price according to the criteria listed above.
- 2. After completion of the technical evaluations, the Evaluation Committee may request oral presentations and/or demonstrations from qualified proposers for further evaluation.
 - a. At the sole option of FPHNYC, in coordination with DOHMH, and if the Evaluation Committee deems it necessary, respondents will be invited to present an overview of the solution contained in their technical proposal.
 - b. The oral presentation shall be followed by a question and answer session. A total maximum of two (2) hours in duration will be set-aside for each oral session.
 - c. Oral and/or visual presentations should not include any information that is not included in the written proposal. The purpose of the oral/visual presentation shall be solely to clarify the information contained in the written proposal.
- 3. As a result of the oral interview, the Evaluation Committee may re-assess the initial evaluation of the technical proposals based on an assessment of:
 - a. How well the total proposal meets DOHMH's requirements.
 - b. The quantity and knowledge of the Contractor's representatives about project management, data cleaning and standardization, interoperability standards, and data exchange technologies and services.

C. Award Process

A contract award will be made to the responsible bidder whose proposal is determined to be the most advantageous to the City, taking into consideration technical merit and price. Contract award shall be subject to the timely completion of contract negotiations between FPHNYC, in collaboration with DOHMH, and the selected Proposer as well as a determination of vendor responsibility. FPHNYC and DOHMH reserve the right to accept or reject the proposals.

DOHMH shall rank proposers by technical merit. DOHMH reserves the right to ask for Best and 18 | REPLACEMENT OF ELECTRONIC DISEASE REPORTING INFRASTRUCTURE (EDRI) AND SURVEILLANCE WORKFLOW ENHANCEMENTS Final Offers on both technical approach and price and may then further negotiate a fair and reasonable price with the highest technically ranked proposer. In the event that DOHMH has chosen to negotiate a fair and reasonable price with the top-ranked proposer and such fee was not successfully negotiated as determined by DOHMH, FPHNYC and DOHMH may conclude such negotiations and enter into negotiations with the next ranked proposer as necessary.

Each Proposer submitting a proposal will be notified in writing regarding the decision concerning their proposal. Once a selection has been made, the designated vendor will be asked to contract with the Fund for Public Health in New York City. Release of funds and other needs will be incorporated into the contracting process.

D. General Disclosures

1. Right to Reject Proposals

FPHNYC may reject any or all proposals received and may ask for further clarification or documentation. Submitted information that does not respond to all items in this RFP may be excluded from further consideration and alternative information packages may not be considered.

2. Proposal Costs

The respondent will be solely responsible for any costs incurred in preparing, delivering, or presenting responses to this RFP. Respondents will not be reimbursed for any costs incurred in preparing proposals.

- Fulfillment of Requirements By submitting an information package, the Proposer acknowledges that the respondent has read and understands this RFP and is capable of fulfilling all requirements.
- 4. Right to Amend, Cancel this RFP, or Solicit a New RFP FPHNYC may amend or cancel this RFP at any time, without any liability to FPHNYC, and/or DOHMH. FPHNYC or DOHMH may solicit new requests for information and/or proposals regarding the services addressed in this RFP at any time.

5. Amount of Business

FPHNYC does not guarantee of any specific amount of business or revenue as a result of this RFP.

6. Security and Confidentiality

Respondents should give specific attention to the identification of those portions of their proposals that they deem to be confidential, proprietary information or trade secrets and provide appropriate justification for why such materials, upon request, should not be disclosed by FPHNYC. Such information must be easily separable from the non-confidential sections of the proposal. All information not so identified may be disclosed by FPHNYC.

7. Proof of Insurance

The selected contractor will need to demonstrate that necessary insurance coverage, including Commercial General Liability and Worker's Compensation, is in place from the start of the contract.

ATTACHMENT A VENDOR PROPOSAL FORM

Instructions: Please complete and submit this Vendor Proposal Form with your application signed by the Project Director for the application and the entity's Authorizing Official.

Bidder/Proposer's Legal Entity Name:		
Business Name, if different from above:		
Employer Identification Number:		
Principal Place of Business:		
Authorizing Official		
Name:		Title:
Email:	Phone Num	ber:
Project Director		
Name:		Title:
Mailing Address:		
E-mail:	Phone Nun	nber:
Certifications		
As Project Director, I certify that all information accurate to the best of my knowledge.	n provided in t	his application is correct and
Signature of Project Director		Date
As the Authorizing Official for the entity submit application and commit my organization to fully application.		
Signature of Authorizing Official		Date

ATTACHMENT B APPLICANT ELIGIBILITY QUESTIONNAIRE

INSTRUCTIONS: Proposers must respond to each of the following Minimum Requirements. Failure to submit a response, or selection of the response "No", may disqualify the proposer from further consideration.

Part I:		
		MANDATORY MINIMUM REQUIREMENTS OF RFP
	A.	Have a minimum five (5) years of experience with project management, data cleaning and standardization, interoperability standards, and data exchange technologies and services including XML.
	В.	Be available to provide services within the New York City area (a New York City office is preferred) and for all aspects of service required herein.
	C.	Confirm that, if awarded, it will agree to enroll as a City of New York approved vendor.

Part II:

PREFERRED EXPERIENCE			
Α.	Knowledge of HL7 standards, Maven, public health surveillance, and experience replacing systems similar in size and scope to this RFP		
В.			
C.			
D.			

Part III:

		APPLICANT STATUS
□ Yes	□ No	Is the Proposer a Minority and Women Business Enterprise (M/WBE)?

Part IV:

PROPOSER'S CERTIFICATION

By my signature below, I certify that I am an authorized representative of the proposer named below, and that all information provided above is true and complete to the best of my knowledge.

Signature of Authorizing Official

Date

Bidder/Proposer (Name of Firm)

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ATTACHMENT C PRICE PROPOSAL FORM INSTRUCTIONS

Proposers are instructed to offer a maximum, not-to-exceed (NTE) rate for each title. The rate must be inclusive of all costs associated with the performance of work (for example, overhead, administrative fees, etc.). There will be no separate budget lines or payments for expenses other than the items of cost listed here.

Proposers must also attach their rate card, or a comprehensive list of the maximum hourly rates paid to personnel performing these functions. These rates will be provided for informational purposes only. DOHMH will only pay the contractor based on deliverables.

The contract that results from this solicitation will be a requirements contract. There is no minimum guaranteed quantity of work. The quantities estimated here are estimates for evaluation purposes only. The actual quantities may be more or less, depending upon the needs of DOHMH.

PRICE PROPOSAL FORM

				1
Item #	Title / Description	Quantity for Evaluation Purposes (Hours)	Proposed Not-To- Exceed Hourly Rate (\$)	Extension Total (\$) (A x B)
Labor Rates for Stat	ff*			
1				
2				
3				
4				
5				
6				
7				
8				
		Subto	otal: Labor Rates	
Software/Tools/ Supplies	Title / Description	Quantity for Evaluation Purposes	Estimated Cost	Extension Total (A x B)
9			\$	\$
		1	ļ	
Subcontracting Mark-up	Title / Description	Quantity for Evaluation Purposes (\$)	Percent Mark-up (%)	Extension Total (A x (1+B))
10		\$		\$
Subtotal:	Other Expenses (Software	e/Tools + Subcont	tracting Mark-up)	
	TOTAL	(Labor Rates + C	ther Expenses)	

*Note: For any unit item title rate listed above for which subcontracting is required, the Proposer will indicate the applicable rate in the appropriate unit item as well as include the applicable mark-up in unit item 10. The Proposer shall identify separately any unit item title rate that is to be subcontracted.

ATTACHMENT D ACKNOWLEDGEMENT OF ADDENDA

INSTRUCTIONS: Complete Part I OR Part II as applicable; complete and sign in Part III

Part I – Acknowledgement of Receipt of Addenda

Listed below are the dates of issue for each Addendum received in connection with this RFP:

Addendum #1: Dated
Addendum #2: Dated
Addendum #3: Dated
Addendum #4: Dated
Addendum #5: Dated

Addendum #7: Dated _____

Addendum #6: Dated_____

Addendum #8: Dated

Addendum #9: Dated _____

Part II – Acknowledgment of No Receipt

_____ No Addenda were received in connection with this RFP.

Part III – Signature

Signature of Authorizing Official

Date

Bidder/Proposer (Name of Firm)

ATTACHMENT E DOING BUSINESS DATA FORM

See next two pages.



Doing Business Data Form

To be completed by the City agency prior to distribution Agency				Transaction	ID		
Check One		Transaction Typ	be (check one)				
Proposal	□ Award	□ Concession	Economic Development Agreement	□ Franchise	□ Grant	Pension Investment Contract	□ Contract

Any entity receiving, applying for or proposing on an award or agreement must complete a Doing Business Data Form (see Q&A sheet for more information). Please either type responses directly into this fillable form or print answers by hand in black ink, and be sure to fill out the certification box on the last page. **Submission of a complete and accurate form is required for a proposal to be considered responsive or for any entity to receive an award or enter into an agreement.**

This Data Form requires information to be provided on principal officers, owners and senior managers. The name, employer and title of each person identified on the Data Form will be included in a public database of people who do business with the City of New York, as will the organizations that own 10% or more of the entity. No other information reported on this form will be disclosed to the public. **This Data Form is not related to the City's PASSPort registration or VENDEX requirements.**

Please return the completed Data Form to the City office that supplied it. Please contact the Doing Business Accountability Project at <u>DoingBusiness@mocs.nyc.gov</u> or 212-788-8104 with any questions regarding this Data Form. Thank you for your cooperation.

Entity Information

If you are completing this form by hand, please print clearly.

•				
Entity EIN/TIN	Entity Name			
Filing Status	(\$	Select One)		
NEW: Data Forms submitted now must include		Entity has never completed	a Doing Business Data F	orm. Fill out the entire form.
listing of organizations , as well as individuals, w or more ownership of the entity. Until such certit of ownership is submitted through a change, ne	fication	o .		Fill out only those sections that have no longer hold positions with the entity.
update form, a no change form will not be accept		No Change from previous D	ata Form dated	Skip to the bottom of the last page.
Entity is a Non-Profit 🛛 🗆 Yes	□ No			
Entity Type Corporation (any type) Joint	Venture DLLC	C □ Partnership (any type)	□ Sole Proprietor □	Other (specify)
Address				
City				Zip
Phone				
	E man			s in order to receive notices regarding this form by e-mail.
Principal Officers Please fill in the required identification information exist." If the entity is filing a Change Form and the name of the person being replaced so his/her name	e person listed is	replacing someone who was	, previously disclosed, ple	ase check "This person replaced" and fill in the
Chief Executive Officer (CEO) or equivalent of The highest ranking officer or manager, such as the Presiden		Sole Proprietor or Chairperson of the	e Board.	□ This position does not exist
First Name	MI	Last		Birth Date (mm/dd/yy)
Office Title		Employer (if not empl	oyed by entity)	
Home Address				
□ This person replaced former CEO				on date
Chief Financial Officer (CFO) or equivalent offi The highest ranking financial officer, such as the Treasurer, C		Director or VP for Finance.		□ This position does not exist
First Name	MI	Last		Birth Date (mm/dd/yy)
Office Title		Employer (if not empl	oyed by entity)	
Home Address				
□ This person replaced former CFO				on date
Chief Operating Officer (COO) or equivalent of The highest ranking operational officer, such as the Chief Pla		r of Operations or VP for Operations.		□ This position does not exist
First Name	M	Last		Birth Date (mm/dd/yy)
Office Title		Employer (if not empl	oyed by entity)	
Home Address				
□ This person replaced former COO				on date

1/2018

For information or assistance, please contact the Doing Business Accountability Project at DoingBusiness@mocs.nyc.gov or 212-788-8104.

Principal Owners

Other (explain)

Please fill in the required identification information for all individuals or organizations that, through stock shares, partnership agreements or other means, **own or control 10% or more of the entity**. If no individual or organization owners exist, please check the appropriate box to indicate why and skip to the **Senior Managers** section. If the entity is owned by other companies that control 10% or more of the entity, those companies must be listed. If an owner was identified on the previous page, fill in his/her name and write "See above." If the entity is filing a Change Form, list any individuals or organizations that are no longer owners at the bottom of this section. If more space is needed, attach additional pages labeled "Additional Owners."

There are no owners listed because (select one):

The entity is not-for-profit	The entity is an individual
------------------------------	-----------------------------

 \square No individual or organization owns 10% or more of the entity

Individual Owners (who own or control 10% or more of	of the e	ntity)	
First Name	_ MI	_Last	Birth Date (mm/dd/yy)
Office Title			_ Employer (if not employed by entity)
Home Address			
First Name	_MI	_Last_	Birth Date (mm/dd/yy)
Office Title			_ Employer (if not employed by entity)
Home Address			
Organization Owners (that own or control 10% or mo	re of th	e entity))
Organization Name			
Organization Name			
Organization Name			
Remove the following previously-reported Principal O			
Name			Removal Date
Name			Removal Date
Name			Removal Date

Senior Managers

Please fill in the required identification information for all senior managers who oversee any of the entity's relevant transactions with the City (e.g., contract managers if this form is for a contract award/proposal, grant managers if for a grant, etc.). Senior managers include anyone who, either by title or duties, has substantial discretion and high-level oversight regarding the solicitation, letting or administration of any transaction with the City. At least one senior manager must be listed, or the Data Form will be considered incomplete. If a senior manager has been identified on a previous page, fill in his/her name and write "See above." If the entity is filing a Change Form, list individuals who are no longer senior managers at the bottom of this section. If more space is needed, attach additional pages labeled "Additional Senior Managers."

Senior Managers

First Name	_ MI	_Last_	E	Birth Date (mm/dd/yy)
Office Title			_ Employer (if not employed by entity)	
Home Address				
First Name				
Office Title				
Home Address				
First Name				
Office Title				
Home Address				
Remove the following previously-reported Senior Mar	nagers			
Name			r	removal date
Name			r	removal date
Certification I certify that the information submitted on these two page materially false statement may result in the entity being f				nd that willful or fraudulent submission of a
Name			Title	
Entity Name				Work Phone #
Signature				_ Date

ATTACHMENT F IRAN DIVESTMENT ACT COMPLIANCE RIDER FOR NEW YORK CITY CONTRACTORS

The Iran Divestment Act of 2012, effective as of April 12, 2012, is codified at State Finance Law ("SFL") §165-a and General Municipal Law ("GML") §103-g. The Iran Divestment Act, with certain exceptions, prohibits municipalities, including the City, from entering into contracts with persons engaged in investment activities in the energy sector of Iran. Pursuant to the terms set forth in SFL §165-a and GML §103-g, a person engages in investment activities in the energy sector of Iran if:

- a) The person provides goods or services of twenty million dollars or more in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran; or
- b) The person is a financial institution that extends twenty million dollars or more in credit to another person, for forty-five days or more, if that person will use the credit to provide goods or services in the energy sector in Iran and is identified on a list created pursuant to paragraph (b) of subdivision three of Section 165-a of the State Finance Law and maintained by the Commissioner of the Office of General Services.

A bid or proposal shall not be considered for award nor shall any award be made where the bidder or proposer fails to submit a signed and verified bidder's certification.

Each bidder or proposer must certify that it is not on the list of entities engaged in investment activities in Iran created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. In any case where the bidder or proposer cannot certify that they are not on such list, the bidder or proposer shall so state and shall furnish with the bid or proposal a signed statement which sets forth in detail the reasons why such statement cannot be made. The City of New York may award a bid to a bidder who cannot make the certification on a case by case basis if:

- 1. The investment activities in Iran were made before the effective date of this section (i.e., April 12, 2012), the investment activities in Iran have not been expanded or renewed after the effective date of this section and the person has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran: or
- 2. The City makes a determination that the goods or services are necessary for the City to perform its functions and that, absent such an exemption, the City would be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.

BIDDER'S CERTIFICATION OF COMPLIANCE WITH IRAN DIVESTMENT ACT

Pursuant to General Municipal Law §103-g, which generally prohibits the City from entering into contracts with persons engaged in investment activities in the energy sector of Iran, the bidder/proposer submits the following certification: [*Please Check One*]

BIDDER'S CERTIFICATION

- By submission of this bid or proposal, each bidder/proposer and each person signing on behalf of any bidder/proposer certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief, that each bidder/proposer is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law.
- I am unable to certify that my name and the name of the bidder/proposer does not appear on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the State Finance Law. I have attached a signed statement setting forth in detail why I cannot so certify.

Dated: _____, New York

SIGNATURE

PRINTED NAME

TITLE

Sworn to before me this _____ day of_____, 20____

Notary Public

APPENDIX A MINIMUM REQUIREMENTS PER TITLE

Any personnel provided by the Consultant and/or its Subconsultants must satisfy the Minimum Requirements Per Title set forth below:

	MININ	IUM REQUIREMENTS
TITLE	NUMBER OF	PROFESSIONAL LICENSE
	YEARS OF	OR CERTIFICATION
	EXPERIENCE	
ADMINIST	RATIVE PERSONNE	L
Project Manager	5	
Business Analyst	3	
Project Director	7	
TECHN	IICAL PERSONNEL	
Senior	7	
Developer/Engineer/Analyst		
Mid-level	4	
Developer/Engineer/Analyst		
Junior	1	
Developer/Engineer/Analyst		

APPENDIX B

HIGH LEVEL BUSINESS REQUIREMENTS FOR EDRI REPLACEMENT

(Must meet or address the below use cases at a minimum. May need additional requirements for upstream systems)

Req #	Requirement	Objective / Rationale	Program / Core Team Feedback	Priority
FR-D- 001	Need reporting capabilities and data analytics.	A dashboard with reporting capabilities will allow users to visually see data that are applicable to their program needs. Dashboards with reporting capabilities can be configured based on different metrics, i.e., users can select certain criteria such as a disease or condition based on a timeframe or select data from a specific provider or facility as well as monitor real- time metrics.	 TB: Statistics and reporting are handled in Maven. SQL and SAS code are written off the BI tables in Maven. BOI: A nice snapshot of how many reports we have received by diseases within the past 24 hours. YTD reports would be nice broken down by time periods and diseases. Last 24 hours would make sense for a dashboard but if there was some reporting functionality then we can use that for YTD. BCD: Would like to see a total of diseases, broken up by disease and date range. STI: Would like to see an option for all diseases in a 24-hour period. Programs agreed they are open to see what other data and statistics are available. 	Must
FR-D- 002	Need ability to add new diseases to reports that are monitored and tracked.	For new diseases or conditions being defined, monitored, and tracked, users should be able to easily add to report criteria for rapid		Must

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		turnaround on reporting needs.		
FR-D- 003	System should have a dashboard that is configurable for data elements that reflect daily workflow, troubleshooting activities and disease reporting of the programs.	To have a configurable dashboard for program and informatics workflow needs.	 STI: mentioned, dashboards are for telling us about the health of our system and what to expect each day. Are things working as expected? BCD: would be helpful to see a breakdown of diseases (Likes the current hold queue set-up). Look at recent activity of messages and see if messages are flowing through correctly. STI: Would like to see hold queue data elements for troubleshooting. Informatics: would like to see connection points and where a connection failed. TB: Would like to see a dashboard that is tailored to TB and does not impact the other programs: Example: one variable change for a program should not impact the other programs. DDC: Dashboard can inform us operationally, where data are queued or backlogged. 	Must
FR-D- 004	System dashboard should refresh in real time. 15-20 minutes is acceptable.	The Dashboard should refresh in real time. If that is not possible a refresh every 15 to 20 minutes is acceptable.	TB: A dashboard that refreshes every 15-20 minutes. STI: A dashboard that refreshes in real time.	Must
FR- DF- 001	System should have a way to audit all stages of message:	To have audit tracking for all stages of message processing.	STI: Would like to see the status of each message and where they are in the process.	Must

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	transformation, classification, matching, cleaning, output data sources, input data sources and rules applied.		BOI: Audits should happen at all levels to a message and any rules that are applied— any edits to a message either by a user or by a rule should be audited. DDC: System should allow users to see before and after messages for each of the stages with date/time stamps of completion: Log all message record transactions and acknowledgements.	
FR- DF- 002	System should show all connections Audits (Interfaces, Services, Messages Sent, Messages coming in, Logging user audits)	To have audit tracking on all data and messages from inbound and outbound connections.	Informatics: Would like to see connection points or failures. A flag on a certain process and more specifically to the stopped process. As part of workflow examine to see if the client has sent data. Audits if an interface is connected, idle, stopped, errors or queued. Would like to know who stopped or started an interface or service. STI: Audits should be able to tell us if there is a system issue and where the issue occurred.	Must
FR- DF- 003	System should have a log/audit of user activity.	To have audit tracking and/or log files for all user activities.	 TB: Would like to see audits to user roles for certain activities. Maven has super users and regular users for managing hold queues and having only certain users create rules. BOI: When a resubmit of a message is performed, would be helpful to have a user ID, line of audit on who edit and resent a message. 	Must

FR- DF- 004	Diseases need to be classified before being captured in the surveillance system.	To ensure system has a way to handle the classification workflow for eCR.	DDC: For the majority of cases disease classification for eCR will be seen in the reportability response. When the doctor updates the patient record with the LOINC for the test they ordered, a report is automatically generated and sent to the AIMS platform. There, the report is compared to reporting criteria authored by DOHMH surveillance staff in RCKMS. If the case is determined to be reportable to DOHMH it is routed appropriately. At this point, a Reportability Response document is created and sent to both the reporting provider and DOHMH. Once DOHMH receives the report and the RR, they will be linked by their shared document ID. The condition name contained in the RR will determine where in the agency the case will be routed.	Must
FR- DF- 006	System will have a way to handle Classifications that need manual intervention.	To ensure system has a way to handle messages that do not conform to classification rules.	Informatics: Rules are written to handle classification. If a required data element is missing and a result cannot be classified, these messages will need to be reviewed. Informatics will evaluate the unclassified messages. Unclassified would not make it to the program level.	Must
FR- DF- 007	Ability to clear and/or reclassify	To ensure system has functionality to clear and/or reclassify any	A Currently if a message is routed to the wrong	Must

	any erroneously sent information.	erroneously sent information.	program/queue, the user can't reclassify	
FR- DF- 008	Ability for system to handle classification with Reportability Response and without Reportability Response.	To ensure system has a way to handle classification with Reportability Response and without Reportability Response.	DDC Team went over high- level workflow for eCR and classification using the reportability response. In cases of manual classification, mentioned there will be an option for providers to manually initiate a case report and another case when certain classification needs to be added that is not on the priority list of the AIMS team. STI: For further classification, if there is a case where we can't classify on the reportability response, we look at test type and LOINC to make further classification.	Must
FR- DF- 011	Need a way to clean messages that are missing SNOMED, LOINC, Pregnancy status, DND, HOLD as well as other eCR errors.	To ensure system has a way to handle messages that are missing required data for message processing.	STI/TB/BCD/BOI: Programs will write rules to handle processing of messages, and when a message is missing required fields, these messages go to a hold queue for further evaluation. The programs analyze the messages in the hold queue, and will check for missing specimen source, LOINC code (Test Type), SNOMED (test results), and PREGNANCY STATUS. If test results contain a numeric value, then a Standard Quant should be populated. There are times when a result needs to be corrected due to an error and resubmitted or	Must

FR- DF- 012	System should have a way to determine the correct order of when rules fire.	To ensure system has a way to determine the order that rules will fire when multiple rules are applied to a message. (Should be solved if the system can write complex rules)	marked as "DND". (Do not distribute)- These DND errors do not transmit to Maven. STI: Currently there is no determination in what order the rules will fire. So, this affects messages in different ways. Some of the data gets contradictory. (See use case) BCD: Order of when rules fire is especially important. There are times when multiple rules are applied to a message and BCD does not know what rule worked or which one fired. BCD does not know if the rule fired or if it was done correctly and why it went to a certain bureau and are not able to trace it. TB: We should consider the downstream impacts of when order of rules will fire. This	Must
FR- DF- 013	System will have a way to allow for the definition of multiple data fields for classification of conditions/diseas es on the front end with reportability response and without reportability response.	To have a front-end user interface for classification of diseases/conditions with and without Reportability Response.	is not an issue for TB. Classification using the reportability response (RR) and how classification will take place for eCR using digital bridge: Every time a case report is triggered from the patient record in the EHR system. It gets sent to the AIMS platform and if it is determined to be reportable to a jurisdiction. The AIMS platform will create a second corresponding document called the reportability response. The sending provider gets a copy and we get a copy. This is the only place where the condition	Must

			name is stated. RR has the condition name. The easiest way is to match the eCR to the RR. In future there will be a manual option for providers to report- where we cannot rely on the RR. RR is going to be our primary method of classification for eCR. Informatics: Also, not just using the RR -looking at data points to look at additional data. For eCR, we will have situations where we need to perform additional/multiple classification's based on other test results, test codes and rules that will look at the reportability response sent from AIMS. We can also map certain laboratory tests and diagnosis codes to certain conditions. Have more clinical and epidemiology criteria's similar to RCKMS. We may also have to manually classify only if a couple of jurisdictions are interested in certain diseases/conditions. Informatics: Classification of diseases under eCR will be handled by Informatics. Certain fields help to identify classification: test, results, order fields as well as MD notes.	
FR- DF- 014	Need a front end for Rules Management: System should have a robust rules management	To have a robust front-end user interface for rules management.	Rules Management front end input from Programs: Create a basic, complex rule (have logic to support complex rules creation), Sort rules by type of rule, creator of the rule, Security features for	Must

	function in which one can configure.		who creates a rule (See User, Roles and Permissions), Choose which rules should be applied first to a message, Allow for comparison between the rules, Show how rules are related to each other (see other rules on specimen source) See what the rules were applied to messages.	
FR- DF- 015	System will have a front end to handle unclassified diseases.	To have a front-end user interface or queue for informatics to handle unclassified diseases/conditions.	Informatics: Any message/result that is not automatically classified is sent to the unclassified queue. Here they are manually assigned a disease by ECLRS Coordinators. Informatics will check unclassified queue as part of their daily workflow.	Must
FR- DF- 016	System should have a front end for users to view results that do not conform to standards and see the details of failure points. (HOLD QUEUE)	To have a front-end user interface or queue for programs to handle messages that do not conform to standards.	Each program has their hold queue sectioned based on their workflows. Hold rule allows programs to put reports that do not conform to standards and those that require additional review in a "Hold queue".	Must
FR- DF- 017	Messages: A way to see all messages that have been processed/recent activity.	To have a front-end user interface for programs to see all messages that have been processed and show recent activity for messages.	BCD: Would like to see recent activity of messages and if messages are flowing through correctly.	Must
FR- DF- 018	System should have a way to see errors. (error queues)	To have a front-end user interface to show all IT errors for messages.	IT error queues: All messages that error that are not in the hold queue or unclassified queue, show the type of error and where the failure occurred, a step to re- submit the message and error	Must

			on if a message can't get	
			transformed.	
		To have a front-end user interface for	STI: Does not need to update patient demographics- Does not want the patient data to be manipulated.	
FR-	Ability to have a front end to	updates to patient demographics on certain fields like race	BCD: All demographic changes are done in Maven.	
DF- 019	add/edit/update patient demographics.	and ethnicity or patient address and access to this function is limited by user,	STI: We should have the option to for items such as race or ethnicity.	Should
		roles, and permissions.	TB: Would like to keep the option to update address if the address is being sent incorrectly.	
FR- DF- 020	Ability to have a front end to add/edit/update facilities and laboratories.	To have a front-end user interface for Facility definition and must support the definition to its most granular level.	The team agreed a larger conversation needs to happen on a master facility list. Each program uses the facility in different ways, and some have their own facility list. All programs agreed for a definition of the facilities list granularity must be considered. (Facility Name, Address, Suite number, Phone number, Hospital/Laboratory affiliate, Type of facility)	Must
FR- DF- 021	Ability to have a front end to add/edit/update providers.	To have a front-end user interface for provider definition.	Informatics: Definition for eCR will be handled by informatics and defined like laboratories. Example: NPI number, Provider Name, Specialty. Programs deal mostly with Facility and not providers, since Providers' information often changes. DDC: Provider information is coming through as free	Should

			text -dirty data in current	
			state.	
			BOI: Specialty would be valuable for providers.	
FR- DF- 022	Ability to see all connection points: System should have a way to identify each facility that is sending data.	To have a front-end user interface to view all connection points and visually see which facility is sending data.	BOI: System should have a way to identify each facility that is sending data. Informatics: Would like to know connection points or failures- if something is stopped. A flag on a certain process and more specifically the stopped process, when notifications are sent to the group. Need to be able to quickly identify from each facility that is sending data- what status they are at in the cert process, once they are in production and continuing to report to us: We need to follow up directly with the site and check if they haven't sent data to us in a day or a month, etc.	Must
FR- DF- 023	Ability to set up alerts and notifications.	To have a front-end user interface for user setup of alerts and notifications.	 STI: Currently gets the notification emails in the morning- once a day. BCD: Add disease of interest as a possibility for alerts and notifications. Informatics: Sets threshold and alerts for each sender and checks for file frequency of the sender. Since that is not currently a part of rhapsody, a new application will need to be able to identify what facility hasn't sent us data in a certain timeframe. 	Should

FR- DF- 024	Ability to clean facilities according to CDC facility type.	To have a way to handle cleaning of facilities to set facility type.	STI: Overmatch facilities, big issue for STI. Certain # of cases reported to the CDC say they were diagnosed at a TB clinic, but was really at an STI clinic. In this case looking at the same address, but not looking at the suite/room number. STI also analyzes and cleans the facilities for facility type- the CDC needs facility type information. (This may not be needed if we have a comprehensive and well- defined facility table)	Should
FR- DF- 026	System facility algorithm should take into consideration granularity of facility matching – Facility name, address, phone, suite, room # etc.	To have a way to handle facility matching at its most granular level	TB: mentioned, when it comes to facility matching, the granularity of matching needs to be considered for the individual needs of the programs. That could potentially affect at what level we are matching. Gave example, STI- likes facility data at a more granular level than TB does. It's important for them to know, where a test was done and what dept. in a hospital. TB does not necessarily care about what floor or office. If we are to centralize the matching, it must be at the most granular level of the program's needs. BOI: For facility matching, mentioned each instance of Maven chooses which facilities to add and what they would like to see in their instances. BOI adds to the Maven list if it is a regular reporter.	Must

			BCD: Has a different facility list that they follow. STI: For facilities, they are being over matched. Overmatch facilities, big issue for STI. Certain number of cases reported to the CDC say they are diagnosed at a TB clinic but really was at an STI clinic. In this case looking at the same address but not looking at the suite/room number.	
FR- DF- 027	System patient algorithm should take into consideration: Maven matching. Undermatching is preferable but not a gross level of undermatching. Should have a human review queue for fuzzy matches. Patient algorithm should look at disease level information and take advantage of additional information available in the eCR system.	To have a way to handle patient matching and workflow for fuzzy matching.	 TB: mentioned for configuration of patient match in Maven, we can add additional fields to it, we can write rules on age, address, parse out common addresses for a stronger match. There is also a human review queue for fuzzy match es that fall between a certain threshold. In general, likes the undermatching approach, but does not want a gross level of undermatching. Easier to merge than to unmerge in Maven. There are challenges for deduplication in Maven. If we are working on a new matching algorithm outside of Maven- we must be cognizant of how Maven matches to avoid duplicate efforts. BOI: For patient matching prefers undermatch and then human review. Likes the writeback capability. STI: Current state only looks at patient level information and does not consider the 	Must

			disease information. Maven looks at disease level. Agreed, the human review queue is good, but not good use of individual program time to do the same activity. Key piece to consider is the quality of actual data coming in for eCR- algorithms must use the data received as its baseline. BCD: For patient matching – prefers under matching, but not grossly under matching. DDC: CIR uses machine learning and have trained, with the help of a vendor – front loading the work to improve their algorithm. It's a great method for a lot of applications. Training the AI would help with quirks in population.	
FR- DF- 028	System must have a standardized facility table and eliminate duplicate entries as much as possible.	To have a comprehensive and standardized facility table that allows for duplicate checking. (A global rule for matching of facilities would help in standardization)	Facility requirements captured for each program. TB: Current state -there are many facility locations that are duplicated, unknown or no longer exist. We will need to look at the facility table and standardize. For facility list, addresses sent by the laboratories are not standard, therefore there may be the same lab defined twice in the facility mapping table, creating duplicates. A global rule for matching of facilities would help in standardization.	Must
FR- DF- 030	System should be able to Integrate and perform	To have a way to perform matching and deduplication between electronic	DDC: Introducing eCR data to DOHMH surveillance eco- system, we will now have to consider multiple data	Must

	matching between ELR & ECR.	lab reporting and electronic case reporting.	sources with the same patient in multiple sources at once: Reporting Central, PHB, eCR, ELR. Potentially have 2 sets of same lab data at different times. There will also be duplicate clinical information as we onboard facilities off Reporting Central to eCR. In these cases, matching and deduplication will have to take place to compare records from these data sources for patient, provider, and facility in order to know how to handle the result.	
FR- DF- 032	Need ability to create user defined rules: DND, HOLD, SNOMED, LOINC etc.	To ensure rules function has the capability for users to create DND, HOLD, SNOMED, LOINC and other rules related to eCR workflow.	 STI: Creates rules to DND negative gonorrhea. Cleaning a message when the spelling of a specimen is wrong. There are rules for checking for specimen source and gender. There are common hold rules. Each program can write a rule for individual labs. There are rules that can be agreed on and rules only applicable to certain programs. BCD: Having specimen source cleaned and standardized up front is an especially important feature. BCD receives a large volume of conditions and depending on what the source is, it will dictate if it's a report they want to route to their system. 	Must
FR- DF- 033	Ability for users to create complex rules.	To ensure rules function has the capability for users to create complex rules	TB: Gave use cases of complex rules. Current state cannot handle complex rules, therefore there is a constant	Must

		and system should have logic to support this.	need to create new rules to handle each scenario that comes into the hold queue. Rules are one to one. Being able to create complex rules- take one result and write a rule against another result record. STI: Complex rules for probable pregnancy. Does not think it will be a problem for eCR. Pregnancy in ELR comes in a text field and each lab sends different so rules are often written to handle this.	
FR- DF- 035	System should allow for the creation of simple rules to apply immediately to messages with correct user, roles, and permissions.	To have more governance over rules. When rules are simple, rules can be applied immediately. More complex rules will require a second review.	TB: Security features on who has the option to create rules. In current state users do not need approval to create a rule.	Must
FR- DF- 036	System should allow for users to: Create Rule – to create a new rule in the cleaning application. View All Rules – to search and view cleaning rules. Hold Rules – to hold messages temporarily until programs. Share rules – share cleaning	To ensure the rules function has the capability of creating rules, viewing rules, holding rules, sharing of rules, deactivate of rules, as well as other rules functions.	 TB: TB and BCD share a rule where they will filter out negative results. Users can use existing program rules and are shared. BCD: There are times when a rule is broken and no longer fires due to changes in the sending Laboratory Information System. Therefore, BCD will create a new rule to handle these changes. (Acquisition of lab, New Laboratory Information System, Update in Lab codes). 	Must

rules across programs. Show deactivated rules, date, time and user.	e,	 STI: Particularly important feature that needs to be improved upon. When creating certain rules, we should be able to have more rule options available and be able to create a complex rule. BOI: Should allow for deletion of old or not used rules or deactivation of a rule. See what rules are impacted by other rules. Allow for searching of existing rules, search on the rules that user created, filter on who created it. 	
System will have business rules/rules engine to learnFR- DF- 037how to deal wit diseases and route to one program or multiple programs.	To ensure there is a way to handle classification of	 STI: eCR data is far more complex. A lot of time should be spent on order of operations, complex rules, outside rules engine can assist us. Important to knowall programs have quite different needs when writing of rules. BOI: Age criteria on pneumococcal is a case where further classification needs to happen, a rule is set up based on age criteria. For classification, If there are two or more conditions reported in one patient message for two different programs, the message would have to be duplicated and sent to the individual programs. In the case where the two conditions are for the same program the; message will need to be duplicated and split to the different conditions in the same 	Must

FR- DF- 038	System should have a way to prioritize the flow of messages by source and disease.	To have a way to support prioritization of source and diseases using rules.	 program. Also, if pregnancy is sent over with eCR for Hep B- this will determine if this goes to Perinatal Hep B team (BOI) or Hep B team (BCD). STI: Prioritize source and disease: Yes, there are high priorities- example Zika. Current State, prioritizes the flow of messages by source and disease. Those with the highest priority get processed before others with the lowest priority. DDC: COVID takes precedence over Shigella. BOI: Measles and other VPDs were shifted to higher 	Must
FR- DF- 039	System must be able to process and use rules where a person can be in multiple data sources, Reporting Central, eCR, & ELR all at once and can potentially have 2 sets of lab data at different times.	To have a way to check if a patient is in multiple data sources such as Reporting Central, eCR, ELR, PHB and other surveillance systems using rules.	priority in 2019. DDC mentioned that we are already getting data to Rhapsody, but are not matching, cleaning, or mapping to maven. We have the CDA R2 spec and the RR response that tells us which program to deliver to. We have enough to know where it should go. We must keep in mind a person can be in multiple data sources, Reporting Central, eCR, & ELR all at once and some of those reports may have already gone to Maven. We can potentially have 2 sets of lab data at different times.	Must
FR- DF- 041	System must handle current state special processing rules.	To ensure system has functionality to compare incoming lab results to historical lab results.	Spruce previous special processing from Marti. Document: DOHMH CD Special Processing v5.	Should

FR- DF- 042	Need a way to allow for comparison between the rules.	To ensure rules function can do a comparison between the rules.	BOI: Allow for comparison between the rules. (Global and user level or user rules to user rules)	Should
FR- DF- 043	System should be flexible in changing of pathways and workflow direction, ease of adjusting and defining new algorithms.	To ensure updates can be easily made to the system to adjust to workflow needs.	DDC mentioned system should be flexible in changing of pathways and workflow direction, ease of adjusting and defining new algorithms, and work with our existing systems: EDRI, Maven and additional Surveillance systems.	Must
FR-I- 002	System should be able to handle multiple data sources from all inbound disease surveillance components. (Files and Formats).	To ensure that system can support all inbound disease surveillance system file formats.	New solution should have a way to handle all file formats from: Reporting Central, HARS, CIR, ECLRS (NYSTATE), MAVEN (I/O), PHB, WEB SURVEY FEEDBACK (STI), FUTURE VITAL RECORDS (BIRTH & DEATH): CIR (API)- pulls data from CIR to Maven upon initiating the request. ECLRS: HL7 version 2.5.1, pipe delimited, PHB: pipe delimited, HARS: TXT format REPORTING CENTRAL: XML, Feedback server: Only login used for this (Java, PHP, XML) Maven: XML URF file format/Excel (Rikers) Ability to parse and display the attachments embedded within the HL7 messages.	Must
FR-I-	System will need the ability to	To ensure the system can pull data from		Must
003	import data from CIR.	CIR through an API, based on requests		

		initiated by a person or process.		
FR-I- 004	Ability to parse and display the attachments embedded within the HL7 messages.	To ensure the system can receive and process attachments sent in the HL7 message and is viewable.	DDC: Currently, the attachment is stripped from the HL7 message before the message goes into EDRI. EDRI can't handle the attachment. Allow the user to view and submit the attachment to Maven if it is deemed necessary Alert the user that there are attachment files to review Automate the routing of attachments based on rules.	Must
FR-O- 003	System should be able to integrate with Maven. Please note: as part of the POC, the product will show it can generate XML files and map to MIF.	To ensure that the system can integrate with Maven and generate XML file formats.	eCR will have more data to send to Maven than ELR. The eCR system must integrate with Maven.	Must
FR- PW- 004	System must have the ability to track and indicate patient pregnancy status.	To ensure system has a way to track and indicate pregnancy status of patients.	 STI: Currently being sent as free text for ELR. DDC: For eCR will need to figure out how this will work since this can come in numerous ways: diagnosis, flag, lab test, doctor's notes. BOI: Women of childbearing age, BOI will track pregnancy status. All programs need this, especially BOI and STI. Also look for probable pregnancy. Also, if pregnancy is sent over with eCR for Hep B-this will determine if this 	Must

			goes to Perinatal Hep B team (BOI) or Hep B team (BCD).	
FR- PW- 005	Need the ability to track infants born to Hepatitis positive mothers.	To ensure system has a way to track patients based on certain criteria.	BOI: will track a mother who has Hepatitis B throughout her birth history, single or multiple births. Therefore, mother's patient history will be tracked for many years and can be lengthy. The child is also tracked- up to 2 years from birth. Informatics: System must be able to track other information for a patient as well.	Must
FR- PW- 006	Need ability to create web-based user surveys (STI).	To allow setup of web forms for surveys.	STI: Nice to have in the web form. The only function current state serves are it provides the initial login for the patient. Need to capture data from Feedback Server software application that allows users to create web- based surveys (STI)	Could
FR- PW- 007	Programs need the ability to do advanced searching of messages in the new system.	To ensure system has advanced searching of messages for program workflow.	TB: When searching for a patient by accession or order number, the search will only bring up the first message. The user must do additional searching in the current system or other systems for additional information.	Should
FR- PW- 009	System must have ability to store numerous contacts sent by the EHR	To ensure system can capture and store multiple patient contacts associated with the patient record.	Contacts coming in from an eCR message – if an eCR message has x number of patient contacts, we should be able to store all and send to Maven. Motherbaby relationship, Father-mother, etc. as well as additional information sent with the contacts such as phone number.	Should

FR- PW- 010	System must have ability to store all providers for each patient contact.	To ensure the system can capture and store all providers associated with the patient contacts.	For eCR multiple providers are coming in with the results: Consulting, Attending, Ordering.	Must
FR- PW- 011	Ability to share data amongst all bureaus.	To ensure system has a way to allow for sharing of data amongst programs.	STI: In current state all demographic information is shared, and we get to know which program contributed to that particular demographic information- patient in STI can see a telephone number that the TB registry contributed. This will need further discussion. 4 bureaus: can see data from each other with special permission. Assumption for future solution would be that programs can share data but programs will need to have special sign off from the deputy commissioner to see a patient across the board. For now, we have program specific views for data (example: TB can only view TB and can not see clinical data for BCD). Conversation is going on for consolidation on a division level vs. groups- how can we better share and leverage data across all groups? Hepatitis B is tracked for immunization by BOI and is also tracked by BCD for reporting.	Must
FR- PW- 012	System should allow for configuration to support eCR onboarding/Cert process.	To ensure the system can support the configuration of the onboarding and certification process.	 Informatics: Current state: Done in a QA environment: A test file is generated in QA in an HL7 format and then UAT with the programs. Once 	Must

			 confirmed data is coming through correctly for disease, then the feed is turned on in production. eCR: eCR would follow a similar process of initial onboarding and then have programs UAT. This will need to be discussed. New system's workflow for testing and UAT should not interfere with the production 	
FR- PW- 018	System should support onboarding for ELR & eCR.	To ensure system has a way to support workflow for onboarding of laboratories, facilities, providers for eCR and ELR in regard to Informatics workflow.	DDC: It would be nice for the system to be able to list/show what has been checked during the onboarding QA. Informatics: DOHMH currently has 6 people that handle the flow of data for laboratory reporting such as onboarding new labs, quality assurance, compliance, reports, issues, etc. For ELR & eCR: Informatics will need a way to handle the flow of data for laboratory reporting such as onboarding new labs, quality assurance, compliance, reports, issues, etc.	Should
FR- PW- 021	System should facilitate identifying social determinants.	To ensure system looks at the patient holistically.	DDC: We need to vet a new system or expand on the current system that will look at the patient holistically in order to identify the social determinants of health and potentially connect patients to appropriate healthcare.	Should

FR- PW- 023	System should be able to consume positive and negative results.	To ensure the system can handle the capture of all negative and positive test results.	DDC: For IFH, we are receiving negatives for Hepatitis RNA and plan to receive all eCR patients' results (positive or negative) for certain conditions TB: Due to an increase in health code changes, TB receives more laboratory reports on QuantiFERON- Negative and Positive results. Also, every negative result within a year of a positive result must be reported.	Must
FR- PW- 024	One message should not fail the entire batch of messages.	To ensure system has a way to handle processing of errors for a single message when sent in a batch.	Informatics checks all reference and hospital laboratories, non- classification work queues daily. There is one scenario where the whole batch of results previously sent may have failed due to one message not being classified due to one of many issues such as missing LOINC or SNOMED code.	Must
FR- PW- 025	Informatics needs the ability to set some results that are not classified as non-reportable or create a rule.	To account for informatics writing rules to DND or set results to non- reportable for results that are not classified.	When a result comes through to work queue as non- classified: Informatics will work with the client to fix the issue on their side or create a rule to resolve or set to non- reportable. Informatics will also search NYS web portal (Health Commerce) for additional classification data.	Must
FR- PW- 026	System should have a way to do an advanced search to support informatics role.	To account for advanced searching of patient information to troubleshoot issues for informatics.	Informatics writes SQL queries to search for additional results in database if unable to find out why the result failed initially. Currently, they have no way to do advanced searching and therefore need to write SQL queries.	Should

FR- PW- 027	System should handle results received from Wadsworth (Reflex testing).	To account for system handling of reflex testing performed in any reference laboratory.	Informatics: Should handle reflex testing from any of our reference laboratories.	Must
FR- PW- 029	Need a way to handle testing of rules once created.	To account for testing of rules, once a user creates a rule, users can then test out the rule to see the impact.	In current state users can create new rules and test rules in Pre-Prod (holds the same data as Prod).	Must
FR- PW- 031	System must handle Bulk message resends.	To ensure bulk message resends can be handled by the system.	DDC: System should consider how many messages can be processed at once. System must have a High throughput. Need a way to resend a load of messages. Sometimes users will bypass EDRI. Sometimes vendors will resend messages when there are failures due to missing information: LOINC, Updated Lab Code, Patient demographics, etc. and it slows down the current system.	Must
FR- PW- 032	System should capture: Medications, Immunizations, Travel History, Reason for visit, Diagnosis, pregnancy, status-and additional data sent from EHR.	To account for capturing all information applicable to the patients' medical history in the system.	When DOHMH receives laboratory reporting information that is positive- there is a need to find out additional information: i.e.; medications, follow up, initial screening, pregnancy results, ordering facility information, immunization records as well as other test results that can aid in how diseases are treated. eCR now captures all of this information: Medications, Immunizations, Travel History, Reason for visit, Diagnosis, pregnancy status.	Must
FR- PW- 033	Need ability to add new diseases to the system.	To ensure diseases/conditions can be added to the system.	New diseases added: BCD- maybe once a year, STI- once in last 10 years	Must

FR- PW- 035	Need ability to view external systems side by side.	Capabilities of the system to pull data from any external sources such as Maven, EDRI and view, side by side.		Should
FR- PW- 039	System should have a front end for the definition of users, roles, and permissions. Users, roles, and permissions should allow for definition to be set as view only, create, edit, or delete.	To account for configuration on the front end for all users, roles, and permissions.	Current state user roles: DIIT, Informatics, Program admin (BCD, TB, STI, BOI). TB: Examples of roles: Superusers, only can create rules and do high-level activities. Basic users only have access to view messages or edit/resend messages. STI: Role of program user & application user. Application users: Ability to check/resend messages but to not be able to write rules or delete rules. BCD: Several of us on rotation have the same permissions. All users would have the same kind of permission, but most of us do not write rules. BOI: Would like to see two types of roles: An admin role and a basic user role. Basic user roles would be able to view and search messages, edit/resubmit, but would not want them to go into the hold queue or write rules.	Must
FR-T- 003	System must be able to support, receive and capture data in an HL7/CDAR2(X ML) and FHIR	To ensure that system support eCR file format.	DDC: We have one provider who is sending raw data in an HL7/CDAR2 (xml) format through AIMS for 6 diseases (2 STIs, 1 vaccine preventable disease, and 3 communicable diseases)-	Must

	standard format required by CMS and ONC (version 4).		potentially 40 (BCD) diseases. We will have to figure out how we will process the data, i.e. de- duplicate, match, classify/ETL process to be consumed by Maven.	
FR-T- 004	System should follow standard HL7 formats: MSH, PID, OBR, NK1, NTE & SPM Segment (where the source comes in). If the source is coming in another field, this needs to be specified.	To ensure the system can capture all data elements in the HL7 message that is necessary for informatics and program workflow.	Informatics: can receive files in real time or batch. Most of the clients are on HL7 2.5.1 which has the SPM segment as well as standard MSH, PID, OBR, NK1 & NTE. Former versions of HL7 do not have the SPM segment. Mayo and LabCorp are on HL7 2.3 version and still needs to convert. eCR has a separate section for the source in the CDAR2/FHIR formats.	Must
FR-T- 005	The new system needs to be flexible to deal with blocking/looking at messages at the OBX level rather than at the MSH level, so results are moved down to Maven.	To ensure the system is flexible to handle blocking and looking at messages at the OBX level.	DDC: BCD was looking to block disease code 610 from processing in EDRI. However, upon a closer look at the data, there are non- COVID results which impact the other programs so blocking all disease code 610 isn't an optimal solution. The new system needs to be flexible to deal with blocking at the OBX level rather than at the MSH level, so results are moved down appropriately to Maven.	Must
FR-T- 008	System should retain ''15'' years of data as per IT data retention.	To account for current retention time policy of 15 years.	Informatics has performed searches on patient data up to 5 years. DDC: Current retention time policy is 15 years.	Should
FR-T- 011	System should integrate with other surveillance system	To ensure the system can integrate with a surveillance system component.	DDC: the focus of the project is eCR, but we should keep in mind how to integrate with other surveillance system components, either by talking	Must

	components, either by talking to other components; or by plugging into other components.		to other components; or by plugging into other components. (Example: Interface Engines)	
FR-T- 014	System must be able to handle high volumes of eCR files daily, monthly, and yearly for all eCR locations. (volume requirements/pr ojections)	To account for handling of processing of large volumes of data.	 DDC: Future solution capabilities should take on a lot of volume and allow for scalability and processing of multiple messages at once. DDC mentioned volume of data projections for IFH, 1 location and 6 conditions in a 10-month period is 2,929 eCR's. Which estimates to an average file size of 208KB. STI: 100,000 reportable cases of STI per year and every case should have a corresponding provider report, (baseline). TB: LTBI will now be reported for positive patient for infections, # hard to project. We will be receiving all negatives and positives. BCD: Potential for a lot of data- hepatitis C highest volume. 	Must
FR-T- 015	System considered <i>should</i> be agnostic.	To ensure Spruce team is vetting all solutions, windows, or non-windows.	DOHMH is deemed as a windows shop and any other solution not windows based will need to be thoroughly vetted from a Financial, Resources and IT scalability standpoint. Spruce team evaluating all types of solutions; non- windows and windows based. (Windows, Linux, Unix, Mac OS etc.)	Must

Use Case 1	: Dashboar	d & Analytics: Reporting	
Use Case Name:	Reporting for conditions and diseases within a timeframe		
Purpose:	To generate a	report within a 24-hour timeframe for 1 or multiple disease/condition	
Business Requireme nt:	# FR-D-001, #	FR-D-002	
Primary Actor(s):	Bureaus		
Stakeholder	Stakeholder	Interest	
(s) and Interests :	Bureaus	Follow-up for patient care, Reporting	
	DDC	Reporting	
System Criteria:	System must	have a reporting tool/dashboard	
System/Do wnstream Impact:	System must	be able to handle processing of reports without impact to the system	
Success Guarantees:	User can see	all the selected disease/conditions within a 24-hour timeframe	
Preconditio ns:	User has a va	lid login username for system and has access to the dashboard functionality	
Trigger:	User selects d timeframe	lisease/condition code from dashboard options and parameter for	
Use Case Steps:	User selects the code for a condition or disease , selects the client # or leaves blank to see all clients, and then selects date & time parameter based on the users' needs .i.e., Last 12 hours, 24 hours, 48 hours etc. User can now preview a report within the past 24 hours.		
Use Case 2	: Dashboar	d & Analytics: Reporting	
Use Case Name:	Reporting fo	or conditions and diseases year to date	

Purpose:	To generate a	report for a disease/condition, year to date		
i uipose.				
Business Requireme nt:	# FR-D-001, # FR-D-002			
Primary Actor(s):	Bureaus			
Stakeholder (s) and	Stakeholder	Interest		
Interests :	Bureaus	Follow-up for patient care, Reporting		
	DDC	Reporting		
System:	System must	have a reporting tool/dashboard		
System/Do wnstream Impact:	System must be able to handle processing of reports without impact to system			
Success Guarantees:	User can see all the selected disease/conditions for year to date			
Preconditio ns:	User has a valid login username for the system and can access the dashboard functionality			
Trigger:	User selects disease/condition code from dashboard options and parameter for timeframe			
Use Case Steps	User selects the code for a condition or disease , selects the client # or leaves blank to see all clients, and then selects time parameter for the date, selects start and end date to reflect a timeframe within the year. Example: 1/1/- 12/31. User can now preview a report for diseases/conditions.			
		d & Analytics: Workflow		
Use Case Name:	Accessing hold queue from dashboard			
Purpose:	To have a configurable dashboard for Bureau workflow needs			
Business Requireme nt:	# FR-D-003			
Primary Actor(s):	Bureaus			

Stakeholder	Stakeholder	Interest			
(s) and Interests :	Bureaus View hold messages and troubleshooting from dashboard				
interests .					
System:	System must	have a way to configure the dashboard to show hold queue			
-					
System/Do wnstream	None				
Impact:					
Success	User can acce	ss their hold queue from the dashboard			
Guarantees:					
Preconditio	User has a val	id login username for the system and has access to the dashboard			
ns:	functionality				
Trigger:	User clicks on	link of their hold queue from dashboard			
Steps:		based on current hold queue settings. Example: Major, Minor, Hepatitis, Flu, Wadsworth, Lyme, Salmonella & PHL.			
Use Case 4	: Dashboard	d & Analytics: Workflow			
Use Case Name:	Accessing co dashboard	nnections to interfaces, services, and processes from the			
Purpose:	To have a con	figurable dashboard for informatics workflow needs			
Business Requireme nt:	# FR-D-003				
Primary Actor(s):	Informatics				
Stakeholder	Stakeholder	Interest			
(s) and Interests :	Informatics	View connections and troubleshooting			
System:	System must have a way to configure the dashboard to show connection points				

System/Do	None		
wnstream			
Impact:			
Success	Llser can view	all or single connections from the dashboard (tailored to the connections	
Guarantees:	they monitor)	and single connections from the dashboard (tanored to the connections	
Preconditio		d login username for the system and can access the dashboard	
ns:	functionality		
Trigger:	User clicks on	the connection link on the dashboard	
Use Case	User clicks on	a single connection or all connections to see if any queues are stopped,	
Steps:	started, queue	ed or when last message was sent.	
Use Case 5	: Audit		
	Audite ferrur		
Use Case	Audits for us	ser activity to edits and resubmits to messages	
Name:			
Purpose:	System should	d have a log/audit of all user activity for when a user edit/resubmits a	
	message		
Business	# FR-DF-003		
Requiremen			
t:			
Primary	Bureaus, Info	rmatics or System Administrator	
Actor(s):			
Stakeholder	Stakeholder	Interest	
(s) and	Stakenolder		
Interests :	Bureaus	Troubleshooting	
	Informatics	Troubleshooting	
System:	System must	have a way to audit user actions such as edit/resubmit a message	
System/Do	Log file is written to on edit/resubmit with who took the action		
wnstream			
Impact:	Submitted message goes to the correct bureau in Maven		
Success	All actions for edit/resubmit is audited with user information		
Guarantees:			
Preconditio	User has valid	username for the system and has access to edit/resubmit a message	
ns:			

Trigger:	User edits message and then resubmits the message		
Use Case Steps:	User logs into system and goes to the edit/resubmit function for messages, opens the message, edits the message then resubmits the message. The message then flows over to Maven and the correct bureau. User can go into the user log and/or message window and see their user id/name attached to the resubmitted message, with what was edited.		
Use Case 6	: Connectio	ns	
Use Case Name:	View connec	ctions to interfaces, services, and processes	
Purpose:	To allow infor	matics users to see connection points	
Business Requiremen t:	# FR-DF-022		
Primary Actor(s):	Informatics		
Stakeholder (s) and	Stakeholder	Interest	
Interests :	Informatics	View connections, monitor and troubleshooting	
	Bureaus	View connections	
System:	System must have a way to show all connections from senders, files, services, processes, and interfaces		
System/Do wnstream Impact:	None		
Success Guarantees:	User can view all or single connections and act on the connections if needed		
Preconditio ns:	User has valid login username for the system and user has access to view and act on connections		
Trigger:	User selects connection and can view or stop, start, or drill down further to message level		
Use Case Steps:	User logs into system and would like to see if IFH has sent data for today. User goes to the connection function and clicks on the connection for IFH. User checks to see if the connection is stopped, queued, started and when the last message was sent.		

Use Case 7	: Matching a	and Deduplication	
Use Case Name:	Matching and Deduplication- Twin babies		
Purpose:	To show syste	ms matching and deduplication algorithm does not over match	
Business Requiremen t:	# FR-DF-027		
Primary Actor(s):	Bureaus		
Stakeholder (s) and	Stakeholder	Interest	
Interests :	Bureaus	Patient identity	
System:	Systems matcl	ning and deduplication algorithm must handle twin demographics	
System/Do wnstream Impact:	Patients demographics should flow to Maven as two separate patients		
Success Guarantees:	System identifies the twin babies as two patients and links to mother or gets assigned to a human review queue.		
Preconditio ns:	Systems algorithm must be configured to handle matching and deduplication for patient with almost an exact match in demographics		
Trigger:	System receive	es twin demographics transaction	
Use Case Steps:	System receives transactions for sisters: Vera Anderson & Verza Anderson, Same Birthday, Same Address, Same parents. System must be able to determine these are twins and not overmatch. (System can tell these are two different patients or transactions are sent to a human review queue)		
Use Case 8	: Matching a	and Deduplication	
Use Case	•	Deduplication- when a patient record is received with no address	
Name:	and patient e	xists in the database	
Purpose:		ns matching and deduplication algorithm can handle when a patient's received with no address and patient exists in database	

Business	# FR-DF-027		
Requireme nt:			
Primary	Bureaus		
Actor(s):			
Stakeholder (s) and	Stakeholder	Interest	
Interests :	Bureaus	Patient Identity	
System:	-	ching and deduplication algorithm must look at additional information the system for a match	
System/Do wnstream	Maven updat	es patient record	
Impact:			
Success Guarantees:	System can match to existing patient record or gets assigned to a human review queue.		
Preconditio ns:	System algorithm must be flexible to handle cases where not all demographic fields are present on the transaction and still establish an accurate match		
Trigger:	System receives transaction with no address present		
Use Case Steps:	Christopher Pound's patient record is received by the system with no address present. The only demographics present in this transaction is his First Name, Last Name, DOB and Gender. There is an existing patient record in the system with the same First Name, Last Name, DOB and Gender and is the same patient. System can look at additional details sent in the message and system to determine a match. 3 scenarios: System can match to an existing patient record, gets assigned to a human review queue or creates a new patient record. (Create a new patient record is how EDRI behaves in current state)		
Use Case 9	: Matching	and Deduplication	
Use Case Name:	Matching and Deduplication- when a patient record is received with no address and patient does not exist in database		
Purpose:		ems matching and deduplication algorithm can determine when a new d be created when no address is present	
Business Requireme nt:	# FR-DF-027		

Primary	Bureaus		
Actor(s):			
Actor(3).			
Stakeholder (s) and	Stakeholder Interest		
Interests :	Bureaus	Patient Identity	
-	Systems match create a new p	hing and deduplication algorithm needs to be able to determine when to patient	
System/Do	Maven update	es patient record	
wnstream Impact:	·		
Success Guarantees:	System should	determine no matches and create a new patient or human review queue	
Preconditio	System algorit	hm must be flexible to handle cases where not all demographics fields are	
ns:	present on the	e transaction and determine there is no likely matches	
	System receives a transaction with no address present and unable to find a match based		
	on demograph	nics in the database	
	Christopher Warburg's patient record is received by the system with no address present.		
	The only demographics present is the First and Last Name, DOB and Gender. The system cannot find a match then the system creates a new patient record or human review		
	based on the algorithms requirement.		
Use Case 10): Matching	and Deduplication	
Use Case	Matching an	d Deduplication- human review queue for fuzzy matches	
Name:	-		
Purpose:	To show syst	em can route fuzzy matches to a queue for human review when	
	algorithm cannot determine patient is an exact match		
Business	# FR-DF-027		
Requireme nt:			
Primary	Bureaus		
Actor(s):			
	Stakeholder	Interest	
	Bureau	Patient Identity	

Stakeholde			
r(s) and			
Interests :			
System:	Systems mat	ching and deduplication algorithm needs to route a transaction to a	
oyoteini	-	w queue that do not meet the threshold for matching	
	numanrevie	w quede that do not meet the threshold for matching	
System/Do	Maven updat	tes patient record once transaction is reviewed and confirmed	
wnstream			
Impact:			
Success	System shou	ld send configured threshold matches to a human review queue	
Guarantee			
s:			
Preconditi	System algor	ithm must be able to determine when to route transactions to a	
		ithm must be able to determine when to route transactions to a	
ons:	human reviev	w queue	
Trigger:	System recei	ves a transaction that is similar to an existing patient record in	
00	, database	51	
Use Case	Sarah Anderson who lives at <u>945 East</u> 73rd street, NY, NY, 10034 Apt 5H exists in		
Steps:	the system, DOB: 12/3/2019. A new transaction is received by the system for a		
	Sarah Anderson who lives at <u>954</u> East 73rd street, NY, NY, 10034 Apt, DOB:		
	3/12/2019. S	ystem should send this to a human review queue.	
Use Case 1	1: Matching	and Deduplication	
Use Case	Matching an	d Deduplication for facility	
Name:			
Purpose:	-	ms matching and deduplication algorithm can look at facility data at its	
	most granular	level	
Business	# FR-DF-020, FR-DF-024, FR-DF-026		
Requireme	/ -	·	
nt:			
Primary	Bureau		
Actor(s):			
Stakeholder	Stakeholder	Interest	
(s) and			
Interests :	Bureau	Use of facility	

1	r				
System:	System matching and deduplication algorithm must look at facility data at a granular level				
System/Do	Maven receives result				
wnstream					
Impact:					
Success	Syster	n matches to co	rrect facility on facility table or sends to a human review queue		
Guarantees:	(*Plea	se note- current	ly, not sure if the bureaus would like the system to add a facility to		
	the da	tabase when the	ere is no match)		
Preconditio	Syster	n must have a fa	icility table defined at a granular level		
ns:					
Trigger:	Syster	n receives facilit	y data in message		
Use Case	Syster	n receives two re	esults on a patient. One result is for the TB bureau and the other is		
Steps:	for the	e STI bureau. Sys	tem should be able to look at the most granular level of facility		
	data a	nd process this message as two separate locations:			
	Result	1 and TB location of: Hudson practice, 123 WestWay, 10023, 212-606-1000, Suite			
	<u>101</u>	1 una 12 location on maison practice, 125 westway, 10025, 212 000 1000, <u>June</u>			
	Result	Result 2 and STI location of: Hudson practice, 122 WestWay, 10022, 212-606, 1000			
		Result 2 and STI location of: Hudson practice, 123 WestWay, 10023, 212-606-1000, Suite 102			
Use Case 1	.2: Ma	tching and D	Deduplication		
Use Case Name:		Matching and Deduplication for a provider record received in the system as a code or freetext			
Purpose:		To show systems algorithm can determine a match on provider record received either as a discrete code or in a freetext field			
Business		# FR-DF-021 F	R-DF-030, FR-PW-010		
Requirement	:				
Primary Acto	r(s):	Informatics & Bureaus			
Stakeholder(s) and	Stakeholder	Interest		
Interests :		Informatics	Updates Provider table		
		Bureaus	Need provider information		
System:		Systems matching and deduplication algorithm must handle provider matching as a code or freetext			
System/Downstrea Maven files the m Impact:		Maven files the	e provider on the result transaction		
-	iistiea				

Success		a match to an existing provider record or no match and sends to a		
Guarantees:		human review queue. (*Please note- currently, not sure if the bureaus would like the system to add a new provider to the database when there is no match)		
Preconditions:	System must h	nave a provider table defined		
Trigger:	System receiv	es a transaction with a provider information as a code or freetext		
Use Case Steps:	freete freete datab • Syster Syster within and se • Syster and de and se to the • Syster and de and se	m receives a result with the ordering provider information in a ext field. System is able to identify the provider information in the ext field and finds a match when doing a lookup within the ase. System processes the message and sends to Maven. m receives a result with the ordering provider as a discrete code. m is able to identify the provider information when doing a lookup the database and finds a match. System processes the message ends to Maven. m receives a result with the ordering provider as a freetext field oes not find a match in the database. The message is processed ent to the correct bureau, however the errored provider data goes informatics or bureau review queue. m receives a result with the ordering provider as a discrete code oes not find a match in the database. The message is processed ent to the correct bureau, however the errored provider data goes informatics or bureau review queue. m receives a result with the ordering provider as a discrete code ones not find a match in the database. The message is processed ent to the correct bureau, however the errored provider data goes informatics or bureau review queue.		
Use Case 13:	Classification			
Use Case Name:	Classification wi	th a reportability response		
Purpose:	System should classify the disease/condition using the reportability response and triage to the correct bureau			
Business Requirement:	# FR-DF-004, FR-DF-008, FR-DF-013			
Primary Actor(s):	Bureaus, Informatics			
Stakeholder(s) and Interests :	Stakeholder	Interest		
and interests :	Bureaus	Follow up- patient care		
	Informatics	Classification		

System:	System must have a way to look at the reportability response in the message for classification. System must have a defined classification table with Bureau associated to disease/ condition to know where to route the message.			
System/Downs tream Impact:		Maven receives data to the correct Bureau		
Success Guarantees:	System matc	hes to a disease or condition based on the Reportability Response		
Preconditions:	Classification table	/Reportability Response must be associated to the correct Bureau on a		
Trigger:	System recei	ves a transaction with a reportability response		
Use Case Steps: A child is seen at a doctor's office in the city and is exhibiting a whooping of doctor suspects pertussis and orders a laboratory test. When the doctor up atient record with the LOINC for the test they ordered, a report is autom generated and sent to the AIMS platform. There, the report is compared t criteria authored by DOHMH surveillance staff in RCKMS. The case is deterbe reportable to DOHMH and is routed appropriately. At this point, a Report Response document is created and sent to both the reporting provider an Once DOHMH receives the report and the RR, they will be linked by their sed document ID. The condition name contained in the RR will determine where agency the case will be routed. The RR is checked against a disease/condition within the system and in this case, it would go to BOI.		cts pertussis and orders a laboratory test. When the doctor updates the of with the LOINC for the test they ordered, a report is automatically and sent to the AIMS platform. There, the report is compared to reporting bred by DOHMH surveillance staff in RCKMS. The case is determined to be to DOHMH and is routed appropriately. At this point, a Reportability cument is created and sent to both the reporting provider and DOHMH. H receives the report and the RR, they will be linked by their shared . The condition name contained in the RR will determine where in the ase will be routed. The RR is checked against a disease/condition table		
Use Case 14	: Classification	on		
Use Case Name:	Classification v	vithout a reportability response		
-	•	stem should be able to handle classification when a reportability response is not esent on the transaction.		
Business Requireme nt:	# FR-DF-013, FR-	FR-DF-013, FR-DF-006, FR-DF-008		
Primary Actor(s):	Bureaus, Informa	ureaus, Informatics		
	Stakeholder I	akeholder Interest		

Stakeholder	Bureaus	Follow up- Patient care	
(s) and Interests :	Informatics	Handling of Unclassified	
System:	transaction to	ave a mechanism to look at additional information sent in the patient's determine classification when there is no reportability response. Or end to a queue to initiate human review.	
System/Do wnstream Impact:	Maven receives data to the correct bureau upon classification		
Success Guarantees:	System should send to a human review queue or look at additional information in the patients previous results or within the same result message with same accession number, collection date, and sending facility to classify the disease/condition and triage to the correct bureau		
Preconditio ns:	Classification/Reportability Response must be associated to correct Bureau on a table		
Trigger:	System receive	s a transaction without a reportability response	
Use Case Steps:	New condition of interest for DOHMH: There is an outbreak of legionnaires' in NYC this summer. DOHMH is very interested in receiving reports for these cases, but the rest of the country is not having issues with legionnaires', and the AIMS team is busy keeping up with new developments for their COVID criteria. Instead of waiting for the AIMS team's schedule to clear up, DOHMH asks our onboarded providers to manually send a report whenever they see a case of legionnaires'. This will bypass RCKMS, so it would be up to our data classification workflow to identify those cases when they come in. Classification would likely still be based on lab and diagnostic information since we may not want to rely on the one "reason for manual initiation" free text field.		
Use Case 1	5: Classificat	ion	
Use Case Name:	Classification	without a reportability response	
Purpose:	System should present on the	be able to handle classification when a reportability response is not transaction.	
Business Requireme nt:	# FR-DF-013, FR-DF-006, FR-DF-008		

Primary	Bureaus, Informatics		
Actor(s):			
Stakeholder (s) and	Stakeholder Interest		
Interests :	Bureaus	Follow up- Patient care	
	Informatics	Handling of Unclassified	
System:	transaction to	have a mechanism to look at additional information sent in the patient's determine classification when there is no reportability response. Or send to a queue to initiate human review.	
System/Do wnstream Impact:	Maven receiv	es data to the correct Bureau upon classification	
Success Guarantees:	System should send to a human review queue or look at additional information in the patients previous results or within the same result message with same accession number, collection date, and sending facility to classify the disease/condition and triage to the correct bureau		
Preconditio ns:	Classification/Reportability Response must be associated to correct bureau on a table		
Trigger:	System receives a transaction without a reportability response		
Use Case Steps:	Provider-initiated case report: Dr. Corrado sees a patient who she is concerned about. The patient has unusual symptoms or seems to have a flu-like illness that the doctor does not recognize. She is aware of how case reports trigger in her EHR system and knows there are no triggers in the patient record after the encounter. In this example, the doctor should call the health department as well, but she may choose to manually initiate a case report to preemptively provide some context to DOHMH case investigators. The case report would bypass RCKMS and come directly to our system. It would largely look the same as an automatic one, but there would be a free text field present for the provider to include the reason for manual initiation.		
Use Case 1	6: Rules		
Use Case Name:	Do not deliv	er results to Maven	
Purpose:	To allow resul	ts to be set to do not deliver	

Business	# FR-DF-032		
Requireme			
nt:			
Primary	Bureaus		
Actor(s):			
Stakeholder	Stakeholder	Interest	
(s) and	Stakenoluei	Interest	
Interests :	Bureaus	Results that should not be delivered to Maven	
interests.			
System:	System must	have a way to write a rule or block certain results that do not need to be	
	reported to N	/laven.	
		· · ·	
System/Do wnstream	iviaven does r	not receive result	
Impact:			
impact.			
Success	The result go	es to the DND queue and not reported to Maven	
Guarantees:			
Preconditio	liser has valio	login username for the system and has access to DND a result	
ns:	User has valid login username for the system and has access to DND a result (Rules/Blocking)		
	(naies, bioon		
Trigger:		nessage and set to DND or write a rule based on a result or text from result	
	to DND		
Use Case	User logs into	the system to the message queue. User observes that a sender has sent	
Steps:	results that should not be reported to Maven. User can either write a rule to handle this		
	singular mess	age or create a global rule to address any message of this nature to be	
	"DND". User	decides to write a global rule and then resubmits the message to see that	
	the rule work	ed, and result was sent to DND queue.	
	Example:		
	User creates a rule to "DND" negative results for Gonorrhea		
	User creates	a rule to "DND" if the result does not contain "positive" or "detected"	
	User creates	a rule to "DND" a test result based on age criteria of a patient	
	User creates	a rule to "DND" if specimen source is not from a sterile source	
Use Case 1	7: Rules		

Use Case	Set Not-Reportable to Maven					
Name:						
Purpose:	To allo	w result	ts to be set to Not- Reportable to Maven			
Business Requireme nt:	# FR-DF-032					
Primary Actor(s):	Bureaus					
Stakeholder	Stakeh	older	Interest			
(s) and Interests :	Inform	natics	Results that should not be delivered to Maven			
System:	System must have a way to write a rule or block certain results that do not need to be reported to Maven.					
System/Do wnstream Impact:	Maven does not receive result					
Success Guarantees:	The result is not reported to Maven					
Preconditio ns:	User has valid login username for the system and has access to set a result to non-reportable (Rules/Blocking)					
Trigger:	User selects message and set to not-reportable or write a rule based on a result or text from result					
Use Case Steps:	User logs into the system to the message queue. User observes that a sender has sent results that should not be reported to Maven. User can either write a rule to handle this singular message or create a global rule to address any message of this nature to be set to not-reportable.					
	A result would get classified as 'Not Reportable' when it is not required for reporting (i.e. not a required in the NYC Health Code, not a reportable organism)					
Use Case 1	8: Rul	es				
Use Case Na	me:	Cleani	ng and Standardization messages			
Purpose:		To clean and standardize a message that does not conform to standards				

Business	# FR-DF-032				
Requirement:					
Primary Actor(s):	Bureaus and				
Stakeholder(s) and Interests :	Stakeholder	Interest			
· interests .	Bureaus	Cleaning and standardizing of data			
System:	System must have a way to clean and standardize messages				
System/Downstrea m Impact:	Maven receives results				
Success Guarantees:	Maven receives results that are clean and standardized				
Preconditions:	User has valid login username for the system and has access to module for cleaning and standardizing a message				
Trigger:	User selects message and edits				
Use Case Steps:	User logs into the system to the message queue where messages did not conform to standards. User observes that a sender is sending data in a non- standardized way. User can either write a rule to handle this singular message or create a global rule to address any message of this nature. User decides to write a global rule and then resubmits the message to see that the rule worked and successfully filed to Maven.				
		rule to standardize specimen source when received as "SPUT", UTUM" for all senders			
	User creates a i	rule to look at source and gender of patient results from a sender			
	corresponds to	rule when Loinc code ="94309-2" is received in a message, which = "2019-nCoV RNA XXX NAA+probe-Imp". The Loinc would c code = "2019-nCoV" and send to Maven			
Use Case 19: Rules					
Use Case Name:	Complex rules	5			

72 | REPLACEMENT OF ELECTRONIC DISEASE REPORTING INFRASTRUCTURE (EDRI) AND SURVEILLANCE WORKFLOW ENHANCEMENTS

Purpose:	To ensure rules function has the capability for users to create complex rules and system should have logic to support this.					
Business Requirement:	# FR-DF-033					
Primary Actor(s):	Bureaus					
Stakeholder(s) and	Stakeholder Interest					
Interests :	Bureaus	Write o	complex rules			
System:	System must have a robust rules function					
System/Downstrea m Impact:	Maven receives results					
Success Guarantees:	Record 1 and 2 are transmitted over to Maven and Record 3 is sent to the DND queue					
Preconditions:	System has robust rules function with operators to support complex rules writing					
Trigger:	System receives a result that calls a complex rule					
Use Case Steps:	Complex rules: User creates a global rule where records 1 and 2 are sent to Maven and record 3 is sent to the DND (Do not deliver) queue.					
	Record	Accession#	Test Type	Result		
	1	1234	AFB Smear	Negative		
	2	1234	Culture – DNA probe for M. tuberculosis complex	Positive		
	3	1234	Culture – DNA probe for M avium complex	Negative		
Use Case 20: Rul	es					
Use Case Comple Name:	ex rules					

73 | REPLACEMENT OF ELECTRONIC DISEASE REPORTING INFRASTRUCTURE (EDRI) AND SURVEILLANCE WORKFLOW ENHANCEMENTS

D	Talana	- for the base the second life for when the second second second sectors				
Purpose:	To ensure rules function has the capability for users to create complex rules and system					
	has logic to support					
Business	# FR-DF-033					
Requirem						
ent:						
Primary	Bureaus					
Actor(s):						
Stakehold	Stakeholder	Interest				
er(s) and	Bureaus	Write complex rules				
Interests :	Bulcaus					
System:	System must	I have a robust rules function				
e yeteini	System must have a robust rules function					
System/D	Maven receives results					
ownstrea						
m Impact:						
Success	Result is sent as two separate results to Maven					
Guarante						
es:						
Preconditi	System has robust rules function with operators to support complex rules writing					
ons:	system has result rules rules rule for with operators to support complex rules writing					
Trigger:	System receiv	ves a result that calls a complex rule				
Use Case	Multiple resu	Its combined into one record. This record contains two results.				
Steps:						
	Result = "MTB Complex DNA DETECTED. RIFAMPIN RESISTANCE NOT DETECTED. The MTB RIF PCR Test is FDA approved for testing sputa."					
		Test is FDA approved for testing sputa.				
	This is a PCR result that is combining two results into one record. "MTB Complex DNA					
	DETECTED." And "RIFAMPIN RESISTANCE NOT DETECTED." Should have been reported as					
	two separate results. User creates a rule to treat the one long result as two results and is					
	received by Maven as two results.					

ATTACHMENT 1

STANDARD CLAUSES FOR FPHNY SPECIAL PROJECTS CONTRACTS

Upon acceptance of a proposal and award of a contract, the successful applicant will enter into an FPHNY Special Projects emergency contract that specifies:

This Agreement ("Agreement") is made and effective as of ________ (the "Effective Date") betweenthe Fund for Public Health in New York, Inc. (hereinafter "FPHNY") a nonprofit corporation having itsprincipal office located at 22 Cortlandt Street, 8th Floor, New York, New York 10007 and _______(hereinafter "Contractor"), having its principal office located at

WHEREAS:

- A. FPHNY is a nonprofit corporation that is exempt from taxation under Section 501(c)(3) of the Internal Revenue Code and is formed for the purpose of soliciting, administering and receiving funds and using such funds to assist the Department of Health and Mental Hygiene ("<u>DOHMH</u>") of the City of New York (the "<u>City</u>") to fulfill its mission.
- B. Pursuant to an Agreement dated as of July 1, 2021 between the City acting by and through DOHMH and FPHNY (the "<u>DOHMH Federal Funds Emergency Contract</u>"), FPHNY has agreed to provide to DOHMH services, on a requirements basis, in connection with disbursing emergency Federal Emergency Management Agency ("<u>FEMA</u>") and Centers for Disease Control ("<u>CDC</u>") funds to support

______("<u>the Project</u>").

C. In furtherance of the purpose of the DOHMH Federal Funds Emergency Contract and the Project, FPHNY requires certain assistance and services of the kind Contractor has offered and is able to furnish, in consideration of the compensation set out in this Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants herein set forth, FPHNY and Contractor agree as follows:

I. DESCRIPTION AND CONDUCT OF WORK

- A. <u>Services/Deliverables</u>: Contractor shall provide services and complete deliverables in the manner and at the levels set forth in the Scope of Services annexed hereto and incorporated herein as <u>Appendix A</u> and consistent with and in adherence to the Schedule of Deliverables & Compensation annexed hereto and incorporated herein as <u>Appendix B</u>. Any due dates listed in Appendix A are subject to change at the discretion of DOHMH.
- B. <u>Standard of Care</u>: Contractor shall deliver and provide all services and deliverables set forth in this Agreement ("<u>Services</u>") in accordance with generally accepted standards of professional quality and care existing or recognized during the term of this Agreement.
- C. <u>Licensure and Professional Qualifications</u>: Contractor shall ensure that all persons, consultants and staff performing Services pursuant to this Agreement are qualified to perform such Services and maintain any required New York State licenses and certifications throughout the term of this Agreement.
- D. <u>Terms of the DOHMH Federal Funds Emergency Contract</u>: Contractor agrees that (i) the Services performed hereunder shall be in accordance with the terms of the DOHMH Federal Funds Emergency Contract, (ii) nothing contained herein shall impair the rights of the City, (iii) nothing contained herein, or under the DOHMH Federal Funds Emergency Contract shall create any contractual relation between Contractor and the City, and (iv) Contractor specifically agrees to be bound by Section 4.05 and Article 5 of Appendix A of the DOHMH Federal Funds Emergency Contract, attached hereto and incorporated herein as Appendix D, and agrees that the City may enforce such provisions directly against Contractor as if the City were a party to this Agreement.
- E. <u>Terms of the Uniform Federal Contract Provisions Rider & FEMA Rider</u>. Contractor agrees that the Services performed hereunder shall be in accordance with the terms of the Uniform Federal Contract Provisions Rider, annexed hereto and incorporated herein as Appendix E, and the FEMA Rider, annexed hereto and incorporated herein as Appendix F, as applicable.
- F. <u>No Publicity</u>: Contractor shall not give any interviews, issue any press releases or otherwise disclose any information whatsoever about this project and this agreement without at least 48 hours prior written notice to FPHNY. Contractor will cause its officers, employees, consultants, agents and representatives to observe the requirements of the foregoing provision.
- G. <u>No Exclusion</u>: Contractor represents and warrants that neither Contractor nor Contractor's employees or permitted subcontractors who provide Services in connection with this Agreement have been excluded from participation in, or otherwise sanctioned by, Medicare, Medicaid or any other federal, state or local health care program, as applicable, and have not otherwise been barred from being a government contractor or subcontractor by any unit of the federal, state, or local government, and will promptly notify FPHNY if it or any such persons becomes so excluded or sanctioned during the term of this Agreement.

- H. <u>Evaluation</u>: Contractor shall cooperate fully with FPHNY and DOHMH regarding the evaluation of Services provided hereunder, and will advise and consult with employees and officials of FPHNY, DOHMH, and any designated Project evaluation agent.
- I. <u>Inspections</u>: FPHNY, DOHMH or their designated agents, shall have the right at any time, given reasonable notice, to inspect the site(s) where Services are performed, to inspect the materials and curricula (if any) used by Contractor in connection with the provision of Services under this Agreement, and to attend any and all trainings, drills, tests, and activities (if any) organized or sponsored by Contractor pursuant to this Agreement. Contractor shall render all assistance and cooperation to FPHNY, DOHMH, or their designated agents, in making such inspections and shall assure FPHNY, DOHMH, and their designated agents, ready access to such site(s), materials, curricula, trainings, drills, tests, and activities, and all medical, financial or other records and reports relating to Services provided hereunder.
- J. <u>Investigations Clause</u>: The parties to this Agreement agree to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a State of New York (State) or City of New York (City) governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to this Agreement or the DOHMH Federal Funds Emergency Contract. By signing this Agreement, the Contractor agrees to be fully bound by the "Investigations Clause" contained in the DOHMH Federal Funds Emergency Contract, which is hereby made part of this Agreement and incorporated herein by reference, as if such Contractor were a party or any of the parties, persons or entities therein described.

II. TERM AND TERMINATION

- A. <u>Term</u>: This Agreement shall commence on the Effective Date and shall continue in force until ______ (the "<u>Expiration Date</u>"), except as terminated sooner in accordance with the terms of this Agreement.
- B. <u>Right of Termination</u>: FPHNY shall have the right to terminate this Agreement, in whole or in part, before the Expiration Date, with or without cause and in FPHNY's sole discretion, provided that written notice of termination is given at least ten (10) days prior to the effective date of the proposed termination. Upon termination of this Agreement, Contractor shall immediately cease the provision of all Services and shall, within ten (10) days of FPHNY's request, return to FPHNY all FPHNY equipment, materials and supplies within the possession or control of Contractor as required by Section VI of this Agreement.
- C. <u>Immediate Termination</u>: In the event that, in FPHNY's opinion, Contractor demonstrates a clear intent not to fulfill the terms of this Agreement, FPHNY shall have the right to terminate this Agreement immediately, by written notice faxed, mailed or delivered to Contractor. FPHNY shall also have the right to terminate this Agreement immediately, by written notice faxed, mailed, or

delivered to Contractor, if the DOHMH Federal Funds Emergency Contract is not duly executed or is terminated.

- D. <u>Effect of Termination</u>: In the event that this Agreement is terminated pursuant to paragraphs B or C of this Section II., Contractor shall not incur any further obligation pursuant to this Agreement beyond the termination date. Any obligation necessarily incurred by Contractor on account of this Agreement prior to receipt of notice of termination and falling due after termination shall be paid in accordance with the terms of this Agreement.
- E. <u>Close-out Procedures</u>: Upon the Expiration Date, or the sooner termination of this Agreement, Contractor shall comply with FPHNY's disclosed close-out procedures, including, but not limited to:
 - 1. submitting within fifteen (15) days of the contract end date a final invoice for all services that have been completed under the contract terms and conditions;
 - 2. accounting for and refunding to FPHNY, within fifteen (15) days, any excess payments that have been made to the Contractor pursuant to this Agreement;
 - 3. furnishing to FPHNY, within fifteen (15) days, an inventory of all equipment, appurtenances and property purchased through this Agreement on behalf of FPHNY or DOHMH as provided for herein;
 - 4. turning over to FPHNY, upon request, within fifteen (15) days, all books, records, documents and material specifically relating to this Agreement; and
 - 5. confirming the completion of the processes set forth in 1 through 4 above.

III. CONSIDERATION AND PAYMENT

- A. <u>Total Compensation</u>: The total maximum amount payable to Contractor under this Agreement shall not exceed \$______ in accordance with the Schedule of Deliverables & Compensation contained in Appendix B (the "<u>Fee Schedule</u>").
- B. <u>Invoices</u>: Contractor shall submit to DOHMH, no later than fifteen (15) days following the end of each month within the term of this Agreement, a detailed invoice (each, an "<u>Invoice</u>," and together, "<u>Invoices</u>") itemizing each deliverable completed and all costs incurred as part of Services rendered, as specified in the Fee Schedule. DOHMH's fiscal year (the "Fiscal Year") begins July 1 and ends

June 30. All deliverables completed or costs incurred as part of Services rendered within the Fiscal Year must be invoiced within fifteen (15) days of the end of the Fiscal Year. The Invoices shall be in a form approved by FPHNY, and shall identify the type and quantity of each deliverable and the overall costs and fees claimed in accordance with the Fee Schedule. The Invoices shall be accompanied by supporting documentation providing proof of performance of Services as specified in Appendix A and Appendix B, and any other supporting documentation deemed necessary by FPHNY. FPHNY shall review the Invoices and supporting documentation as required, and may disallow for payment any costs or fees claimed which were for Services not rendered, documented and/or authorized in accordance with the terms of this Agreement, or for failure to deliver any required service, deliverable, or work product.

- C. <u>Payments</u>: FPHNY shall pay Contractor for costs and/or fees claimed on Invoices submitted to DOHMH in accordance with the Fee Schedule, provided that Contractor has submitted to FPHNY a duly executed Form W-9 and the requirements of paragraph B of this Section III. have been completed to the satisfaction of DOHMH and FPHNY.
- D. <u>Subject to the Availability of Funds</u>. This Agreement is subject to the availability of funds and all approvals required by DOHMH, the CDC, and/or FEMA. FPHNY shall notify Contractor, in writing, of any modification, payments, delays, or cancellations of said funds and shall modify the Agreement accordingly.
- E. <u>Use of Payment(s); Certified Statement</u>: Reimbursement or payments made under this Agreement shall be deposited within (90) days of the issuance of the check.
- F. <u>No Duplicative Reimbursement</u>: Contractor shall not seek nor be paid for services, deliverables or costs provided for under this Agreement if Contractor has received or is reasonably likely to receive payments for such services, deliverables or costs from another source, including, but not limited to client fees, private insurance, public donations, grants, legislative funding from units of government, or any other source.
- G. <u>Erroneous Payments</u>: Contractor shall immediately return to FPHNY any payments made to Contractor to which it is not entitled.

H. Maintenance of Books and Records:

a. Contractor shall maintain complete and accurate books and records supporting all payments made under this Agreement. Contractor shall keep such books and records in accordance with generally accepted accounting principles. Such records may include but are not limited to bank statements, canceled checks, bills, receipts, employee time cards, requests for payment and deposit slips relating to all financial accounts and transactions. The expenditures and receipts shall be segregated on the books of Contractor.

- b. For six (6) years after the Expiration Date, or sooner termination of this Agreement, Contractor shall maintain copies of all financial and work reports, evaluation surveys and audits which reflect all Services rendered hereunder and fiscal accountability for all monies appropriated and spent thereby, all training and curricula materials (if any) prepared or compiled in connection with Services provided under this Agreement, and all attendance sheets and training rosters collected and prepared in connection with all trainings and activities (if any) held pursuant to this Agreement.
- c. Contractor shall make such books, financial documentation, records, reports, surveys, audits, materials, and other documents available at all reasonable times during the performance period of this Agreement and for six (6) years after the Expiration Date or sooner termination of this Agreement or, in the case of an ongoing audit that encompasses the Services provided under this Agreement by federal, state or local authorities, for six (6) years after completion of the audit, for inspection and/or audit by FPHNY, DOHMH, the City of New York, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives. FPHNY, DOHMH, the City or their agents, and other federal, state or local governmental agencies will determine the scope and protocol of all inspections and audits, based on a review of any materials they consider reasonably necessary, and Contractor shall assist and cooperate in relation to such inspections and audits.

IV. CONFIDENTIALITY AND PRIVACY

- A. <u>General Compliance</u>: Contractor shall comply with all federal, state, and local laws, rules and regulations (each, a "<u>Law</u>," and together, the "<u>Laws</u>") pertaining to confidentiality, privacy and security of information received, generated, used or held by Contractor in the course of its performance under this Agreement.
- B. Confidential Information: As used in this Agreement, "Confidential Information" shall mean information disclosed to, or known to, Contractor, in connection with the services to be provided pursuant to this Agreement, and the methods, business plans, databases, systems, technology, intellectual property, know-how, management, development, operations, products, processes, and services, including without limitation, information and data relating to research, development, inventions, recommendations, programs, systems, systems analyses, finances, financial statements, financial projections, financing methods, fine collection methods and strategies, sources, systems designs, personal information identifying any individual or de-identified information which could lead to the identification of any individual and which was furnished as part of a dataset provided to the Contractor in connection with this Agreement, terms and conditions of arrangements of any government system relating to secure information transfers, as well as reports, informational lists, which Contractor knows or should have known to be confidential. All information disclosed to a party or to which a party has access to in connection with performing the services covered in this Agreement, for which there is any reasonable basis to be believed is, or which appears to be treated by the disclosing party as, Confidential Information shall be presumed to be Confidential information under this Agreement. The existence or occurrence of any meetings or discussions between the parties related in any manner to the Confidential Information will also

be considered Confidential Information and will not be disclosed to any third party, except as may be required by law or in any legal proceedings.

Contractor agrees, at all times, to regard and preserve as confidential such Confidential Information, and to refrain from publishing or disclosing any part of such Confidential Information or from using it, except as provided pursuant to the terms and conditions of this Agreement, or with the express written consent of FPHNY or the person to whom such information pertains, or except as otherwise authorized by applicable Laws. Contractor shall require any person, including, but not limited to, all agents, employees or volunteers, performing Services on behalf of Contractor under this Agreement to do the same. In the event that Contractor receives a request to produce Confidential Information pursuant to an order of a court of competent jurisdiction or a facially valid administrative, Congressional, state or local legislative or other subpoena, or believes Contractor is otherwise required by law to disclose Confidential Information, then Contractor shall promptly notify FPHNY prior to making such disclosure, and shall afford FPHNY, or other owner of the Confidential Information, the opportunity to challenge or otherwise lawfully seek limits upon such disclosure of Confidential Information.

- C. <u>City/DOHMH Information</u>: All documents of any nature pertaining to the activities of the City and DOHMH that include any Confidential Information, in Contractor's possession now or at any time during DOHMH's evaluation of any services provided, or to be provided hereunder, including, without limitation, memoranda, notebooks, notes, data sheets, records, and DOHMH computers, software programs, are and shall be exclusively property of the City and that all copies thereof shall be surrendered to DOHMH, or its designee, upon such party's request.
- D. <u>Patient Health Information</u>: All medical or mental health information identifiable to a person received by Contractor in the course of its performance under this Agreement shall be kept confidential and shall not be used or disclosed except as permitted by an applicable law and, where permitted by law, such use or disclosure shall be undertaken in strict compliance with Contractor's policies regarding the use or disclosure of such information. Contractor represents and warrants that its policies regarding use and disclosure of patient information are compliant with all applicable state, federal, and local laws, including, but not limited to, New York State Laws and the federal Health Insurance Portability and Accountability Act of 1996.

V. LITERATURE

A. <u>Approvals</u>: Contractor shall submit to DOHMH the final draft copy of each piece of written material, educational material, manual, survey, test, brochure, flyer, pamphlet, questionnaire, or video developed by it under this Agreement, as applicable, for review and approval prior to printing. DOHMH will respond in writing to Contractor within twenty (20) business days indicating approval or need for modification of the submitted material. Should this response indicate need for modification, specific written guidance will be given to Contractor. Contractor shall make the modifications as indicated by DOHMH, and resubmit the material for DOHMH's final approval. The

format and content of educational programs (if any) will also be subject to the approval provision of this paragraph A.

- B. <u>Copyright Ownership:</u> All materials, publications, videos, curricula, reports, and other material produced under this Agreement ("<u>Material</u>") shall be considered "work-made-for-hire" within the meaning and purview of Section 101 of the United States Copyright Act, 17 U.S.C Section 101, and the City shall be the copyright owner thereof and of all aspects, elements and components thereof in which copyright protection might subsist. To the extent that the Material does not qualify as "work-made-for-hire," Contractor hereby irrevocably transfers, assigns and conveys exclusive copyright ownership in and to the Material to the City, free and clear of any liens, claims or other encumbrances.
- C. <u>Technology/Software Licensing</u>: In the event that, for the provision of Services under this Agreement, Contractor requires the use of any technology, software or systems belonging to, or licensed to, FPHNY or the City, then such use is permitted only to the extent necessary for Contractor's performance under this Agreement, and only for so long as this Agreement is in force, and such permission shall immediately terminate on the expiration or sooner termination of this Agreement.

VI. EQUIPMENT

A. All equipment with a purchase price of \$5,000 or more, the cost of which is reimbursed in whole or in part from Agreement funds or which is provided by FPHNY to Contractor for use on the Project, shall be deemed to be property of the City of New York and shall be used as far as practicable by Contractor for the purpose of carrying out the intent of this Agreement and shall not be available for the general use of Contractor. Contractor shall properly maintain and keep in good repair all such equipment and shall maintain at all times a complete inventory of all such equipment, including a description of the item and a clear record of its location, serial number, date of purchase, and purchase price. Contractor shall submit a copy of said inventory to FPHNY promptly following a request by FPHNY. Upon termination of this Agreement, Contractor shall dispose of all such equipment in the manner directed by FPHNY, and shall maintain detailed records concerning such disposition.

VII. DISPUTE RESOLUTION

A. <u>Jurisdiction and Venue; Claims and Actions:</u> (i) The parties agree that any and all claims asserted by or against the other arising under or related to this Agreement shall solely be heard and determined either in the courts of the United States located in the City or in the courts of the State located in the City and County of New York. The parties shall consent to the dismissal and/or transfer of any claims asserted in any other venue or forum to the proper venue or forum. If the Contractor initiates any action in breach of this Section, the Contractor shall be responsible for and shall promptly reimburse FPHNY for any attorneys' fees incurred by FPHNY in removing the action to a proper court consistent with this Section and (ii) No action shall be instituted or maintained on any such claim unless such action shall be commenced within six (6) months of the termination or expiration

of this Agreement, or within six (6) months after the accrual of the cause of action, whichever first occurs.

- B. <u>Injunctive Relief</u>: Contractor acknowledges and agrees that, in the event of Contractor's breach of any part of Section IV. or Section V. hereof, money damages will be difficult to quantify and will not appropriately compensate FPHNY and/or the City for Contractor's breach, and, therefore, FPHNY and/or the City (as applicable) may seek to enjoin any breach of the provisions of Section IV. and Section V. hereof in any court of competent jurisdiction.
- C. <u>Resolution of Disputes:</u> Except as set forth in paragraph B of this Section VII., the parties will attempt in good faith to negotiate a resolution of any dispute arising out of or relating to this Agreement. If applicable, resolutions of disputes hereunder shall be subject to the terms of the DOHMH Federal Funds Emergency Contract_in respect of FPHNY's rights to resolve disputes with the City and/or DOHMH.

VIII. MISCELLANEOUS

- A. <u>Insurance</u>: Contractor warrants and represents that it has, and will have continuously during the term of this Agreement, and that it shall require all subcontractors to obtain and maintain continuously during the term of this Agreement:
 - 1. <u>Commercial General Liability</u>: insurance to provide coverage for bodily injury and property damage, including damage to any facilities, equipment or vehicles, in limits of no less than \$1,000,000 per occurrence \$3,000,000 aggregate, \$1,000,000 personal and advertising injury aggregate; written on an occurrence basis with coverage at least as broad as the most recently-issue version of ISO form CG 00 01, and no exclusions other than as required by law or approved in writing by DOHMH. Such insurance shall include the City of New York and FPHNY, including their respective officials, and employees as additional insured, with coverage at least as broad as the most recently issued ISO form CG 20 26.
 - Professional Liability (Medical Malpractice): If Contractor is providing professional services, Contractor shall obtain professional liability insurance, in limits of no less than \$1,000,000 per occurrence and \$3,000,000 aggregate;
 - 3. <u>Employers Liability</u>: maintain employer's liability as required by law. and
 - 4. <u>Workers' Compensation</u>: workers' compensation and disability insurance as required by the applicable New York State law.
 - 5. <u>Commercial Auto</u>: If Contractor uses any vehicles in the performance of services under this Agreement, Contractor shall obtain commercial auto coverage for all owned, non-owned, and hired vehicles, written on a form at least as broad as ISO form CA 00 01, with minimum limits of \$1,000,000 per accident.
 - 6. <u>Excess Umbrella Liability:</u> in the event that contractor's insurance policy(s) does not meet the limits stated above.

Contractor shall maintain on file with FPHNY current Certificates of Insurance for the above referenced policies, listing FPHNY and the City as Additional Insureds for General Liability policies and as Certificate Holders for all other required insurance. All of the above policies shall provide for a waiver of subrogation in favor of the City of New York and FPHNY, including their respective officials and employees, and shall be primary and non-contributing to any insurance or self-insurance maintained by any of those parties. Contractor waives all claims against the City of New York and FPHNY, including their respective officials and employees, that would be covered under any policy of insurance required by this Agreement. Acceptance of a certificate of insurance or policy of insurance obligations are in addition to, separate from, its obligations to defend and indemnify the City of New York and FPHNY and their respective officials and employees as provided for elsewhere in this Agreement. The limits stated in this section are minimums; the amount available to the City and FPHNY and their respective officials and employees as additional insured, shall be the greater of such minimum limits or the maximum total insurance limits available to the Contractor under all primary and excess policies of insurance.

- B. <u>Equal Employment Opportunity</u>: This contract is subject to the requirements of Executive Order No. 50 (1980) of the Mayor of the City of New York as revised ("E.O. 50") and the Rules and Regulations promulgated thereunder. No contract will be awarded unless and until these requirements have been complied with in their entirety. Contractor agrees that it:
 - a. Will not discriminate unlawfully against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status, sexual orientation or citizenship status with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment;
 - b. Will not discriminate unlawfully in the selection of subcontractors on the basis of the owners', partners' or shareholders' race, color, creed, national origin, sex, age, disability, marital status, sexual orientation, or citizenship status;
 - c. Will state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, color, creed, national origin, sex, age, disability, marital status, sexual orientation or citizenship status, and that it is an equal employment opportunity employer;
 - d. Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder;
 - e. Will furnish before this Agreement is awarded all information and reports including an Employment Report which are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the City Department of Small Business Services, Division of Labor Services ("DLS"); and

- f. Will permit DLS to have access to all relevant books, records, and accounts for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- g. Contractor understands that in the event of its noncompliance with the nondiscrimination clauses of this Agreement or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this Agreement and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of DLS, the Director of DLS may direct the Commissioner of DOHMH to impose any or all of the following sanctions:
 - 1. Disapproval of the Contractor; and/or
 - 2. Suspension or termination of this Agreement; and/or
 - 3. Declaring the Contractor in default; and/or
 - 4. In lieu of any of the foregoing sanctions, imposition of an employment program.
- h. Failure to comply with E.O. 50 and the rules and regulations promulgated thereunder in one or more instances may result in DOHMH declaring the Contractor to be non-responsible.
- C. <u>Executive Order 74 of 2021</u>: The Contractor shall comply with the provisions of Executive Order 74 of 2021 regarding Safety Practices of Public-Facing Contracted Personnel During the COVID-19 Crisis, as applicable, annexed hereto and incorporated herein as Appendix G.
- D. <u>Whistleblower Protection Expansion Act.</u> The Contractor shall comply with the provisions of the Whistleblower Protection Expansion Act, in accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the New York City Administrative Code and outlined in the Whistleblower Protection Expansion Rider annexed to this Agreement as Appendix C.
- E. <u>Conflict of Interest</u>: The Contractor represents and warrants that neither it nor any of its directors, officers, members, partners or employees has any interest nor shall they acquire any interest, directly or indirectly, which would or may conflict in any manner or degree with the performance or rendering of the services herein provided. The Contractor further represents and warrants that in the performance of this Agreement no person having such interest or possible interest shall be employed by it. No elected official or other officer or employee of the City of New York or DOHMH, nor any person whose salary is payable, in whole or in part, from the City Treasury, shall participate in any decision relating to this Agreement which affects his or her personal interest or the interest of any corporation, partnership or association in which he or she is, directly or indirectly, interested; nor shall any such person have any interest, direct or indirect, in this Agreement or in the proceeds thereof.
- F. <u>Independent Contractor Status</u>: Contractor and FPHNY agree that Contractor is an independent contractor, and not an employee of FPHNY or the City, and that in accordance with such status as an independent contractor, Contractor covenants and agrees that neither it nor its employees nor its agents will hold themselves out as, nor claim to be, officers or employees of FPHNY or the City, or of any department, agency or unit thereof, by reason hereof, and that they will not, by reason hereof, make any claim, demand or application to or for any right or privilege applicable to an officer or employee of FPHNY or the City, including, but not limited to, workers' compensation

coverage, unemployment insurance benefits, social security coverage or employee benefits, retirement membership or credit.

- G. <u>Employees of Contractor</u>: Contractor represents and warrants that all experts or consultants or employees of Contractor who are employed or engaged by Contractor to perform Services under this Agreement will not be employees of FPHNY or the City and will not otherwise be under contract to FPHNY or the City. Contractor alone shall be responsible for the consultants' or employees' work, direction, compensation and personal conduct while engaged under this Agreement. Nothing in this Agreement shall impose any liability or duty on FPHNY or the City for the acts, omissions, liabilities or obligations of Contractor, or any person, firm, company, agency, association, expert, consultant, independent contractor, specialist, trainee, employee, servant, or agent of Contractor, or for taxes of any nature, including, but not limited to, worker's compensation, unemployment insurance, disability benefits and social security, or, except as specifically stated in this Agreement, to any person, firm or corporation.
- H. Indemnification: Contractor shall be solely responsible for all injuries or death to its agents, servants, or employees, or to any other person, or damage to any property sustained in connection with the rendering of Services pursuant to this Agreement, resulting from any act or omission or commission or error in judgment of any of its officers, trustees, employees, agents, servants, or independent contractors. To the fullest extent allowable by law, Contractor shall indemnify, defend, and hold harmless FPHNY and the City, including their respective officials and employees from claims, (even if the allegations of the claims are without merit), judgments for damages on account of injuries or death to any person or damage to any property, and costs and expenses to which FPHNY, the City, or their respective officials and employees may suffer or incur allegedly arising out of any of the operations of the Contractor to the extent arising from any negligent act of commission or omission, intentional tortious act, and/or failure to comply with the law or with the requirements of this Agreement. Insofar as the facts or law relating to any of the foregoing would preclude FPHNY, the City or their respective officials or employees from being completely indemnified by the Contractor, FPHNY, the City, and their respective officials and employees shall be indemnified to the fullest extent permitted by law.
- Infringements: To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless FPHNY, the City of New York, and their respective officials and employees against any and all claims (even if the allegations of the claim are without merit), judgments for damages, and costs and expenses to which FPHNY or the City or their respective officials and employees may be subject to or which they may suffer or incur allegedly arising out of any infringement, violation, or unauthorized use of any copyright, trade secret, trademark or patent or any property or personal right of any third party by the Contractor and/or its employees, agents, or subcontractors in the performance of this Agreement. To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless FPHNY, the City, and their respective officials and employees regardless of whether or not the alleged infringement, violation or unauthorized use arises out of compliance with the agreement's scope of services/scope of work. Insofar as the facts or law relating to any of the foregoing would preclude FPHNY, the City, or their respective officials and employees from being completely indemnified by the Contractor, FPHNY, the City, and their

respective officials and employees shall be partially indemnified by the Contractor to the fullest extent permitted by law.

- J. <u>Prohibition on Assignment/Subcontract</u>: This Agreement shall neither be assigned nor subcontracted by Contractor in whole or in part without the prior, express, written consent of FPHNY. Contractor shall not assign, transfer, convey or otherwise dispose of this Agreement or of Contractor's rights, obligations, duties, in whole or in part, or of its right to execute it, or its right, title or interest in it or any part thereof, or assign, by power of attorney or otherwise, any of the notices due or to become due under this Agreement, unless the prior, express, written consent of FPHNY shall be obtained. Any such assignment, transfer, conveyance or other disposition without such consent shall be void. This Agreement may be assigned by FPHNY to any corporation, agency or instrumentality having authority to accept such assignment without the consent of, or notice to, Contractor. In particular, but not limiting the foregoing, this Agreement may be assigned by FPHNY to the City at any time without the consent of, or notice to, Contractor.
- K. <u>No Partnership, Agency, Association or Joint Venture</u>: The parties agree that nothing contained herein shall create any partnership, agency, association, or joint venture relationship between the parties. Except as expressly provided in this Agreement, neither party shall have any right of authority to create any obligation or responsibility, express or implied, on behalf of or in the name of the other party, or to bind the other party contractually in any manner whatsoever.
- L. <u>No Contractual Relationship</u>: Contractor agrees that nothing contained herein shall create any contractual relationship between Contractor and the City. The City is hereby deemed to be the sole and exclusive third party beneficiary of this Agreement. Accordingly, this Agreement does not grant any third party beneficiary rights with respect to the City to individuals or entities involved in the provision of Services under this Agreement.
- M. <u>Legal Compliance</u>: Notwithstanding any other provision in this Agreement, Contractor remains responsible for ensuring that all Services provided pursuant to this Agreement comply with all pertinent provisions of federal, state and local law, and that all necessary approvals from federal, state and local governmental authorities have been obtained in order to perform the work provided for under this Agreement.
- N. <u>Notices</u>: All notices and requests hereunder by either party shall be in writing and, except as otherwise specified in this Agreement, directed to the address of the parties as follows, either in person or by certified mail, return receipt requested, and shall be effective upon delivery:

If to FPHNY:	Fund for Public Health in New York, Inc.
	22 Cortlandt Street, 8 th Floor
	New York, New York 10007-3160
	Attn.: Sara W. Gardner, M.P.H.
	Executive Director
If to Contractor:	CONTRACTOR

- O. <u>No Waiver</u>: No delay or failure by any party to exercise any right under this Agreement, nor any partial exercise of any such right, shall constitute a waiver of such right or any other right. The waiver by any party of the breach of any terms and conditions of, or any right under, this Agreement shall not be deemed to constitute the waiver of any other breach of the same or any other term or condition or of any similar right. No waiver shall be binding or effective unless expressed in writing and signed by an authorized representative of the party giving such waiver.
- P. <u>Conflict of Laws</u>: This Agreement and all disputes arising out of this Agreement shall be interpreted and decided in accordance with the laws of the State of New York, without regard to conflict of law rules.
- Q. <u>All Legal Provisions Deemed Included</u>: It is the intent and understanding of the parties to this Agreement that each and every provision of Law required to be inserted in this Agreement shall be and is inserted herein. Furthermore, it is hereby stipulated that every such provision is to be deemed to be inserted herein, and if, through mistake or otherwise, any such provision is not inserted, or is not inserted in correct form, then this Agreement shall forthwith upon the application of either party be amended by such insertion so as to comply strictly with the Law or Laws and without prejudice to the rights of either party hereunder.
- R. <u>Other Provisions Deemed Included</u>: It is the intent and understanding of the parties to this Agreement that, to the extent that FPHNY's subcontractors are bound by or obligated under the terms and conditions of grants from and contracts with the federal government or other funders, then each and every such obligation shall be and is inserted herein and imputed to Contractor, which shall comply with such terms and conditions as a subcontractor of FPHNY.

- S. <u>Order of Precedence</u>. The Parties agree to and incorporate as though set forth fully herein the appendices attached to this Agreement. During the term of this Agreement, any conflicts between the Agreement or any appendices shall be resolved in the following order of precedence:
 - a. Uniform Federal Contract Provisions Rider
 - b. FEMA Rider;
 - c. This Agreement;
 - d. Section 4.05 and Article 5 of Appendix A of the DOHMH Federal Funds Emergency Contract
 - e. Whistleblower Protection Expansion Act Rider
 - f. Scope of Work;
 - g. Schedule of Deliverables & Compensation
- T. <u>Severability</u>: If this Agreement contains any unlawful provision which is not an essential part of this Agreement and which shall not appear to have been a controlling or material inducement to the making thereof, the same shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from this Agreement without affecting the binding force of the remainder.
- U. <u>Counterparts</u>: This Agreement may be executed in any number of counterparts, each of which will be deemed an original, but all of which together will constitute but one and the same instrument. This Agreement will become effective when duly executed by both parties.
- V. <u>Entire Agreement and Amendments</u>: This Agreement, including all exhibits and attachments hereto, constitutes the entire agreement between the parties relating to the subject matter hereof and supersedes all prior negotiations, writings, agreements and understanding between the parties, whether oral or written. No amendment or modification of this Agreement shall be binding or effective unless expressed in writing and signed by an authorized representative of each party.
- W. <u>Survival</u>: Notwithstanding any other provision of this Agreement, the following Sections shall survive termination of this Agreement: Sections II.D, II.F, III.D, III.E, III.F, III.G, IV., V.B, VI., VII., and VIII.

Appendix A: Scope of Services

ATTACHMENTS:

Appendix B:	Schedule of Deliverables & Compensation
Appendix C:	Whistleblower Protection Expansion Act Rider
Appendix D:	Section 4.05 and Article 5 of Appendix A of the DOHMH FEMA Funds Emergency Contract
Appendix E:	Uniform Federal Contract Provisions Rider
Appendix F:	FEMA Rider
Appendix G:	Executive Order 74 of 2021

WHISTLEBLOWER PROTECTION EXPANSION ACT RIDER

1. In accordance with Local Law Nos. 30-2012 and 33-2012, codified at sections 6-132 and 12-113 of the New York City Administrative Code, respectively,

- (a) Contractor shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this Contract to (i) the Commissioner of the Department of Investigation, (ii) a member of the New York City Council, the Public Advocate, or the Comptroller, or (iii) the City Chief Procurement Officer, ACCO, Agency head, or Commissioner.
- (b) If any of Contractor's officers or employees believes that he or she has been the subject of an adverse personnel action in violation of subparagraph (a) of paragraph 1 of this rider, he or she shall be entitled to bring a cause of action against Contractor to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (i) an injunction to restrain continued retaliation, (ii) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (iii) reinstatement of full fringe benefits and seniority rights, (iv) payment of two times back pay, plus interest, and (v) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.
- (c) Contractor shall post a notice provided by the City in a prominent and accessible place on any site where work pursuant to the Contract is performed that contains information about:
 - (i) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the Contract; and
 - (ii) the rights and remedies afforded to its employees under New York City Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the Contract.

For the purposes of this rider, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.

Section 4.05 and Article 5 of Appendix A

of the DOHMH Federal Funds Emergency Contract

Section 4.05 Non-Discrimination in Employment

A. General Prohibition. To the extent required by law, the Contractor shall not unlawfully discriminate against any employee or applicant for employment because of actual or perceived age, religion, religious practice, creed, sex, gender, gender identity or gender expression, sexual orientation, status as a victim of domestic violence, stalking, and sex offenses, familial status, partnership status, marital status, caregiver status, pregnancy, childbirth or related medical condition, disability, presence of a service animal, predisposing genetic characteristics, race, color, national origin (including ancestry), alienage, citizenship status, political activities or recreational activities as defined in N.Y. Labor Law 201-d, arrest or conviction record, credit history, military status, uniformed service, unemployment status, salary history, or any other protected class of individuals as defined by City, State or Federal laws, rules or regulations. The Contractor shall comply with all statutory and regulatory obligations to provide reasonable accommodations to individuals with disabilities, due to pregnancy, childbirth, or a related medical condition, due to status as a victim of domestic violence, stalking, or sex offenses, or due to religion.

B. N.Y. Labor Law § 220-e. If this Agreement is for the construction, alteration or repair of any public building or public work or for the manufacture, sale, or distribution of materials, equipment, or supplies, the Contractor agrees, as required by N.Y. Labor Law § 220-e, that:

1. In the hiring of employees for the performance of work under this Agreement or any subcontract hereunder, neither the Contractor, subcontractor, nor any person acting on behalf of such Contractor or subcontractor, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates;

2. Neither the Contractor, subcontractor, nor any person on his or her behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this Agreement on account of race, creed, color, disability, sex or national origin;

3. There may be deducted from the amount payable to the Contractor by the City under this Agreement a penalty of \$50.00 for each person for each calendar day during which such person was discriminated against or intimidated in violation of the provisions of this Agreement; and

4. This Agreement may be terminated by the City, and all monies due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this Section 4.05.

The provisions of this Section 4.05(B) shall be limited to operations performed within the territorial limits of the State of New York.

C. Admin. Code § 6-108. If this Agreement is for the construction, alteration or repair of buildings or the construction or repair of streets or highways, or for the manufacture, sale, or distribution of materials, equipment or supplies, the Contractor agrees, as required by Admin. Code § 6-108, that:

1. It shall be unlawful for any person engaged in the construction, alteration or repair of buildings or engaged in the construction or repair of streets or highways pursuant to a contract with the City or engaged in the manufacture, sale or distribution of materials, equipment or supplies pursuant to a contract with the City to refuse to employ or to refuse to continue in any employment any person on account of the race, color or creed of such person.

2. It shall be unlawful for any person or any servant, agent or employee of any person, described in Section 4.05(C)(1) above, to ask, indicate or transmit, orally or in writing, directly or indirectly, the race, color, creed or religious affiliation of any person employed or seeking employment from such person, firm or corporation.

Breach of the foregoing provisions shall be deemed a breach of a material provision of this Agreement.

Any person, or the employee, manager or owner of or officer of such firm or corporation who shall violate any of the provisions of this Section 4.05(C) shall, upon conviction thereof, be punished by a fine of not more than \$100.00 or by imprisonment for not more than 30 Days, or both.

D. E.O. 50 -- Equal Employment Opportunity

1. This Agreement is subject to the requirements of City Executive Order No. 50 (1980) ("E.O. 50"), as revised, and the rules set forth at 66 RCNY §§ 10-01 *et seq.* No agreement will be awarded unless and until these requirements have been complied with in their entirety. The Contractor agrees that it:

a. Will not discriminate unlawfully against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status, sexual orientation or citizenship status with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment;

b. Will not discriminate unlawfully in the selection of subcontractors on the basis of the owners', partners' or shareholders' race, color, creed, national origin, sex, age, disability, marital status, sexual orientation, or citizenship status;

c. Will state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, color, creed, national origin, sex, age, disability, marital status, sexual orientation or citizenship status, and that it is an equal employment opportunity employer;

d. Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder;

e. Will furnish before this Agreement is awarded all information and reports including an Employment Report which are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the SBS, Division of Labor Services ("DLS"); and

f. Will permit DLS to have access to all relevant books, records, and accounts for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.

2. The Contractor understands that in the event of its noncompliance with the nondiscrimination clauses of this Agreement or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this Agreement and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of DLS, the Director of DLS may direct the Commissioner to impose any or all of the following sanctions:

- a. Disapproval of the Contractor; and/or
- b. Suspension or termination of the Agreement; and/or
- c. Declaring the Contractor in default; and/or
- d. In lieu of any of the foregoing sanctions, imposition of an employment program.

3. Failure to comply with E.O. 50 and the rules and regulations promulgated thereunder in one or more instances may result in the Department declaring the Contractor to be non-responsible.

4. The Contractor agrees to include the provisions of the foregoing Sections 4.05(D)(1)-(3) in every subcontract or purchase order in excess of \$100,000.00 to which it becomes

a party unless exempted by E.O. 50 and the rules and regulations promulgated thereunder, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Director of DLS as a means of enforcing such provisions including sanctions for noncompliance. A supplier of unfinished products to the Contractor needed to produce the item contracted for shall not be considered a subcontractor or vendor for purposes of this Section 4.05(D)(4).

5. The Contractor further agrees that it will refrain from entering into any subcontract or modification thereof subject to E.O. 50 and the rules and regulations promulgated thereunder with a subcontractor who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder. A supplier of unfinished products to the Contractor needed to produce the item contracted for shall not be considered a subcontractor for purposes of this Section 4.05(D)(5).

6. Nothing contained in this Section 4.05(D) shall be construed to bar any religious or denominational institution or organization, or any organization operated for charitable or educational purposes, that is operated, supervised or controlled by or in connection with a religious organization, from lawfully limiting employment or lawfully giving preference to persons of the same religion or denomination or from lawfully making such selection as is calculated by such organization to promote the religious principles for which it is established or maintained.

ARTICLE 5 - RECORDS, AUDITS, REPORTS, AND INVESTIGATIONS

Section 5.01 Books and Records

The Contractor agrees to maintain separate and accurate books, records, documents, and other evidence, and to utilize appropriate accounting procedures and practices that sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this Agreement.

Section 5.02 Retention of Records

The Contractor agrees to retain all books, records, documents, other evidence relevant to this Agreement, including those required pursuant to Section 5.01, for six years after the final payment or expiration or termination of this Agreement, or for a period otherwise prescribed by Law, whichever is later. In addition, if any litigation, claim, or audit concerning this Agreement has commenced before the expiration of the six-year period, the books, records, documents, and other evidence must be retained until the completion of such litigation, claim, or audit. Any books, records, documents, and other evidence that are created in an electronic format in the regular course of business may be retained in an electronic format. Any books, records, documents, or other evidence that are created in the regular course of business as a paper copy may be retained in an electronic format provided that they satisfy the requirements of N.Y. Civil Practice Law and Rules ("CPLR") 4539(b), including the requirement that the reproduction is created in a manner "which does not permit additions, deletions, or changes without leaving a record of such additions, deletions, or changes." Furthermore, the Contractor agrees to waive any objection to the admissibility of any such books, records, documents, or other evidence on the grounds that such documents do not satisfy CPLR 4539(b).

Section 5.03 Inspection

A. At any time during the Agreement or during the record retention period set forth in Section 5.02, the City, including the Department and the Department's Office of the Inspector General, as well as City, State, and federal auditors and any other persons duly authorized by the City shall, upon reasonable notice, have full access to and the right to examine and copy all books, records, documents, and other evidence maintained or retained by or on behalf of the Contractor pursuant to this Article 5. Notwithstanding any provision herein regarding notice of inspection, all books, records, documents, and other evidence of the Contractor kept pursuant to this Agreement shall be subject to immediate inspection, review, and copying by the Department's Office of the Inspector General, the Comptroller, and/or federal auditors without prior notice and at no additional cost to the City. The Contractor shall make such books, records documents, and other evidence available for inspection in the City of New York or shall reimburse the City for expenses associated with the out-of-City inspection.

B. The Department shall have the right to have representatives of the Department or of the City, State or federal government present to observe the services being performed. If observation of particular services or activity would constitute a waiver of a legal privilege or violate the Law or an ethical obligation under the New York Rules of Professional Conduct for attorneys, National Association of Social Workers Code of Ethics or other similar code governing the provision of a profession's services in New York State, the Contractor shall promptly inform the Department or other entity seeking to observe such work or activity. Such restriction shall not act to prevent government representatives from inspecting the provision of services in a manner that allows the representatives to ensure that services are being performed in accordance with this Agreement.

C. The Contractor shall not be entitled to final payment until the Contractor has complied with any request for inspection or access given under this Section 5.03.

96 | REPLACEMENT OF ELECTRONIC DISEASE REPORTING INFRASTRUCTURE (EDRI) AND SURVEILLANCE WORKFLOW ENHANCEMENTS

Section 5.04 Audit

A. This Agreement and all books, records, documents, and other evidence required to be maintained or retained pursuant to this Agreement, including all vouchers or invoices presented for payment and the books, records, and other documents upon which such vouchers or invoices are based (e.g., reports, cancelled checks, accounts, and all other similar material), are subject to audit by (i) the City, including the Comptroller, the Department, and the Department's Office of the Inspector General, (ii) the State, (iii) the federal government, and (iv) other persons duly authorized by the City. Such audits may include examination and review of the source and application of all funds whether from the City, the State, the federal government, private sources, or otherwise.

B. Audits by the City, including the Comptroller, the Department, and the Department's Office of the Inspector General, are performed pursuant to the powers and responsibilities conferred by the Charter and the Admin. Code, as well as all orders, rules, and regulations promulgated pursuant to the Charter and Admin. Code.

C. The Contractor shall submit any and all documentation and justification in support of expenditures or fees under this Agreement as may be required by the Department and by the Comptroller in the exercise of his/her powers under Law.

D. The Contractor shall not be entitled to final payment until the Contractor has complied with the requirements of this Section 5.04.

Section 5.05 No Removal of Records from Premises

Where performance of this Agreement involves use by the Contractor of any City books, records, documents, or data (in hard copy, or electronic or other format now known or developed in the future) at City facilities or offices, the Contractor shall not remove any such items or material (in the format in which it originally existed, or in any other converted or derived format) from such facility or office without the prior written approval of the Department's designated official. Upon the request by the Department at any time during the Agreement or after the Agreement has expired or terminated, the Contractor shall return to the Department any City books, records, documents, or data that has been removed from City premises.

Section 5.06 Electronic Records

As used in this Appendix A, the terms "books," "records," "documents," and "other evidence" refer to electronic versions as well as hard copy versions.

Section 5.07 Investigations Clause

A. The Contractor agrees to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a State or City agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license that is the subject of the investigation, audit or inquiry.

B.

 If any person who has been advised that his or her statement, and any information from such statement, will not be used against him or her in any subsequent criminal proceeding
 97 | REPLACEMENT OF ELECTRONIC DISEASE REPORTING INFRASTRUCTURE (EDRI) AND SURVEILLANCE WORKFLOW ENHANCEMENTS refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the City, or State, or any political subdivision or public authority thereof, or the Port Authority of New York and New Jersey, or any local development corporation within the City, or any public benefit corporation organized under the Laws of the State, or;

2. If any person refuses to testify for a reason other than the assertion of his or her privilege against self-incrimination in an investigation, audit or inquiry conducted by a City or State governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interest in, and is seeking testimony concerning the award of, or performance under, any transaction, agreement, lease, permit, contract, or license entered into with the City, the State, or any political subdivision thereof or any local development corporation within the City, then;

С.

1. The Commissioner or Agency Head whose agency is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license shall convene a hearing, upon not less than five (5) Days written notice to the parties involved to determine if any penalties should attach for the failure of a person to testify.

2. If any non-governmental party to the hearing requests an adjournment, the Commissioner or Agency Head who convened the hearing may, upon granting the adjournment, suspend any contract, lease, permit, or license pending the final determination pursuant to Paragraph E below without the City incurring any penalty or damages for delay or otherwise.

D. The penalties that may attach after a final determination by the Commissioner or Agency Head may include but shall not exceed:

1. The disqualification for a period not to exceed five years from the date of an adverse determination for any person, or any entity of which such person was a member at the time the testimony was sought, from submitting bids for, or transacting business with, or entering into or obtaining any contract, lease, permit or license with or from the City; and/or

2. The cancellation or termination of any and all such existing City contracts, leases, permits or licenses that the refusal to testify concerns and that have not been assigned as permitted under this Agreement, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the City incurring any penalty or damages on account of such cancellation or termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the City.

E. The Commissioner or Agency Head shall consider and address in reaching his or her determination and in assessing an appropriate penalty the factors in Paragraphs (1) and (2) below. He or she may also consider, if relevant and appropriate, the criteria established in Paragraphs (3) and (4) below, in addition to any other information that may be relevant and appropriate:

1. The party's good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and

records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.

2. The relationship of the person who refused to testify to any entity that is a party to the hearing, including, but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility the person has within the entity.

3. The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the City.

4. The effect a penalty may have on an unaffiliated and unrelated party or entity that has a significant interest in an entity subject to penalties under Paragraph D above, provided that the party or entity has given actual notice to the Commissioner or Agency Head upon the acquisition of the interest, or at the hearing called for in Paragraph (C)(1) above gives notice and proves that such interest was previously acquired. Under either circumstance, the party or entity must present evidence at the hearing demonstrating the potential adverse impact a penalty will have on such person or entity.

F. Definitions

1. The term "license" or "permit" as used in this Section shall be defined as a license, permit, franchise, or concession not granted as a matter of right.

2. The term "person" as used in this Section shall be defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.

3. The term "entity" as used in this Section shall be defined as any firm, partnership, corporation, association, or person that receives monies, benefits, licenses, leases, or permits from or through the City, or otherwise transacts business with the City.

4. The term "member" as used in this Section shall be defined as any person associated with another person or entity as a partner, director, officer, principal, or employee.

G. In addition to and notwithstanding any other provision of this Agreement, the Commissioner or Agency Head may in his or her sole discretion terminate this Agreement upon not less than three (3) Days written notice in the event the Contractor fails to promptly report in writing to the City Commissioner of Investigation any solicitation of money, goods, requests for future employment or other benefits or thing of value, by or on behalf of any employee of the City or other person or entity for any purpose that may be related to the procurement or obtaining of this Agreement by the Contractor, or affecting the performance of this Agreement.

Section 5.08 Confidentiality

A. The Contractor agrees to hold confidential, both during and after the completion or termination of this Agreement, all of the reports, information, or data, furnished to, or prepared, assembled or used by, the Contractor under this Agreement. The Contractor agrees to maintain the confidentiality of such reports, information, or data by using a reasonable degree of care, and using at least the same degree of care that the Contractor uses to preserve the confidentiality of its own confidential information. The Contractor agrees that such reports, information, or data shall not be made available to any person or entity without the prior written approval of the Department. The obligation under this Section 5.08 to hold reports,

 $99 \mid \mathsf{Replacement}$ of Electronic Disease Reporting Infrastructure (EDRI) and Surveillance Workflow Enhancements

information or data confidential shall not apply where the Contractor is legally required to disclose such reports, information or data, by virtue of a subpoena, court order or otherwise ("disclosure demand"), provided that the Contractor complies with the following: (1) the Contractor shall provide advance notice to the Commissioner, in writing or by e-mail, that it received a disclosure demand for to disclose such reports, information or data and (2) if requested by the Department, the Contractor shall not disclose such reports, information, or data until the City has exhausted its legal rights, if any, to prevent disclosure of all or a portion of such reports, information or data. The previous sentence shall not apply if the Contractor is prohibited by law from disclosing to the Department the disclosure demand for such reports, information or data.

The Contractor shall provide notice to the Department within three days of the discovery by Β. the Contractor of any breach of security, as defined in Admin. Code § 10-501(b), of any data, encrypted or otherwise, in use by the Contractor that contains social security numbers or other personal identifying information as defined in Admin. Code § 10-501 ("Personal Identifying Information"), where such breach of security arises out of the acts or omissions of the Contractor or its employees, subcontractors, or agents. Upon the discovery of such security breach, the Contractor shall take reasonable steps to remediate the cause or causes of such breach, and shall provide notice to the Department of such steps. In the event of such breach of security, without limiting any other right of the City, the City shall have the right to withhold further payments under this Agreement for the purpose of set-off in sufficient sums to cover the costs of notifications and/or other actions mandated by any Law, or administrative or judicial order, to address the breach, and including any fines or disallowances imposed by the State or federal government as a result of the disclosure. The City shall also have the right to withhold further payments hereunder for the purpose of set-off in sufficient sums to cover the costs of credit monitoring services for the victims of such a breach of security by a national credit reporting agency, and/or any other commercially reasonable preventive measure. The Department shall provide the Contractor with written notice and an opportunity to comment on such measures prior to implementation. Alternatively, at the City's discretion, or if monies remaining to be earned or paid under this Agreement are insufficient to cover the costs detailed above, the Contractor shall pay directly for the costs, detailed above, if any.

C. The Contractor shall restrict access to confidential information to persons who have a legitimate work related purpose to access such information. The Contractor agrees that it will instruct its officers, employees, and agents to maintain the confidentiality of any and all information required to be kept confidential by this Agreement.

D. The Contractor, and its officers, employees, and agents shall notify the Department, at any time either during or after completion or termination of this Agreement, of any intended statement to the press or any intended issuing of any material for publication in any media of communication (print, news, television, radio, Internet, etc.) regarding the services provided or the data collected pursuant to this Agreement at least 24 hours prior to any statement to the press or at least five business days prior to the submission of the material for publication, or such shorter periods as are reasonable under the circumstances. The Contractor may not issue any statement or submit any material for publication that includes confidential information as prohibited by this Section 5.08.

E. At the request of the Department, the Contractor shall return to the Department any and all confidential information in the possession of the Contractor or its subcontractors. If the Contractor or its subcontractors are legally required to retain any confidential information, the Contractor shall notify the Department in writing and set forth the confidential information that it intends to retain and the reasons why it is legally required to retain such information. The Contractor shall confer with the Department, in good faith, regarding any issues that arise from the Contractor retaining such confidential information. If the Department does not request such information or the Law does not require otherwise, such information shall be maintained in accordance with the requirements set forth in Section 5.02.

F. A breach of this Section 5.08 shall constitute a material breach of this Agreement for which the Department may terminate this Agreement pursuant to Article 10. The Department reserves any and all other rights and remedies in the event of unauthorized disclosure.