



AIRA

AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION

Resource Plan

**The Message Quality Evaluation
(MQE) Tool**

September, 2018

Revisions/Change Log

Version	Date	Approved By	Changes/Updates
0.1	02/10/2018	AIRA-MQE	Initial version of draft document
0.2	02/16/2018	AIRA-MQE	Updates based on feedback
Final	9/30/2018	AIRA Staff	Reformatted Document

Table of Contents

Introduction	1
Roles and Responsibilities.....	1
Project Management and Governance	1
Technical Development and Maintenance	1
User Support	2
Resources by Phase	2
Phase I – Initial Implementation (2018).....	3
Phase II – Transition to the Community (2019).....	3
Phase III – Community Adoption (2020 and Beyond)	3
Resource Planning by Phase.....	4

Introduction

The beta 2.5 version of the Message Quality Evaluation (MQE) tool is now available in the open source marketplace via GitHub at <http://github.com/immregistries/mqe>. Currently, there is a small group of developers who use the tool in their IIS Programs, and AIRA is committed to facilitating collaborative development through the initial release. The aim of this resource plan is twofold: 1) to describe resources needed to complete the initial release and associated documentation, and 2) to provide an outline for resource planning to support ongoing enhancements and future releases that benefit the entire IIS Community. The official initial release of this AIRA-JDI supported tool will be Summer 2018.

This plan describes the three phases of resource planning: Initial Release (Summer 2018), Community Adoption (2019), and Future Considerations (2020 and beyond). While the goal of JDI is to establish the foundation for the community to take ownership of the future of the MQE tool, it is anticipated that AIRA will need to continue to play a significant supporting role during the transition to full ownership. Because this type of project and deliverable is new to AIRA, all resources and planning described in the subsequent sections are subject to change. Outputs from the JDI investment are the inputs that will inform Future Considerations, but it is beyond the scope of this project or AIRA's involvement to support future resources needs.

Roles and Responsibilities

There are three principal areas of responsibility for successful management and support of any technology project: Project Management and Governance, Technological Development and Maintenance, and User Support. Within each of these three broad categories are a number of needed roles and expected activities. Roles and activities may change over time, and should be re-evaluated on an ongoing, regular basis.

Project Management and Governance

While the MQE tool is expected to have discrete deliverables (i.e., version releases), coordinating user needs, developer time, and application deliverables require oversight. This realm of responsibility includes document management, prioritization of work, and ensuring that the tool meets the needs of users. Roles may include a Project Manager, Scrum Master (for organizing the Technical Team), Governance Board or similar decision-making body, and administrative support to ensure that public-facing information about the tool is accurate, up to date, and functional.

Technical Development and Maintenance

There are two primary roles within this category: developers and testers. Developers may be in-house technicians or contracted resources and they must have experience working in Java or be willing to learn it. The MQE tool is available as an open-source product on GitHub, and as such the code is available to anyone free of charge. The methodology adopted for this project is an Agile-hybrid. The Technical Team is expected to be dynamic

and distributed, and new development will be organized into Sprints that should be scheduled by a Scrum-Master (which might also be a resource dedicated by a site). The philosophy behind Agile development is focused on rapid iterative development cycles that always result in a functional product.

Since developers are required to build the tool according to need, testers are the resources needed to ensure that the tool functions as intended. Thorough testing and documentation are the bedrock on which the ongoing support of this type of application rests. The MQE tool is built on the guiding principles outlined in the [IIS Functional Standards](#) and MIROW guidance documents, including [Data Quality Assurance in IIS: Incoming Data \(also referred to as Chapter 3\)](#) and [MIROW Best Practices for Data Quality Assurance: Selected Aspects](#). To that end, every quality metric is expected to reflect those standards. The MQE tool should both accurately evaluate and report on that principle for each message it receives. As new standards are identified and incorporated, those too, should be built and tested. While the documentation for the tool (including Functional Requirements, Installation Guide, and User Guide) should accurately reflect the tool and its capabilities, the partnership between developers and testers will ensure that the tool does what it is intended to do.

User Support

While any successful technology project requires oversight and development, the application itself has no purpose without a community of users that both needs and benefits from its existence. Therefore, the core of the community is the user base. The most basic level of commitment might be participation in a User Group. In a User Group, participants identify issues and needed enhancements, identify and report bugs, and engage with other users to propose best practices and novel use cases. Because all members of the community will have access to the tool and its supporting documentation, the entire community can take advantage of installing this tool and benefit from its use. Analysts, Onboarding Specialists, and Developers will all make meaningful contributions to the MQE tool user base.

Resources by Phase

The immediate goal of the JDI project is for an initial public release of the MQE tool that can be deployed as a stand-alone application on a desktop or shared server. The minimum requirements for this release are described in the [MQE Tool Overview and Functional Requirements Document](#). In addition to the application, the following documents will be delivered: Functional Requirements (updated), Implementation Guide, User Guide, Test Plan(s), Governance Framework, Support and Maintenance Plan, and Evaluation Plan. Resources to achieve this initial release have largely been accounted for in the initial JDI Project Charter and include paid AIRA staff, a paid consultant, and existing in-kind resources that serve in both technical and advisory roles.

Out of pocket financial costs to build, host, maintain and coordinate the MQE tool have been mitigated and are described in the Functional Requirements document. AIRA has committed to supporting a consultant and portions of three AIRA project staff through September 2018 to complete this initial release and associated documentation.

Phase I – Initial Implementation (Summer 2018)

During the first phase, resources required to complete the initial stand-alone public release version of the tool have been outlined and accounted for in the JDI Project Charter. The ultimate goal of the JDI initiative is to set the foundation for the community to adopt the stand-alone application (i.e. the initial release) and invest in its ongoing development and use by sharing responsibility for its technical development, user community, and governance. As stated, all administrative resources for JDI-specific deliverables are supported by AIRA through September 2018. This includes JDI Project Management, meeting coordination and facilitation, document creation, and the initial community release of the MQE tool. In-kind resources are provided by interested community members, including technical (development and testing), advisory, and governance roles. AIRA is also able to support a single in-person meeting to facilitate community engagement, co-development and testing, and as a launching pad for ongoing governance strategies.

Phase II – Community Adoption (2019)

AIRA's official commitment to ongoing MQE tool development ends in September 2018. However, as the application and processes will be new for everyone, it is anticipated that the transition to community ownership may continue to rely on support from AIRA while the community decides how to move forward. For a successful transition from AIRA to community ownership, AIRA may be needed to provide some limited ongoing support. This could include ongoing meeting facilitation (i.e., webinar hosting), document hosting, and participation in governance activities if requested by the community. However, AIRA will not be responsible for application enhancements, overall project management, or Technical Team coordination after the conclusion of the JDI project period.

Phase III – Future Considerations (2020 and beyond)

The ultimate goal is for the community to take on full responsibility for the ongoing maintenance, support, coordination, and documentation for the MQE tool. At this point, AIRA's involvement is expected to be minimal and may include the continued role of a central repository for documentation and resources that the community maintains. Because this is uncharted territory for AIRA and the community, there are many unknowns. Resources identified below assume community adoption and broad support for the ongoing use and enhancement of this tool.

Resource Planning for Phased Development and Implementation of the MQE tool

The table below describes current and anticipated resources for the MQE tool project.

Role/Responsibilities	Phase I – Initial Release (2018)	Phase II – Community Adoption (2019)	Phase III – Future Considerations (2020 and beyond)
JDI Project Management <ul style="list-style-type: none"> • Meeting Facilitation • Document Creation and Review • Web-site Management 	AIRA (Salary and Contract)	N/A	N/A
MQE Project Management and Governance <ul style="list-style-type: none"> • Meeting Facilitation • Issue Prioritization • Documentation • Web presence 	AIRA (Salary, Contract, Admin Support) Community (In-Kind)	AIRA (Admin Support) Community (In-Kind) [e.g., establish an oversight group]	Community (In-Kind) [e.g., oversight group]
Technical Development and Maintenance <ul style="list-style-type: none"> • Meeting Attendance • Scrum Master • Application Development • Issue Reporting • Functional Testing 	AIRA (Contract, Salary) Community (In-Kind)	Community (In-Kind) [e.g., establish roles for Scrum Master, Lead Developer, and 2-3 ad-hoc developers per sprint]	Community (In-Kind) [e.g., Scrum Master, Lead Developer, 2-3 ad-hoc developers per sprint]

Role/Responsibilities	Phase I – Initial Release (2018)	Phase II – Community Adoption (2019)	Phase III – Future Considerations (2020 and beyond)
In-person Collaboration <ul style="list-style-type: none"> Joint development session for 3-5 developers, 3-5 testers, and coordinator 	AIRA (Salary, Contract, and all travel related costs) Community (In-Kind)	TBD [e.g., based on oversight group recommendations]	TBD [e.g., based on oversight group recommendations]