AIRA
AMERICAN IMMUNIZATION REGISTRY ASSOCIATION

AIRA Discovery Session, May 30, 2019

Consideration When Documenting IIS Service-Level Expectations

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Background and Summary

The purpose of the webinar was to increase understanding throughout the IIS community of documentation of services to support IIS. Key informant phone interviews with three IIS, three IIS vendors, the Public Health Informatics Institute, and AIRA staff provided the content for the webinar.

Services include all activities that support an IIS. The webinar focused on application development and maintenance, help desk, and hosting. Other examples of services used to support an IIS are address cleansing and address forwarding. It is important to keep in mind that services can be performed by the IIS's jurisdiction information technology (IT) department, an outside vendor, or both. The need for clear documentation and specification of responsibilities is the same. Based on the key informant interviews, there is very little consensus in the IIS community on basic terminology and what should be included in documentation of service agreements. The webinar was intended to begin a community discussion about terminology and current practices.

Service-level agreements are important for both the vendor and the customer (i.e., the IIS), especially if multiple IIS jurisdiction departments or agencies are involved. Agreeing on and documenting definitions, expectations, roles, and responsibilities can minimize misunderstandings and miscommunications.

Ideally, a service-level agreement is a single contract that defines the level of service expected by a customer from a vendor (i.e., service performance measure), specifies the metrics by which that service is measured, defines consequences, remedies, or penalties if the agreed-on service level is not met, and specifies roles and responsibilities of all parties and other interested entities who might not be parties to the agreement. In reality, service-level expectations in the IIS community are typically documented in a number of different documents or not at all.

Documentation of service-level expectations may begin with a request for proposal (RFP) as part of a procurement process. Current practices vary considerably in the level of involvement of the IIS in a procurement process. Central IT or informatics is usually involved to ensure compliance with jurisdiction security and privacy policies. The jurisdiction's procurement department is usually involved in any contracting process. The RFP may include high-level requirements and acknowledge that representatives from the jurisdiction and the vendor will negotiate specific terms in a supplement or annex, or the RFP may contain very specific requirements, to the point of attaching a contract that the vendor must accept. Very specific requirements in an RFP with no room to negotiate may result in no bids or in higher

costs. Contract renewals may allow more room to negotiate than an initial contract with a vendor.

Ideally, the IIS is involved in any procurement or contracting process, especially in establishing and writing the functional and non-functional (service level) requirements and in a negotiation to define and document specific service-level expectations. One of the most important aspects of establishing requirements is to analyze the business needs of the IIS and structure the service-level requirements to meet those needs. The IIS and immunization program managers should work with others in the jurisdiction to determine those business needs and the service-level expectations. Central IT may have a template that it uses for other public health programs that is not appropriate for IIS. The IIS should ensure that the template is not inconsistent with the service-level requirements that are specific to the IIS.

What are some general considerations about service levels and metrics to keep in mind?

- IIS should define their business needs. Don't ask for more than you need.
- Higher/more service levels translate directly into increased cost.
- Keep your metrics S.M.A.R.T = Specific, Measurable, Achievable, Relevant, and Timely.
- Specificity in measurement of time periods, methods, and reporting is very important for the goal in the long run but may be costly, difficult, and tedious in the short run.
- Service-level performance reports should be monthly—to correspond to timing of invoices and sign-off from the IIS that expectations were met.

Examples of Service Levels and Measurement Considerations

Each measurement should specify the time period over which it is measured (e.g., monthly), the method of reporting, and roles and responsibilities for identification, prioritization, escalation, and resolution of issues.

- Availability: System must be available at least [99.x%] of the time. Define "system" (consider specific requirements for data exchange), working hours, extended hours, and scheduled down time.
- Response (Tier 1 help desk): methods of response (e.g., calls, chat, email); [%] calls dropped, [%] calls resolved, [x] hours to respond to emails, etc.

- Response Time (Tier 2/3 help desk): Based on the urgency/criticality/severity/frequency of the request, response occurs within [x] minutes/hours. Define “urgency/criticality/severity/frequency” specifically.
- Response time (application): [x] seconds of receipt of HL7 request to time response sent.
- Backup: Application is fully functional within [x] hours/days of disruption (recovery point objective).
- Recovery: Backups must occur at least every [x] hours/days (recovery time objective).

Until recently, the primary potential consequence of not meeting a performance expectation was stipulated by a general contract-termination clause. The termination clause may have been buried deep in the boilerplate of the general contract. More recently, some RFPs or contract renewals have included specific provisions concerning service-level expectations, including consequences for not meeting a service-level expectation. The specific consequences almost always include notice and an opportunity to correct. Some agreements allow a percentage of payment (10-15%) to be withheld from a monthly payment if expectations are not met. On the other hand, some jurisdictions do not allow a “hold back,” and some IIS feel that it is better to work together with the vendor to resolve issues and counterproductive to have monetary penalties. Since so many states are in consortiums now, a monetary penalty from one state could adversely affect other states. Monetary penalties probably will never compensate for a loss to the jurisdiction, so the best outcome may be to encourage consistently working together so that the problem can be identified and addressed early (before it becomes a major issue) and the vendor can earn back any withheld amount. Large penalties may also result in the vendor charging higher fees to compensate for the risk of incurring a penalty. Consequences should never be used unless the performance is in the control of the vendor. Open communications among all parties is key.

Conclusions and Recommendations

Service-level agreements are important for both the IIS and any service vendor. Agreeing on and documenting definitions, expectations, roles, and responsibilities can minimize misunderstandings and miscommunications. There are no standard definitions of service-level expectations or what should be included in a service-level agreement in the IIS community. Future steps to address this wide variation in practices could include:

- Additional research to gather examples of documentation of service-level expectations, including cloud service providers
- Additional research to identify potential best practices for documenting service-level expectations
- Convening one or more focus groups to identify current practices and best practices and develop templates for documenting service-level expectations
- Including many different stakeholders who would have valuable insights:
    - IIS managers
    - Immunization program managers
    - IIS vendors, including IIS vendors and third-party cloud service providers
    - Jurisdiction central IT and informatics leadership
    - Jurisdiction procurement
    - Jurisdiction legal and privacy staff

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