



AIRA
AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION

AIRA Discovery Session

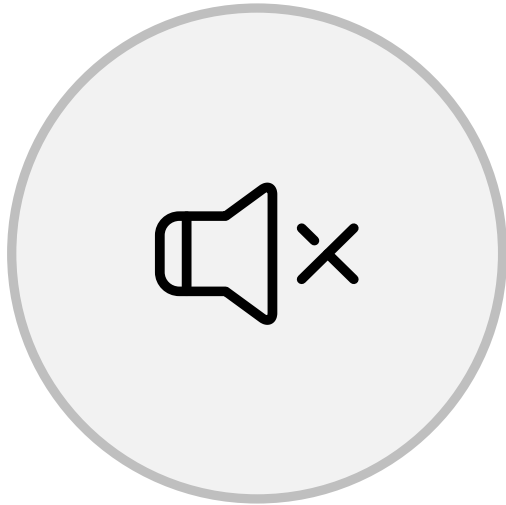
Considerations when Documenting IIS Service Level Expectations

May 30, 2019

4pm ET



Welcome



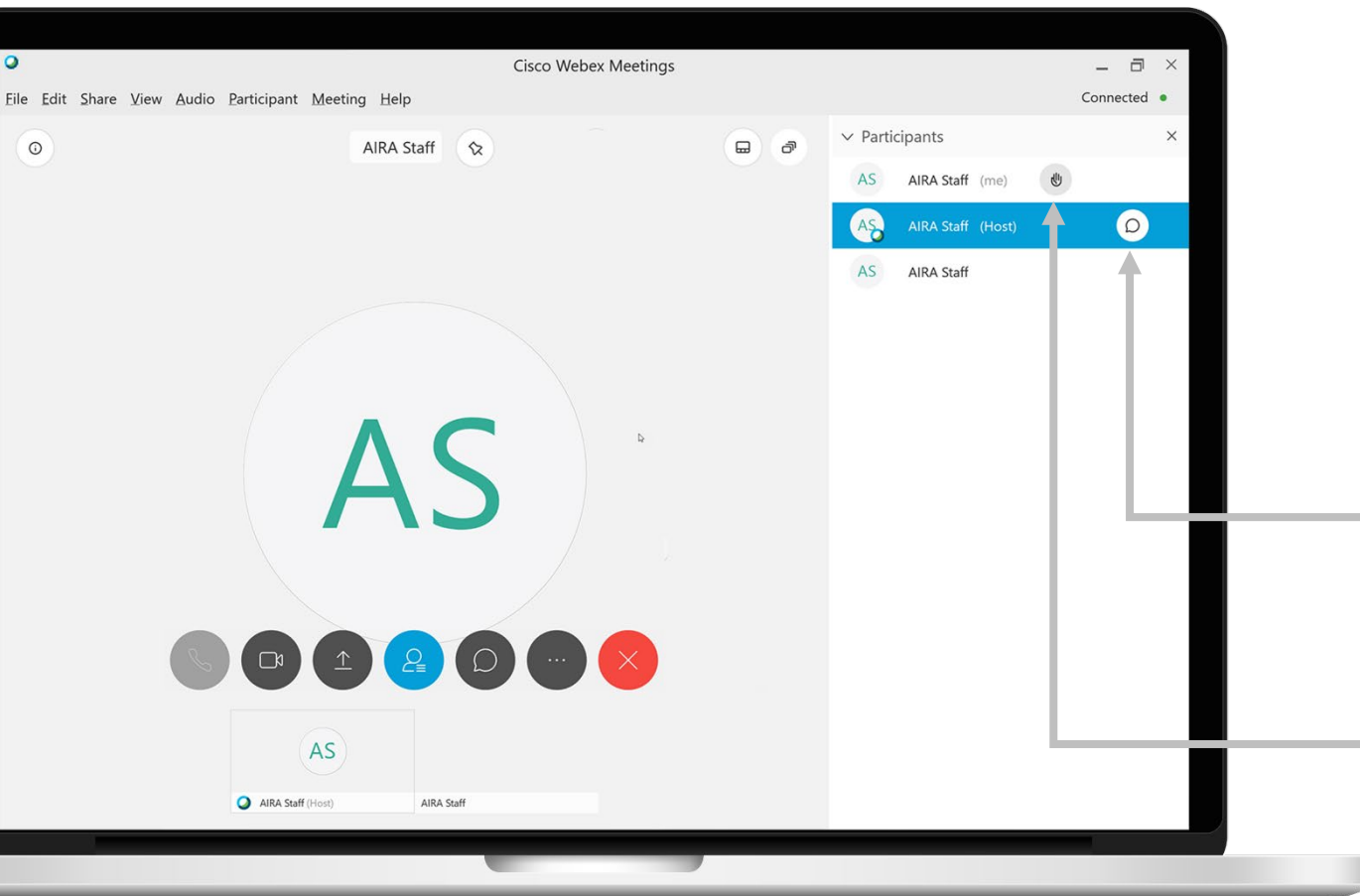
All phone lines
are muted



This meeting is being recorded
and will be posted on the
AIRA repository

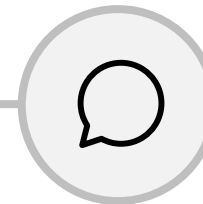


Welcome

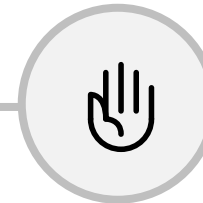


How do I ask a question?

- There will be time allotted for Q&A following the presentation, to unmute your line **press *6**
- Via WebEx:



Select the chat icon next to the host and type question into the chat box.



Select the hand icon next to your name and you will be called on.





Today's Topic

- Increase understanding throughout the IIS community around documentation of services to support IIS
- Questions, Comments, Discussion



Press *6 to unmute your line





Today's Speaker

- Elaine Lowery, JD, MSPH, Public Health Consultant, AIRA



Press *6 to unmute your line



Considerations when Drafting Documentation for Services

Elaine Lowery



What is the purpose of this webinar?

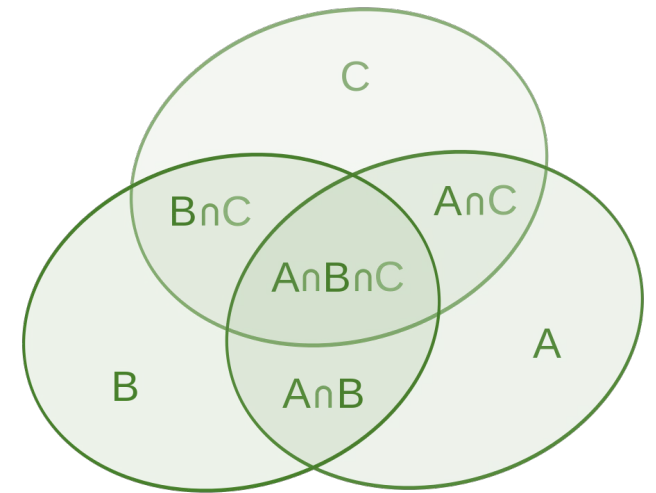
- Purpose:
 - To increase awareness around documentation of expectations for delivery and acceptance of services that support IIS
 - To position the IIS community to improve documentation of service expectations
- Services include all activities that support an IIS
- Services to support an IIS can be performed by jurisdiction's central IT or an outside vendor, or both





What is the scope for this webinar?

- Service level expectations and agreements could/should be used to document provision of all services used by an IIS
- Focus for the webinar: hosting, development, maintenance and help desk for an IIS application
- Excluded from the webinar: security and confidentiality requirements





How did we prepare the content for this webinar?



- Methodology
 - Community survey with request for material
 - Confidential interviews with 3 IIS vendors and 3 IIS Programs
 - Interviews with the Public Health Informatics Institute (PHII) and AIRA staff



What does the term “service level agreement” mean?

- Ideally—a single contract specifying
 - responsibilities of a service provider in providing a service
 - responsibilities of the IIS in receiving a service
 - responsibilities of other entities, such as central IT
 - levels of service expected
 - metrics
 - consequences if service levels are not met
- IIS community—typically uses the term “service level agreement” to refer to levels of service expected
 - responsibilities of the parties, metrics and consequences are loosely defined, if at all



How are service level expectations, metrics, responsibilities and consequences documented?

- Ideally—one document
- In real life—many documents or not at all
 - Request for proposal (RFP)—
 - Includes statement of objectives, performance work statement or scope of work
 - May include a requirement that the vendor and IIS negotiate and execute more detailed agreements, such as a support and maintenance agreement
 - Supplement/annex specific to service level measures and metrics
 - Separate formal service level contract





Why is it important to have documentation of all aspects of service performance?

- Multiple entities may be involved:
- Each of the parties will have responsibilities
- Documentation protects everyone from misunderstandings





What are more specific examples of services to develop, host and maintain an IIS?

- Hosting—servers and operating system maintenance
 - Development
 - Production
 - Non-production (training, testing, data warehouse)
 - User Acceptance Testing (UAT) environment
 - Report environment
 - HL7 onboarding QA/Staging
 - Training
 - Disaster recovery---Backup and recovery
- IIS application software maintenance—including Tier 2 and 3 help desk
- IIS application software development
- End user help desk (Tier 1)
- Informational website



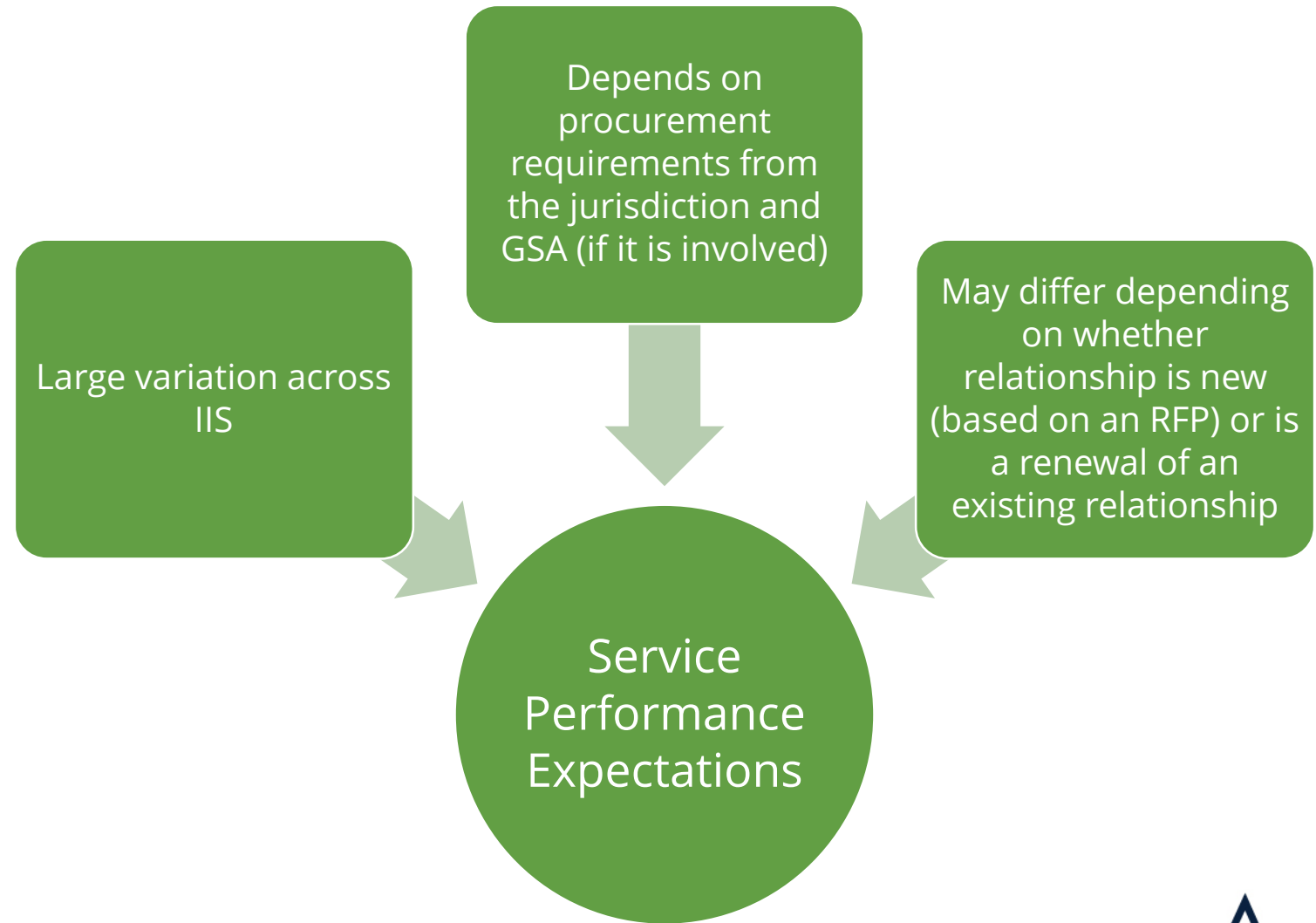


What do we mean by service provider?

- Hosting
 - Jurisdiction information technology department ("Central IT")
 - IIS vendor/implementer (directly by vendor/implementer or through third party/cloud)
 - Third party/cloud
- IIS application support and development
 - Jurisdiction personnel
 - IIS vendor/implementer
- Help desk
 - Tier 1—Jurisdiction personnel
 - Tier 2—IIS vendor/ implementer and/or central IT



Who drafts documentation of service performance expectations?






Who negotiates documentation of service performance expectations on behalf of the IIS?

- Variation in who is involved and the extent of the involvement
- Procurement usually determines general contract provisions
 - Term (usually 3-5 years), termination, reporting, invoicing
- Central IT is usually involved with hosting services to ensure compliance with jurisdiction security, privacy and confidentiality requirements
- Immunization program manager may or may not be involved
- IIS manager may or may not be involved

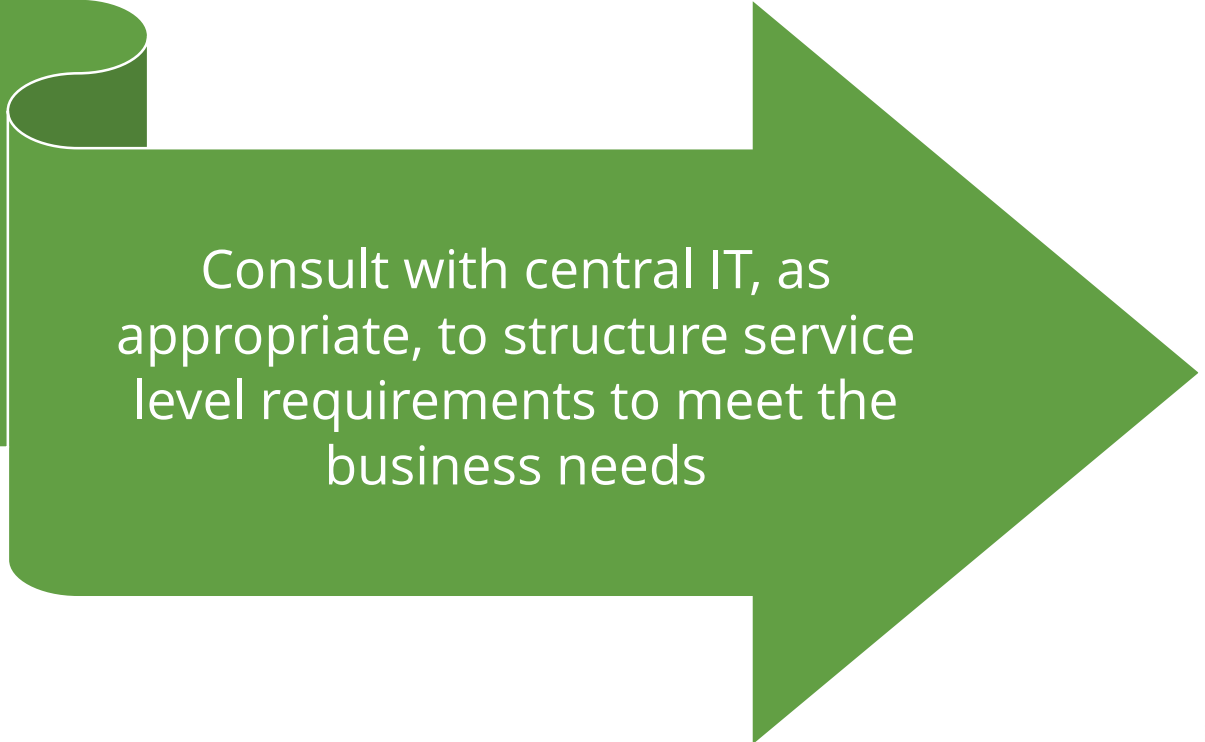




How should service level expectations be determined?



IIS and Immunization Program Manager should analyze the business needs of the IIS and structure service level requirements to meet those needs



Consult with central IT, as appropriate, to structure service level requirements to meet the business needs





How do RFP and contract renewal/modifications differ?

- RFP: Jurisdiction procurement policies determine what is required in an RFP
 - Broad requirements, with specifics established after contract award between the IIS and vendor
 - Specific requirements, with the vendor required to accept an attached contract—No ability to negotiate
- Contract renewal/modification
 - Often more ability for the IIS to negotiate directly with the vendor



Who is the customer?



- Regardless of who negotiates documentation, there is variation in who “owns” a service agreement with an outside vendor
 - **Option 1:** Central IT “owns” agreements with outside vendors for IT services and is the primary point of contact with the vendors
 - **Option 2:** The Immunization Program/IIS “owns” agreements with outside vendors related to the IIS application and is the primary point of contact with the vendors





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

IIS should define its business needs—don't ask for more than you need

Keep your metrics S.M.A.R.T = Specific, Measurable, Achievable, Relevant and Timely

Higher/more service levels translate directly into increased cost

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

Report of results of service level performance should be monthly—to correspond to timing of invoices





What are broad examples of service levels?

Availability	• System must be available at least [99.x%] of the time
Response Time - (Tier 1 help desk)	• [x%] calls abandoned; [x%] calls resolved; [x%] calls answered within [x] minutes
Response Time - (Tier 2/3 help desk)	• Based on the criticality/severity/frequency of the request, response will occur within [x] minutes/hours
Response time (application)	• [x] seconds
Backup	• [x] hours/days (Recovery Point Objective)
Recovery	• [x] hours/days (Recovery Time Objective)





What are specific examples of availability?

Category	Service Level Examples	Frequency of Measurement	Method of Measurement
Availability	Working Hours: The application will be available 99.x% of the time [during the hours 6:00 AM through 7:00 PM local time at the IIS Monday to Friday] OR [24/7]	Over a month/quarter	[Third party tools and methods TBD]
	Extended Hours: The application will be available 99.x% of the time [during the hours 7:01 PM to 5:59 AM local time at the IIS Monday to Friday] OR [24/7]	Over a month/quarter	[Third party tools and methods TBD]





What do more 'nines' actually mean?

Availability	Downtime per Year (365 days & 24 hour cycle)
99.9999%	32 Seconds
99.999%	5 minutes, 15 seconds
99.99%	52 minutes, 36 seconds
99.95%	4 hours, 23 minutes
99.9%	8 hours, 46 minutes
99.5%	1 day, 19 hours, 48 minutes
99%	3 days, 15 hours, 40 minutes





What are examples of Tier 1 (end user) help desk service level expectations?

- Standard Tier 1 support: During normal working hours (Monday to Friday from 7:00 AM to 6:00 PM local time at the IIS, excluding holidays recognized by the IIS)
- Response to help desk telephone call (average over a calendar month, based on an agreed upon measurement method)
 - Average speed to answer call ≤ 20 seconds
 - Call abandonment rate $\leq 5\%$
 - First call resolution $\geq 75\%$





Examples of Tier 1 (end user) help desk service level expectations (cont.)

- Response to other correspondence (average over a calendar month based on an agreed upon measurement method)
 - Email = < 24 hours
 - Fax = < 24 hours
 - Chat = < 1 minute
- Extended Tier 1 support: 24/7/365?
 - If the application is hosted by vendor as a part of the hosting service, extended Tier 1 is provided as part of the hosting service— if the IIS is not accessible to users OR does not accept/respond to an automatic query
 - If the application is not hosted by the vendor, extended support must be negotiated between the parties





What are examples of Tier 2/3 support level expectations?

Questions/issues from IIS/Central IT staff

Urgent: Resolution procedures are initiated within 15 minutes of notice from the IIS, Monday through Friday (7:00 AM to 6:00 PM local IIS time), excluding local holidays and within 2-4 hours at all other times

- Option 1—The response time target for resolution will be mutually developed at the time the problem is identified
- Option 2—The parties establish a set time frame for resolution

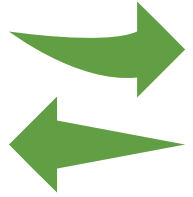
Non-urgent: Categorized by criticality/severity/frequency (high impact to low impact)

- Option 1—The response time target for resolution will be mutually developed at the time the problem is identified
- Option 2—The parties establish set time frames for % of issues in each severity category with resolution within [x] days/months





What are examples of response time service level expectations?



Response within [4] seconds to an HL7 query



Run time for a specific category of reports (AFIX/IQIP) or single report





What are examples of disaster recovery expectations?



Recovery Time Objective (RTO):

- Servers must be back online and available within [6] [24] hours.



Recovery Point Objective (RPO):

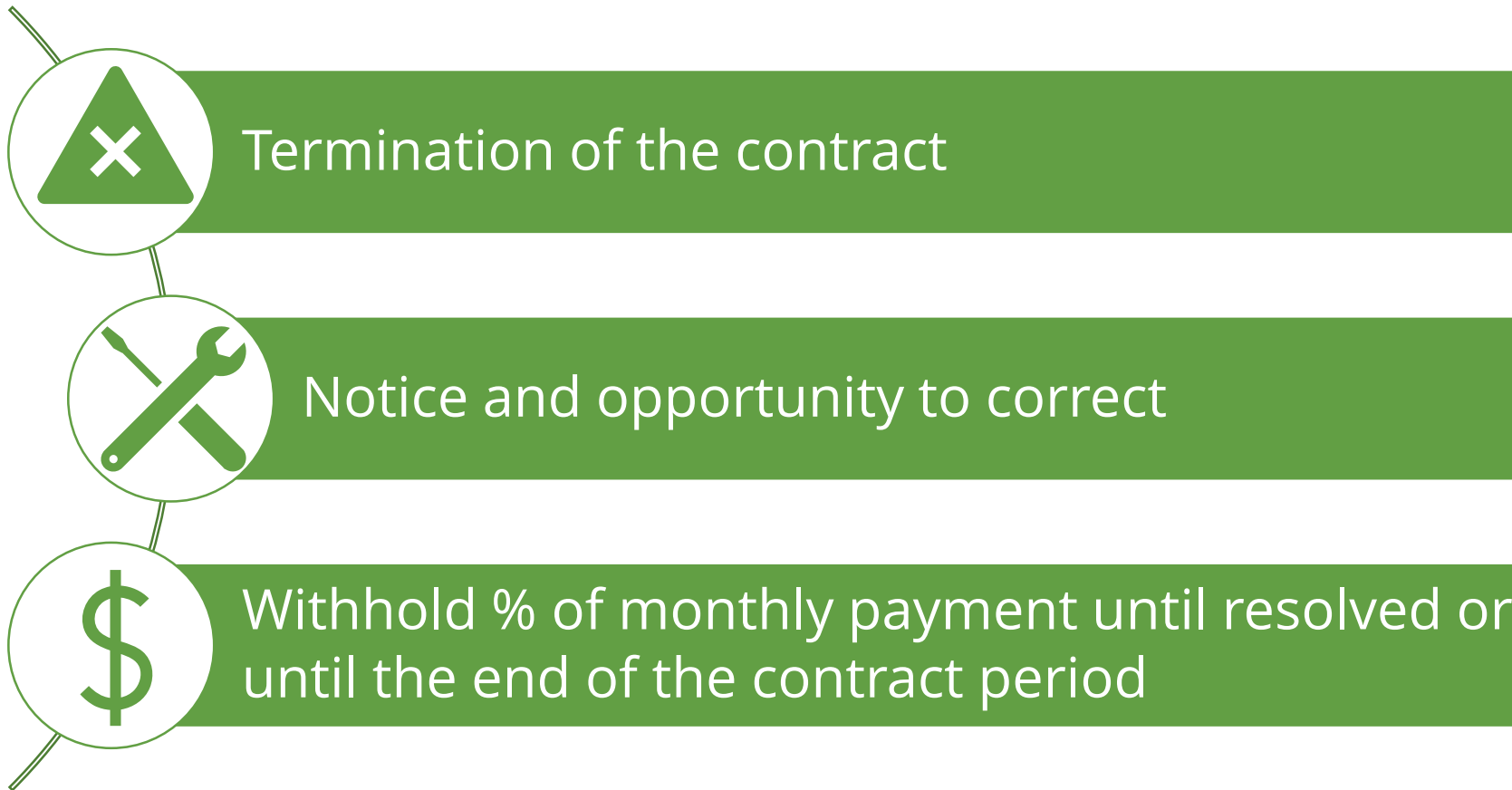
- [1] hour is the maximum amount of data that can be lost



Annual test



What are consequences for not meeting a service performance expectation?





What else should be documented?

Detailed description of service expected

Detailed metrics and methods by which the services are measured

Reporting/Escalation requirements

Roles and responsibilities of each party

Payment provisions

Consequences if the service requirements are not met

Dispute resolution process

Security, privacy and confidentiality provisions

Breach notification provisions

Update mechanism



What are next steps?

AIRA is going to continue to work with the community, including CDC, PHII, IIS and Immunization Programs, to define future work, which could include:

- A more formal discussion with the migration project within the TA Collaborative (CDC, PHII, and AIRA) to explore how to address IIS programs' most pressing needs
- A needs assessment/survey to more comprehensively assess gaps in information and knowledge about SLAs
- User groups to discuss SLA development
- Development of a set of sample/template SLAs to use as a starting point
 - Similar to standard requirements



References

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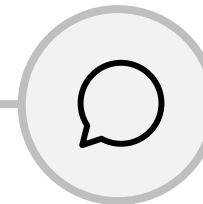
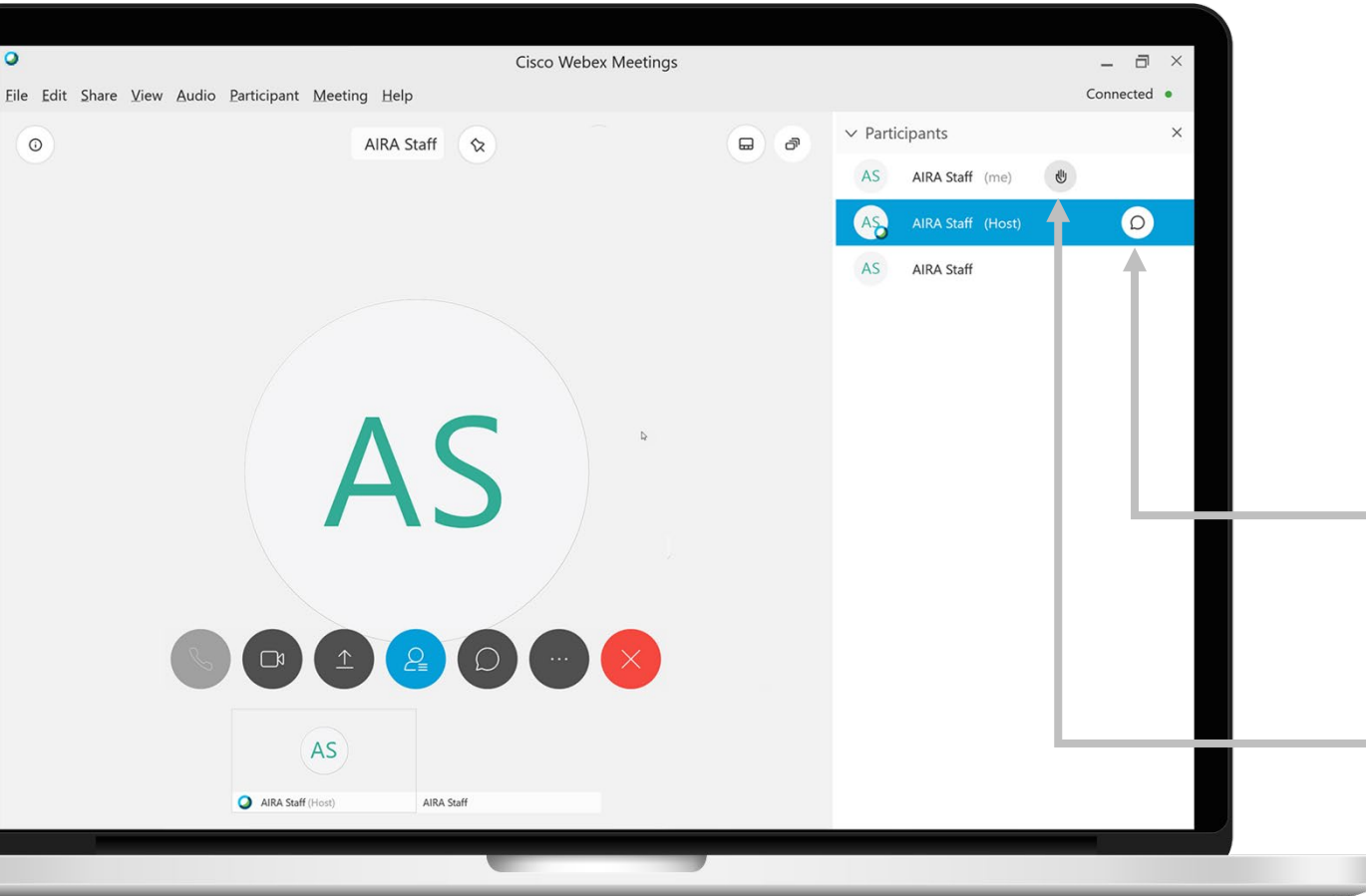
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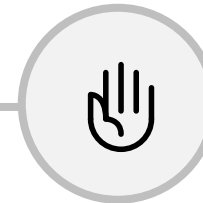
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Thank you to our presenters, and
thanks to all of you for joining us!

A brief evaluation survey will be sent out
following this webinar

The next Discovery Session will be June 24th at
4pm ET

