

DH-24-0007 Attachment 1

2.1 INTRODUCTION

The integration of ELRs, Syndromic Surveillance data and eCRs into a surveillance for disease monitoring, case management system which provides integral notification to the CDC requires additional FTEs to onboard healthcare providers and hospitals, including providing information to support the receipt of electronic reportable disease information via ELRs, Syndromic Surveillance, cancer, immunizations, etc., and to implement eCR using HL7 (Health Level 7) eCR standards and APHL AIMS (Association of Public Health Laboratories Informatics Messaging Services). This is a very specialized skill and is required to meet the grant requirements for the Epidemiology and Lab Capacity (ELC) and Public Health Infrastructure/Workforce (PHIG) grants. Personnel are also required to develop routes within a new Rhapsody engine to process ELR, Syndromic Surveillance, Cancer, and other Reportable disease results. They are needed to ensure the quality and continuity of the data for all reportable diseases and maintenance and development of a new Rhapsody engine. The Interoperability Department is functioning on an 8-year-old Rhapsody engine which is unable to handle the expected increase and size of the reportable disease information being accepted by ADH. The contractor will identify and resolve issues with the current Rhapsody engine which has delayed completion of the development of the new Rhapsody engine.

2.2 MINIMUM QUALIFICATIONS

- A. There are 4 separate sets of Scopes of Work, Project Milestones and Minimum Vendor Qualifications within this document, one set for each of the following:
 1. Senior Consultant (FTE – 1)
 2. Onboarding Specialist (FTE – 1.5)
 3. Senior Rhapsody Specialists (FTE – 3)
 4. Senior Consultant eCR and eICR Onboarding Specialist (FTE - 1)
- B. The successful bidder must be able to provide personnel to be fully operational for all 5 of these scopes of Work simultaneously within 30 days of the contract's start date.
- C. The successful bidder is to provide all needed equipment including, and not limited to Laptop, cameras, microphones, ability to complete videoconferencing, ability to VPN into ADH environment, etc. Personnel shall be available for live Team or Zoom meetings between the hours of 7:00am -5:00pm central time Monday through Friday.
- D. The successful bidder personnel shall be able to provide support to ADH in real time and all work will be completed between the hours of 7:00am -5:00pm central time Monday through Friday. There may be potential work required outside of this time frame on an as needed basis that is pre-approved by ADH.
- E. Because of the required work schedule and other concerns all persons shall be physically located within the United States of America while performing billable hour work under the contract.
- F. A maximum of \$56,000 annually will be budgeted for reimbursable expenses for up to 4 trips per contractor at a cost up to \$2,000 per trip. Prior approval will be required.

2.3 SCOPE OF WORK

2.3.1 Senior Consultant (FTE - 1) Will perform the following onboarding and training tasks for ADH under this SOW:

A. Scope Of Work:

1. Onboarding of Electronic Lab Reporting
 - a. Coordinate with ADH Interoperability Team on Laboratory onboarding process for reportable diseases for electronic reporting through Rhapsody.
 - b. Coordinate with ADH Interoperability Team on onboarding and other activities involving all reportable diseases for ELRs, cancer, and syndromic surveillance.
 - c. Must demonstrate 2 years' experience shepherding the National Electronic Disease Surveillance System (NEDSS) activities as it relates to reportable diseases, evaluate the current system and be able to compare current to new versions of NBS.
 - d. Must demonstrate 5 years' experience with data processing through eHARS, PRISM, and other systems for data analysis and reporting purposes.
 - e. Provide integration services in support of approved projects.
 - f. Must demonstrate 5 years' experience in onboarding facilities, hospitals, and laboratories to improve quality and timeliness and to evaluate HL7 messages for missing/incorrect data for all reportable diseases.
 - g. Must demonstrate 5 years' experience in onboarding facilities, hospitals, and laboratories to improve quality and timeliness and to evaluate syndromic surveillance, cancer and other HL7 messages for missing/incorrect data for all reportable diseases.
 - h. Must demonstrate 5 years' experience in assisting with analyzing HL7 messages through eHARS, PRISM, and other systems for data analysis and reporting purposes.
 - i. Must demonstrate 5 years' experience onboarding facilities, hospitals and laboratories reporting electronic laboratory data, and experience, analyzing and improving data quality.
2. Supporting and Training of ADH Staff
 - a. Must demonstrate 5 years' experience in developing protocols, processes, and onboarding procedures for electronic lab and syndromic surveillance disease reporting for 2 prior public health agencies.
 - b. Train ADH Interoperability team on creation and execution of SQL and other queries.
 - c. In conjunction with ADH Interoperability team, assess, troubleshoot, and optimize existing interfaces and onboarding processes as requested.
 - d. Support ADH Interoperability team during NIST validation and onboarding processes and coordinate between ADH and reporting facilities.
 - e. Must demonstrate 5 years' experience in NIST validation and onboarding processes for HL7 messages for all reportable diseases.
3. CDC Reporting and Database Management
 - a. Must demonstrate 5 years' experience in creation and execution of SQL and other queries to provide reports on data.
 - b. Support and maintain database and information for all reportable diseases, data visualizations created in PHP.
 - c. Coordinate with Rhapsody Specialists and Onboarding personnel to ensure databases and routes are updated as needed.
 - d. Must demonstrate 5 years' experience with reviewing and analyzing HL7 messages from hospitals, laboratories, and facilities, coordinating with at least 2 departments of health

- to evaluate missing data and other discrepancies.
 - e. Work on PHP based dashboard, directing migration towards other reporting software.
 - f. Adhere to established change control procedures, developing, and using standard reporting tools and documentation repository.
4. Provide Technical Expertise and Assistance
 - a. Coordinate with ADH Interoperability team to assess current status of all reportable disease reporting systems.
 - b. Summarize findings of assessment and communicate recommendations to the ADH Interoperability team.
 - c. Must demonstrate 5 years' experience implementing recommendations to improve accuracy and timeliness for all reportable disease reporting systems.
 5. Other Tasks/Weekly Reporting
 - a. Under the direction of ADH Interoperability team, complete additional tasks/assignments associated with the scope of work as needed.
 - b. Submit weekly reports detailing tasks/assignments and a summary of the status of project deliverables by close of business each Monday for the prior week.
 - c. Complete other reportable disease-related tasks as assigned.
 - d. Provide routine integration and onboarding assistance as requested.
 - e. Assess, troubleshoot, and optimize existing onboarding, HL7 messages, and processes as requested.
 - f. Provide integration services and reporting methodologies in support of approved projects.
 - g. Provide other onboarding services and reporting methodologies as requested.
 - h. Other assignments as needed.
- B. Project Milestones
1. Short-term Outcomes
 - a. Increase the number of third-party facilities, laboratories, and hospitals actively reporting and/or able to submit all reportable disease specimen reports to ADH pursuant to volume.
 - b. Reduce the number of facilities, laboratories, and hospitals faxing all reportable disease reports to ADH.
 - c. Improve data quality and timely reporting by increasing the number of facilities, laboratories, and hospitals reporting electronically.
 - d. Train ADH Interoperability team to improve onboarding and interface processes to ADH Rhapsody systems, or other programs used for processing and/or reporting data.
 - e. Train ADH Interoperability team on reporting information to Centers for Disease Control and Prevention, and any other institutions.
 2. Intermediate Outcomes:
 - a. Decrease the time it takes HL7 messages from specimen collection to submitting their data, to initiating case investigation at ADH or other needed processes.
 - b. Decrease the number of incomplete specimen reports from third-party facilities, laboratories, and hospitals and improve data quality.
 - c. Increase internal capacity to improve onboarding and interface processes to ADH Rhapsody systems.
 - d. Increase the security of electronic laboratory data collection reporting using electronic data transfer mechanisms.

3. Long-Term Outcomes:
 - a. Improve the quality and timeliness of HL7 messages to enable ADH to rapidly identify and effectively mitigate reportable disease outbreaks in Arkansas.
 - b. Improve the quality and timeliness of HL7 messages to enable ADH Interoperability team to improve accuracy of the electronic reporting for all reportable diseases.
 - c. Ensure that state and local communities have timely and accurate reportable disease information to inform decision-makers to improve health quality.

- C. Minimum Vendor Qualifications.
 1. Must demonstrate 5 years of experience in coordinating with facilities to submit HL7 messages, validating electronic healthcare data to ensure data quality according to HL7 standards for all reportable diseases.
 2. Must demonstrate 5 years' experience in CDC reporting according to CDC requirements and coordinating with public health and CDC agencies to evaluate the results of Electronic Laboratory testing for all reportable diseases.
 3. Must demonstrate experience with a minimum of 2 prior onboarding projects evaluating HL7 messages with State Public Health agencies.
 4. Must demonstrate 5 years' experience in evaluating and improving ELRs, Syndromic Surveillance HL7 messages, and shepherding National Electronic Disease Surveillance System (NEDSS) activities as it relates to all reportable diseases, cancer, and syndromic surveillance data.
 5. Must demonstrate 5 years' experience in validating HL7 messages for NBS, eHARS, and PRISM systems for all reportable diseases.
 6. Must demonstrate 2 years' experience in validating HL7 messages through AIMS for all reportable diseases.
 7. Must demonstrate 5 years of experience in developing processes to accept and evaluate the ELR's and syndromic surveillance data and evaluate the results for errors for all reportable diseases.
 8. Must demonstrate 5 years of technical expertise in coordinating with facilities to evaluate and improve documentation for all reportable disease requirements according to HL7 and CDC guidelines.
 9. It is required that the Senior Consultant be fully operational within 30 days of awarding this contract.
 10. The Senior Consultant must demonstrate 5 years of experience with onboarding facilities, working with hospitals, clinics, or other Departments of Health, HL7 messages, and troubleshooting errors within messages.

2.3.2 Onboarding Specialists (FTE – 1.5) Will perform the following onboarding and training tasks for ADH under this SOW:

- A. Scope Of Work
 1. Onboarding of Electronic Lab Reporting
 - a. Coordinate with ADH Interoperability team to onboard facilities, laboratories, and hospitals to improve quality and timeliness and to evaluate syndromic surveillance, cancer and other HL7 messages for missing/incorrect data for all reportable diseases.
 - b. Must demonstrate 2 years' experience shepherding the National Electronic Disease Surveillance System (NEDSS) activities as it relates to reportable diseases as needed.

- c. Must demonstrate 5 years' experience in assisting with analyzing HL7 messages through eHARS, PRISM, and other systems for data analysis and reporting purposes.
 - d. Must demonstrate 5 years' experience onboarding facilities, laboratories, and hospitals reporting electronic laboratory data, analyzing, and improving data quality.
 - 2. Supporting ADH Staff
 - a. Must demonstrate 5 years' experience in developing protocols, processes, and onboarding procedures for electronic lab and syndromic surveillance disease reporting for 2 prior public health agencies.
 - b. In conjunction with ADH Interoperability team, assess, troubleshoot, and optimize existing interfaces as requested.
 - c. Must demonstrate 5 years' experience in NIST validation and onboarding processes for HL7 messages for all reportable diseases.
 - 3. CDC Reporting and Database Management
 - a. Must demonstrate 5 years' experience in creation and execution of SQL and other queries to provide reports on data as needed.
 - b. Must demonstrate 5 years' experience with reviewing and analyzing HL7 messages from facilities, laboratories, and hospitals, coordinating with at least 2 departments of health to evaluate missing data and other discrepancies.
 - c. Adhere to established change control procedures, utilizing standard reporting tools and documentation repository.
 - 4. Provide Technical Expertise and Assistance
 - a. Coordinate with ADH Interoperability team to assess current status of all reportable disease reporting systems.
 - b. Summarize findings of assessment and communicate recommendations to the ADH Interoperability team.
 - c. Must demonstrate 5 years' experience implementing recommendations to improve accuracy and timeliness for all reportable disease reporting systems.
 - 5. Other Tasks/Weekly Reporting
 - a. Under the direction of ADH Interoperability team, complete additional tasks/assignments associated with the scope of work as needed.
 - b. Submit weekly reports detailing tasks/assignments and a summary of the status of project deliverables by close of business each Monday for the prior week.
 - c. Complete other reportable disease-related tasks.
 - d. Provide routine integration and onboarding assistance as requested.
 - e. Assess, troubleshoot, and optimize existing onboarding processes and HL7 messages as requested.
 - f. Develop, test and document onboarding processes as requested.
 - g. Provide other onboarding services and reporting methodologies as requested.
 - h. Other assignments as needed.
- B. Project Milestones
1. Short-Term Outcomes:
 - a. Increase the number of third-party facilities, laboratories, and hospitals actively reporting and/or able to submit all reportable disease specimen reports to ADH pursuant to volume.
 - b. Reduce the number of facilities, laboratories, and hospitals faxing all reportable disease reports to ADH.
 - c. Improve data quality and timely reporting by increasing the number of facilities,

- laboratories, and hospitals reporting electronically.
 - d. If needed, train ADH Interoperability team to improve onboarding processes to ADH Rhapsody systems or other programs used for processing and/or reporting data.
 - e. In coordination with the ADH Interoperability team, identify and work to resolve issues associated with Rhapsody, eHARS, PRISM, NBS, or other systems.
 - f. Train ADH Interoperability team on reporting information to Centers for Disease Control and Prevention, and any other institutions.
2. Intermediate Outcomes:
- a. Decrease the time it takes HL7 messages from specimen collection to submitting their data, to initiate case investigation at ADH or other needed processes.
 - b. Decrease the number of incomplete specimen reports from third-party facilities, laboratories, and hospitals and improve data quality.
 - c. Increase internal capacity to improve onboarding processes to ADH Rhapsody systems.
 - d. Increase the security of electronic laboratory data collection reporting using electronic data transfer mechanisms.
3. Long-Term Outcomes:
- a. Improve the quality and timeliness of HL7 messages to enable ADH to rapidly identify and effectively mitigate reportable disease outbreaks in Arkansas.
 - b. Improve the quality and timeliness of HL7 messages to enable ADH Interoperability team to improve accuracy of the electronic reporting for all reportable diseases.
 - c. Ensure that state and local communities have timely and accurate reportable disease information to inform decision-makers to improve health quality.
- C. Minimum Vendor Qualifications.
- a. Must demonstrate 5 years of experience in coordinating with facilities to submit HL7 messages, validating electronic healthcare data to ensure data quality according to HL7 standards for all reportable diseases.
 - b. Must demonstrate 5 years' experience in CDC reporting according to CDC requirements and coordinating with public health and CDC agencies to evaluate the results of Electronic Laboratory testing for all reportable diseases.
 - c. Must demonstrate experience with a minimum of 2 prior onboarding projects evaluating HL7 messages with State Public Health agencies.
 - d. Must demonstrate 5 years' experience in evaluating and improving ELRs, Syndromic Surveillance HL7 messages, and shepherding National Electronic Disease Surveillance System (NEDSS) activities as it relates to all reportable diseases, cancer, and syndromic surveillance data.
 - e. Must demonstrate 5 years' experience in validating HL7 messages for NBS, eHARS, PRISM, and other reporting systems.
 - f. Must demonstrate 2 years' experience in validating HL7 messages through AIMS for all reportable diseases.
 - g. Must demonstrate 5 years' experience analyzing and identifying errors and/or missing data in HL7 messages.
 - h. Must demonstrate 5 years of technical expertise in all reportable disease requirements, validating HL7 messages for data formatting in accordance with the HL7 guidelines, and meeting CDC requirements.
 - i. Must demonstrate 5 years of technical expertise in coordinating with facilities to evaluate and improve documentation for all reportable disease requirements according to HL7 and CDC guidelines.

- j. It is required that the Onboarding Specialist be fully operational within 30 days of awarding this contract.
- k. The Onboarding Specialist must demonstrate 5 years of experience with onboarding facilities, working with hospitals, clinics, or other Departments of Health, HL7 messages, and troubleshooting errors within messages.

2.3.3 Senior Rhapsody Consultants (FTE – 3) Will perform the following onboarding and training tasks for ADH under this SOW:

A. Scope Of Work:

1. Provide Technical Expertise and Assistance
 - a. Must demonstrate 5 years' experience assisting with Rhapsody interface building, testing and implementation.
 - b. Must demonstrate 5 years' experience in building and testing all new Rhapsody interfaces according to best practices.
 - c. Must demonstrate 5 years' experience assessing the current status of reportable disease reporting systems and suggesting improvements to adhere to best practices and plan future enhancements.
 - d. Summarize findings of assessment and communicate recommendations to the ADH Interoperability team.
 - e. Deliverable: Document and provide recommendations to the ADH Interoperability team to analyze and implement improvement processes for reportable disease reporting systems.
2. Support and Training of ADH Staff
 - a. Train ADH Interoperability team on how to build, test and implement Rhapsody interface connections, routes and comm points.
 - b. Mentor ADH Meaningful Use team members as needed for routing and processes with Rhapsody, NBS, eHARS, PRISM, and other reporting systems.
3. CDC Reporting and Database Management
 - a. Must demonstrate 5 years' experience in creation and execution of SQL and other queries to provide reports on data as needed.
 - b. Analyze HL7 messages for validating and accuracy, coordinating with ADH Interoperability team to address missing data and other discrepancies.
 - c. Analyze, validate, and maintain data on reportable diseases to ensure data quality and completeness within databases of Rhapsody or other reporting systems.
4. Other Tasks/Weekly Reporting
 - a. Under the direction of ADH Interoperability team, complete additional tasks/assignments associated with the scope of work as needed.
 - b. Submit weekly reports detailing tasks/assignments and a summary of the status of project deliverables by close of business each Monday for the prior week.
 - c. Must demonstrate 5 years' experience with other reportable disease-related tasks for Rhapsody, NBS, eHARS, PRISM, or other reporting systems.
 - d. Must demonstrate 5 years' experience developing, analyzing, troubleshooting, and maintaining Rhapsody, NBS, eHARS, PRISM, or other reporting systems as requested.
 - e. Provide integration services in support of approved projects.
 - f. Other assignments as needed.

B. Project Milestones:

1. Short-Term Outcomes:

- a. Increase the number of third-party facilities, laboratories, and hospitals actively submitting and/or able to submit reportable diseases and electronic laboratory reports to ADH pursuant to volume through developing, analyzing, and improving routes, comm points, etc., within Rhapsody and other reporting systems used for processing and/or reporting data.
- b. Reduce the number of facilities, laboratories, and hospitals faxing reportable diseases and specimen reports to ADH by developing, analyzing, and improving Rhapsody and other reporting systems used for processing and/or reporting data.
- c. Improve data quality and timely reporting by increasing the number of facilities, laboratories, and hospitals reporting electronically to ADH by developing, analyzing, and improving Rhapsody, NBS, eHARS, PRISM, and other reporting systems.
- d. If needed, train ADH staff to conduct onboarding and interface processes for ADH Rhapsody, NBS, eHARS, PRISM, or other programs used for processing and/or reporting data.
- e. In coordination with the ADH Interoperability team, identify and work to resolve issues associated with incomplete/missing data, or evaluating routes for Rhapsody, NBS, eHARS, PRISM, or other reporting systems.

2. Intermediate Outcomes:

- a. Decrease the time an electronic lab report record takes from specimen collection to case investigation at ADH.
- b. Increase the number of complete reportable disease information from third-party facilities, laboratories, and hospitals.
- c. Increase internal capacity to perform onboarding and interface processes to ADH Rhapsody systems.
- d. Increase the proficiency and security of reportable disease collection using electronic data transfer mechanisms.

3. Long-Term Outcomes:

- a. Improve the quality and timeliness of HL7 messages to enable the ADH to rapidly identify and effectively mitigate reportable disease outbreaks in Arkansas.
- b. Improve the quality and timeliness of HL7 messages to enable the ADH Interoperability team to improve accuracy of the electronic reporting for all reportable diseases.
- c. To ensure that state and local communities have timely and accurate reportable disease information to inform decision-makers to improve health quality.
- d. Assist ADH staff to develop, analyze and update reportable disease systems to effectively maintain increased electronic reporting volume during reporting surges.

C. Minimum Vendor Qualifications.

1. Due to the complexity of the programming and routing needed with the Rhapsody engine to process all reportable disease information, Rhapsody certification is required. For the purpose of this request, Rhapsody Certification means completing the Rhapsody Integration training through the Rhapsody.Health (Lyniate) organization and providing the necessary certifications.
2. Must demonstrate 5 years of experience in developing, analyzing, and updating Rhapsody routes to validate HL7 messages and electronic laboratory results in accordance with HL7 guidelines for CDC reporting according to CDC requirements.
3. Must demonstrate successful completion of 2 prior projects with other State Public Health

agencies.

4. Must demonstrate 2 years' experience in validating HL7 messages for NBS, eHARS, and PRISM, and other reporting systems to validate HL7 messages and electronic laboratory results in accordance with HL7 guidelines for CDC reporting according to CDC requirements.
5. Must demonstrate 5 years' experience in developing, analyzing, programming, updating and supportive maintenance of Rhapsody for all reportable diseases.
6. Must demonstrate 5 years' experience in managing ELR, Syndromic Surveillance, shepherding National Electronic Disease Surveillance System (NEDSS) activities as it relates to all reportable diseases, cancer, developing, analyzing, programming, and updating of a new Rhapsody engine, while maintaining the current Rhapsody engine.
7. Must demonstrate 5 years of experience in developing the routing and processes to accept and evaluate the ELR's and syndromic surveillance data to evaluate the results for errors.
8. Must demonstrate 5 years of experience with HL7 messages for reportable diseases and CDC requirements.
9. It is required that the Senior Rhapsody Consultant be fully operational within 30 days of awarding this contract.
10. The Senior Rhapsody Consultants must demonstrate a minimum of 5 years of experience with SQL, developing and analyzing and revising routes within Rhapsody, and troubleshooting errors within HL7 messages.
11. Must demonstrate 5 years' experience coordinating with hospitals, labs, AIMS, Office of Health Information Technology, etc., to conduct eCR and eICR onboarding processes for laboratory and testing facilities submitting reportable disease data for Arkansas residents.
12. Assess ADH onboarding processes and the Rhapsody routes to provide the ADH Interoperability team with recommendations to improve and expand onboarding and reporting processes for electronic data.
13. Produce reports and information using electronic data from reporting entities to the ADH Interoperability team according to the CDC guidelines.
14. Develop SQL queries for ADH Interoperability team as needed.

2.3.4. Senior Consultant eCR and eICR Onboarding Specialist (FTE – 1) Will perform the following onboarding and training tasks for ADH under this SOW:

A. Scope Of Work:

1. Onboarding of Electronic Case and Electronic Initial Case Reporting
 - a. Must demonstrate minimum of 1 year experience with receiving, processing and validating eCR and eICR data with hospitals, labs, AIMS, SHARE, and other reporting facilities.
 - b. Must demonstrate 1 year experience with validating eCR, eICR messages, the Laboratory onboarding process for all reportable diseases and electronic reporting to Rhapsody following CDC Guidelines.
 - c. Must demonstrate 1 years' experience in onboarding and other activities involved with eCR and eICR as it relates to reportable diseases.
2. Provide Technical Expertise and Assistance
 - a. Must demonstrate 1 year experience in defining/creating structure and architecture to normalize eCR and eICR to meet CDC and ADH requirements.
 - b. Must demonstrate 1 year experience in documenting the onboarding and validation process for eCR and eICR.
 - c. Must demonstrate 5 years' experience assessing the current status of reportable disease

- reporting systems and suggesting improvements to adhere to best practices and plan future enhancements.
- d. Summarize findings of assessment and communicate recommendations to the ADH Interoperability team.
 - e. Deliverable: Document and provide recommendations to the ADH Interoperability team to analyze and implement improvement processes for reportable disease reporting systems.
 - f. Must demonstrate 5 years' experience assisting with Rhapsody interface building, testing and implementation.
 - g. Must demonstrate 5 years' experience in building and testing all new Rhapsody interfaces according to best practices.
3. Support and Training of ADH Staff
 - a. Train ADH Interoperability team on how to build, test and implement Rhapsody interface connections, routes and comm points.
 - b. Mentor ADH Interoperability team members for routing and processes within Rhapsody, NBS, eHARS, and PRISM and other reporting systems as needed.
 4. CDC Reporting and Database Management
 - a. Coordinate with the ADH Interoperability team to finalize the reporting of accurate eCR and eICR data according to the CDC guidelines.
 - b. Must demonstrate 5 years' experience in creation and execution of SQL and other queries to provide reports on data as needed.
 - c. Analyze, validate, and maintain data on reportable diseases to ensure data quality and completeness within databases of Rhapsody or other reporting systems.
 - d. Analyze HL7 messages for validating and accuracy, coordinating with ADH Interoperability team to address missing data and other discrepancies.
 5. Other Tasks/Weekly Reporting
 - a. Submit weekly reports detailing tasks/assignments and status of project deliverables by each Monday for the previous week.
 - b. Provide integration services in support of approved projects.
 - c. Under the direction of ADH Interoperability team, complete additional tasks/assignments associated with the scope of work as needed.
 - d. Must demonstrate 5 years' experience with other reportable disease-related tasks for Rhapsody, NBS, eHARS, PRISM, or other reporting systems.
 - e. Must demonstrate 5 years' experience developing, analyzing, troubleshooting, and maintaining Rhapsody, NBS, eHARS, PRISM, or other reporting systems as requested.
 - f. Provide integration services in support of approved projects.
 - g. Other assignments as needed.
- B. Project Milestones:
1. Short-term Outcomes:
 - a. Increase the number of third-party facilities, laboratories, and hospitals actively submitting and/or able to submit reportable diseases and electronic laboratory reports to ADH pursuant to volume through developing, analyzing, and improving routes, comm points, etc., within Rhapsody and other reporting systems used for processing and/or reporting data.
 - b. Reduce the number of facilities, laboratories, and hospitals faxing reportable diseases and specimen reports to ADH by developing, analyzing, and improving Rhapsody and other reporting systems used for processing and/or reporting data.

- c. Improve data quality and timely reporting by increasing the number of facilities, laboratories, and hospitals reporting electronically to ADH by developing, analyzing, and improving Rhapsody, NBS, eHARS, PRISM, and other reporting systems.
 - d. If needed, train ADH staff to conduct onboarding and interface processes for ADH Rhapsody, NBS, eHARS, PRISM, or other reporting systems used for processing and/or reporting data.
 - e. In coordination with the ADH Interoperability team, identify and work to resolve issues associated with incomplete/missing data, or evaluating routes for Rhapsody, NBS, eHARS, PRISM, or other reporting systems.
2. Intermediate Outcomes:
- a. Decrease the time an electronic laboratory report and/or eCR takes from initiation to completion at ADH.
 - b. Decrease the number of incomplete eCRs from third-party facilities, laboratories, and hospitals.
 - c. Increase internal capacity to perform onboarding and interface processes using ADH Rhapsody, NBS, eHARS, PRISM, or other reporting systems.
 - d. Increase the security of eCR reporting using electronic data transfer mechanisms.
 - e. Increase the number of complete and accurate reportable disease information from third-party facilities, laboratories, and hospitals.
 - f. Increase the proficiency and security of reportable disease collection using ADH Rhapsody, NBS, eHARS, PRISM, or other electronic data transfer mechanisms.
3. Long-Term Outcomes:
- a. Improve the quality and timeliness of HL7 and eCR messages to enable the ADH to rapidly identify and effectively mitigate reportable disease outbreaks in Arkansas.
 - b. Improve the quality and timeliness of HL7 and eCR messages to enable the ADH Interoperability team to improve accuracy of the electronic reporting for all reportable diseases.
 - c. Ensure that state and local communities have timely and accurate reportable disease information to inform decision-makers to improve health quality.
 - d. Assist ADH staff to develop, analyze and update reportable disease systems to effectively maintain increased electronic reporting volume during reporting surges.
- C. Minimum Vendor Qualifications.
- 1. Due to the complexity of the programming and routing needed with the Rhapsody engine to process all reportable disease information, Rhapsody certification is required. For the purpose of this document, Rhapsody Certification means completing the Rhapsody Integration training through the Rhapsody.Health (Lyniate) organization and providing the necessary certifications.
 - 2. Must demonstrate 5 years of experience in developing, analyzing, and updating Rhapsody routes to validate HL7 and 2 years' experience in eCR messages and electronic laboratory results in accordance with HL7 guidelines for CDC reporting according to CDC requirements.
 - 3. Must demonstrate 2 years' experience in validating HL7 messages for NBS, eHARS, and PRISM, and other reporting systems to validate HL7 messages and electronic laboratory results in accordance with HL7 guidelines for CDC reporting according to CDC requirements.
 - 4. Must demonstrate completion of 2 prior projects with other State Public Health agencies.
 - 5. Must demonstrate 5 years' experience in managing ELR, Syndromic Surveillance, shepherding National Electronic Disease Surveillance System (NEDSS) activities as it relates to all reportable diseases, Cancer, developing, analyzing, programming, and updating of a

- new Rhapsody engine, while maintaining the current Rhapsody engine.
6. Must demonstrate 5 years of experience in developing the routing and processes to accept and evaluate the ELR's and syndromic surveillance data to evaluate the results for errors.
 7. Must demonstrate 5 years' experience in developing, analyzing, programming, updating and supportive maintenance of Rhapsody for all reportable diseases.
 8. It is required that the Senior Consultant be fully operational within 30 days of awarding this contract.
 9. The Senior Consultant must demonstrate a minimum of 5 years' experience with HL7 messages, interface development, and troubleshooting errors within messages.
 10. The Senior Consultants must demonstrate a minimum of 5 years of experience with SQL, developing and analyzing and revising routes within Rhapsody, and troubleshooting errors within HL7 and eCR messages.
 11. Must demonstrate 5 years' experience coordinating with hospitals, labs, AIMS, Office of Health Information Technology, etc., to conduct eCR and eICR onboarding processes for laboratory and testing facilities submitting reportable disease data for Arkansas residents.
 12. Assess ADH onboarding processes and the Rhapsody routes to provide the ADH Interoperability team with recommendations to improve and expand onboarding and reporting processes for electronic data.
 13. Produce reports and information using electronic data from reporting entities to the ADH Interoperability team according to the CDC guidelines.
 14. Develop SQL queries for ADH Interoperability team as needed.