# Electronic Lab Reporting (ELR) Roadmap to Interoperability!

This checklist will prepare you to fulfill ELR interoperability with the Arkansas Department of Health (ADH) and begin the process of meeting requirements for Meaningful Use (MU).

Please contact ADH.ELR.MU@arkansas.gov for additional assistance.

| Step 1: Register Intent to submit ELR | | |
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| | Yes | Comments & Resources |
| Visit the Arkansas Department of Health (ADH) Meaningful Use Website and follow the On-Boarding Process. | ☐ | The ADH website is located at: ADH Meaningful Use Website |
| Register through the Meaningful Use Registration and Communication System (MURCS). | ☐ | The website where the registration system is located is: https://adhmurcs.arkansas.gov/meaningfuluse/ |
| Prior to registration, gather information on all data elements (see Provider Tip Sheet) in registration system. | ☐ | This following document provides a tip sheet on data elements in the registration system: Registration Tip Sheet |
| Add the Hospitals OID and CLIA in MURCS specific to the "assigning authority". | ☐ | An "Assigning Authority" is an organization that has assigned an identifier. The identifier can be a CLIA number, NPI number, OID number. |
| Step 2: Obtain Necessary Documentation for ELR Implementation | | |
| Download a free copy of HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health (US Realm). | ☐ | Available for Download through the Health Level 7 (HL7) website: https://www.hl7.org/implement/standards/product_brief.cfm?product_id=98 |
| Download the ADH Laboratory Reporting Requirements. | ☐ | Available for Download from the ADH Meaningful Use instructions: http://www.healthy.arkansas.gov/programsServices/MeaningfulUse/Documents/ADHELRFields.xlsx |
| Download the PHIN Standard Electronic Laboratory Reporting Message Guide. | ☐ | Available for Download from PHIN Guides Library: http://www.cdc.gov/phin/library/archive_2006/DRAFT_PHIN_ORU_ELR_v2.5.1_20061221.pdf |
| Step 3: Incorporate Standard Vocabulary | | |
| Map local codes to Logical Observation Identifiers Names and Codes (LOINC) for Lab Orders and Test Performed. | ☐ | Reference materials are available from the following websites: LOINC: http://loinc.org/ |

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| Map local codes to Systematized Nomenclatures to Medicine Clinical Terms (SNOMED CT) for Lab Results and Specimen Types. | ☐ | SNOMED-CT: https://www.nlm.nih.gov/research/umls/Snomed/snomed_main.html |
| Map local codes to other codes according to the HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health (US Realm).<br><br>Eg. HL7 defined tables (race, ethnicity, gender, etc.) & UCUM (measurement units). | ☐ | SNOMED-CT TOOL: https://vtsl.vetmed.edu/terminologyMGt/RF2Browser/menu.cfm<br>Public Health Information Network Vocabulary Access Distribution System (VADS0 & Reportable Condition Mapping Table: https://phinvads.cdc.gov |

**Step 4: Develop ELR HL7 Version 2.5.1 Message for Public Health**

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| Develop HL7 message in conformance with the HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health (US Realm) and ADH ELR Implementation Guidelines. | ☐ | *Please Note: ADH does not have the capability to support the development of an HL7 2.5.1 message for individual health systems. Please review the above documentation or contact your EHR/EMR/HIS vendor for support.* |

**Step 5: Perform ELR Sending Facility Internal Pretest Message Validation**

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| Visit the Arkansas Department of Health (ADH) Meaningful Use Website and follow Step 2 of the On-Boarding Process and test ELR messages on national websites. | ☐ | The website is located at: ELR On-Boarding Process |
| Upload test validation report into MURCS to be placed into the validation queue. | ☐ | Upload test document to be placed in queue |

**Step 6: Set up Secure Message Transport with ADH**

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| Contact the MU program coordinator through the MURCS registration system. Test the secure connection with ADH. | ☐ | Set up a transport mechanism. Send an email to ADH.ELR.MU@arkansas.gov to request information on how to establish a data transport mechanism with ADH. |

**Step 7: Send a Test Message to ADH for initial Validation**

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| After sending an ELR HL7 version 2.5.1 message to ADH you will receive confirmation from the ADH MURCS system the test file was received. | ☐ | If the message passes initial validation, coordinate daily message transmissions to production.<br><br>If message does not pass initial validation, please continue message development and internal Pre-Test validation. |

**Step 8: Structure and Content Validation**

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| ADH will perform structure and content validation to ensure conformance to the HL7 | ☐ | ADH will notify the ELR sending facility during structure and content validation to discuss and resolve any discrepancies in messaging. |

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| Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health (US Realm) and ADH ELR Implementation Guidelines. | | If the ELR sending facility is non-responsive, the ELR sending facility may not fulfill the Meaningful Use Objective for ELR. |
| **Step 9: Parallel Data Validation by ADH** | | |
| ADH will perform data validation, comparing the electronic submissions against existing reporting structure (e.g. mail, phone or fax). | ☐ | ADH will notify the ELR sending facility during structure and content validation to discuss and resolve any discrepancies in messaging. |
| **Step 10: Discontinue Paper or Fax Submissions to ADH** | | |
| ADH transitions the facility reports to production surveillance systems. | ☐ | ADH utilizes different surveillance systems depending on disease category; therefore timelines for discontinuing current paper submissions may vary by disease. |
| Coordinate with the program coordinator through the MURCS system or by email to determine date to solely submit ELR. | ☐ | ADH and ELR Sending/Receiving facility will continue to perform continual quality control checks. |
| **You have achieved ELR Interoperability!** | | |