**APPENDIX C.1 - FADS REQUIREMENTS AND CHECKLIST**

HCA desires a Solution that leverages state-of-the art technology and enhances opportunities for fraud, waste, and abuse detection and prevention in Medicaid fee-for-service, managed care and long-term care services. The tables below list HCA’s requirements for a Fraud and Abuse Detection Solution (FADS). They are organized in the following Sections and Groups:

Section I – Mandatory FADS Solution and Contractor Requirements **(MR)**

The Bidder’s Proposed Solution must meet these mandatory requirements or the Bidder must agree to these requirements. ***If the Bidder’s Proposed Solution does not meet these requirements or the Bidder does not agree to the requirement, the Proposal will not be scored.***

1. General Solution Requirements
2. Integration Solution Requirements
3. Analytics Modeling and Algorithms Solution Requirements
4. User Documentation and Support Solution Requirements
5. Access/Display/Navigation Solution Requirements
6. Security and Public Records Solution Requirements
7. General Contractor Requirements
8. FADS Certification Contractor Requirements
9. Operations and Maintenance Contract Requirements

Note that some requirements have additional requirements identified in the “Solution Sub-Requirement” column.

Section II – Desired FADS Solution Requirements **(M)**

Each Desired requirement has been prioritized by HCA in the following manner:

* Desired – High: requirement is desired by the HCA and is highest priority of desired requirements.
* Desired – Medium: requirement is desired by the HCA and is medium priority of desired requirements.
* Desired – Low: requirement is desired by the HCA and is lowest priority of desired requirements.

1. General
2. Integration
3. Analytics Modeling and Algorithms
4. Reports and Alerts
5. User Documentation and Support
6. Access/Display/Navigation
7. Security and Public Records

Note that some requirements have additional requirements identified in the “Solution Sub-Requirement” column.

Bidder’s instructions to complete all FADS Solution Requirements Checklist:

| **No.** | **Priority** | ***Grouping***  **Solution Requirement** | ***Grouping***  **Solution Sub-Requirement** | **Bidder’s Solution Meets this Requirement? Y/N** | **Bidder’s Solution Meets this Requirement Via** |
| --- | --- | --- | --- | --- | --- |
| *X-#* | *XXXX* | *Sample Requirement* |  |  |  |

* In the column labled “Bidder’s Proposed Solution Meets this Requirement? Y/N”:
  + place a ‘Y’ for yes, if the Bidder’s Proposed Solution meets the requirement or sub-requirement; and then in the column labled “Bidder’s Solution Meets this Requirement Via,” use one of the following responses (below in bold) to indicate how the Bidder’s solution will meet this requirement:
    - **Core** – use if the Bidder’s Proposed Solution meets this requirement in its current offering as-is with little to no modification.
    - **Configuration –** use ifthe Bidder’s Proposed Solution meets this requirement or sub-requirement in its current offering with configuration applied.
    - **Custom –** useif the Bidder Proposed Solution to meets this requirement through custom development or through moderate or extensive modification to the solution.
    - **3rd Party**: use if the Bidder’s Proposed Solution will meet this requirement or sub-requirement through a relationship with another party (e.g., a Subcontractor, or other 3rd party).
  + or place an ‘N’ for no, if the Bidder’s Proposed Solution does not meet the requirement or sub-requirement.
* If a cell is grayed out, no response is required.

**Section I – Mandatory FADS Solution and Contractor Requirements (MR)**

1. **General Solution Requirements**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Priority** | **General**  **Solution Requirement** | **General**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| G-1 | Mandatory | The Solution shall be software-as-a-service (SaaS). |  |  |  |
| G-2 | Mandatory | The Solution shall have amodular approach (e.g. discrete functional modules, that can be enabled, disabled, or even removed and added from the solution). |  |  |  |
| G-3 | Mandatory | The Solution shall be in alignment with Medicaid Information Technology Architecture (MITA 3.0) framework (<https://www.medicaid.gov/medicaid/data-systems/medicaid-information-technology-architecture/medicaid-information-technology-architecture-framework/index.html>). |  |  |  |

1. **Integration Solution Requirements**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Priority** | **Integration**  **Solution Requirement** | **Integration**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| INT-1 | Mandatory | The Solution shall use the HCA directed data source, which at this time is HCA’s Enterprise Data Warehouse, an Amazon Redshift cluster hosted in the HCA AWS environment. |  |  |  |
| INT-2 | Mandatory | The Solution shall integrate with HCA PI’s Case Management solution, ServiceNow. |  |  |  |
| INT-3 | Mandatory | The Solution shall be able to connect to multiple databases, for example Department of Social and Health Service’s (DSHS’s) Social Service Payment System (SSPS) database. |  |  |  |

1. **Analytics Modeling and Algorithm Solution Requirements**

| **No.** | **Priority** | **Analytics Modeling and Algorithms**  **Solution Requirement** | **Analytics Modeling and Algorithms**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| --- | --- | --- | --- | --- | --- |
| A-1 | Mandatory | The Solution shall support HCA’s Program Integrity to run models, including but not limited to: |  |  |  |
| A-1.1 | Mandatory |  | utilization comparisons between providers or managed care entities (MCEs) and their peer groups. |  |  |
| A-1.2 | Mandatory |  | billing spikes. |  |  |
| A-1.3 | Mandatory |  | user customized models. |  |  |
| A-2 | Mandatory | The Solution shall provide supervised modeling. |  |  |  |
| A-3 | Mandatory | The Solution shall provide unsupervised modeling, utilizing at least one of the below: |  |  |  |
| A-3.1 | Desirable – high |  | Link analysis to find relationships between clients, billing providers and/or referring/prescribing providers. |  |  |
| A-3.2 | Desirable – high |  | Provider billing number rotations. |  |  |
| A-3.3 | Desirable – high |  | Sharing “rings”. |  |  |
| A-4 | Mandatory | The Solution shall be able to create custom algorithms, including HCA’s current algorithms. |  |  |  |

1. **User Documentation and Support Solution Requirements**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Priority** | **User Documentation and Support**  **Solution Requirement** | **User Documentation and Support**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| U-1 |  | The Solution’s System Documentation shall, at a minimum, include: |  |  |  |
| U-1.1 | Mandatory |  | a narrative overview of the entire Solution. |  |  |
| U-1.2 | Mandatory |  | data dictionary content and usage. |  |  |

1. **Access/Display/Navigation Solution Requirements**

| **No.** | **Priority** | **Access/Display/Navigation**  **Solution Requirement** | **Access/Display/Navigation**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| --- | --- | --- | --- | --- | --- |
| ADN-1 | Mandatory | The Solution’s user interface shall comply with recognized usability standards (e.g., the American Disabilities Act (ADA), Older Americans Act, the Rehabilitation Act Section 508 Subpart B Section 1194.21). |  |  |  |
| ADN-2 | Mandatory | The Solution’s user interfaces shall be fully compatible with HCA’s standard desktop operating system, Windows 10 |  |  |  |
| ADN-3 | Mandatory | The Solution’s user interfaces shall be fully compatible with at least a minimum of one of HCA’s standard web browsers: |  |  |  |
| ADN-3.1 | Desirable – high |  | Microsoft Edge latest version. |  |  |
| ADN-3.2 | Desirable – high |  | Google Chrome latest version. |  |  |
| ADN – 3.3 | Desirable – high |  | Mozilla Firefox latest version. |  |  |

1. **Security and Public Records Solution Requirements**

| **No.** | **Priority** | **Security & Public Records**  **Solution Requirement** | **Security & Public Records**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| --- | --- | --- | --- | --- | --- |
| S-1 | Mandatory | The Solution shall meet the security requirements for handling up to category 4 data in accordance with the Washington State Office Chief Information Officer (OCIO) policy 141.10 (Appendix F). |  |  |  |
| S-2 | Mandatory | The Solution shall comply with the HIPAA privacy, security, and breach notification rules. |  |  |  |
| S-3 | Mandatory | The Solution shall comply with the state law: Public Records Act, RCW 42.56 (Appendix H) <https://app.leg.wa.gov/RCW/default.aspx?cite=42.56> |  |  |  |
| S-4 | Mandatory | The Solution shall comply with the state law: Preservation and Destruction of Public Records, RCW 40.14 (Appendix G) <https://app.leg.wa.gov/RCW/default.aspx?cite=40.14> |  |  |  |
| S-5 | Mandatory | The Solution shall comply with the state regulation: Imaging Systems, Standards For Accuracy And Durability, WAC 434-663 <https://app.leg.wa.gov/WAC/default.aspx?dispo=true&cite=434-663&full=true#434-663-600> |  |  |  |
| S-6 | Mandatory | The Solution shall support role-based access. |  |  |  |
| S-7 | Mandatory | The Solution shall support multiple administrator roles to administer access to the software and administer content within the software. |  |  |  |
| S-8 | Mandatory | The Solution shall support customizable roles. |  |  |  |
| S-10 | Mandatory | The Solution, data, and all facilities and services provided to HCA will be located within the United States. Data cannot be moved offshore. |  |  |  |

Bidder’s instructions to complete the mandatory FADS Contractor Requirements of the Requirements Checklist: Where the Bidder, as the potential resulting Contractor, agrees to the requirement, the Bidder should place an ‘X’ in the “Bidder Agrees” column. Where the Bidder does not agree to a requirement, the Bidder should leave the “Bidder Agrees” column blank. Respond to the following requirements:

1. **General Contractor Requirements**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Priority** | **General Contractor Requirements** | **Bidder Agrees** |
| G-4 | Mandatory | The Contractor shall sign a HIPAA business Associate Agreement (BAA) (Appendix E.) |  |
| G-5 | Mandatory | The Contractor shall participate in all security reviews of all 3rd party integrations with the Solution. |  |
| G-6 | Mandatory | The Contractor shall allow HCA to oversee and govern access to, and use of, any Medicaid client related data that the Solution houses. |  |

1. **FADS Certification Contractor Requirements**

| **No.** | **Priority** | **FADS Certification Contractor Requirements** | **Bidder Agrees** |
| --- | --- | --- | --- |
| C-1 | Mandatory | The Contractor agrees to support successful CMS Certification through correct design, implementation, documentation and certification support and correction of problems/defects that prevent CMS Certification of the FADS System. |  |
| C-2 | Mandatory | The Contractor agrees to participate in certification planning activities. |  |
| C-3 | Mandatory | The Contractor agrees to participate in CMS certification reviews. |  |
| C-4 | Mandatory | Contractor agrees to maintain the System to the standards required by CMS (e.g., Standards and Conditions outlined in 42 CFR 433 Subpart C) and ensure that CMS Certification is maintained throughout the period of Operations and Maintenance of the System by Contractor in accordance with the Certification baseline and any new certification requirements or documentation. |  |

1. **Operation & Maintenance Contractor Requirements**

| **No.** | **Priority** | **Operation & Maintenance Contractor Requirements** | **Bidder Agrees** |
| --- | --- | --- | --- |
| O&M-1 | Mandatory | The Contractor agrees to assume responsibility for and keep up to date all licensing fees for any software required for the Contractor-installed Solution. |  |
| O&M-2 | Mandatory | The Contractor agrees to assume responsibility and keep up to date all upgrades and patches (within a timeframe to be determined by HCA) required for the Contractor-installed Solution. |  |
| O&M-3 | Mandatory | The Contractor agrees to adhere to HCA’s testing procedures and entrance/exit criteria for all changes introduced to the FADS during O&M (see SOW 3.0 for criteria information). |  |
| O&M-4 | Mandatory | The Contractor agrees to cooperate completely with HCA and the subsequent Contractor should HCA transition to a new organization upon Contract termination. |  |

**Section II – Desired FADS Solution Requirements (M)**

1. **General Requirements**

| **No.** | **Priority** | **General**  **Solution Requirement** | **General**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| --- | --- | --- | --- | --- | --- |
| G-7 | Desirable – high | The Solution shall at most have only a single copy of data; ideally the Solution will use data sourced directly from HCA’s EDW without any extraction. |  |  |  |
| G-8 | Desirable – high | The Solution shall maintain the minimum amount of data necessary in the FADS to support detection of fraud, waste and abuse. |  |  |  |
| G-9 | Desirable – high | The Solution shall support the prevention of the double recovery of claims. |  |  |  |
| G-10 | Desirable - high | The Solution shall perform minimal transformations on the source data |  |  |  |
| G-11 | Desirable – high | The Solution shall support geospatial analysis of detected fraud, waste, and abuse. |  |  |  |
| G-12 | Desirable – high | The Solution shall be able to ingest, read and utilize disparate data formats, such as .pdf and image files, etc. |  |  |  |
| G-13 | Desirable – high | The Solution shall have the ability to be reverted to the previous version, when necessary. |  |  |  |
| G-14 | Desirable – high | The Solution shall have incident/resolution tracking that is available to HCA staff for reporting. |  |  |  |
| G-15 | Desirable – high | The Solution shall integrate with the Washington State AWS cloud environment in a way that minimizes the costs associated with compute, storage, and transport of data. |  |  |  |

1. **Integration Requirements**

| **No.** | **Priority** | **Integration**  **Solution Requirement** | **Integration**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| --- | --- | --- | --- | --- | --- |
| INT-4 | Desirable – high | The Solution shall connect directly to the Enterprise Data Warehouse, an Amazon Redshift cluster hosted in the HCA AWS environment. |  |  |  |
| INT-5 | Desirable – high | The Solution shall use application programming interfaces (APIs) to integrate with the Case Management solution. |  |  |  |
| INT-6 | Desirable – high | The Solution shall be able to trigger new leads/cases in HCA’s Case Management system both manually and from automated alerts. |  |  |  |
| INT-7 | Desirable – high | The Solution shall be able to pass information relevant to the lead to the Case Management system. |  |  |  |
| INT-8 | Desirable – Medium | The Solution shall use APIs to integrate with non-P1 data sources. |  |  |  |

1. **Analytics Modeling & Algorithms**

| **No.** | **Priority** | **Analytics Modeling and Algorithms**  **Solution Requirement** | **Analytics Modeling and Algorithms**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| --- | --- | --- | --- | --- | --- |
| A-5 | Desirable – high | The Solution shall provide predictive modeling. |  |  |  |
| A-6 | Desirable – high | The Solution shall provide models that integrate the accepted case-mix or health risk adjustment. |  |  |  |
| A-6.1 | Desirable – high |  | The Solution’s models shall provide the ability for peer group adjustments. |  |  |
| A-7 | Desirable – high | The Solution shall allow the user to drill down on models with graphical displays. |  |  |  |
| A-8 | Desired – high | The Solution shall have the ability to identify, rank, and report on providers of interest, for example due to billing patterns from previous findings (algorithms or rules). |  |  |  |
| A-9 | Desired – high | The Solution shall allow the user to view model results in a graphical format (e.g., timelines, pie charts, bar charts). |  |  |  |
| A-10 | Desired – medium | The Solution shall utilize Social Network for Link Analysis with examples of using social networks to at a minimum find: |  |  |  |
| A-10.1 | Desired – medium |  | Links from provider or MCE to provider. |  |  |
| A-10.2 | Desired – medium |  | Provider or MCE to client. |  |  |
| A-10.3 | Desired – medium |  | Client to client. |  |  |
| A-10.4 | Desired – medium |  | All of the above to a particular entity. |  |  |
| A-11 | Desired – high | The Solution shall make use of available machine learning to augment its FADS. |  |  |  |
| A-11.1 | Desired – high |  | The Solution shall be able to disable machine learning and not impact the rest of the Solution. |  |  |
| A-12 | Desired – high | The Solution shall look for relationships, including but not limited to: |  |  |  |
| A-12.1 | Desired – high |  | Client-provider links. |  |  |
| A-12.2 | Desired – high |  | Provider-Provider links. |  |  |
| A-12.3 | Desired – high |  | MCO-Provider links. |  |  |
| A-12.4 | Desired – high |  | MCO-Client links. |  |  |
| A-12.5 | Desired – high |  | Potential fraud networks. |  |  |
| A-13 | Desired – high | The Solution shall employ Geospatial analysis with visualization. |  |  |  |
| A-14 | Desired – high | The Solution shall be able to schedule existing and new algorithm analyses. |  |  |  |
| A-15 | Desired – high | The Solution shall track and document all changes to algorithms when being developed and in use to provide transparency. |  |  |  |
| A-16 | Desired – high | The Solution shall save the data sets sent as leads to case management such that the data sets can be further analyzed in the FADS. |  |  |  |

1. **Reports and Alerts Requirements**

| **No.** | **Priority** | **Alerts and Reports**  **Solution Requirement** | **Alerts and Reports**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| --- | --- | --- | --- | --- | --- |
| R-1 | Desired – high | The Solution shall generate alerts based on data analysis that identifies, but is not limited to: |  |  |  |
| R-1.1 | Desired – high |  | Provider “billing spikes”. |  |  |
| R-1.2 | Desired – high |  | “Pattern deviation”. |  |  |
| R-1.3 | Desired – High |  | Outliers. |  |  |
| R-1.4 | Desired – high |  | Other aberrancies. |  |  |
| R-2 | Desired – high | The Solution’s alerts shall include the data and information about what prompted the alert. |  |  |  |
| R-3 | Desired – high | The Solution’s alerts shall lead to the evidence of the alert, for example an attached findings or a hyperlink to the findings. |  |  |  |
| R-4 | Desired – high | The Solution’s alerts shall notify specific analysts of analytics findings. |  |  |  |
| R-5 | Desired – high | The Solution shall provide a data report for the results of its fraud, waste and abuse detection analysis that includes but is not limited to: |  |  |  |
| R-5.1 | Desired – high |  | Transaction Control Numbers (TCNs) identified. |  |  |
| R-5.2 | Desired – high |  | Providers . |  |  |
| R-5.3 | Desired – high |  | Clients. |  |  |
| R-5.4 | Desired – high |  | Service Code. |  |  |
| R-5.5 | Desired – high |  | Parameters around detection, including listing the taxonomies used. |  |  |
| R-5.6 | Desired – high |  | Reason why the fraud, waste or abuse was detected. |  |  |
| R-5.7 | Desired – high |  | Risk score emerging patterns. |  |  |
| R-5.8 | Desired - high |  | Additions to the algorithms. |  |  |
| R-5.9 | Desired - high |  | Method for detection, such as machine learning. |  |  |
| R-6 | Desired - high | The Solution shall have the ability to produce ad hoc/customized reports. |  |  |  |
| R-7 | Desired - high | The Solution shall have the ability to produce scheduled reports. |  |  |  |
| R-8 | Desired - high | The Solution shall enable users the ability to review a report and its parameters, for example to identify false positives. |  |  |  |
| R-9 | Desirable - high | The Solution’s report parameters must be stored with the results. |  |  |  |
| R-10 | Desirable - High | The Solution shall produce utilization reports of services. |  |  |  |
| R-11 | Desirable – high | The Solution shall enable the ability to define parameters for reports that will result in unduplicated counts of values at any level of summarization *(*e.g., individual level and aggregate level) across several providers or procedures. |  |  |  |
| R-12 | Desirable – high | The Solution shall enable the ability for reports to be viewed by multiple users simultaneously at various locations and workstations. |  |  |  |
| R-13 | Desirable – high | The Solution shall enable the ability to download report content to Microsoft Office, Tableau, Adobe, etc. |  |  |  |
| R-14 | Desirable – high | The Solution shall enable the ability to cancel report requests before the result is returned. |  |  |  |
| R-15 | Desirable – high | The Solution shall enable the ability to drag and drop fields to report workspace and generate report. |  |  |  |
| R-16 | Desirable – high | The Solution shall enable the ability to generate management reports from a report template |  |  |  |
| R-17 | Desirable – high | The Solution’s reports shall be labeled with unique identifiers. |  |  |  |
| R-18 | Desirable – High | The Solution shall produce performance monitoring reports, including but not limited to those identified in Attachment E to the RFP. |  |  |  |

1. **User Documentation and Support Requirements**

| **No.** | **Priority** | **User Documentation and Support**  **Solution Requirement** | **User Documentation and Support**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| --- | --- | --- | --- | --- | --- |
| U-1 | Desirable - high | The Solution’s Data Dictionary shall maintain for each data element a unique data element number, standard data element name, narrative description of the data element, list of data names used to describe the data element and the source of each data element. |  |  |  |
| U-2 | Desirable - high | The Solution’s Data Dictionary shall maintain for each data element a list of files and tables containing the data element. |  |  |  |
| U-3 | Desirable - high | The Solution’s Data Dictionary shall be able to be queried by the database field name and the screen name, if different. |  |  |  |
| U-4 | Desirable - high | The Solution’s Data Dictionary shall maintain previous versions or track and record any changes made to the Data Dictionary. |  |  |  |
| U-5 | Desirable - high | The Solution’s Data Dictionary shall provide definitions of all data found in the Solution. |  |  |  |
| U-6 | Desirable - high | The Solution’s Data Dictionary and file layouts for all data sources used shall be available online. |  |  |  |
| U-7 | Desirable - high | The Solution’s Data Dictionary shall keep current all standards and documented processes for maintenance. |  |  |  |
| U-8 | Desirable - high | The Solution’s Data Dictionary shall provide context-sensitive help for all areas of the Solution and allow the user to go to online help. |  |  |  |
| U-9 | Desirable - high | The Solution shall have the ability to develop, prepare, maintain, store, view, and print all components of the Solution’s documentation. |  |  |  |
| U-10 |  | The Solution’s System Documentation shall, at a minimum, include: |  |  |  |
| U-10.1 | Desirable - high |  | A text description and process flowcharts depicting the flow of major modules and processes in the Solution. |  |  |
| U-10.2 | Desirable - high |  | Multiple sets of hierarchical, multi-level charts that give a high, medium, and detail view of the Solution. |  |  |
| U-10.3 | Desirable - high |  | Data model charts and descriptions.. |  |  |
| U-10.4 | Desirable - high |  | Meta data source, descriptions, parameters, and usage. |  |  |
| U-10.5 | Desirable - high |  | Data exchanges and interfaces. |  |  |
| U-10.6 | Desirable - high |  | Name and numeric identification. |  |  |
| U-10.7 | Desirable - high |  | Narrative, including each function and feature of the Solution. |  |  |
| U10.8 | Desirable - high |  | Flowcharts, identifying inputs and outputs, including the source of data. |  |  |
| U.10.9 | Desirable - high |  | Job streams within the Solution identifying programs, input and output, controls, job stream flow, operating procedures, and error and recovery procedures. |  |  |
| U-10.10 | Desirable - high |  | Online tables and entries. |  |  |
| U-10.11 | Desirable - high |  | Identification and listing of all Contractor’s internal control reports. |  |  |
| U-10.12 | Desirable - high |  | For all forms, screens, and other inputs: input definitions, including names, descriptions, sources, examples, and content definition. |  |  |
| U-10.13 | Desirable - high |  | For all screens, reports, and other outputs: output definitions, including names, numbers, sources, destinations, examples, and content definition. |  |  |
| U-10.14 | Desirable - high |  | Program narratives, including process specifications for each, the purpose of each, and the relationships between the programs and modules. |  |  |
| U-10.15 | Desirable - high |  | A list of input and output files and reports, including retention. |  |  |
| U-10.16 | Desireable - high |  | File layouts. |  |  |
| U-10.17 | Desireable - medium |  | File names and dispositions. |  |  |
| U-10.18 | Desirable - high |  | Specifics of all updates and manipulations. |  |  |
| U-10.19 | Desirable - high |  | Module source listing. |  |  |
| U-10.20 | Desirable - medium |  | Comments in source listing, identifying changes to the module by date, author, and reason. |  |  |
| U-10.21 | Desirable - medium |  | Comments in the listing, identifying each subroutine and each major entrance, exit, and function of the subroutine. |  |  |
| U-10.22 | Desirable – high |  | Table documentation, including intermediate and work files. |  |  |
| U-10.23 | Desirable – high |  | File and table descriptions and record layouts, with reference to file and table names, and numbers, data element numbers, names, number of occurrences, length, and type, record names, numbers, and lengths. |  |  |
| U-10.24 | Desirable – high |  | File maintenance data such as number of records, file space, and any other data necessary to manage the data or utilize the documentation. |  |  |
| U-10.25 | Desirable - medium |  | Lists, by identifying name, of all files and tables, inputs, and outputs with cross references to the modules in which they are used. |  |  |
| U-10.26 | Desirable – high |  | The system documentation shall maintain a system change request library with search capability to enable users to query change request status. |  |  |
| U-10.27 | Desirable – high |  | Changes to the the system documentation shall be tracked with version and timestamps. |  |  |
| U-10.28 | Desirable - high |  | The documentation shall be able to revert to the previous version, when necessary. |  |  |
| U-10.29 | Desirable – high |  | The Solution shall use all data names, labels and definitions consistently in the data dictionary, user manuals, etc. |  |  |
| U-11 | Desirable - high | The Solution’s metadata shall be exportable into a CSV, XLS or TXT format to allow for ingestion into HCA’s metadata management tool, Collibra. |  |  |  |

1. **Access/Display/Navigation Requirements**

| **No.** | **Priority** | **Access/Display/Navigation**  **Solution Requirement** | **Access/Display/Navigation**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| --- | --- | --- | --- | --- | --- |
| ADN-4 | Desirable – high | The Solution shall provide an intuitive and friendly user interface that reduces steps for the user. |  |  |  |
| ADN-5 | Desirable – high | The Solution’s navigation process shall be as seamless as possible. |  |  |  |
| ADN-6 | Desirable – high | The Solution shall provide a context-sensitive, user-guide-type “Help” menu for the Solution. |  |  |  |
| ADN-7 | Desirable – high | The Solution’s menu system must be hierarchical and provide submenus for all functional areas. |  |  |  |
| ADN-8 | Desirable – high | The Solution’s menu system shall not restrict the ability of users to directly access a screen, or the ability to access one screen from another without reverting to the menu structure. |  |  |  |
| ADN-9 | Desirable – high | The Solution shall have the ability to view information/data on more than one screen/output/window at the same time without having to jump back and forth between them. |  |  |  |
| ADN-10 | Desirable – high | The Solution shall provide both out-of-the-box and customizable/configurable “help”/descriptive information at the data/field level, such as “tool tips.” |  |  |  |
| ADN-11 | Desirable – high | The Solution should display where the user is at within the application, so the user won’t get lost within the application. |  |  |  |
| ADN-12 | Desirable – high | The Solution’s GUI drop-down lists shall be available to identify options and code descriptions for each field where applicable. |  |  |  |
| ADN-13 | Desirable – high | The Solution shall have the ability to display current date and time on all screens, windows and reports. |  |  |  |
| ADN-14 | Desirable – high | The Solution’s headers and footers shall be standardized on all screens, windows, and reports. |  |  |  |

1. **Security & Public Records Requirements**

| **No.** | **Priority** | **Security & Public Records**  **Solution Requirement** | **Security & Public Records**  **Solution Sub-Requirement** | **Bidder’s Proposed Solution Meets this Requirement? Y/N** | **Bidder’s Proposed Solution Meets this Requirement Via\*** |
| --- | --- | --- | --- | --- | --- |
| S-9 | Desirable – high | The Solution shall support single-sign on security, for example: Security Assertion Markup Language (SAML) 2.0 or active directory. |  |  |  |