

**Department of Veterans Affairs**  
**Administrative Data Repository**  
**Requirements Specification Document**  
**ADR Release FY16-Q1—Version 3.12, Increment 24**

**Version 1.2**



**October 2015**

## Revision History

Date	Version	Description	Author
07/04/2015	0.1	Create the 1 <sup>st</sup> draft version	
07/07/2015	1.0	Incorporate the input from the review	
08/28/2015	1.1	Updated Increment and Dates	
09/11/2015	1.2	Updated and TW edits	

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# 1. Introduction

The Administrative Data Repository (ADR) consists of a clustered transactional database designed and implemented to host demographic, identity management, eligibility/enrollment, Patient Protection Affordable Care Act (PPACA) transaction logging data, and the Veteran's benefit plan for all persons, a reporting database for overall customer reports, and a content repository to house Veterans Benefit Handbooks. Per the Department of Veterans Affairs (VA) enterprise n-tier architecture, ADR serves as the data layer and its consuming/supporting applications make up the service layer.

This document provides high level functional requirements for the production release of ADR scheduled for national deployment in the last month of FY16Q. The requirements below are based on the ADR FY16 BRD established before FY16 and/or additional business needs received afterward and subsequent changes from the client business and/or development team could reduce and/or remove all requests for the project. It also provides the customer requirements for all ADR database enhancements supporting the following:

- Enterprise Health Benefits Determination (EHBD)/Enrollment System (ES) Modernization
- Civilian Health and Medical Program of Veterans Affairs (CHAMPVA)
- Business Event Notification Service (BENS)
- Contact Information Management under Customer Information Integration Phase I and II
- CareT in supporting Caregivers and Veterans Omnibus Health Services Act of 2010: Title 1, Sections 101-104 Supplemental
- Veterans Access, Choice and Accountability Act (VACAA)
- Patient Advocate Tracking System (PATS)

**A special note:** The ADR BRD is a combination of all the ADR supported individual business project's BRDs. ADR BRD FY16 combined all the annual business requirements of all the separate business projects for the entire period of FY16. During each specific ADR quarterly release, the business projects may or may not make requests to ADR for database enhancements and/or maintenance tasks in support of their business needs. Therefore, in any given ADR quarterly release, the ADR or the ADR clients' database enhancement and maintenance tasks to be delivered are not always equally matched, usually they are less than, the total number of all the business/functional requirements for the entire year. Each ADR quarterly release tasks generally meet a subset of the total business/functional requirements, but not necessarily all the business requirements in a single release because of the rapid development cycle—quarterly and agile/iterative development methodology the ADR project adapts. From the entire perspective, the total business/functional requirements are usually met via iterative development in the ADR's four quarterly enhancement releases and twelve monthly maintenance releases in a calendar year.

In addition, some projects' business requirements provided to ADR are high level and intended for multi-year period of performance. The business requirements described in the ADR FY16 BRD are intended to be met via many ADR increments over multiple years. An Administrative

Data Repository (ADR) RSD is intended to cover phased functionalities to fulfill some of the business needs in a quarter, and later increments can continue delivering new features on top of those delivered in the current quarter.

These aforementioned scenarios made ADR unique as a service-like/infrastructural project providing the common repository/database support to many upstream application projects and hence do cause questioning often by various release management reviewers, and thus cause multiple delays to normal ADR project progress. The reviewers generally believe that each ADR release should meet the entire ADR business/functional requirements scoped for the entire year or multiple future years in the ADR BRD, RSD, SDD, RTM, and other related documents. In fact, the total business requirements are to be satisfied by multiple ADR releases through the period of one year, in some special cases even span over multiple years of projects lifecycles.

To further clarify the uniqueness of the ADR project, ADR operation is similar to a Help Desk like service to its business clients. At the beginning of the period of the business scope analysis – usually the start of the fiscal year, ADR creates a set of PMAS required documents such as BRD, RSD, and SDD containing the business/functional requirements for the entire year. The ADR BRD, RSD, and SDD provide the defined scope ADR targets for the full period of the performance – a fiscal year. However, at the time ADR documents are created, the ADR project does not know the exact number of change requests, their precise contents of the change requests, and even the exact requestors of the change requests prior to the time that these change requests are actually made

Therefore, ADR cannot provide the precise information about the actual change requests in advance of the submission of the change requests. ADR can only provide the information about the actual change requests after the change requests have been made to the ADR project during the development lifecycle of each increment.

For this Help Desk like operation ADR provides, it frequently causes questioning and even holdups by the multiple release management offices. They require ADR team to provide the documents at the beginning of the year during the process of document creation that these documents offer actual description of the change requests for all the future ADR increments during the entire year.

## **1.1. Purpose**

This document provides high level functional requirements for the ADR Fiscal Year 2016 Quarter 1(FY16-Q1) release (v 3.12, Increment 24) scheduled for December 2015.

## **1.2. Scope**

The following sections cover the scope of the ADR project

### **1.2.1. Software Product**

This ADR release contains enhancements and modifications to database tables, stored procedures, indexes, background processing jobs, data migrations and data conversions. ADR, a backend database, provides no user interface (UI).

## **1.2.2. Parent Software/Service Layer Applications**

ADR client applications use ADR as their data repository. Currently, ADR clients include EHBD/ES Modernization, Identity Access Management (IAM), and Veteran Relationship Management (VRM)

### **1.2.2.1. EHBD/ES Modernization**

The ES application and its sub-applications comprise the service layer applications supported by the ADR database for data persistence in VA enterprise architecture. The Enterprise Health Benefits Determination organization requires that the ADR provide database enhancements and modifications in support of ES and its sub-projects that make up the Enterprise Health Benefits Determination (EHBD) program in support of their goals and objectives.

### **1.2.2.2. Identity Access Management (IAM)**

The Information Technology (IT) mechanisms for establishing and maintaining unique patient identity and facilitating the sharing of key patient information between all Veterans Health Administration (VHA) facilities are:

Master Veteran Index (MVI Austin) - a centralized database and software.

Master Veteran Index/Patient Demographics (MVI/PD) - VistA 1.0 software resides in the local VistA systems and includes the "RG" namespace, and "MPIF" namespace.

Patient Information System (PIMS) - enables the user to collect identifying information about a patient that is passed to the MVI Austin for patient identification services across the VHA Enterprise (DG and VAFC namespaces).

Person Services Identity Management (PSIM) - a centralized Person Service which supports Identity Management.

### **1.2.2.3. VRM**

Affordable Care Act/Veterans Information and Eligibility Reporting System (VIERS) under VRM is the application under VRM using the ADR database for ACA transaction logging. The Affordable Care Act/VIERS is a single, streamlined application used to apply for eligibility and enrollment in an insurance affordability program, which includes a qualified health plan through the Exchange, advance payments of the premium tax credit, cost-sharing reductions, Medicaid, the Children's Health Insurance Program (CHIP), or the Basic Health Program (BHP). These insurance affordability programs are operated by the administering entities which include Exchanges, Medicaid, CHIP, and BHP. An individual must be able to file this application online, by telephone, manually in person, or by mail with any of the entities administering these programs. The ability for an individual to access the appropriate coverage across multiple programs through a single streamlined application and coordinated eligibility process means that no matter how an application is submitted or which program receives the application data, an applicant will experience a consistent process and receive a consistent eligibility determination, without the need to submit information to multiple programs.

## **1.2.3. Software Product Capabilities**

The enhancements and modifications to the ADR database will allow ES and its sub-projects to store, update, and retrieve data for presentation to the end user in the form of reports and via

graphical user interfaces (GUI). The enhancements and modifications to the ADR database will also enable integration of data across the enterprise.

The chief business office (CBO) for Enterprise Health Benefits Determination established their goals and objectives for FY2016 which are contained in the Business Requirements Document. Refer to the attached BRD for a list of their goals and objectives.

**Note:** New requirements or enhancement requests for ADR beyond what has been approved through PMAS will not be addressed until ADR receives PMAS approval and additional resources, if necessary, for the added requirements.

The ADR team will implement these requirements through a series of tasks created using the Rational Team Concert. Customers submit Customer Requirement documents containing code specifications, which are attached to the corresponding Rational Team Concert work items. ADR and respective customer Software Quality Assurance (SQA) teams will use the Customer Requirement documents as the authoritative source for verifying the correct implementation of database changes.

ADR creates Production-ready release packages that are deployed to testing, staging, and Pre-Production environments so that their customers can perform testing and verification prior to inclusion of the ADR changes in the client software releases. Availability of these release packages to the client is timed to coordinate with corresponding customer releases and testing practices. ADR includes all of the packages in their PMAS releases for customer access.

## 1.3. References

The artifacts referenced in this document are located in the *Documentation Reference Library* section in the Technical Services Project Repository (TSPR) at the following link:

- Business Requirements Document - ADR FY16 BRD

Other ADR-related documentation is located on the [REDACTED]

- *ADR Database Standards and Guidelines*
- *ADR System Design Document*

*Repositories System Security Plan*. Due to the sensitive information contained within the System Security Plan, for secure access contact the Salt Lake FO ISO Larry Skrabut

## 2. Overall Description

As ADR, a backend database, provides no UI, many of the subsections found in Section 2 do not apply to ADR.

## 2.1. Accessibility Specifications

N/A

## 2.2. Business Rules Specification

N/A

## 2.3. Design Constraints Specification

N/A

## 2.4. Disaster Recovery Specification

ADR is implemented in a centralized deployment design at the Austin Information Technology Center (AITC), with failover to the Hines Information Technology Center (HITC) in the event of WAN failure or disaster. ADR requires the availability of numerous related deliverables, as well as cooperation and collaboration across multiple software development teams.

ADR is designated as Mission Critical for disaster recovery. Disaster recovery requirements and steps for execution are found in the [Production Operations Manual](#) and in the [Information System Contingency Plan](#).

[AITC is responsible for Disaster Recovery readiness and necessary testing.](#)

## 2.5. Documentation Specifications

N/A

## 2.6. Functional Specifications

The functional requirements listed below are high level and reflect the general categories, based on ADR FY16 BRD established before FY16, of requests that ADR expects to receive from customers during the quarter. ADR may not receive customer requirements/requests in all of the listed categories for this quarter due to unplanned changes from the business and/or development management perspectives.

**Table 1: Functional Requirements for FY16-Q1**

Requirement #	Functional Requirement
2.6.1	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning support in support of EHBD and ES Modernization I & II
2.6.2	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning support in support of Civilian Health and Medical Program of Veterans Affairs (CHAMPVA)
2.6.3	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning support in support of Business Event Notification Service (BENS)



Requirement #	Functional Requirement
2.6.4	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning support in support of Contact Service under Customer Data Integration (CDI)
2.6.5	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning support in support of CareT
2.6.6	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning in support of the Veterans Choice project
2.6.7	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning in support of the PATS project

The specific database needs for ADR customers and their projects might not be known or defined until the projects are in the design or development stages. Because of this, all required code specifications are addressed in specific Customer Requirements documents which the ADR team will use to generate Work Itemz, which are then used to create or modify objects and schemas within the ADR database. The Customer Requirements documents for this release can be found in Addendum A of this document.

The ADR Database Administrators (DBAs) use the Customer Requirements documents and Work Items to develop the necessary code functionality, while the ADR SQA team uses them to test that functionality. For traceability purposes, the ADR SQA team will link each Work Item tested to the high level functional requirements provided in this section and to the Work Item - specific Customer Requirements documents. Customer Requirements are also put in Addendum A of this document.

Test results will be recorded in corresponding SQA checklists that are then added to the quarter's *Requirements Traceability Matrix* (RTM), which is used to map requirements and record test results, and the *Test Evaluation Summary* document.

A Version Description Document (VDD) for each production deployment will also be posted to the [ADR Phase II TSPR](#).

## 2.7. GUI Specifications

ADR does not provide GUIs.

## 2.8. Multi-divisional Specifications

ADR is positioned to provide data elements for Identity Services, Veteran/Beneficiary Enrollment/Eligibility, and ACA processing and other VA administrative related data. This data can be added, retrieved and updated through ADR client applications/services such as the Master Veteran Index (MVI), ES, ACA/VIERS applications/services.

The ADR establishes and manages this data as a corporate asset. It is implemented in a centralized deployment. The person-oriented data that forms the content of ADR comes from multiple sources, including:

- IdM Services
- Enrollment System (ES)

- PPACA/VIERS
- Legacy Vista

## 2.9. Performance Specifications

The ADR system, managed by the Enterprise Operation team at AITC, must be provisioned with adequate computational, storage, and infrastructural resource in order to continue to support the established performance levels that were set up and achieved through prior ADR processes, as well as all performance requirements which have been established as part of prior system releases and performance tuning, etc.

The established performance requirements are documented in ADR SDD. Please see **Error! Reference source not found.** for details.

## 2.10. Quality Attributes Specification

Quality attributes, such as coding standards, naming conventions, class libraries, and maintenance utilities, as defined in the template, are outside the scope of this RSD. Database standards and naming conventions are defined in the *ADR Database Standards and Guidelines* under the [ADR Phase II TSPR](#).

All development consistently follows the ADR-defined process for requesting, tracking, developing and testing each Change Request, Code Change Request, and Release. ADR uses Rational Team Concert tool for this and a variety of other purposes, including: documentation, progress tracking, historical tracking, management reporting, resource management, and other development processes.

All changes are documented to manage propagation into each development stream and eventual installation in the Production environment. The ADR team is not involved with assuring the quality of data content that is put into Production.

## 2.11. Reliability Specifications

- Availability: AD RP 00:00 to 24:00 CT
- Percentage of time available: 99.95% (excluding planned outages and scheduled replication specific to ADR reporting DB only)
- Maintenance access: scheduled in advance

## 2.12. Scope Integration

N/A

## 2.13. Security Specifications

The ADR security strategy is documented in the [ADR Database Security Guide](#). The ADR security methodology follows all Department of Veterans Affairs (VA) security directives and

guidelines from National Institute of Standards and Technology (NIST), Federal Information Security Management Act (FISMA), Security Management and Reporting Tool (SMART), and the Continuous Readiness in Information Security Program (CRISP).

The ADR is housed within the Austin Information Technology Center (AITC) that provides physical security. The ADR also follows best practices and has implemented a Continuous Monitoring Plan which reviews key security controls for regular monitoring. The ADR is current in all security Plan of Action and Milestones (POAM) with none outstanding.

ADR security features in production and non-production environments include:

- Authentication and Authorization
- Auditing
- Backup and Recovery
- Archiving
- Reporting

## **2.14. System Features**

ADR system features include:

- Shared data set—ADR is intended to hold shared data (not private)
- Optimized for the authoritative service which will be maintaining or providing the data
- Near real-time
- Facilitates data portability
- Data is received from and used for transaction processing, as well as reporting
- Viewable data state
- Person Service is the service layer with a common Hibernate interface

## **2.15. Usability Specifications**

N/A

## **3. Purchased Components**

N/A

## 4. Estimation

The table below shows the high level estimation of the work size for the requirements in FY16 Q1. Later adjustments may be required as detailed requirements are received from the ADR clients.

Requirement #	Functional Requirement	Work Size
2.6.1	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning support in support of EHBD and ES Modernization I & II	Large
2.6.2	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning support in support of Civilian Health and Medical Program of Veterans Affairs (CHAMPVA)	Large
2.6.3	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning support in support of Business Event Notification Service (BENS)	Small
2.6.4	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning support in support of Contact Service under Customer Data Integration (CDI)	Large
2.6.5	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning support in support of CareT	Large
2.6.6	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning in support of the Veterans Choice project	Large
2.6.7	ADR shall provide DBMS objects, implementation, data population, migration and/or tuning in support of the PATS project	Large

## Appendix A. Non Functional Requirements

- Disaster Recovery (DR)

DR testing is responsibility of Austin Information Technology Center (AITC) to ensure the readiness of the DR system at Hine Information Technology Center (HITC) in case of a disaster.

- VA 508 Compliance

ADR does not provides any interface to the end users and hence has an exemption for VA 508 compliance

- HIPAA

ADR does not directly generate PHI/PII information. All PII/PHI information is handled by ADR client application. All staff, VA employees or contractors, are required for Privacy and HIPPA training

- Security

Please refer Section 2.13 for details.

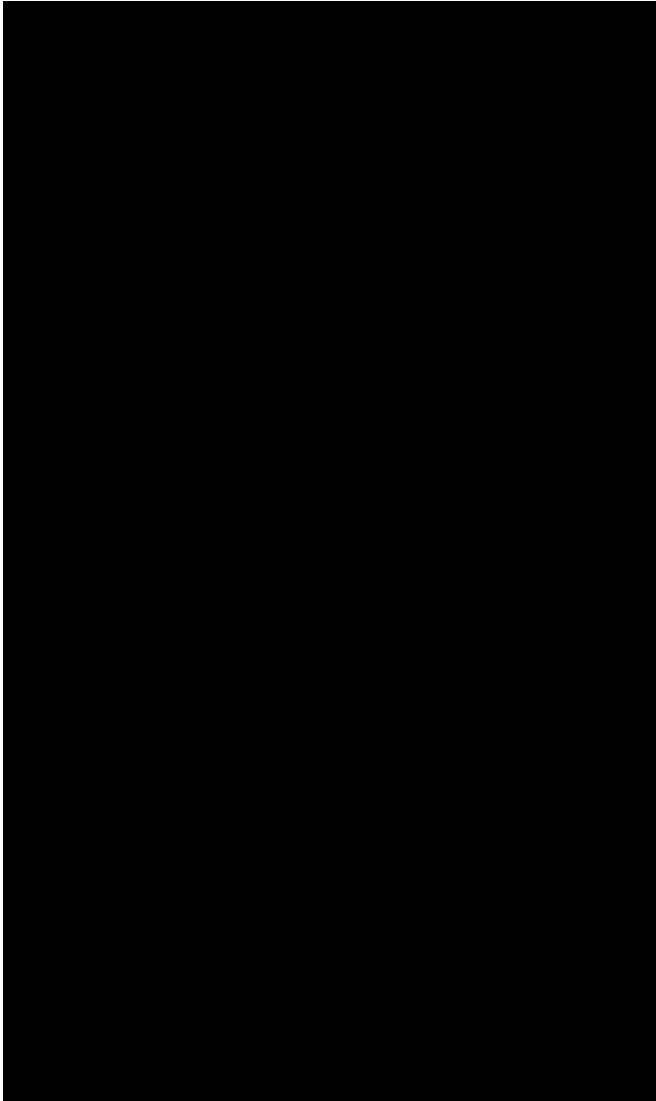
- Performance requirement

Please refer to ADR SDD in Attachment C for performance requirements specified by ADR clients

- Capacity Planning

Enterprise Operation team at AITC is responsible for resource provisioning. The storage for ADR is provisioned on demand.

## **Appendix B. ADR Relevant Documents**



## Attachment A. Approval Signatures

This section contains the reviews and approval signatures for the *Requirements Specification Document for ADR FY16-Q1*.

The signatures below indicate agreement and acceptance of the declarations contained in this document.

//es// [REDACTED] 09/14/2015

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[REDACTED] Date  
Project Manager, ES (EHBD, ES Modernization, and CHAMPVA)

[REDACTED] 10/02/2015

---

[REDACTED] Date  
Business Owner (Contact Information Management/CDI)

//es// [REDACTED] 10/02/2015

---

[REDACTED] Date  
Business Owner (BENS)

//es// [REDACTED] 10/02/2015

---

[REDACTED] Date  
Director, System Management, CBO  
(VACAA)

//es// [REDACTED] 09/14/2015

---

[REDACTED] Date  
Project Manager, ADR

//es// [REDACTED] 09/14/2015

---

[REDACTED] Date  
Program Manager/IPT Chair, Repositories

