

# **Department of Veterans Affairs**

## **VistA Evolution Immunization Enhancement Project**

### **System Design Document**



**June 2014  
Version 0.6**

## Revision History

Date	Version	Description	Author
10 June 2014	0.6	Added Data Dictionaries.	[REDACTED]
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## Table of Contents

<b>1. Introduction</b> .....	<b>1</b>
1.1. Purpose .....	1
1.2. Identification .....	1
1.3. Scope.....	1
1.3.1. Scope Exclusions .....	2
1.4 Relationship to Other Plans.....	2
1.5 Methodology, Tools, and Techniques.....	3
1.6 Policies, Directives, and Procedures .....	3
1.7 Constraints.....	4
1.8 Design Trade-offs .....	4
1.9 User Characteristics.....	4
1.9.1 User Problem Statement .....	4
1.9.2 User Objectives.....	5
<b>2 Background</b> .....	<b>6</b>
2.1 Overview of the System .....	6
2.2 Overview of the Business Process .....	6
2.3 Business Benefits.....	6
2.4 Assumptions, and Constraints.....	7
2.4.1 Design Assumptions .....	7
2.4.2 Design Constraints.....	7
2.5 Overview of the Significant Requirements .....	7
2.5.1 Overview of Significant Functional Requirements .....	7
2.5.2 Functional Workload and Functional Performance Requirements .....	7
2.5.3 Operational Requirements .....	7
2.5.4 Overview of the Technical Requirements.....	7
2.5.5 Overview of the Security or Privacy Requirements.....	8
2.5.6 System Criticality and High Availability Requirements.....	8
2.5.6.1 Reliability.....	8
2.5.6.2 Maintainability.....	8
2.5.6.3 Availability.....	9
2.5.7 Special Device Requirements.....	9
2.6 Legacy System Retirement.....	9
<b>3 Conceptual Design</b> .....	<b>9</b>
3.1 Conceptual Application Design.....	9
3.1.1 Application Context.....	9
3.1.2 High Level Application Design .....	10
3.1.3 Application Locations .....	15

3.1.4	Application Users .....	15
3.2	Conceptual Data Design.....	15
3.2.1	Project Conceptual Data Model .....	15
3.2.2	Database Information .....	15
3.3	Conceptual Infrastructure Design .....	15
3.3.1	System Criticality and High Availability.....	15
3.3.2	Special Technology .....	15
3.3.3	Technology Locations.....	16
3.3.4	Conceptual Infrastructure Diagram.....	16
3.3.4.1	Location of Environments and External Interfaces .....	16
3.3.4.2	Conceptual Production String Diagram.....	17
4	System Architecture .....	17
4.1	Hardware Architecture .....	17
4.2	Software Architecture.....	17
4.3	Communications Architecture.....	17
5	Data Design .....	17
5.1	Data Dictionaries.....	17
5.2	Field Definition Information .....	20
5.3	Data Entries Affected by the Design .....	23
5.3.1	Unique Record(s) [Commonly the .01 field] .....	24
5.3.2	File/Global Size Changes .....	24
5.4	Database Management System Files .....	24
5.5	Non-Database Management System Files .....	24
6	Detailed Design .....	24
6.1	Hardware Detailed Design.....	24
6.2	Software Detailed Design.....	24
6.3	Local data structures.....	24
6.3.1	Immunization File (#9999999.14) .....	25
6.3.2	V Immunization File (#9000010.11).....	26
6.3.3	Vaccine Information Statement File (#920).....	28
6.3.4	IMM Manufacturer File (#9999999.04).....	29
6.3.5	IMMUNIZATION LOT File (#9999999.41).....	29
6.4	Communications Detailed Design .....	30
7	External Interface Design .....	30
7.1	Interface Architecture.....	30
7.2	Interface Detailed Design .....	30
8	Human-Machine Interface .....	30
8.1	Interface Design Rules .....	30

8.2	Inputs .....	30
8.3	Outputs .....	30
8.4	Navigation Hierarchy .....	31
8.4.1	Screen [x.1] .....	31
8.4.2	Screen [x.2] .....	31
8.4.3	Screen [x.3] .....	31
<b>9</b>	<b>System Integrity Controls .....</b>	<b>31</b>
<b>Appendix A.....</b>		<b>32</b>
	Requirements Traceability Matrix.....	32
	Packaging and Installation.....	32
	Design Metrics .....	32
	Glossary of Terms .....	32
	Required Technical Documents .....	33
<b>Appendix B – Approval Signatures .....</b>		<b>35</b>
<b>Appendix C – Data Dictionaries.....</b>		<b>36</b>
	IMMUNIZATION FILE (#9999999.14) .....	36
	IMM MANUFACTURER FILE (#9999999.04) .....	42
	VACCINE INFORMATION STATEMENT FILE (#920).....	46

# 1. Introduction

Immunization is an essential capability of the VistA program because it allows common business processes to be used in operational environments to document and capture immunization information for all beneficiaries in a common repository. This immunization capability will facilitate the interoperability of immunization data across the external trading partners and VA to better support force health protection and readiness activities, to ensure the health of all beneficiaries receiving vaccinations, to support clinical decision support, and ensure the ability to interchange immunization data with authorized entities and non-federal partners consistent with meaningful use and CDC guidance.

Currently, DoD and VA manage immunizations using separate IT systems, with separate data repositories, and complex sharing processes. The use of multiple and disparate IT systems, non-standardized immunization data and non-standardized data management processes can lead to inconsistent or duplicative non-associated documentation within an individual's immunization record with the potential for unnecessary and excessive vaccinations, increased cost, and inventory waste. To address these challenges the VistA Immunization Enhancements (VIMM) project was created to enhance VA IT systems capability to display, store and share standardized immunization data in a uniform manner. For VA, the PCE system will be modernized and other VistA packages modified to carry out the aforementioned objectives.

## 1.1.Purpose


The purpose of the SDD is to document system design specifications for the Department of Veterans Affairs (VA) Office of Information Technology (OI&T) Office of Enterprise Development (OED) that are required to attain IOC for VIMM in support of VistA- 4. Other development to support Full Operating Capability (FOC), such as updates to VistA-based Remote Procedure Calls (RPC) to read/write within the evolved file structure, improved user interface integrated to User Experience (UX) and the development of a data exchange using web-enabled decision support for bidirectional exchange of vaccine information with state registries, is not in scope for this document. The intended audience includes project managers, business analysts, configuration managers and software developers that will be tasked with developing the patch.

## 1.2.Identification

This SDD applies to the first and second increment of the VIMM VistA Enhancement. An increment is a segment of a project that delivers functional business capability within a fixed time period. VIMM increments one and two are aimed at achieving IOC.

## 1.3.Scope

- The scope of work outlined in this document will be confined to modifications to the V IMMUNIZATION (9000010.11), IMMUNIZATION (9999999.14), IMM MANUFACTURER (9999999.04), and VACCINE INFORMATION STATEMENT (920) VistA files in order to accommodate additional standards-required data elements.
- The file modifications will be packaged in PCE patch (PX\*2.0\*1 *patch number TBD*), deployed to selected test sites for Initial Operating Capability Evaluation and eventually be made available for national release.
- There will be no immunization data deployed with this patch. New fields will be added to the V IMMUNIZATION and IMMUNIZATION files but the fields will remain unpopulated until future development efforts aimed at achieving FOC are completed.

- PCE and other VistA packages that interoperate with PCE and read immunization data from the V IMMUNIZATION and IMMUNIZATION files will retain their current functionality with the deployment of this patch. There is no VistA package development required outside the scope of this patch.
- Development of a means to capture documents pushed to VA by external partners, in response to a subscription request from VA, and to store those documents and the information they contain within VistA Immunization files for later use. (Part of Data Persistence project). VIMM will provide testing and DPRPC will provide development of this project. Detailed information is contained in the DPRPC Requirements Elaboration Document (RED). The RED can be accessed at: 
- Ensuring compliance with current standards of documentation based upon business rules identified by the Department Subject Matter Experts (SMEs).
- Ensuring compliance with applicable guiding standards for immunization data, including those from the US Food and Drug Administration (FDA), Presidential Executive Orders (PEO), Centers for Disease Control and Prevention (CDC), state and VA immunization policy.
- Provision of immunization data to enable clinical decision support
- Adherence to all appropriate security and privacy requirements

### 1.3.1. Scope Exclusions

Items specifically out of scope for the Immunization Capability Project include:

- Individual Medical Readiness (IMR) elements other than immunization data.
- Cost associated with establishing connectivity to the immunization data from non-DoD, and non-VA healthcare facilities.
- Population health and readiness reporting, though the system will be able to provide immunization data to such systems.
- Development of a common immunization data entry tool.
- Development of a common immunization data repository.
- Development of a means for the immunization capability to execute all of the same functionality in disconnected/Area of Responsibility (AOR) mode deployment as in a brick and mortar care facility.
- Development of the capability for immunization data to be shared with external reporting systems, such as the DoD Services' readiness systems, State registries, CDC, and other authorized entities.

## 1.4 Relationship to Other Plans

This VistA VIMM enhancements described by this document should address the needs addressed by the following documents:

- Integrated Business Requirements Document (iBRD)
- Requirements Specification Document (RSD)

The VistA VIMM enhancements must also adhere to the following plan documents:

- Configuration Management (CM) Plan
- VA, and IPO Test Plans
- Support Certification & Accreditation (C&A) sustainment life cycle Information Assurance (IA) Plan
- Deployment Plan
- Support Plan
- Training Plan

## 1.5 Methodology, Tools, and Techniques

VA OIT encourages the use of Agile methodology to manage its portfolio of applications, its development programs, and its development teams. The Agile approach merges the typical program management decision points (milestones for the VA) with continuous and collaborative prioritization of functionality into program increments and releases based on functional priority, technical feasibility, and financial viability. VistA VIMM enhancements will be expected to provide a project management approach which demonstrates an ability to execute project activities utilizing the Agile methodology.

This SDD was created from the appropriate template from ProPath: `system_design_document_template.docx`. Per ProPath recommendation, the technical details have been fleshed out to this initial draft through conceptual design. Technical writing and reviews will then provide a clean-up service on the document's way to PMAS Review (as part of a packet of artifacts required attaining the Active state). From that review, changes will be implemented to further refine the accuracy of the document's technical content. With the input of several program and project peers, the document will be ready for the Formal Review. Any feedback come from this review will be implemented, as well. Should the document receive approval from the Formal Review, it will be then archived in the Rational tool (ClearCase) for change control management. Any SDD change requests made during the development phase are then addressed as needed and changes captured throughout.

In addition, the VistA VIMM Enhancement shall maintain a repository that contains all required artifacts (as defined in ProPath and the PMAS Guide section 3.1). The PMAS Artifact Central Repository (ACRe) will be a Microsoft Office SharePoint Server (MOSS) site created for all OI&T projects. The process for establishing a project artifact repository is in ProPath. PMAS projects will keep using their current organizational repositories until the new PMAS Artifact Central Repository is available.

## 1.6 Policies, Directives, and Procedures

- The OI&T-wide process management tool that assists in the execution of an IT project (including adherence to PMAS standards). It is a one-stop shop providing critical links to the formal approved processes, artifacts, and templates to assist project teams in facilitating their PMAS-compliant work. ProPath is used to build schedules to meet project requirements, regardless of the development methodology employed. This document conforms to the ProPath template for the SDD and is required in the planning phase of a project. It is part of Determining Requirements which came after Developing the Project Management Plan.
- The Project Management Accountability System (PMAS) that mandates all new VA IT projects/programs use an incremental development approach, requiring frequent delivery milestones that deliver new capabilities for business sponsors to test and accept functionality. Implemented by the Assistant Secretary for IT, PMAS is a VA-wide initiative to better empower



the OI&T Project Managers and teams to meet their mission: delivering world-class IT products that meet business needs on time and within budget.

- Constraints or requirements placed on this document by policies, directives, or procedures include the following:
  - VA Directive 6300 – Records and Information Management  
[REDACTED]
  - VA Handbook 6500 – Information Security Program  
[REDACTED]
  - Veterans Health Administration Records Control Schedule 10-1 MARCH 1, 2011  
[REDACTED]
  - VHA Strategic Plan and Power of Performance Goals  
[REDACTED]

## 1.7 Constraints

Constraints placed on the system design include the following:

- The Initial Operating Capability will include two VA facilities; one in Hampton Roads, Virginia and one in San Antonio, Texas and must be completed by September 2014.
- The Full Operating Capabilities will be achieved when a fully operational immunization system is implemented in a Government data center to support all VA facilities by September 2017.
- VistA Standards Profile.
- Meets VA statutory and regulatory requirements.
- VA development and product integration efforts will be managed using best practices and controls consistent with the Agile Methodology.

## 1.8 Design Trade-offs

Not Applicable to IOC.

## 1.9 User Characteristics

Not Applicable (VistA Patch)

### 1.9.1 User Problem Statement

The known problems can be categorized into specific functional areas as described here:

1. Each Department has its own immunization tracking systems that has limited communication to the other Department's immunization tracking systems:
  - a. Within VA, when an individual goes from one VA facility to another VA facility to receive an immunization, that individual's entire immunization history may not be available from a central data repository. Consequently, patient safety, EHR updates, and individual medical readiness statistics can be impacted.

- b. Lack of visibility of individuals' immunization history and immunization requirements between VA facilities can result in erroneous, duplicative, and/or missed immunizations.
  - c. Immunization history is not readily accessible following transition of care between VA facilities.
  - d. Inpatient immunization processes can vary greatly between VA facilities.
  - e. At this time, the impacts to all VA systems have not been evaluated. Because the impacts are unknown, we acknowledge that there may be effects that require changes to the existing reporting systems or the interfaces to those systems.
2. In the current environment within the VA there are multiple systems to document and track the administration of vaccinations for Veterans, and eligible beneficiaries. Disparate systems, as well as the lack of a single standardized format for capturing or storing immunizations data results in complications when attempting to communicate or provide data across organizations or departments. Both of the issues above can have a negative impact on optimizing Readiness and Population Health.
  3. Immunization data is inconsistently recorded / available across VA:
    - a. Not all VA facilities document immunizations in the same manner.
    - b. Providers may or may not have visibility of the immunization status of their patients.
    - c. Lack of enforcement of documentation standards and controls can lead to error prone records and duplicate entries. For example, processes for documenting immunizations given in the inpatient setting require significant duplicative effort.
  4. Immunization systems do not effectively communicate across one another:
    - a. Lack of interface between VA's Computerized Patient Record System (CPRS) and Occupational Health Record System (OHRS), due to regulations requiring protection of employee medical information.
    - b. Current issues with adequate and appropriate Clinical Decision Support (CDS) during immunization administration resulting in VA systems unable to provide consistent ability to access the patient's allergies and medical history to determine suitability of the immunization at the point of administration.
    - c. Immunization history is not consistently shared as computable data between individual VA facilities; standardization of the nomenclature and identification of vaccinations is incomplete.
  5. Immunizations given by VA Occupational Health Services are not consistently reflected in the patient care databases. Employee medical files (EMF) must be maintained in a separate and independent system of records from the Veteran system of records for health care documentation in CPRS. Employee medical records must be kept separate from other medical files with restricted access procedures and audit trails. Occupational Health staff document care provided to employees in the EMF. In many facilities, some documentation may occur in CPRS. That is problematic because there is comingling of Veteran and employee health information. Therefore, the immunizations given by Occupational Health are inconsistent as to where they reside, and they need to be in one central location, but identified as Occupational Health when appropriate so that they can be filtered as necessary.

## 1.9.2 User Objectives

Not Applicable to IOC.

## 2 Background

The VA is committed to full and seamless electronic exchange and record portability of healthcare information in a secure and private format, wherever needed, to ensure the highest quality and effective delivery of healthcare services. To this end, the VA is implementing an immunization application into VistA that allows for full interoperability of patient's health care information. Immunization management has been prioritized as a component of the first set of VistA clinical capabilities to be developed and delivered.

The VA currently manages immunizations using separate information technology (IT) systems, with separate data repositories associated with these systems, and complex sharing processes. The use of multiple IT systems can lead to inconsistent or duplicative non-associated documentation within an individual's immunization record with the potential for unnecessary and excessive vaccinations, increased cost, and inventory waste. Uniting VA business processes and capturing immunization documentation using a common system achieves the desired outcome of shared information interoperability to better support force health protection and readiness activities, and ensure the health of all beneficiaries receiving vaccinations.

The VA administers immunizations in approximately 1300 locations. The primary storage of immunization data for VA is in VistA (Veterans Health Information Systems and Technology Architecture), for which there is an instance at each of the 127 VA Medical Centers. Additionally within the VA, health care employee personnel immunization data resides in a separate system called OHRS (Occupational Health Record System) that by policy is required to be separated from VistA data, and at present does not have any data exchange, uni- or bi-directional, with VistA data stores.

### 2.1 Overview of the System

Not Applicable (This VistA patch is inclusive of data dictionary changes to two files, See section 6.2 for detailed description)

### 2.2 Overview of the Business Process

Not Applicable to IOC.

### 2.3 Business Benefits

The VistA VIMM enhancements for IOC will deliver modifications to two VistA files and lays the groundwork for an immunization capability that will facilitate common patient care practices across the VA. It will also simplify access to information that is reliable and securely available whenever and wherever needed by care providers and administrators. The ability to document, track, and report immunizations of eligible beneficiaries, and Veterans will provide the following benefits:

- Optimize the quality of health care
- Reduce unnecessary immunizations
- Reduce excess costs
- Reduce inventory waste
- Improve accuracy of patient health records
- Facilitate immunizations reporting
- Extend public health protections to support the decrease of risk of preventable infections

## **2.4 Assumptions, and Constraints**

This section describes the assumptions, and constraints that impacted the design of the system.

### **2.4.1 Design Assumptions**

Specific assumptions that were made which may influence the design of this system are listed below:

- Common external interfaces are assumed to be developed at the system level and are not considered to be within the scope of the Immunization capability, with the exception of Immunization unique external system interfaces.

### **2.4.2 Design Constraints**

Government imposed constraints include the following:

1. The solution will be compliant with the standard VA development processes as defined by the Office of Enterprise Development (OED).
2. The solution will support achieving service level agreements with other VistA packages.
3. The solution will meet VA statutory and regulatory requirements.

## **2.5 Overview of the Significant Requirements**

### **2.5.1 Overview of Significant Functional Requirements**

Deliver standardized, interoperable immunization data allowing VA to quickly and reliably document and exchange information related to immunizations on beneficiaries across services and departments.

### **2.5.2 Functional Workload and Functional Performance Requirements**

Not Applicable to IOC.

### **2.5.3 Operational Requirements**

The VIMM enhancements shall support peak VistA file server capacity and should be available 100% of the time during core hours.

Notification for scheduled downtime shall be provided at least 48 hours in advance.

### **2.5.4 Overview of the Technical Requirements**

- Modernization of the VistA PCE system and modifications to other VistA applications that consume immunization data is critical to the success of VistA- 4 and will be completed, in a phased approach, with a series of development efforts that will span multiple years. The first development effort, VA Short Term Phase 1 aimed at obtaining IOC, consists of modifications to two (2) VistA immunization files that support the PCE system and a number of other VistA applications.
- The scope of work outlined in this document will be confined to modifications to the V IMMUNIZATION (9000010.11) and IMMUNIZATION (9999999.14) IMM

MANUFACTURER (9999999.04), and VACCINE INFORMATION STATEMENT (920) VistA files files in order to accommodate additional standards-required data elements.

- All files will be packaged and deployed to selected test sites for Initial Operating Capability Evaluation and eventually be made available for national release.
- There will be no immunization data deployed with this patch. New fields will be added to the V IMMUNIZATION and IMMUNIZATION files but the fields will remain unpopulated until future development efforts aimed at obtaining FOC are completed.
- PCE, CPRS and other VistA applications that read immunization data from the V IMMUNIZATION and IMMUNIZATION files will retain their current functionality with the deployment of this patch. There is no development required for other VistA applications as a result of nationally releasing this patch.

## 2.5.5 Overview of the Security or Privacy Requirements

To enforce security, VistA applications must adhere to the rules established to control access and protect the privacy of VistA information. Security measures assist in preventing unauthorized use of data and protect against loss, tampering and destruction. The VIMM solution must be capable of including or interfacing with standards-conformant security services to ensure that any Principal (user, organization, device, application, component, or object) accessing the system or its data is appropriately authenticated, authorized and audited in conformance with local and/or jurisdictional policies. The VistA immunization application should support Chains of Trust in respect of authentication, authorization, and privilege management, either intrinsically or by interfacing with relevant external services.

All applicable VA and VHA security requirements will be adhered to. Cross-cutting security requirements are contained in the VA Enterprise Requirements Repository (ERR). Additionally, all applicable VA and VHA Privacy requirements will be adhered to. Efforts that involve the collection and maintenance of individually identifiable information must be covered by a Privacy Act system of records notice.

Federal security specifications are documented in the Federal Information Processing Standard (FIPS) 199 and National Institute of Standards and Technology (NIST) SP 800-60.

Minimum security control requirements are addressed in NIST SP 800-53 and VA Handbook 6500, Appendix D.

Proposed solution capabilities deployed as part of the VistA immunization application are required to be compliant with privacy, security and information assurance requirements as outlined in the VHA directive 1605. [REDACTED]

## 2.5.6 System Criticality and High Availability Requirements

Mission criticality high availability requirements are highlighted in this section.

### 2.5.6.1 Reliability

Not Applicable to IOC.

### 2.5.6.2 Maintainability

Not Applicable to IOC.

### **2.5.6.3 Availability**

Not Applicable to IOC.

### **2.5.7 Special Device Requirements**

Not Applicable to IOC.

## **2.6 Legacy System Retirement**

Not Applicable.

## **3 Conceptual Design**

Not Applicable to IOC.

### **3.1 Conceptual Application Design**

Not Applicable to IOC.

#### **3.1.1 Application Context**

Not Applicable to IOC.

### 3.1.2 High Level Application Design

- Fields definitions will be modified on the IMMUNIZATION file.
- New fields will be added to the IMMUNIZATION file.
- Fields definitions will be modified on the V IMMUNIZATION file.
- New fields will be added to the V IMMUNIZATION file.

Below is a sample high level Application Design for IMMUNIZATION FILE #9999999.14 [CHANGES TO ACHIEVE FUTURE STATE]:

Current Field Number from VistA or Indian Health System RPMS	Field Name	Current Data Dictionary Attributes (for existing fields), Suggested Data Dictionary Attributes (for proposed new fields)	Exists in Current VistA?
.01	NAME	45 characters	Yes, length will need to be expanded to account for CDC full vaccine name and short description. (See fields .1 and 1.14 below).
.02	SHORT NAME	10 characters	Yes; lengthen to CDC/CVX example so that it can be a PRINT NAME. Changes here will affect existing Health Summary report formatting.
.03	CVX CODE	3 digit numeric	No; use same DD placement as RPMS.
.1	CDC SHORT DESCRIPTION		No; use data location of RPMS 'ALTERNATE SHORT NAME' and edit field definition to make it long enough to meet the necessary length of standard entries.
2	CDC FULL VACCINE NAME		No; use data location of RPMS 'FULL NAME'; consider a word-processing field so that it can match format from CDC table.
.2	COMBINATION IMMUNIZATION(Y/N)	Yes/No	No = single ingredient vaccine (or at least defined by a single VIS) yes = multi-component vaccine (includes anything that requires multiple VIS to be given).
TBD	(multiple) Components	Could be a self-referential file pointer back to IMMUNIZATION (vaccine table).	List of the components of a vaccine (e.g., Hep A and Hep B).

TBD	(multiple) Available Lot Numbers	A multiple that is locally managed, to list which lot numbers are available for selection by the users.	No; each entry will have a lot number, manufacturer (as MVX pointer) and expiration date.
4	(multiple) Current Vaccine Information Statement	A multiple that is nationally managed, to hold the current available VIS choices for a given immunization.	No; need to define VIS name (e.g., INFLUENZA INACTIVATED INJECTABLE), VISN language (e.g., differentiate between English [default] and Spanish) and publication date.
99.98	MASTER ENTRY FOR VUID	Yes/No	No; used for file standardization, file lockdown, and data update pushes.
99.99	VUID	20 digit number	No; used for file standardization, file lockdown, and data update pushes.
99.991	EFFECTIVE DATE/TIME	Multiple	No; used for file standardization, file lockdown, and data update pushes.
100	CLASS	Set of codes: (L)ocal, (V)ISN, (N)ational	No; it remains to be determined whether VA file standardization will be VUID-based or CLASS-based. Recommend creation of both fields at this time in order to maintain options for consistency with overall PCE standardization. A pattern for this field exists within Clinical Reminders (PXR namespace).
8801	MNEMONIC	Free Text	No

For reference, pre-existing VA data dictionary:

```

^AUTTIMM(D0,0)= (#.01) NAME [1F] ^ (#.02) SHORT NAME [2F] ^ ^ ^ (#.05) MAX
    ==># IN SERIES [5S] ^ ^ (#.07) INACTIVE FLAG [7S] ^
^AUTTIMM(D0,88)= (#8801) MNEMONIC [1F] ^

```

Below is a sample high level Application Design for V IMMUNIZATION FILE #9000010.11 [CHANGES TO ACHIEVE FUTURE STATE]:

Field Number	Field Name	Attributes	Exists?
TBD	Name of which VIS was offered/given to patient	By pointer reference, this should identify the name, version/language and the date may need to be a multiple, with commonly just one entry, but to accommodate multiple VIS's given for multi-component vaccines.	No
TBD	Date on which VIS was offered/given to patient		No
1201	EVENT/DATE TIME	Acceptable for user interface to default VA administrations to "NOW", but has to be editable and precise to time for VA	No



		administrations. Historical documentation needs to be capable of storing to the DATE, but can accept MONTH/YEAR imprecision (e.g., flu shot or a series immunization), or just YEAR imprecision (e.g., tetanus, zoster, pneumovax), depending on which immunization it is.	
1205	DATE/TIME RECORDED	To differentiate between the time that the data was entered to the system and the date/time of the administration event; usually will be timestamped as NOW.	No
1207	LOT NUMBER	Determine whether to store one field and point to MVX and Expiration Date, or to store all three explicitly.	No
TBD	Injection Site	The anatomic location (e.g. left deltoid) where the vaccine was administered Maps to HL7 Table 0163.	No
TBD	Injection Route	For example, IM, SQ. Maps to HL7 Table 0162.	No
TBD	Administered amount ('volume')	Number of units administered, e.g., 0.5 mL, includes both numeric amount (0.5) and the units of measurement (mL).	No
TBD	Injection Location; better named as 'Clinic of Administration'	(Required by other stakeholders) the geographic location (i.e., facility) where the vaccine was administered.	No
1202	Ordering Provider	Pointer to NEW PERSON FILE (#200).	No
1204	ENCOUNTER PROVIDER	Pointer to NEW PERSON FILE (#200). The process does not guarantee that "ordering" provider, "administering" provider and "documenting" provider are one and the same.	No
1206	IMMUNIZATION DOCUMENTER	Pointer to NEW PERSON FILE (#200).	No
TBD	Vaccination Event Information Source	Per HL7 2.5.1, this is to capture "administered" vs. "historical" data.	No
81101	Comments	Per HL7 2.5.1, Table 5-11. No coding change necessary; listing here for cross-walk when HL7 message construction is evaluated.	Yes
81203	Data Source	There is an existing field DATA SOURCE. Used to track the difference between VA-administered data and external source persisted data. Will require new entries in the PCE DATA SOURCE file #839.7, used by the API that stores external data into VistA.	Yes
TBD	Contraindications/Precautions	Source: NVAC Core Data Elements.	No
TBD	Contraindications/Precautions Observation Date	(See above).	No

TBD	Exemption(s) or Parent Refusals, Date of exemption/refusals, Documented Reason - 3 fields	Needs more research to determine if VA will record these in the V IMMUNIZATION file for exemptions or refusals documented at/by VA.	No
#.04	SERIES	field definition will need to be updated to account for inbound /refusal/ records, even if VA does not record our own refusals in this element. Maps to HL7 Table 0322.	Yes
#.06	REACTION	File definition is currently is a set of codes. Suggestion has been made to change to a pointer to VistA file 120.83. Implies a mapping between file 120.83 and SNOMED-CT to be created. Alternatively, map to HL7 Table 0396.	Yes
#.07	CONTRAINDICATION	to create the OBX-14 segment.	Yes

For reference: pre-existing VA data dictionary:

```

^AUPNVIMM(D0,0)= (#.01) IMMUNIZATION [1P:9999999.14] ^ (#.02) PATIENT NAME
    ==>[2P:9000001] ^ (#.03) VISIT [3P:9000010] ^ (#.04) SERIES
    ==>[4S] ^ ^ (#.06) REACTION [6S] ^ (#.07) CONTRAINDICATED [7S]
    ==>^ (#.08) DIAGNOSIS [8P:80] ^ (#.09) DIAGNOSIS 2 [9P:80] ^
    ==>(#.1) DIAGNOSIS 3 [10P:80] ^ (#.11) DIAGNOSIS 4 [11P:80] ^
    ==>(#.12) DIAGNOSIS 5 [12P:80] ^ (#.13) DIAGNOSIS 6 [13P:80] ^
    ==>(#.14) DIAGNOSIS 7 [14P:80] ^ (#.15) DIAGNOSIS 8 [15P:80] ^
^AUPNVIMM(D0,11,0)=^9000010.1111^^ (#1101) REMARKS
^AUPNVIMM(D0,11,D1,0)= (#.01) REMARKS [1W] ^
^AUPNVIMM(D0,12)= (#1201) EVENT DATE AND TIME [1D] ^ (#1202) ORDERING
    ==>PROVIDER [2P:200] ^ ^ (#1204) ENCOUNTER PROVIDER [4P:200]
    ==>^
^AUPNVIMM(D0,801)= (#80101) EDITED FLAG [1S] ^ (#80102) AUDIT TRAIL [2F] ^
^AUPNVIMM(D0,811)= (#81101) COMMENTS [1F] ^
^AUPNVIMM(D0,812)= (#81201) VERIFIED [1S] ^ (#81202) PACKAGE [2P:9.4] ^
    ==>(#81203) DATA SOURCE [3P:839.7] ^

```

The following table shows objects in the High Level Application Design.

Not Applicable to IOC.

Objects								
Name	ID	Description	Service or Legacy Code	External Interface Name	External Interface ID	Internal Interface Name	Internal Interface ID	SDP Sections 1&2
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Internal Data Stores								
Name	ID	Data Stored	Steward			Access		
N/A	N/A	N/A	N/A			N/A		

### 3.1.3 Application Locations

Application Component	Description	Location at Which Component is Run	Type
Patient Care Encounter (PCE)	VISTA IMMUNIZATION and V IMMUNIZATION file updates	All VA Medical Centers	Data Dictionary Updates

### 3.1.4 Application Users

Not Applicable to IOC.

Application Component	Location	User
N/A	N/A	N/A

## 3.2 Conceptual Data Design

### 3.2.1 Project Conceptual Data Model

The scope of this release is limited to data dictionary changes to the VistA IMMUNIZATION and V IMMUNIZATION files. These files already exist; there are no changes in the data model.

Not Applicable for IOC.

### 3.2.2 Database Information

The database information is used to identify all databases that will be created, replaced, interfaced with, or whose structure will be modified (i.e., add or delete tables or add or delete columns to a table) as part of this effort.

Database Name	Description	Type	Steward
VistA	Veterans Health Information Systems and Technology Architecture	I	VA

## 3.3 Conceptual Infrastructure Design

Not Applicable for IOC.

### 3.3.1 System Criticality and High Availability

Not Applicable for IOC.

### 3.3.2 Special Technology

Not Applicable for IOC.

### 3.3.3 Technology Locations

Not Applicable for IOC.

Technology Component	Location	Usage
<b>Production 1</b>	N/A	N/A
<b>Workstations</b>	N/A	N/A
<b>Special Hardware</b>	N/A	N/A
<b>Interface Processors</b>	N/A	N/A
<b>Legacy Mainframe</b>	N/A	N/A
<b>Legacy Application Server</b>	N/A	N/A
<b>Legacy Databases</b>	N/A	N/A
<b>Other</b>	N/A	N/A
<b>Production 2</b>	N/A	N/A
	N/A	N/A
<b>Certification</b>	N/A	N/A
	N/A	N/A
<b>QAX</b>	N/A	N/A
	N/A	N/A
<b>Education</b>	N/A	N/A
	N/A	N/A
<b>Test</b>	N/A	N/A
	N/A	N/A
<b>Development</b>	N/A	N/A

### 3.3.4 Conceptual Infrastructure Diagram

#### 3.3.4.1 Location of Environments and External Interfaces

The two files being modified already exist at all VA Medical Centers. No external interfaces are included in the scope of this effort.

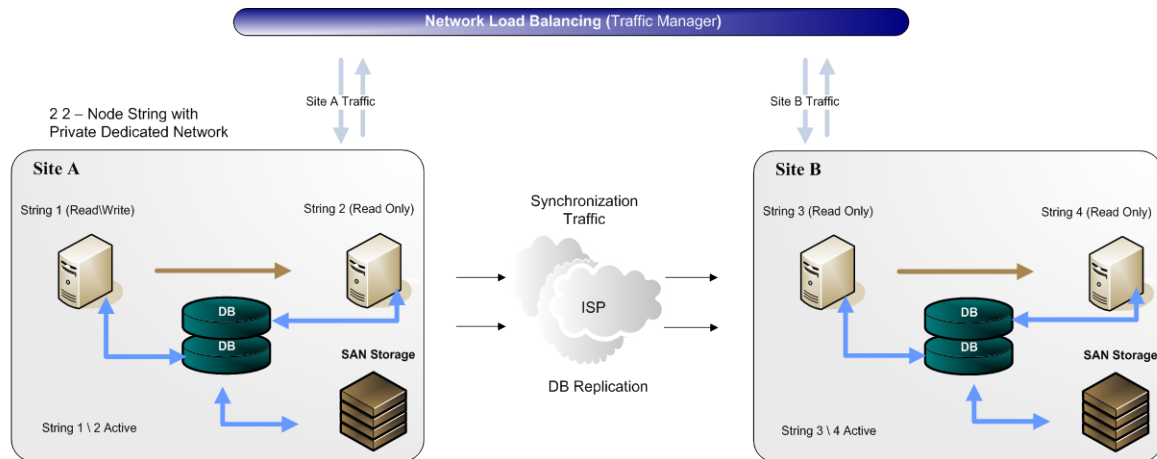


Figure 1 Sample Conceptual Networks and Environments

### 3.3.4.2 Conceptual Production String Diagram

Standard VistA configuration. Nothing new added to this section.

## 4 System Architecture

Standard VistA configuration. Not Applicable to IOC.

### 4.1 Hardware Architecture

Standard VistA configuration. Not Applicable to IOC.

### 4.2 Software Architecture

Standard VistA configuration. Not Applicable to IOC.

### 4.3 Communications Architecture

Standard VistA configuration. Not Applicable to IOC.

## 5 Data Design

Not applicable to IOC.

### 5.1 Data Dictionaries

<b>File Name and Number</b>	V IMMUNIZATION (#9000010.11)
<b>Enhancement Category</b>	<input type="checkbox"/> New <input checked="" type="checkbox"/> <b>Modify</b> <input type="checkbox"/> Delete <input type="checkbox"/> No Change
<b>SRS/RSD Traceability</b>	JIC-0326, JIC-0293, JIC-0290, JIC-0291, JIC-0289, JIC-0288, JIC-0287, JIC-0284, JIC-0286, JIC-0274, JIC-0273, JIC-0250, JIC-0647
<b>Related Options</b>	N/A
<b>Data Dictionary References</b>	^DD(9000010.11, ^DIC(9000010.11,
<b>Related Protocols</b>	N/A
<b>Related Database Integration Agreements</b>	N/A
<b>Data Passing</b>	<input checked="" type="checkbox"/> <b>Input</b> <input type="checkbox"/> <b>Output</b> <input type="checkbox"/> <b>Both Reference</b> <input type="checkbox"/> <b>Global Reference</b> <input type="checkbox"/> <b>Local</b>
<b>File Documentation</b>	This file has been designed for joint use by the Indian Health Service and the Department of Veteran Affairs.

	<p>This file contains immunizations specific to a particular visit for a particular patient. This file contains one record for each immunization.</p> <p>In the VA, if a CPT code is entered into PCE that represents an immunization, than an immunization will automatically be entered in the V Immunization file. And vice versa, if an immunization is entered into PCE that has a related CPT code, then a V CPT entry will automatically be created with the CPT code for the immunization. The PCE Code Mapping file contains the definitions of what immunization is related to what CPT code, and vice versa.</p>
<b>File Auditing, Security, and Archiving</b>	<b>DD ACCESS: @</b>

<b>File Name and Number</b>	<b>IMMUNIZATION (#9999999.14)</b>
<b>Enhancement Category</b>	<input type="checkbox"/> New <input checked="" type="checkbox"/> <b>Modify</b> <input type="checkbox"/> Delete <input type="checkbox"/> No Change
<b>SRS/RSD Traceability</b>	<b>JIC-0639, JIC-0643, JIC-0644, JIC-0645, JIC-0035a</b>
<b>Related Options</b>	<b>PXTT EDIT IMMUNIZATIONS</b>
<b>Data Dictionary References</b>	<b>^DD(9999999.14, ^DIC(9999999.14,</b>
<b>Related Protocols</b>	N/A
<b>Related Database Integration Agreements</b>	N/A
<b>Data Passing</b>	<input checked="" type="checkbox"/> <b>Input</b> <input type="checkbox"/> <b>Output</b> <input type="checkbox"/> <b>Both Reference</b> <input type="checkbox"/> <b>Global Reference</b> <input type="checkbox"/> <b>Local</b>
<b>File Documentation</b>	This file is a list of Immunizations and associated codes developed specifically for use in the IHS. This file contains a full descriptive name for each Immunization, plus a shortened name of Ten Characters which is used on the Health Summary and on reports where space is limited, plus a Two Digit Code for each Immunization.
<b>File Auditing, Security, and Archiving</b>	DD ACCESS: @ DEL ACCESS: @

<b>File Name and Number</b>	<b>VACCINE INFORMATION STATEMENT File (#920)</b>
<b>Enhancement Category</b>	<input checked="" type="checkbox"/> <b>New</b> <input type="checkbox"/> <b>Modify</b> <input type="checkbox"/> <b>Delete</b> <input type="checkbox"/> <b>No Change</b>
<b>SRS/RSD Traceability</b>	<b>JIC-0202</b>
<b>Related Options</b>	<b>N/A</b>
<b>Data Dictionary References</b>	
<b>Related Protocols</b>	<b>N/A</b>
<b>Related Database Integration Agreements</b>	<b>N/A</b>
<b>Data Passing</b>	<input checked="" type="checkbox"/> <b>Input</b> <input type="checkbox"/> <b>Output</b> <input type="checkbox"/> <b>Both Reference</b> <input type="checkbox"/> <b>Global Reference</b> <input type="checkbox"/> <b>Local</b>
<b>File Documentation</b>	<p>This file stores Vaccine Information Statements (VISs). These are information sheets produced by the CDC that explain both the benefits and risks of a vaccine to vaccine recipient.</p> <p>Federal law requires that healthcare staff provide a VIS to a patient, parent, or legal representative before each dose of certain vaccinations.</p>
<b>File Auditing, Security, and Archiving</b>	

<b>File Name and Number</b>	<b>IMM MANUFACTURER File (#9999999.04)</b>
<b>Enhancement Category</b>	<input checked="" type="checkbox"/> <b>New</b> <input type="checkbox"/> <b>Modify</b> <input type="checkbox"/> <b>Delete</b> <input type="checkbox"/> <b>No Change</b>
<b>SRS/RSD Traceability</b>	<b>JIC-0637, JIC-0640</b>
<b>Related Options</b>	<b>N/A</b>
<b>Data Dictionary References</b>	
<b>Related Protocols</b>	<b>N/A</b>
<b>Related Database Integration Agreements</b>	<b>N/A</b>
<b>Data Passing</b>	<input checked="" type="checkbox"/> <b>Input</b> <input type="checkbox"/> <b>Output</b> <input type="checkbox"/> <b>Both Reference</b> <input type="checkbox"/> <b>Global Reference</b> <input type="checkbox"/> <b>Local</b>
<b>File Documentation</b>	This file is a table of immunization and/or vaccine manufacturers. The data in this file is derived from the CDC



	(Center for Disease Control) HL7 Table 0227(Manufacturers of Vaccines (MVX)). This file should not be edited.
<b>File Auditing, Security, and Archiving</b>	

<b>File Name and Number</b>	<b>IMMUNIZATION LOT File (#9999999.41)</b>
<b>Enhancement Category</b>	<input checked="" type="checkbox"/> <b>New</b> <input type="checkbox"/> <b>Modify</b> <input type="checkbox"/> <b>Delete</b> <input type="checkbox"/> <b>No Change</b>
<b>SRS/RSD Traceability</b>	
<b>Related Options</b>	N/A
<b>Data Dictionary References</b>	
<b>Related Protocols</b>	N/A
<b>Related Database Integration Agreements</b>	N/A
<b>Data Passing</b>	<input checked="" type="checkbox"/> <b>Input</b> <input type="checkbox"/> <b>Output</b> <input type="checkbox"/> <b>Both Reference</b> <input type="checkbox"/> <b>Global Reference</b> <input type="checkbox"/> <b>Local</b>
<b>File Documentation</b>	
<b>File Auditing, Security, and Archiving</b>	

## 5.2 Field Definition Information

Provide the following data for each field to be created, modified, or deleted or provide a before and after screen capture of the affected field definitions. If the DD is available at the time the SDD is written, then include it here. It is up to the PM.

### IMMUNIZATION FILE #9999999.14 [CHANGES TO ACHIEVE FUTURE STATE]

<b>Current Field Number from VistA or Indian Health System RPMS</b>	<b>Field Name</b>	<b>Current Data Dictionary Attributes (for existing fields), Suggested Data Dictionary Attributes (for proposed new fields)</b>	<b>Exists in Current VistA?</b>
0.01	NAME	45 characters	Yes, length will need to be expanded to account for CDC full vaccine name and short description.

			(See fields .1 and 1.14 below).
0.02	SHORT NAME	10 characters	Yes; lengthen to CDC/CVX example so that it can be a PRINT NAME. Changes here will affect existing Health Summary report formatting.
0.03	CVX CODE	3 digit numeric	No; use same DD placement as RPMS.
0.1	CDC SHORT DESCRIPTION		No; use data location of RPMS 'ALTERNATE SHORT NAME' and edit field definition to make it long enough to meet the necessary length of standard entries.
2	CDC FULL VACCINE NAME		No; use data location of RPMS 'FULL NAME'; consider a word-processing field so that it can match format from CDC table.
.2	COMBINATION IMMUNIZATION (Y/N)	Yes/No	No = single ingredient vaccine (or at least defined by a single VIS). Yes = multi-component vaccine (includes anything that requires multiple VIS to be given).
TBD	(multiple) Components	Could be a self-referential file pointer back to IMMUNIZATION (vaccine table)	List of the components of a vaccine (e.g., Hep A and Hep B).
TBD	(multiple) Available Lot Numbers	A multiple that is locally managed, to list which lot numbers are available for selection by the users	No; each entry will have a lot number, manufacturer (as MVX pointer) and expiration date.
4	(multiple) VACCINE INFORMATION STATEMENT	Pointer to VACCINE INFORMATION STATEMENT File (#920). A multiple that is nationally managed, to hold the current available VIS choices for a given immunization	No; need to define VIS name (e.g., INFLUENZA INACTIVATED INJECTABLE), VISN language (e.g., differentiate between English [default] and Spanish) and publication date.
99.98	MASTER ENTRY FOR VUID	Yes/No	No; used for file standardization, file lockdown, and data update pushes.
99.99	VUID		No; used for file standardization, file lockdown, and data update pushes.
99.991	EFFECTIVE DATE/TIME	Multiple	No; used for file standardization, file lockdown, and data update pushes.
100	CLASS	Set of codes: (L)ocal, (V)ISN, (N)ational	No; it remains to be determined whether VA file standardization will be VUID-based or CLASS-based. Recommend creation of both fields at this time in order to maintain

			options for consistency with overall PCE standardization. A pattern for this field exists within Clinical Reminders (PXR namespace).
8801	MNEMONIC	Free text	No

**V IMMUNIZATION FILE #9000010.11 [CHANGES TO ACHIEVE FUTURE STATE]**

Field Number	Field Name	Attributes	Exists?
2	VIS OFFERED/GIVEN TO PATIENT	<p>Pointer to VACCINE INFORMATION STATEMENT File (#920) by pointer reference, this should identify the name, version/language and the date.</p> <p>May need to be a multiple, with commonly just one entry, but to accommodate multiple VIS's given for multi-component vaccines.</p>	No
TBD	Date on which VIS was offered/given to patient		No
1201	EVENT DATE/TIME	Acceptable for user interface to default VA administrations to "NOW", but has to be editable and precise to time for VA administrations. Historical documentation needs to capable of storing to the DATE, but can accept MONTH/YEAR imprecision (e.g., flu shot or a series immunization), or just YEAR imprecision (e.g., tetanus, zoster, pneumovax), depending on which immunization it is.	No
1205	DATE/TIME RECORDED	To differentiate between the time that the data was entered to the system and the date/time of the administration event; usually will be time stamped as NOW.	No
1207	LOT NUMBER	Determine whether to store one field and point to MVX and Expiration Date, or to store all three explicitly.	No
TBD	Injection Site	The anatomic location (e.g. left deltoid) where the vaccine was administered Maps to HL7 Table 0163.	No
TBD	Injection Route	For example, IM, SQ. Maps to HL7 Table 0162.	No
TBD	Administered amount ('volume')	Number of units administered, e.g., 0.5 mL, includes both numeric amount (0.5) and the units of measurement (mL).	No
TBD	Injection Location; better named as 'Clinic of Administration'	(Required by other stakeholders) the geographic location (i.e., facility) where the	No

		vaccine was administered.	
1202	Ordering Provider	Pointer to NEW PERSON FILE (#200).	No
1204	ENCOUNTER PROVIDER	Pointer to NEW PERSON FILE (#200). The process does not guarantee that "ordering" provider, "administering" provider and "documenting" provider are one and the same.	No
1206	IMMUNIZATION DOCUMENTER	Pointer to NEW PERSON FILE (#200).	No
TBD	Vaccination Event Information Source	Per HL7 2.5.1, this is to capture "administered" vs. "historical" data.	No
81101	Comments	Per HL7 2.5.1, Table 5-11. No coding change necessary; listing here for cross-walk when HL7 message construction is evaluated.	Yes
81203	Data Source	There is an existing field DATA SOURCE. Used to track the difference between VA-administered data and external source persisted data. Will require new entries in the PCE DATA SOURCE file #839.7, used by the API that stores external data into VistA.	Yes
TBD	Contraindications/Precautions	Source: NVAC Core Data Elements.	No
TBD	Contraindications/Precautions Observation Date	(see above).	No
TBD	Exemption(s) or Parent Refusals, Date of exemption/refusals, Documented Reason - 3 fields	Needs more research to determine if VA will record these in the V IMMUNIZATION file for exemptions or refusals documented at/by VA.	No
#.04	SERIES	Field definition will need to be updated to account for inbound /refusal/ records, even if VA does not record our own refusals in this element. Maps to HL7 Table 0322.	Yes
#.06	REACTION	File definition is currently is a set of codes. Suggestion has been made to change to a pointer to VistA file 120.83. Implies a mapping between file 120.83 and SNOMED-CT to be created. Alternatively, map to HL7 Table 0396.	Yes
#.07	CONTRAINDICATION	To create the OBX-14 segment	Yes

### 5.3 Data Entries Affected by the Design

The scope of this release is limited to data dictionary changes to the VistA IMMUNIZATION and V IMMUNIZATION files. Existing data entries will not be affected.

Field Name	Current Value	New Value
N/A	N/A	N/A

### 5.3.1 Unique Record(s) [Commonly the .01 field]

Unique Record ID		
Field Name(s)	Current Value	New Value
None	N/A	N/A

### 5.3.2 File/Global Size Changes

File/Global Name(s)	Estimated Increase	Estimated Decrease
V IMMUNIZATION (#9000010.11)/ ^DD(9000010.11,	Negligible	None
IMMUNIZATION (#9999999.14) / ^DD(9999999.14,	Negligible	None

## 5.4 Database Management System Files

Not applicable for IOC.

## 5.5 Non-Database Management System Files

Not Applicable to IOC.

## 6 Detailed Design

Not Applicable to IOC.

### 6.1 Hardware Detailed Design

Not Applicable to IOC.

### 6.2 Software Detailed Design

The scope of this release is limited to data dictionary changes to the VistA IMMUNIZATION and V IMMUNIZATION files and the addition of the IMM MANUFACTURER and VACCINE INFORMATION STATEMENT files. These files are part of the VistA Patient Care Encounter (PCE) V 1.0 package.

### 6.3 Local data structures

File Number	File Name	Data Global
9000010.11	V Immunization	^AUPNVIMM
9999999.14	Immunization	^AUTTIMM
920.0	Vaccine Information Statement	^AUTTIVIS

9999999.04	IMM Manufacturer	^AUTTIMAN
------------	------------------	-----------

### 6.3.1 Immunization File (#9999999.14)

This file is a list of Immunizations and associated codes developed specifically for use in the IHS. This file currently contains a full descriptive name for each Immunization, plus a shortened name of Ten Characters which is used on the Health Summary and on reports where space is limited, plus a Two Digit Code for each Immunization.

Current Field Number from VistA or Indian Health System RPMS	Field Name	Current Data Dictionary Attributes (for existing fields), Suggested Data Dictionary Attributes (for proposed new fields)	Exists in Current VistA?
0.01	NAME	45 characters	Yes, length will need to be expanded to account for CDC full vaccine name and short description. (See fields .1 and 1.14 below).
0.02	SHORT NAME	10 characters	Yes; lengthen to CDC/CVX example so that it can be a PRINT NAME. Changes here will affect existing Health Summary report formatting.
0.03	CVX CODE	3 digit numeric	No; use same DD placement as RPMS.
0.1	CDC SHORT DESCRIPTION		No; use data location of RPMS 'ALTERNATE SHORT NAME' and edit field definition to make it long enough to meet the necessary length of standard entries.
2	CDC FULL VACCINE NAME		No; use data location of RPMS 'FULL NAME'; consider a word-processing field so that it can match format from CDC table.
.2	COMBINATION IMMUNIZATION (Y/N)	Yes/No	No = single ingredient vaccine (or at least defined by a single VIS).
			Yes = multi-component vaccine (includes anything that requires multiple VIS to be given).
TBD	(multiple) Components	Could be a self-referential file pointer back to IMMUNIZATION (vaccine table).	List of the components of a vaccine (e.g., Hep A and Hep B).
TBD	(multiple) Available Lot Numbers	A multiple that is locally managed, to list which lot numbers are available for	No; each entry will have a lot number, manufacturer (as MVX pointer) and expiration date.

		selection by the users.	
4	VACCINE INFORMATION STATEMENT	Pointer to VACCINE INFORMATION STATEMENT File (#920). A multiple that is nationally managed, to hold the current available VIS choices for a given immunization.	No; need to define VIS name (e.g., INFLUENZA INACTIVATED INJECTABLE), VISN language (e.g., differentiate between English [default] and Spanish) and publication date.
99.98	MASTER ENTRY FOR VUID	Yes/No	No; used for file standardization, file lockdown, and data update pushes.
99.99	VUID		No; used for file standardization, file lockdown, and data update pushes.
99.991	EFFETIVE DATE/TIME	Multiple	No; used for file standardization, file lockdown, and data update pushes.
100	CLASS	Set of codes: (L)ocal, (V)ISN, (N)ational	No; it remains to be determined whether VA file standardization will be VUID-based or CLASS-based. Recommend creation of both fields at this time in order to maintain options for consistency with overall PCE standardization. A pattern for this field exists within Clinical Reminders (PXR namespace).
8801	MNEMONIC	Free text.	No

### 6.3.2 V Immunization File (#9000010.11)

This file has been designed for joint use by the Indian Health Service and the Department of Veteran Affairs.

This file contains immunizations specific to a particular visit for a particular patient. This file contains one record for each immunization.

In the VA, if a CPT code is entered into PCE that represents an immunization, then an immunization will automatically be entered in the V Immunization file. And vice versa, if an immunization is entered into PCE that has a related CPT code, then a V CPT entry will automatically be created with the CPT code for the immunization. The PCE Code Mapping file contains the definitions of what immunization is related to what CPT code, and vice versa.

Field Number	Field Name	Attributes	Exists?
2	VIS OFFERED/GIVEN TO PATIENT	Pointer to VACCINE INFORMATION STATEMENT File (#920). By pointer reference, this should identify the name, version/language and the date.  May need to be a multiple, with commonly just one entry, but to accommodate multiple VIS's given for multi-component vaccines.	No

TBD	Date on which VIS was offered/given to patient		No
1201	EVENT DATE/TIME	Acceptable for user interface to default VA administrations to "NOW", but has to be editable and precise to time for VA administrations. Historical documentation needs to be capable of storing to the DATE, but can accept MONTH/YEAR imprecision (e.g., flu shot or a series immunization), or just YEAR imprecision (e.g., tetanus, zoster, pneumovax), depending on which immunization it is.	No
1205	DATE/TIME RECORDED	To differentiate between the time that the data was entered to the system and the date/time of the administration event; usually will be time stamped as NOW.	No
1207	LOT NUMBER	Pointer to IMMUNIZATION LOT File (#920). Determine whether to store one field and point to MVX and Expiration Date, or to store all three explicitly.	No
TBD	Injection Site	The anatomic location (e.g. left deltoid) where the vaccine was administered Maps to HL7 Table 0163.	No
TBD	Injection Route	For example,, IM, SQ. Maps to HL7 Table 0162.	No
TBD	Administered amount ('volume')	Number of units administered, e.g., 0.5 mL, includes both numeric amount (0.5) and the units of measurement (mL).	No
TBD	Injection Location; better named as 'Clinic of Administration'	(Required by other stakeholders) the geographic location (i.e., facility) where the vaccine was administered.	No
1202	Ordering Provider	Pointer to NEW PERSON FILE (#200).	No
1204	ENCOUNTER PROVIDER	Pointer to NEW PERSON FILE (#200). The process does not guarantee that "ordering" provider, "administering" provider and "documenting" provider are one and the same.	No
1206	IMMUNIZATION DOCUMENTER	Pointer to NEW PERSON FILE (#200).	No
TBD	Vaccination Event Information Source	Per HL7 2.5.1, this is to capture "administered" vs. "historical" data	No
81101	Comments	Per HL7 2.5.1, Table 5-11. No coding change necessary; listing here for cross-walk when HL7 message construction is evaluated.	Yes
81203	Data Source	There is an existing field DATA SOURCE. Used to track the difference between VA-administered data and external source persisted data. Will require new entries in	Yes



		the PCE DATA SOURCE file #839.7, used by the API that stores external data into VistA.	
TBD	Contraindications/Precautions	Source: NVAC Core Data Elements.	No
TBD	Contraindications/Precautions Observation Date	(see above).	No
TBD	Exemption(s) or Parent Refusals, Date of exemption/refusals, Documented Reason - 3 fields	Needs more research to determine if VA will record these in the V IMMUNIZATION file for exemptions or refusals documented at/by VA.	No
#.04	SERIES	Field definition will need to be updated to account for inbound /refusal/ records, even if VA does not record our own refusals in this element. Maps to HL7 Table 0322.	Yes
#.06	REACTION	File definition is currently is a set of codes. Suggestion has been made to change to a pointer to VistA file 120.83. Implies a mapping between file 120.83 and SNOMED-CT to be created. Alternatively, map to HL7 Table 0396.	Yes
#.07	CONTRAINDICATION	To create the OBX-14 segment.	Yes

### 6.3.3 Vaccine Information Statement File (#920)

This file stores Vaccine Information Statements (VISs). These are information sheets produced by the CDC that explain both the benefits and risks of vaccine to vaccine recipients.

Federal law requires that healthcare staff provide a VIS to a patient, parent, or legal representative before each dose of certain vaccinations.

Field Number	Field Name	Attributes	Exists?
.01	NAME	Free text; name of the Vaccine Information Statement.	No
.02	EDITION DATE	Date; Date distributed by the CDC.	No
.03	EDITION STATUS	Set of codes; C – Current, H – Historic.	No
.04	LANGUAGE	Pointer; LANGUAGE file (#.85).	No
2	VIS TEXT	Word Processing; Text of the Vaccine Information Statement (VIS).	No
99.98	MASTER ENTRY FOR VUID	Yes/no; used for file standardization, file lockdown, and data update pushes.	No
99.99	VUID	Free text; used for file standardization, file lockdown, and data update pushes.	No
99.991	EFFECTIVE DATE/TIME	Multiple; used for file standardization, file lockdown, and data update pushes.	No
101	VIS URL	Free text; URL for Vaccine Information Statement to	No

### 6.3.4 IMM Manufacturer File (#9999999.04)

This file is a table of immunization and/or vaccine manufacturers. The data in this file is derived from the CDC (Center for Disease Control) HL7 Table 0227 (Manufacturers of Vaccines (MVX)). This file should not be edited.

Field Number	Field Name	Attributes	Exists?
.01	NAME	Free Text; Complete name of a manufacturer of vaccines/immunizations	No
.02	MVX CODE	Free Text; MVX code used in transferring immunization data via HL7	No
.03	STATUS	Set of Codes; 1 – Active, 0 - Inactive	No
.05	SYNONYM	Free Text	No
201	CDC NOTES	Free Text; Added information the CDC has for this manufacturer	No
99.98	MASTER ENTRY FOR VUID	Yes/no; used for file standardization, file lockdown, and data update pushes	No
99.99	VUID	Free text; used for file standardization, file lockdown, and data update pushes	No
99.991	EFFECTIVE DATE/TIME	Multiple; used for file standardization, file lockdown, and data update pushes	No

### 6.3.5 IMMUNIZATION LOT File (#9999999.41)

This file is a table of lot numbers for immunization and/or vaccine. The data in this file is derived from:

Field Number	Field Name	Attributes	Exists?
.01	LOT NUMBER	Free Text; Lot number of a manufacturer's immunization/vaccine product.	No
.02	MANUFACTURER	Pointer to IMM MANUFACTURER file (#9999999.04).	No
.03	STATUS	Set of Codes; 2 – Expired, 1 – Inactive, 0 – Active.	No
.04	VACCINE	Pointer to IMMUNIZATION file (#9999999.14).	
.05	VACCINE #2	Pointer to IMMUNIZATION file (#9999999.14).	No
.06	VACCINE #3	Pointer to IMMUNIZATION file (#9999999.14).	No
.07	VACCINE #4	Pointer to IMMUNIZATION file (#9999999.14).	No
.08	VACCINE #5	Pointer to IMMUNIZATION file (#9999999.14).	No
.09	EXPIRATION DATE	Date.	No
.11	STARTING POINT	5 digit numeric; number of doses for this lot.	No

.12	DOSES UNUSED	5 digit numeric; number of doses for this lot that have not been used and cannot exceed STARTING COUNT.	No
.13	VACCINE SOURCE	Set of Codes; v – VFC, n- NON-VFC, o – Other State, l – IHS/Tribal.	No
.14	HEALTH CARE FACILITY	Pointer to LOCATION FILE.	No
.15	LOW SUPPLY ALERT	5 digit numeric between 0 and 99,998.	No
.16	LOT NUMBER FOR EXPORT	Free text; 3 to 12 characters.	No
.17	NDC CODE	Pointer to NDC/UPN FILE (#50.67).	No
.18	NDC CODE (VA)	Pointer to NDC/UPN FILE (#50.67).	No

## 6.4 Communications Detailed Design

Not Applicable to IOC.

## 7 External Interface Design

Not Applicable to IOC.

### 7.1 Interface Architecture

Not Applicable to IOC.

### 7.2 Interface Detailed Design

Not Applicable to IOC.

## 8 Human-Machine Interface

Not Applicable to IOC.

### 8.1 Interface Design Rules

Not Applicable to IOC.

### 8.2 Inputs

Not Applicable to IOC.

### 8.3 Outputs

Not Applicable to IOC.

## **8.4 Navigation Hierarchy**

Not Applicable to IOC.

### **8.4.1 Screen [x.1]**

Not Applicable to IOC.

### **8.4.2 Screen [x.2]**

Not Applicable to IOC.

### **8.4.3 Screen [x.3]**

Not Applicable to IOC.

## **9 System Integrity Controls**

Not Applicable to IOC.

# Appendix A

Attach any addition information that supplements the design specification.

## Requirements Traceability Matrix

Refer to the RTMx on the Immunization SharePoint.

## Packaging and Installation

VistA's Kernel Installation & Distribution System (KIDS) will be used to package this release into a KIDS build that will be distributed to the VA medical centers and installed using the standard KIDS install process.

## Design Metrics

No special metrics will be used in the design activity associated with this release.

## Glossary of Terms

Acronym	Definition
BRD	Business Requirements Document
C/MU	Certification of Meaningful Use
CDC	Center for Disease Control
C-IPT	Capability-Integrated Project Teams
CVX	Vaccine Administered
DoD	Department of Defense
EHR	Electronic Health Record
ENTR	Enterprise Requirements
ERR	Enterprise Requirements Repository
FIPS	Federal Information Processing Standard
GUI	Graphical User Interface
HIT	Health Information Technology
HL7	Health Level Seven
iBRD	Integrated Business Requirements Document
IHS	Indian Health Service
IM	Immunization Module
IOC	Initial Operating Capability
IPO	Interagency Program Office
IT	Information Technology

MUMPS	Massachusetts General Hospital Utility Multi-Programming System
MVX	Manufacturer
NHIN	Nationwide Health Information Network
NIST	National Institute of Standards and Technology
nonf	Non-Functional Requirement
NSR	New Service Request
OIA IPS	Office of Information Informatics and Analytics Informatics Patient Safety Office
OIT	Office of Information and Technology
ONC	Office of the National Coordinator for Health Information Technology
PCE	Patient Care Encounter
RDM	Requirements Development and Management
RED	Requirements Elaboration Document
RMR	Requirements Management Repository
RPC	Remote Procedure Call
RSD	Requirements Specifications Document
SDD	System Design Document
SDL	VistA Software Document Library
SLA	Service Level Agreement
SME	Subject Matter Expert
UX	User Experience
VA	Department of Veterans Affairs
VDL	VHA Documentation Library
VHA	Veterans Health Administration
VIS	Vaccine Information Statement
VistA	Veterans Health Information Systems and Technology Architecture

## Required Technical Documents

The following documents must be submitted for review to support proper approval:

- Product Architecture Document
- Disaster Recovery Plan
- Interface Data Mapping
- Security Assurance Strategy
- Conformance Validation Statement (CVS) - Section 508

For additional information regarding how to obtain proper approval for this project, refer to the following documents:

[IT Infrastructure Standards](#)

[Systems Engineering and Design Review \(SEDR\) process](#)

[Enterprise Architecture Web page](#)

[One-VA TRM](#)

# Appendix B – Approval Signatures

This section is used to document the approval of the System Design Document during the Formal Review. The review should be ideally conducted face to face where signatures can be obtained ‘live’ during the review however the following forms of approval are acceptable:

1. Physical signatures obtained face to face or via fax
2. Digital signatures tied cryptographically to the signer
3. /es/ in the signature block provided that a separate digitally signed e-mail indicating the signer’s approval is provided and kept with the document

The Chair of the governing Integrated Project Team (IPT), Business Sponsor, IT Program Manager, Project Manager, and the members of the Technical and Enterprise Architectural Review Team are required to sign. Until the Engineering and Architecture Review Board is stood up, both the Engineering IPT member(s) and the Architecture IPT member(s) must approve/sign the SDD. Please annotate signature blocks accordingly.

---

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
< *Integrated Project Team (IPT) Chair* >

---

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
< *Business Sponsor* >

---

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
< *IT Program Manager* >

---

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
< *Project Manager* >

---

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
< *Enterprise Architecture*> \

---

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
< *Service Delivery and Engineering* >



# Appendix C – Data Dictionaries

This section is used to document the data dictionary details.

## IMMUNIZATION FILE (#9999999.14)

These are the current fields:

.01	NAME
.02	SHORT NAME
.03	CVX CODE
.05	MAX # IN SERIES
.07	INACTIVE FLAG
.2	COMBINATION IMMUNIZATION (Y/N)
2	CDC FULL VACCINE NAME
3	CPT CODE
4	VACCINE INFORMATION STATEMENT
99.98	MASTER ENTRY FOR VUID
99.99	VUID
99.991	EFFECTIVE DATE/TIME
100	CLASS
8801	MNEMONIC

STANDARD DATA DICTIONARY #9999999.14 -- IMMUNIZATION FILE  
MAY 12,2014@14:41:58 PAGE 1  
STORED IN ^AUTTIMM( (74 ENTRIES) SITE: TROY ISC SUPPORT ACCOUNT UCI: INP,DD  
EV

DATA ELEMENT	NAME TITLE	GLOBAL LOCATION	DATA TYPE
-----------------	---------------	--------------------	--------------

-----  
This file is a list of Immunizations and associated codes developed specifically for use in the IHS. This file contains a full descriptive name for each Immunization, plus a shortened name of Ten Characters which is used on the Health Summary and on reports where space is limited, plus a Two Digit Code for each Immunization.

DD ACCESS: @  
DEL ACCESS: @

(NOTE: Kernel's File Access Security has been installed in this UCI.)

IDENTIFIED BY: CVX CODE (#.03)

POINTED TO BY: ASSOCIATED IMMUNIZATION field (#9) of the PHARMACY ORDERABLE  
ITEM File (#50.7)  
FINDING ITEM field (#15) of the REMINDER DIALOG File (#801.41)  
ADDITIONAL FINDINGS field (#.01) of the ADDITIONAL FINDINGS  
sub-field (#801.4118) of the REMINDER DIALOG File (#801.41)  
FINDING ITEM field (#.02) of the REMINDER FINDING ITEM PARAMETER  
File (#801.43)  
FINDING ITEM field (#.04) of the EXTRACT FINDINGS sub-field  
(#810.31) of the REMINDER EXTRACT SUMMARY File (#810.3)  
FINDING ITEM field (#.01) of the LREPI FINDING TOTALS sub-field  
(#810.32) of the REMINDER EXTRACT SUMMARY File (#810.3)  
FILE ENTRY field (#.01) of the PCE CODE MAPPING File (#811.1)  
RELATED SUPPORTING FILE ENTRY field (#.02) of the PCE CODE

MAPPING File (#811.1)  
 FINDING ITEM field (#.01) of the FINDINGS sub-field (#811.52) of  
 the REMINDER TERM File (#811.5)  
 FINDING ITEM field (#.01) of the FINDINGS sub-field (#811.902)  
 of the REMINDER DEFINITION File (#811.9)  
 TARGET field (#.01) of the CIRN DIRECT MAPPING File (#990.32)  
 IMMUNIZATION field (#.01) of the V IMMUNIZATION File  
 (#9000010.11)

CROSS

REFERENCED BY: VUID(AVUID), NAME(B), MNEMONIC(B), CVX CODE(C),  
 SHORT NAME(D)

9999999.14,.01NAME 0;1 FREE TEXT (Required)

Name  
 INPUT TRANSFORM: K:\$L(X)>100!(\$L(X)<3)!'(X'?1P.E)!(X'?.ANP) X I  
 \$D(X) D CKNA^PXTTU1("^AUTTIMM(")  
 LAST EDITED: APR 29, 2014  
 HELP-PROMPT: Enter the name of the Immunization (3-100  
 characters).  
 DESCRIPTION: This is the name of the Immunization (e.g.  
 Hib-Hep B).  
 Enter the Name of the Immunization using 3 to  
 100 characters.  
 DELETE TEST: .01,0)= I 1 D EN^DDIOL("Deletion not allowed!",  
 ,"!!"?2")  
 NOTES: XXXX--CAN'T BE ALTERED EXCEPT BY PROGRAMMER  
 CROSS-REFERENCE: 9999999.14^B  
 1)= S ^AUTTIMM("B", \$E(X,1,100),DA)=" "  
 2)= K ^AUTTIMM("B", \$E(X,1,100),DA)

9999999.14,.02SHORT NAME 0;2 FREE TEXT (Required)

Short Name  
 INPUT TRANSFORM: K:X[""!(\$A(X)=45) X I \$D(X) K:\$L(X)>10!(\$L(X)  
 <2) X  
 LAST EDITED: APR 30, 2014  
 HELP-PROMPT: Enter a short display name for this entry (2-10  
 characters).  
 DESCRIPTION: This is the "Short" name for this immunization  
 such as an acronym, nickname, or other name by  
 which it might be called (e.g. Tet Tox).  
 Enter the short name using 2 to 10 characters  
 (e.g. Tet Tox).  
 CROSS-REFERENCE: 9999999.14^D  
 1)= S ^AUTTIMM("D", \$E(X,1,30),DA)=" "  
 2)= K ^AUTTIMM("D", \$E(X,1,30),DA)

9999999.14,.03CVX CODE 0;3 FREE TEXT

CVX Code  
 INPUT TRANSFORM: K:\$S(X'?1.3N:1,\$L(X)=3:\$E(X)="0",1:X<1) X I \$D(  
 X),\$L(X)=1 S X="0"\_X

LAST EDITED: APR 14, 2014  
 HELP-PROMPT: Enter a numeric code for this vaccine, 1-3 digits, no decimal digits. Codes less than 10, and only those codes, must start with a zero.  
 DESCRIPTION: This is the Center for Disease Control's (CDC) code for this vaccine, known as the CVX Code. The purpose of the CVX code is mainly when using HL7 to share data regarding this vaccine.  
 TECHNICAL DESCR: The CDC's National Center of Immunization and Respiratory Diseases (NCIRD) developed and maintains a table of CVX codes, matching them with vaccine names. The table is known as HL7 Table 0292, Vaccines Administered. The most up-to-date table can be found at the CDC Web site.  
 EXECUTABLE HELP: N PVX S PVX(1)="This should be the CDC's CVX code for this vaccine.",PVX(2)=" ",PVX(1,"F")="!?"  
 5" D EN^DDIOL(.PVX) K PVX  
 NOTES: XXXX--CAN'T BE ALTERED EXCEPT BY PROGRAMMER  
 CROSS-REFERENCE: 9999999.14^C  
 1)= S ^AUTTIMM("C", \$E(X,1,30),DA)=""  
 2)= K ^AUTTIMM("C", \$E(X,1,30),DA)  
 3)= This cross-reference can be used for lookups. May also be used in matching functions. A standard (regular) cross-reference on the CVX CODE field. The index is the "C". This cross-reference is used for lookups and possibly for matching functions.

9999999.14,.05MAX # IN SERIES 0;5 SET

Maximum Number In Series  
 '0' FOR NON-SERIES;  
 '1' FOR 1;  
 '2' FOR 2;  
 '3' FOR 3;  
 '4' FOR 4;  
 '5' FOR 5;  
 '6' FOR 6;  
 '7' FOR 7;  
 '8' FOR 8;

LAST EDITED: APR 30, 2014  
 HELP-PROMPT: Enter the maximum number of vaccinations that can be given for this immunization.  
 DESCRIPTION: (Optional) This is the maximum number of vaccinations that can be given for this immunization.

Enter the number between 0 and 8 that represents the maximum allowable vaccinations that can be given for this immunization.

9999999.14,.07INACTIVE FLAG 0;7 SET

LAST EDITED: AUG 25, 1995  
 '1' FOR INACTIVE;

HELP-PROMPT: Enter 1 to make the immunization type inactive.  
DESCRIPTION: This field is used to inactivate an immunization type. If this field contains a "1" then the immunization is inactive. Inactive immunizations cannot be selected in the manual data entry process. Immunization entries should be made inactive when they are no longer used. Do not delete the entry or change the meaning of the immunization entry.

To make an inactive immunization active, enter the "@" symbol to delete the "1" from the field.

TECHNICAL DESCR: This field was added for use by PCE in the VA.

The inactive flag should be used, rather than deleting entries in the immunization file, since there may be other files pointing at the immunization entry.

9999999.14,.2 COMBINATION IMMUNIZATION (Y/N) 0;20 SET

Combination Immunization (Y/N)  
'0' FOR NO;  
'1' FOR YES;  
LAST EDITED: APR 16, 2014  
HELP-PROMPT: If this is a combination immunization, enter YES. Otherwise, enter NO.  
DESCRIPTION: This YES/NO field identifies if this immunization is a combination product or not. If this immunization is a combination product (a multi-component vaccine requiring multiple vaccine information statements), enter YES. If this immunization is not a combination product, but can be represented by a single vaccine information statement, enter NO.

9999999.14,2 CDC FULL VACCINE NAME 2;0 WORD-PROCESSING #9999999.142  
(IGNORE "|")

DESCRIPTION: This is the CDC Full Vaccine Name for this immunization.

9999999.14,3 CPT CODE 3;0 POINTER Multiple #9999999.143

9999999.143,.01 CPT CODE 0;1 POINTER TO CPT FILE (#81)  
(Multiply asked)

CPT Code  
LAST EDITED: MAY 05, 2014  
HELP-PROMPT: Enter the CPT code associated with this immunization.  
DESCRIPTION: This multiple field stores the CPT codes associated with this immunization.

CROSS-REFERENCE: 9999999.143^B  
1)= S ^AUTTIMM(DA(1),3,"B",\$(X,1,30),DA)=" "  
2)= K ^AUTTIMM(DA(1),3,"B",\$(X,1,30),DA)

```

9999999.143,.02 CPT CODE STATUS          0;2 SET

      CPT Code Status
      '1' FOR ACTIVE;
      '0' FOR INACTIVE;
      LAST EDITED:      MAY 08, 2014
      HELP-PROMPT:     Enter '1' if this CPT code is active or '0'
                        if this CPT code is inactive.
      DESCRIPTION:     If this CPT code is active, enter '1'. If
                        this CPT code is no longer active, enter '0'.

9999999.14,4 VACCINE INFORMATION STATEMENT 4;0 POINTER Multiple #9999999.144

      WRITE AUTHORITY:  ^

9999999.144,.01 VACCINE INFORMATION STATEMENT 0;1 POINTER TO VACCINE INFORMATIO
                  N STATEMENT FILE (#920) (Multiply asked)

      Vaccine Information Statement
      INPUT TRANSFORM:  S DINUM=X Q
      OUTPUT TRANSFORM: S Y(0)=Y D VIS^PXVUTIL
      LAST EDITED:     MAY 07, 2014
      HELP-PROMPT:     Enter a Vaccine Information Statement for
                        this immunization.
      DESCRIPTION:     This is the name of the Vaccine Information
                        Statement associated with this immunization.

      WRITE AUTHORITY:  ^
      NOTES:            XXXX--CAN'T BE ALTERED EXCEPT BY PROGRAMMER

      CROSS-REFERENCE:  9999999.144^B
                        1)= S ^AUTIMM(DA(1),4,"B",$(X,1,30),DA)="
                        2)= K ^AUTIMM(DA(1),4,"B",$(X,1,30),DA)

9999999.14,99.98MASTER ENTRY FOR VUID VUID;2 SET (Required)

      Master Entry for VUID
      '1' FOR YES;
      '0' FOR NO;
      LAST EDITED:     MAY 01, 2014
      DESCRIPTION:     This field identifies the Master entry for a
                        VUID associated with a Term/Concept.

      WRITE AUTHORITY:  ^
                        UNEDITABLE

9999999.14,99.99VUID                      VUID;1 FREE TEXT (Required)

      VHA Unique ID
      INPUT TRANSFORM:  S X=+X K:$L(X)>20!($L(X)<1)!'(X?1.20N) X
      LAST EDITED:     MAY 01, 2014
      HELP-PROMPT:     Answer must be 1-20 characters in length.
      DESCRIPTION:     VHA Unique ID (VUID). A unique meaningless
                        integer assigned to reference terms VHA wide.

      WRITE AUTHORITY:  ^
                        UNEDITABLE
      NOTES:            XXXX--CAN'T BE ALTERED EXCEPT BY PROGRAMMER

```

CROSS-REFERENCE: 9999999.14^AVUID  
1)= S ^AUTTIMM("AVUID",\$(X,1,30),DA)=" "  
2)= K ^AUTTIMM("AVUID",\$(X,1,30),DA)  
3)= XXX--CAN'T BE ALTERED EXCEPT PROGRAMMER  
This cross-reference is by VUID.

9999999.14,99.991EFFECTIVE DATE/TIME TERMSTATUS;0 DATE Multiple #9999999.1499  
(Add New Entry without Asking)

DESCRIPTION: Describes the pair Status and Effective  
Date/Time for each reference term.

WRITE AUTHORITY: ^

9999999.1499,.01EFFECTIVE DATE/TIME 0;1 DATE (Required)

Effective Date/Time

INPUT TRANSFORM: S %DT="ESTX" D ^%DT S X=Y K:Y<1 X

LAST EDITED: APR 29, 2014

DESCRIPTION: This is the date/time when the Status of the  
reference term was established.

WRITE AUTHORITY: ^

UNEDITABLE

NOTES: XXXX--CAN'T BE ALTERED EXCEPT BY PROGRAMMER

CROSS-REFERENCE: 9999999.1499^B

1)= S ^AUTTIMM(DA(1),"TERMSTATUS","B",\$(X,1,30),DA)=" "

2)= K ^AUTTIMM(DA(1),"TERMSTATUS","B",\$(X,1,30),DA)

9999999.1499,.02STATUS 0;2 SET

Status

'1' FOR ACTIVE;  
'0' FOR INACTIVE;

LAST EDITED: APR 29, 2014

DESCRIPTION: The Status of a reference term is either  
'ACTIVE' or 'INACTIVE'. If the term is  
'ACTIVE', then the term will be accessible by  
end-users to document a particular patient  
event. If 'INACTIVE', then the term will only  
be accessible by the application to display  
legacy data.

WRITE AUTHORITY: ^

9999999.14,100CLASS 100;1 SET

Class

'N' FOR NATIONAL;  
'V' FOR VISN;  
'L' FOR LOCAL;

LAST EDITED: APR 30, 2014

HELP-PROMPT: Enter the CLASS.

DESCRIPTION:

This is the CLASS of this Immunization.

999999.14,8801MNEMONIC

88;1 FREE TEXT

Mnemonic

INPUT TRANSFORM: K:X[""!(\$A(X)=45) X I \$D(X) K:\$L(X)>3!(\$L(X)<1) X

LAST EDITED: APR 30, 2014

HELP-PROMPT: Your answer must be 1-3 characters in length.

DESCRIPTION: This is the mnemonic for this Immunization.

Enter a 1 to 3 character mnemonic.

CROSS-REFERENCE: 999999.14^B^MNEMONIC

1)= S ^AUTTIMM("B", \$E(X,1,30),DA)=1

2)= K ^AUTTIMM("B", \$E(X,1,30),DA)

FILES POINTED TO

FIELDS

CPT (#81)

CPT CODE:CPT CODE (#.01)

VACCINE INFORMATION STATEMENT (#920)

VACCINE INFORMATION STATEMENT:VACCINE INFORMAT

ION STATEMENT (#.01)

INPUT TEMPLATE(S):

PVX IMM EDIT WITH CVX APR 20, 2014@21:14 USER #11960

PRINT TEMPLATE(S):

CAPTIONED USER #0

PXTT LIST IMMUNIZATION AUG 16, 1995@06:55 USER #0

PCE IMMUNIZATION LIST

SORT TEMPLATE(S):

FORM(S)/BLOCK(S):

## IMM MANUFACTURER FILE (#999999.04)

These are the current fields. We don't expect to need any other fields.

.01	NAME
.02	VMX CODE
.03	STATUS
.05	SYNONYM
201	CDC NOTES
901	VUID
902	MASTER ENTRY FOR VUID
1000	EFFECTIVE DATE/TIME

STANDARD DATA DICTIONARY #999999.04 -- IMM MANUFACTURER FILE

MAY 12,2014@14:38:27 PAGE 1

STORED IN ^AUTTIMAN( (67 ENTRIES) SITE: TROY ISC SUPPORT ACCOUNT UCI: INP,D DEV

DATA ELEMENT	NAME TITLE	GLOBAL LOCATION	DATA TYPE
--------------	------------	-----------------	-----------

-----  
This file is a table of immunization and/or vaccine manufacturers. The data in this file is derived from the CDC (Center for Disease Control) HL7 Table 0227 (Manufacturers of Vaccines (MVX)). This file should not be edited.

DD ACCESS: @  
RD ACCESS: @  
WR ACCESS: ^  
DEL ACCESS: @  
LAYGO ACCESS: ^  
AUDIT ACCESS: @

(NOTE: Kernel's File Access Security has been installed in this UCI.)

IDENTIFIED BY: MVX CODE (#.02)[R], STATUS (#.03)

POINTED TO BY: MANUFACTURER field (#.02) of the IMMUNIZATION LOT File (#999999.41)

CROSS

REFERENCED BY: VUID(AVUID), NAME(B)

CREATED ON: APR 28,2014 by LINK,CHARLES

9999999.04,.01NAME 0;1 FREE TEXT (Required)

Name  
INPUT TRANSFORM: K:\$L(X)>75!(\$L(X)<3)!'(X'?1P.E) X  
LAST EDITED: MAY 06, 2014  
HELP-PROMPT: Answer must be 3-75 characters in length.  
DESCRIPTION: This is the complete name of a manufacturer of vaccines/immunizations. The name must be at least 3 characters and no more than 100 characters.  
  
TECHNICAL DESCR: This is the name of the manufacturer of vaccines and/or immunizations. It is mainly used by the Immunization Lot Number file.  
  
LAYGO TEST: 1,0)= IF 0  
  
WRITE AUTHORITY: ^  
CROSS-REFERENCE: 9999999.04^B  
1)= S ^AUTTIMAN("B",X,DA)=""  
2)= K ^AUTTIMAN("B",X,DA)  
3)= Used for lookups.

9999999.04,.02MVX CODE 0;2 FREE TEXT (Required)

MVX Code  
INPUT TRANSFORM: K:\$L(X)>3!(\$L(X)<2) X  
LAST EDITED: APR 28, 2014  
HELP-PROMPT: Answer must be 2-3 characters in length.  
DESCRIPTION: This is the MVX code for this manufacturer. The code is either 2 or 3 characters in length.

TECHNICAL DESCR: The MVX code is used in the transferring of



immunization data via HL7.

WRITE AUTHORITY: ^

9999999.04,.03STATUS 0;3 SET

Status

'1' FOR ACTIVE;  
'0' FOR INACTIVE;

LAST EDITED: APR 28, 2014

HELP-PROMPT: Enter a 1 if the manufacturer is currently active. Enter a 0 (or leave blank) if is INACTIVE.

DESCRIPTION: Use to show if this manufacturer is currently active.

TECHNICAL DESCR: A set of codes used to designate a manufacturer as ACTIVE (by entering a '1') or INACTIVE (by entering a '0' or leaving blank). A '1' must be entered for the manufacturer to be seen as ACTIVE - no entry (blank) will be seen by the software as INACTIVE.

WRITE AUTHORITY: ^

9999999.04,.05SYNONYM 0;5 FREE TEXT

INPUT TRANSFORM: K:\$L(X)>50!(\$L(X)<3) X

LAST EDITED: APR 28, 2014

HELP-PROMPT: Answer must be 3-50 characters in length.

DESCRIPTION: This is an alternate (or shortened) name for this manufacturer.

WRITE AUTHORITY: ^

9999999.04,201CDC NOTES 2;1 FREE TEXT

CDC Notes

INPUT TRANSFORM: K:\$L(X)>245!(\$L(X)<1) X

LAST EDITED: APR 28, 2014

HELP-PROMPT: Answer must be 1-245 characters in length.

DESCRIPTION: These are any added information the CDC has for this manufacturer.

TECHNICAL DESCR: This any information regarding this manufacturer found in the CDC's table of manufacturers. It has a length of 245 characters, taking up the entire 2 node.

WRITE AUTHORITY: ^

9999999.04,901VUID 9;1 FREE TEXT (Required)

INPUT TRANSFORM: K:\$L(X)>20!(\$L(X)<1) X

LAST EDITED: MAY 05, 2014

HELP-PROMPT: Answer must be 1-20 characters in length.

DESCRIPTION: This is the VHA Unique IDentifier (VUID) for this manufacturer. It is used to provide unique ID across the VA.

TECHNICAL DESCR: VUIDs are used to uniquely identify terms across the entire VA. In this case the term is an immunization manufacturer. This field is

set to be uneditable.

CROSS-REFERENCE: 9999999.04^AVUID  
1)= S ^AUTTIMAN("AVUID", \$E(X,1,30),DA)=" "  
2)= K ^AUTTIMAN("AVUID", \$E(X,1,30),DA)  
3)= Do not delete.  
Used to sort and possible find a manufacturer  
by its VUID.

9999999.04,902MASTER ENTRY FOR VUID 9;2 SET

Master Entry for VUID  
'1' FOR YES;  
'0' FOR NO;  
LAST EDITED: MAY 08, 2014  
HELP-PROMPT: Answer 'YES' if this is the Master Entry for  
the VUID entered. Enter 'NO' (or leave blank)  
if it is not.  
DESCRIPTION: This is used to determine the master entry for  
the VUID associated with a Term/Concept.

9999999.04,1000EFFECTIVE DATE/TIME 10;0 DATE Multiple #9999999.041

LAST EDITED: MAY 05, 2014  
DESCRIPTION: This is the date and time that this  
corresponding status was established.

9999999.041,.01 EFFECTIVE DATE/TIME 0;1 DATE (Required) (Multiply asked)

Effective Date/Time  
INPUT TRANSFORM: S %DT="ESTXR" D ^%DT S X=Y K:Y<1 X  
LAST EDITED: MAY 05, 2014  
HELP-PROMPT: Enter the date & time the latest STATUS for  
this reference  
DESCRIPTION: This is the date and time that the latest  
status for this reference term was  
established.  
CROSS-REFERENCE: 9999999.041^B  
1)= S ^AUTTIMAN(DA(1),10,"B", \$E(X,1,30),DA)=" "  
"  
2)= K ^AUTTIMAN(DA(1),10,"B", \$E(X,1,30),DA)

9999999.041,.02 STATUS 0;2 SET (Required)

'1' FOR ACTIVE;  
'0' FOR INACTIVE;  
LAST EDITED: MAY 05, 2014  
HELP-PROMPT: Enter '1' if this is an ACTIVE reference  
term, '0' (or leave blank) if it is INACTIVE.  
DESCRIPTION: An ACTIVE status means that this term is  
usable by end users. An INACTIVE status  
means this term can only be used for display  
(historical) purposes.

INPUT TEMPLATE(S):

```

PRINT TEMPLATE(S):
CAPTIONED                                USER #0
VIMM EXPORT                               MAY 01, 2014@08:53 USER #11970
VIMM TILDE                                MAY 01, 2014@08:54 USER #11970

```

SORT TEMPLATE(S):

FORM(S)/BLOCK(S):

## VACCINE INFORMATION STATEMENT FILE (#920)

These are the current fields. We don't expect any other fields to be needed.

```

.01      NAME
.02      EDITION DATE
.03      EDITION STATUS
.04      LANGUAGE
2        VIS TEXT
99.98    MASTER ENTRY FOR VUID
99.99    VUID
99.991   EFFECTIVE DATE/TIME
101     VIS URL

```

```

STANDARD DATA DICTIONARY #920 -- VACCINE INFORMATION STATEMENT FILE
                                MAY 12,2014@14:40:14 PAGE 1
STORED IN ^AUTTIVIS( (34 ENTRIES)  SITE: TROY ISC SUPPORT ACCOUNT  UCI: INP,D
DEV

```

DATA ELEMENT	NAME TITLE	GLOBAL LOCATION	DATA TYPE
--------------	------------	-----------------	-----------

-----

This file stores Vaccine Information Statements (VISs). These are information sheets produced by the CDC that explain both the benefits and risks of a vaccine to vaccine recipients.

Federal law requires that healthcare staff provide a VIS to a patient, parent, or legal representative before each dose of certain vaccinations.

```

DD ACCESS: @
RD ACCESS: @
WR ACCESS: ^
DEL ACCESS: @
LAYGO ACCESS: ^
AUDIT ACCESS: @

```

(NOTE: Kernel's File Access Security has been installed in this UCI.)

IDENTIFIED BY: EDITION DATE (#.02), EDITION STATUS (#.03), LANGUAGE (#.04)

POINTED TO BY: VIS OFFERED/GIVEN TO PATIENT field (#.01) of the VIS  
OFFERED/GIVEN TO PATIENT sub-field (#9000010.112) of the V  
IMMUNIZATION File (#9000010.11)  
VACCINE INFORMATION STATEMENT field (#.01) of the VACCINE  
INFORMATION STATEMENT sub-field (#9999999.144) of the  
IMMUNIZATION File (#9999999.14)

CROSS  
REFERENCED BY: VUID(AVUID), NAME(B)



920,99.98 MASTER ENTRY FOR VUID VUID;2 SET (Required)

Master Entry for VUID  
'1' FOR YES;  
'0' FOR NO;  
LAST EDITED: MAY 06, 2014  
DESCRIPTION: This field identifies the Master entry for a VUID associated with a Term/Concept.

WRITE AUTHORITY: ^  
UNEDITABLE

920,99.99 VUID VUID;1 FREE TEXT (Required)

VHA Unique ID  
INPUT TRANSFORM: S X=+X K:\$L(X)>20!(\$L(X)<1)!'(X?1.20N) X  
LAST EDITED: MAY 06, 2014  
HELP-PROMPT: Answer must be 1-20 characters in length.  
DESCRIPTION: VHA Unique ID (VUID). A unique meaningless integer assigned to reference terms VHA wide.

WRITE AUTHORITY: ^  
UNEDITABLE

NOTES: XXXX--CAN'T BE ALTERED EXCEPT BY PROGRAMMER

CROSS-REFERENCE: 920^AVUID  
1)= S ^AUTTIVIS("AVUID",\$(X,1,30),DA)=" "  
2)= K ^AUTTIVIS("AVUID",\$(X,1,30),DA)  
3)= XXX--CAN'T BE ALTERED EXCEPT PROGRAMMER  
This cross-reference is by VUID.

920,99.991 EFFECTIVE DATE/TIME TERMSTATUS;0 DATE Multiple #920.99  
(Add New Entry without Asking)

DESCRIPTION: Describes the pair Status and Effective Date/Time for each reference term.

WRITE AUTHORITY: ^

920.99,.01 EFFECTIVE DATE/TIME 0;1 DATE (Required)

Effective Date/Time  
INPUT TRANSFORM: S %DT="ESTX" D ^%DT S X=Y K:Y<1 X  
LAST EDITED: MAY 06, 2014  
DESCRIPTION: This is the date/time when the Status of the reference term was established.

WRITE AUTHORITY: ^  
UNEDITABLE

NOTES: XXXX--CAN'T BE ALTERED EXCEPT BY PROGRAMMER

CROSS-REFERENCE: 920.99^B  
1)= S ^AUTTIVIS(DA(1), "TERMSTATUS", "B", \$(X,1,30),DA)=" "  
2)= K ^AUTTIVIS(DA(1), "TERMSTATUS", "B", \$(X,1,30),DA)

920.99,.02 STATUS 0;2 SET

Status

```

'1' FOR ACTIVE;
'0' FOR INACTIVE;
LAST EDITED: MAY 06, 2014
DESCRIPTION: The Status of a reference term is either
              'ACTIVE' or 'INACTIVE'. If the term is
              'ACTIVE', then the term will be accessible by
              end-users to document a particular patient
              event. If 'INACTIVE', then the term will only
              be accessible by the application to display
              legacy data.

```

WRITE AUTHORITY: ^

920,101 VIS URL 101;1 FREE TEXT

```

Vaccine Information Statement URL
INPUT TRANSFORM: K:$L(X)>245!($L(X)<1) X
LAST EDITED: MAY 01, 2014
HELP-PROMPT: Enter the URL for this VIS (1-245 characters).
DESCRIPTION: This is the URL for this vaccine information
              statement. The URL may be used to access this
              vaccine information statement directly over the
              internet from the CDC website.

```

WRITE AUTHORITY: ^

FILES POINTED TO	FIELDS
LANGUAGE (#.85)	LANGUAGE (#.04)

INPUT TEMPLATE(S):

PRINT TEMPLATE(S):  
CAPTIONED

USER #0

SORT TEMPLATE(S):

FORM(S)/BLOCK(S):