

Department of Veterans Affairs

Health Administration Product Enhancements (HAPE)

Electronic Data Interchange (EDI)

Medical Care Collection Fund (MCCF) Enhancements

Insurance Verification Processor (IVP) (Phase 1, Iteration 1)

Increment 1

System Design Document



May 2014

Version 1.0

Revision History

Date	Version	Description	Author
05/23/2014	1.0	Initial Draft	
6/6/14	1.1	Revisions from CBO review	

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1. Introduction

In an ongoing effort to improve and increase revenue, the Chief Business Office (CBO) is seeking to implement best practices related to insurance capture and verification. The new Insurance Verification Processor (IVP) will incorporate industry standard card scanning capabilities and a Windows Graphical User Interface (GUI) to provide VHA intake and verification clerks the electronic software system necessary to seamlessly capture new insurance information for Veterans. This business process will be appointment driven and will implement a standard business process that captures and verifies insurance information and demographic data through paperless technology combined with VistA integration.

1.1. Purpose of the SDD

The purpose of this document is to describe in sufficient detail how the proposed system will be constructed. The SDD contains some GUI screen mock-ups which will help the developers understand and construct all the required components for the new IVP software.

1.2. Identification

N/A

1.3. Scope

The Insurance Verification Processor will be a real-time insurance intake and verification processor developed for Insurance Intake Clerks who perform Veteran check-in processes and Insurance Verification clerks performing authentication and posting processes. Therefore, this software must be present at the Consolidated Patient Account Center (CPAC) and at every patient treatment area of all VHA facilities. The IVP application incorporates insurance card scanning and enables VistA Insurance Buffer File update and information management. IVP will be integrated with VistA Appointment Scheduling, the Master Insurance File, the Insurance Buffer file, and the Patient's Insurance File.

1.4. Constraining Policies, Directives and Procedures

This document, in conjunction with many others, has the additional purpose of satisfying the Veterans Administration *Program Management Accountability System* (PMAS) requirements. Only after these comprehensive requirements are met will the VA customer allow the software production to be declared "active", meet certain milestones and eventually be deployed to one or more production environments.

1.5. User Characteristics

The new Insurance Verification Processor (IVP) will provide VHA intake and verification clerks the electronic software system necessary to seamlessly capture new insurance information for Veterans.

1.6. Relationship to Other Documents and Plans

Business Requirement Document (BRD)

1.7. Definitions, Acronyms, and Abbreviations

Term	Definition
BN	Business Need
BRD	Business Requirements Document
CBO	Chief Business Office
CCD	Continuity of Care Document
COTS	Commercial-Off-The-Shelf products
CPAC	Consolidated Patient Account Center
EDI	Electronic Data Interchange
eIV	Electronic Insurance Verification
FSC	Financial Services Center
GUI	Graphical User Interface
HIPAA	Health Insurance Portability and Accountability Act of 1996
HPID	Health Plan Identifier
IB	Integrated Billing
ICD	Interface Control Document
ICR	Integration Control Registration
IRM	Information Resource Manager
IT	Information Technology
IVP	Insurance Verification Processor
LOINC	Logical Observation Identifiers, Names, and Codes
MCCF	Medicare Care Cost Fund
MFS	Management and Financial Services
NIF	National Insurance File
NTRT	New Term Rapid Turnaround
OCR	Optical Character Recognition
OWNR	Owner Requirement
PMAS	Program Management Accountability System
PMO	Program Management Office
RTM	Requirements Traceability Matrix
SDD	Software Design Document
TWAIN	Standard Software Protocol for Imaging Devices

Term	Definition
UCD	User Centered Design
UI	User Interface
VA	Department of Veterans Affairs
VAMC	VA Medical Center
VETS	VA Enterprise Terminology Services
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network
VistA	Veterans Health Information Systems and Technology Architecture

1.8. References

N/A

2. Background

2.1. Overview of the System

The Insurance Verification Processor (IVP) application will be a new Windows GUI application designed to streamline the collection and update of patient insurance information. It will be mostly used by registration and admission clerks who will feed the information into the existing VistA Insurance Buffer File. This new application will integrate with the Scheduling application for identifying patients with upcoming appointments. A component of this application will allow clerks to scan and store copies of the patient insurance cards. Furthermore, the IVP application will also be used by Consolidated Patient Account Centers (CPACs) staff for verifying entries in the VistA Insurance Buffer and using them to update patient insurance policy information.

By streamlining the collection and accuracy of the information being collected the VA will greatly improve wait times, reduce data entry related errors, and increase revenue collection.

2.2. Overview of the Business Process

This application will mainly support the insurance information collection into the VistA Insurance Buffer performed by Data Entry Clerks (1c) as well as by Insurance Verifiers personnel located at CPACs (1d), which can be identified in the graphical overview of the entire process below.

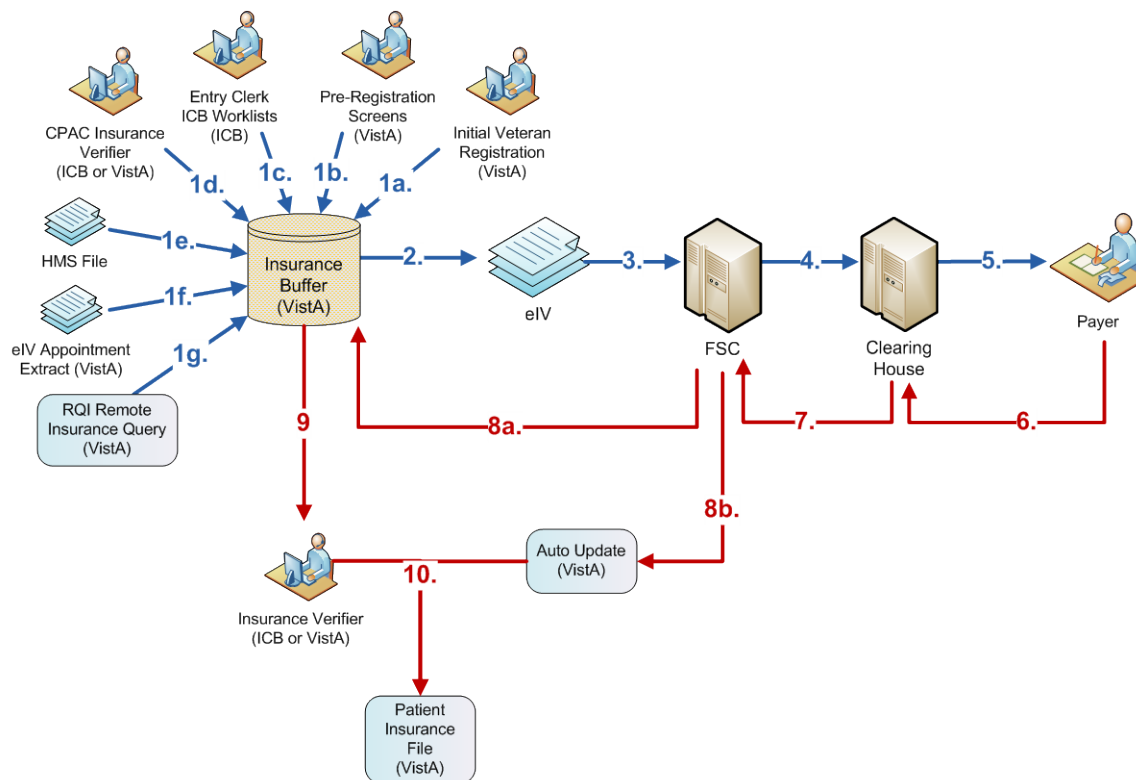


Figure 1: Sample Business Processes Diagram

2.3. Business Benefits

This new software application will incorporate industry standard card scanning capabilities and a Windows Graphical User Interface (GUI) interface for VistA; to provide VHA insurance intake & verification clerks the electronic software system necessary to capture new insurance information for Veterans. The new GUI software will streamline and enhance existing data capture and processing abilities of Veterans Health Information Systems and Technology Architecture (VistA) Integrated Billing (IB) package.

2.4. Assumptions and Constraints

The customer has expressed a preference for a web-based software solution, which will be taken into consideration once we are able to evaluate infrastructure and external components availability (e.g., web server, interface with scanner, etc.). A hybrid (Windows/web) solution will also be considered. The software language and database application have not yet been chosen for this project.

2.4.1. Design Assumptions

This design document takes into account that all existing Remote Procedure Calls (RPCs) in the latest released VistA database today can be utilized for this project and therefore they will not be included in this document.

2.4.2. Design Constraints

Performance issues may render inadequate for some functions of the new software to be web-based, which would result in developing a Windows GUI solution running at a local Windows server.

2.4.3. Design Trade-offs

A web-based application would increase accessibility while simplifying the technical support process. However, most likely it could dramatically decrease the application response time, which could put in risk the user acceptance of the new software.

2.5. Overview of the Significant Requirements

Chief Business Office (CBO) eBusiness Solutions is sponsoring this request. In an ongoing effort to improve and increase revenue, eBusiness Solutions will implement best practices related to insurance capture and verification. The project will incorporate industry standard card scanning capabilities and a Windows Graphical User Interface (GUI) interface for VistA; to provide VHA insurance intake & verification clerks the electronic software system necessary to capture new insurance information for Veterans. This business process will be appointment driven and will implement a standard business process that captures and verifies insurance information and demographic data through paperless technology combined with VistA integration.

The new GUI software will streamline and enhance existing data capture and processing abilities of Veterans Health Information Systems and Technology Architecture (VistA) Integrated Billing (IB) package.

2.5.1. Overview of Significant Functional Requirements

The new GUI software will have to work hand-in-hand with the existing VistA IB user options that are used for collecting and updating patient insurance information. Furthermore, the new software will have to take into account that VistA IB users may be concurrently trying to update the same patient record open in the new software and that needs to be prevented.

The new software will have to maintain a database external to VistA for storing images captured from scanning patient's insurance cards.

The new application will have to be secure and require sign-on by the users, which should be the same credentials currently used in VistA (ACCESS/VERIFY).

Local machine installation of the client version of the software will likely be required.

2.5.2. Overview of Functional Workload / Performance Requirements

Although we do not anticipate workload issues for the specific GUI application, the communication between the new GUI software and the VistA database could run into performance issues, which would be mostly related to network problems between VistA and the server where the new application is running. Reports executed via the new GUI software could have a longer response time than the same report in VistA due to the fact of the large amount of data passing from VistA to the GUI server.

2.5.3. Overview of Operational Requirements

The requirements below were extracted from the BRD.

ID	Requirement
NFR 3	The primary and back-up sites for data storage shall be the same sites used for the VistA Integrated Billing (IB) packages.
NFR 4	The system shall respond to user actions in 7 seconds or less in 95% of the attempts, and never more than 10 seconds.
NFR 5	System response times and page load times shall be consistent with VistA Integrated Billing (IB) standards (for example My HealtheVet or HealtheVet).
NFR 6	Maintenance, including maintenance of externally developed software incorporated into the Insurance Verification Processor application(s), shall be scheduled during off peak hours or in conjunction with relevant VistA maintenance schedules.

ID	Requirement
NFR 7	Information about response time degradation resulting from unscheduled system outages and other events that degrade system functionality and/or performance shall be disseminated to the user community within 30 minutes of the occurrence. The notification shall include the information described in the current Automated Notification Reporting (ANR) template maintained by the VA Service Desk. The business impact must be noted.
NFR 8	Provide a real-time monitoring solution during the maintenance windows or when technical issues/problems occur which may require a preventative back-up.
NFR 9	Notification of scheduled maintenance periods that require the service to be offline or that may degrade system performance shall be disseminated to the user community a minimum of 48 hours prior to the scheduled event.
NFR 10	When/if lapses in system/update availability occur, users would contact local Program Application Specialist (PAS) assigned to IVP; contact OIT assistance as needed; and enter standard IVP package Remedy ticket by calling National Support Desk.

2.5.4. Overview of the Technical Requirements

The requirements below were extracted from the BRD.

ID	Requirement
NFR 11	User acceptance testing personnel shall include insurance intake, insurance verification, and revenue collection management staff that are able to confirm acceptable changes to their workflow.
NFR 12	User acceptance training and testing tools shall include user prompts to guide the use of the application so that minimal technical support is needed by the user.
NFR 13	A technical training curriculum shall be developed and delivered to all levels of staff users.
NFR 14	The training curriculum shall state the expected training time for primary users and secondary users to become productive at using the IVP application.
NFR 15	A training curriculum, user manuals and other training tools shall be created/updated by VHA CBO eBusiness Solutions and then delivered to all levels of staff users at minimum 4-6 weeks in advance of the release of the software through nationwide teleconference calls, Live Meetings, Lync online meetings and PowerPoint presentations. The curriculum shall include all aspects of the new IVP application.
NFR 16	The training curriculum shall state the expected task completion time for primary and secondary users.

2.5.5. Overview of the Security or Privacy Requirements

The requirements below were extracted from the BRD.

ID	Requirement
NFR 26	Due to patient safety considerations, data protection measures such as backup intervals and/or redundancy shall be consistent with systems categorized as critical.
NFR 27	Ensure the proposed solution meets all VHA Security, Privacy and Identity Management requirements including VA Handbook 6500. (See Enterprise Requirements Appendix).

2.5.6. Overview of System Criticality and High Availability Requirements

The requirements below were extracted from the BRD.

ID	Requirement
NFR 4	The system shall respond to user actions in 7 seconds or less in 95% of the attempts, and never more than 10 seconds.
NFR 5	System response times and page load times shall be consistent with VistA Integrated Billing (IB) standards (for example My HealtheVet or HealtheVet).
NFR 6	Maintenance, including maintenance of externally developed software incorporated into the Insurance Verification Processor application(s), shall be scheduled during off peak hours or in conjunction with relevant VistA maintenance schedules.
NFR 7	Information about response time degradation resulting from unscheduled system outages and other events that degrade system functionality and/or performance shall be disseminated to the user community within 30 minutes of the occurrence. The notification shall include the information described in the current Automated Notification Reporting (ANR) template maintained by the VA Service Desk. The business impact must be noted.
NFR 8	Provide a real-time monitoring solution during the maintenance windows or when technical issues/problems occur which may require a preventative back-up.
NFR 9	Notification of scheduled maintenance periods that require the service to be offline or that may degrade system performance shall be disseminated to the user community a minimum of 48 hours prior to the scheduled event.
NFR 10	When/if lapses in system/update availability occur, users would contact local Program Application Specialist (PAS) assigned to IVP; contact OIT assistance as needed; and enter standard IVP package Remedy ticket by calling National Support Desk.

2.5.7. Single Sign-on Requirement

The software will utilize the same user sign-on credentials used by VistA.

2.5.8. Requirement for Use of Enterprise Portals

N/A

2.5.9. Special Device Requirements

The new software must be compatible with the majority of scanners in current use, regardless of manufacturer, model, and design. Only TWAIN driver scanners are used.

2.6. Legacy System Retirement

N/A

3. Conceptual Design

3.1. Conceptual Application Design

The new Windows GUI software will provide the Integrated Billing (IB) end users with a graphical interface for collecting and updating VistA patient insurance information which will be designed to expedite the existing process.

3.1.1. Application Context

The new software will provide a more user-friendly interface than the existing character based interface while following all the existing business logic for capturing and updating patient insurance policy information existing in VistA. Since VistA is unable to image files, a new folder will be part of the new solution to store such files. A local SQL database will also be created with this solution mostly for indexing and reporting purposes.

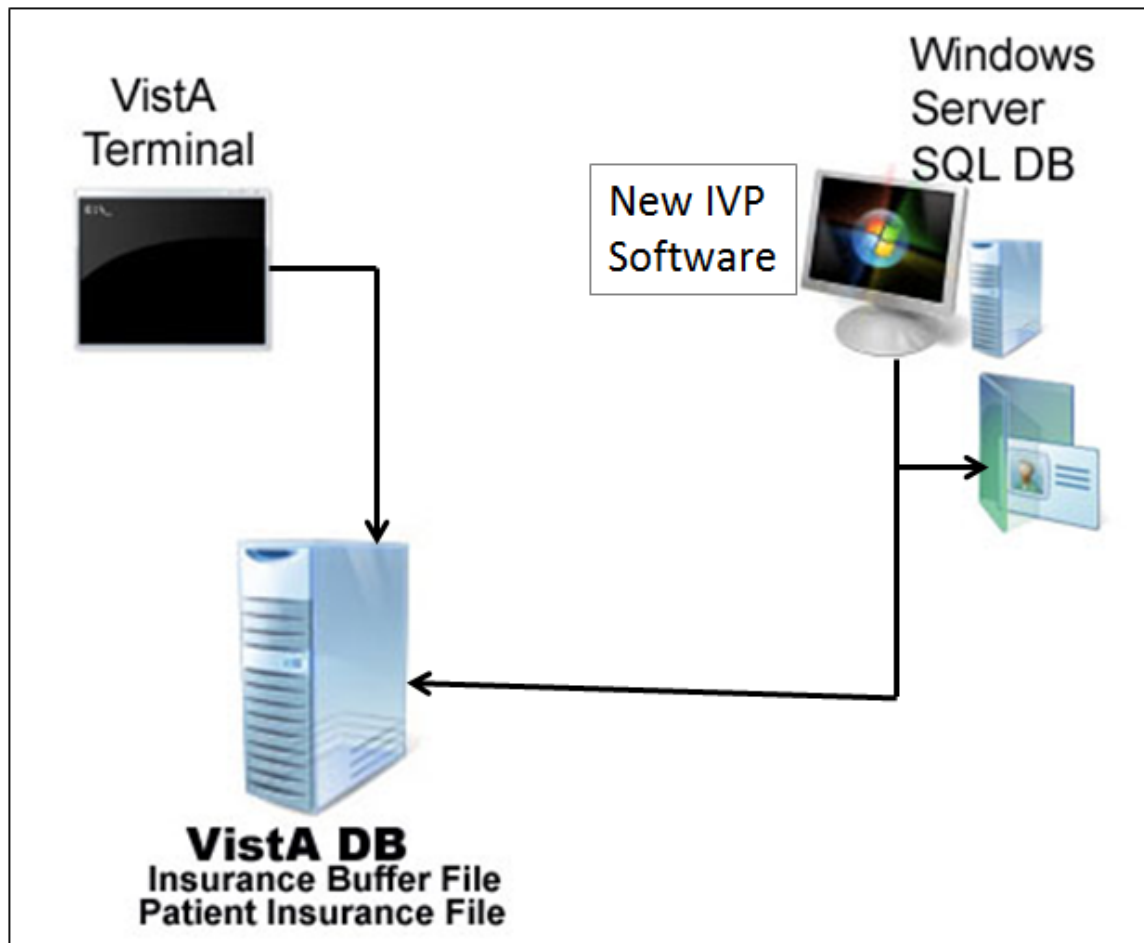


Figure 2: Sample Application Context Diagram

3.1.2. High-Level Application Design

The new GUI software will perform the same functionality available in VistA today via character based interface for capturing and updating patient insurance information, as described above.

3.1.3. Application Locations

Table 7: Application Locations

Application Component	Description	Location at Which Component is Run	Type
IVP GUI software	This is the new Windows based software being developed.	Each facility visited by patients as well as at the CPACs.	Windows GUI

Table 8: Application Users

Application Component	Location	User
Configuration & Reports	VAMC facility/CBO	IRM & CBO staff
Limited Parameter Configuration Module	VAMC facility/CPAC	CPAC Mgr./Supervisor & Non-MCCR Chief
Reporting	CPAC	CPAC IV Lead & POC & non-MCCR Supervisor
Insurance Verification Module	CPAC	Insurance Verification staff
Limited Reporting Module	CPAC	Experienced Insurance Verification staff
Personal Reporting Module	CPAC	Inexperienced Insurance Verification staff
Insurance Intake Module	VAMC	Data Entry Clerks

3.2. Conceptual Data Design

3.2.1. Project Conceptual Data Model

The existing IB VistA data model is not being altered and it will serve as the main data source for the new IVP GUI software. A very limited set of data will be created in a separate SQL database mostly for indexing and reporting purpose only.

3.2.2. Database Information

There will be a local SQL database used solely for temporary report data and indexing information.

Table 9: Database Inventory

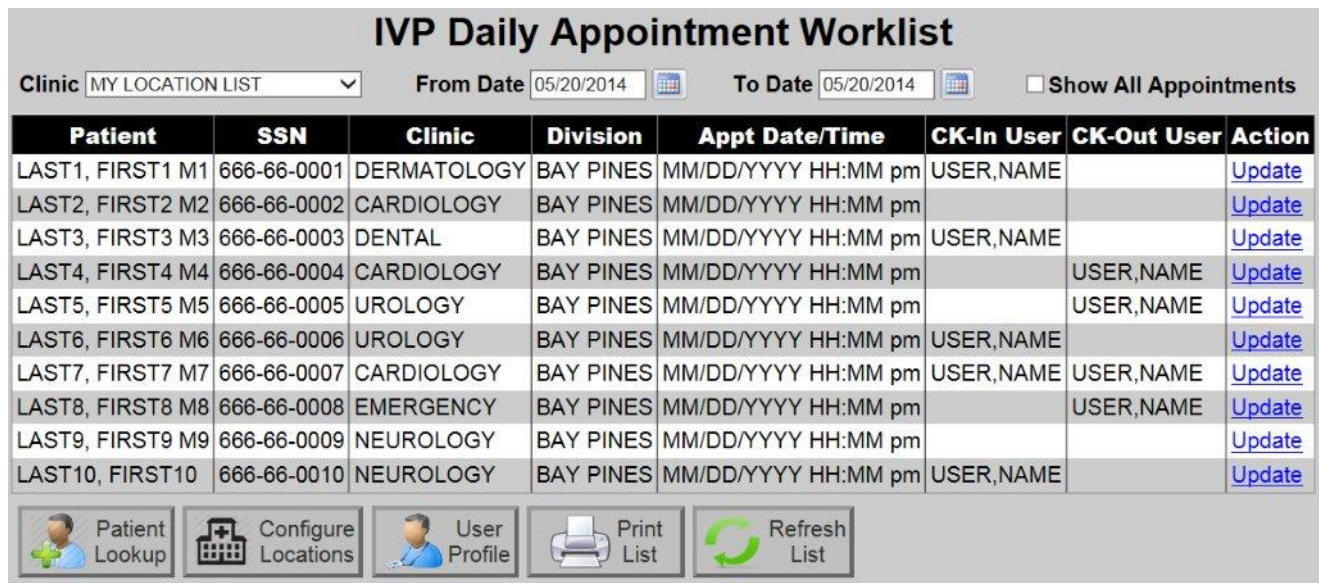
Database Name	Description	Type	Steward
IVP_DB	SQL Database for supporting local storage needs for the new IVP GUI software	Create	VA Facility

3.2.3. User Interface Data Mapping

3.2.3.1. Application Screen Interface

3.2.3.1.1. IVP Daily Appointment Worklist

Figure 5: IVP Daily Appointment Worklist Screen represents the screen that will be mostly utilized by Insurance Intake personnel for quickly retrieving the patient records as they come in for their scheduled visit; Table 10 describes each field in more details.



Patient	SSN	Clinic	Division	Appt Date/Time	CK-In User	CK-Out User	Action
LAST1, FIRST1 M1	666-66-0001	DERMATOLOGY	BAY PINES	MM/DD/YYYY HH:MM pm	USER,NAME		Update
LAST2, FIRST2 M2	666-66-0002	CARDIOLOGY	BAY PINES	MM/DD/YYYY HH:MM pm			Update
LAST3, FIRST3 M3	666-66-0003	DENTAL	BAY PINES	MM/DD/YYYY HH:MM pm	USER,NAME		Update
LAST4, FIRST4 M4	666-66-0004	CARDIOLOGY	BAY PINES	MM/DD/YYYY HH:MM pm		USER,NAME	Update
LAST5, FIRST5 M5	666-66-0005	UROLOGY	BAY PINES	MM/DD/YYYY HH:MM pm		USER,NAME	Update
LAST6, FIRST6 M6	666-66-0006	UROLOGY	BAY PINES	MM/DD/YYYY HH:MM pm	USER,NAME		Update
LAST7, FIRST7 M7	666-66-0007	CARDIOLOGY	BAY PINES	MM/DD/YYYY HH:MM pm	USER,NAME	USER,NAME	Update
LAST8, FIRST8 M8	666-66-0008	EMERGENCY	BAY PINES	MM/DD/YYYY HH:MM pm		USER,NAME	Update
LAST9, FIRST9 M9	666-66-0009	NEUROLOGY	BAY PINES	MM/DD/YYYY HH:MM pm			Update
LAST10, FIRST10	666-66-0010	NEUROLOGY	BAY PINES	MM/DD/YYYY HH:MM pm	USER,NAME		Update

Figure 3: IVP Daily Appointment Worklist Screen

Table 10: IVP Daily Appointment Worklist Screen Description

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Clinic (Combo box)	HOSPITAL LOCATION (#44)	NAME (#.01)	This drop-down selection field allows the user to filter the list of entries by the clinic where the patient has scheduled an appointment. The user also has the option to select their own list of preferred clinics, which is shown as 'MY LOCATION LIST'. ALL clinics are also an option in the list. User can also select user created/named selection.

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Show All Appointments (Checkbox)	N/A	N/A	By default, only appointments that need to be worked on are displayed on the list. This checkbox field allows the user to see all appointments, including the ones that have already been worked on.
Patient (Grid column)	PATIENT (#2)	NAME (#.01)	Patient's name.
SSN (Grid column)	PATIENT (#2)	SOCIAL SECURITY NUMBER (#.09)	Patient's Social Security Number.
Clinic (Grid column)	HOSTPITAL LOCATION (#44)	NAME (#.01)	Clinic where patient has the appointment.
Division (Grid column)	INSTITUTION (#4)	NAME (#.01)	Division where the clinic belongs to.
Appt. Date/Time (Grid column)	PATIENT (#2)	APPOINTMENT DATE/TIME (#.001) in the APPOINTMENT multiple (#2.98)	Date and time of the appointment.
CK-In User (Grid column)	PATIENT MOVEMENT (#405)	ENTERED BY (#100)	User responsible for the patient check in.
CK-Out User (Grid column)	PATIENT MOVEMENT (#405)	ENTERED BY (#100)	User responsible for the patient check out (different Entry in file #405).
Patient Look (Button)	N/A	N/A	In case the patient is not on the list, the user can click on this button to invoke a new window to perform a patient lookup.
Configure Locations (Button)	N/A	N/A	This button invokes a window where the users can set up their Clinic location preferences, which updates 'MY LOCATION LIST' described above. Users shall be able to create multiple lists & the user can name them appropriately using open text (aka: user selected name)
Print List (Button)	N/A	N/A	This button allows the user to send the currently displayed list to a printer device.

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Refresh List (Button)	N/A	N/A	Refreshes the list.

3.2.3.1.2. IVP Patient Insurance Info Summary

Figure 6: IVP Patient Insurance Info Summary Screen represents the screen that will be mostly utilized by Insurance Intake personnel for collecting patient's insurance information. It displays all current patients' insurance information on file as well as the temporary information from the VistA Insurance Buffer for the patient. It gives the user the ability to update existing records or to create new insurance information into the VistA Insurance Buffer file; Table 11 describes each field in more details.

Patient: **LAST5, FIRST5 M5**
SSN: **666-66-0005**
DOB: **02/21/1955**

IVP Patient Insurance Info Summary

Patient Insurance Policies on File

Insurance	Group #	Effective Date	Exp. Date	Verified On	COB	Action
	XPZ102010	MM/DD/YYYY	MM/DD/YYYY	MM/DD/YYYY	PRIMARY	Review
	PLP10	MM/DD/YYYY	MM/DD/YYYY	MM/DD/YYYY	PRIMARY	Review

Temporary Patient IVP Entries

	eIV	Insurance	Group #	Sub. ID	Date Created	Source	Flag	Action
<input type="checkbox"/>			12345	50830-00	MM/DD/YYYY	IVP	+	Edit Delete
<input type="checkbox"/>			9090		MM/DD/YYYY	IVP	!	Edit Delete

Delete Checked
 Create New
 No Insurance
 Not Enough Information
 Refresh Information

Figure 6: IVP Daily Patient Insurance Info Screen

Table 11: IVP Patient Insurance Info Summary Screen Description

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Patient (Label)	PATIENT (#2)	NAME (#.01)	This is the name of the patient previously selected by the user.
SSN (Label)	PATIENT (#2)	SOCIAL SECURITY NUMBER (#.09)	This is the Social Security Number of the patient previously selected by the user.

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
DOB (Label)	PATIENT (#2)	DATE OF BIRTH (#.03)	This is the date of birth of the patient previously selected by the user.
Patient Insurance Policies on File (Panel)	N/A	N/A	This screen section contains a list of all active and expired insurance policies for the patient.
Insurance (Grid Column)	INSURANCE COMPANY (#36)	NAME (#.01)	This is the patient's insurance company name.
Group # (Grid Column)	GROUP INSURANCE PLAN (#355.3)	GROUP NUMBER (#.04)	This is the patient's insurance group number.
Effective Date (Grid Column)	PATIENT (#2)	EFFECTIVE DATE OF POLICY (#8) in the INSURANCE TYPE multiple (#2.312)	This is the date that the patient insurance policy initially went into effect (the date the patient acquired this policy)
Verified On (Grid Column)	PATIENT (#2)	DATE LAST VERIFIED (#1.03) in the INSURANCE TYPE multiple (#2.312)	This is the date that the patient insurance policy was last verified with the insurance company.
COB (Grid Column)	PATIENT (#2)	COORDINATION OF BENEFITS (#.2) in the INSURANCE TYPE multiple (#2.312)	This is the coordination of benefits for the insurance policy (e.g., PRIMARY, SECONDARY or TERTIARY)
Patient IVP Entries (Panel)	N/A	N/A	This screen section contains a list of all VistA Insurance Buffer file for the patient.
Ins. Card Icon column (Grid column)	N/A	N/A	This column indicates the patient's insurance card image has been captured (scanned).
Checkbox column (Grid column)	N/A	N/A	This column allows the user to select multiple entries from the list.
eIV (Grid column)	N/A	N/A	Place the eIV Buffer Status Flags here. + - ! ? \$ #
Insurance (Grid Column)	INSURANCE BUFFER (#355.33)	INSURANCE COMPANY NAME (#20.01)	This is the Insurance Buffer entry's insurance company name.

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Group # (Grid column)	INSURANCE BUFFER (#355.33)	GROUP NUMBER (#40.03)	This is the Insurance Buffer entry's insurance group #.
Sub. ID (Grid column)	INSURANCE BUFFER (#355.33)	SUBSCRIBER ID (#60.04)	This is the Insurance Buffer entry's Subscriber ID.
Date Created (Grid column)	INSURANCE BUFFER (#355.33)	DATE ENTERED (#.01)	This is the date the entry was created in the Insurance Buffer file.
Created by (Grid Column)			This is the name of the user who created the IVP entry.
Source (Grid column)	SOURCE OF INFORMATION (#355.12)	DESCRIPTION (#.02)	This is the name of the source of information for the entry in the Insurance Buffer file.
Flag (Grid column)	N/A	N/A	This is the Patient Status Flag. The following values can be displayed in this column:
Delete Checked (Button)	N/A	N/A	This button allows the user to remove multiple entries from the Temporary IVP list.
No Insurance(Button)	N/A	N/A	This button allows the user to indicate that the patient does not have insurance. Button is only active if no active policies are on file.
Not Enough Information (Button)	N/A	N/A	This button allows the user to indicate patient has insurance however there's not enough information to create an entry.
Refresh Information (Button)	N/A	N/A	Refreshes the patient information.

3.2.3.1.3. IVP Patient Insurance Capture Screen



Figures 7 & 8: IVP Patient Insurance Capture Screens represent the pop-up screen when the user clicks on the 'Create New' (Insurance) button; Table 12 describes each field on the screen in more details.

IVP Patient Insurance Capture


☒ No Card


Front

Back



Insurance Co.
Subscriber ID

 Done

 Done & Add New



 Cancel
(no update)

Figure 8: IVP Patient Insurance Capture Screen (New w/out card)


IVP Patient Insurance Capture

Scan Card
☒ No Card

Front



Back

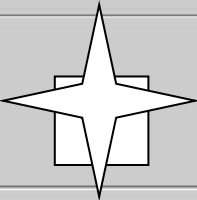



Insurance Co.


Subscriber ID

❌

[SELECT ONE] ▼




Done


Done & Add New



Cancel
(no update)

Figure 8.1: IVP Patient Insurance Capture Screen (New w/out card and no company name or ID)

Table 12: IVP Patient Insurance Capture Screen Description

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Scan Card (Button)	N/A	N/A	This button invokes the Scan Interface Screen which enables to user to scan the front and back of the patient's insurance card.
No Card (Checkbox)	N/A	N/A	This field will be used by the user to indicate the patient does not have an insurance card. The 'Scan Card' button will be disabled when this field is checked.

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Front/Back (Labels)	N/A	N/A	This section will be updated automatically once the patient's insurance card is scanned.
Insurance Co. (ComboBox)	INSURANCE COMPANY (#36)	NAME (#.01)	This dropdown list contains a list of <i>predefined set of values</i> for the user to select from. Pre-populates if existing policy is selected OR Mandatory if card is scanned OR Mandatory if no card is scanned.
Subscriber ID	N/A	N/A	This is the patient's insurance subscriber ID. Pre-populates if existing policy is selected with edit available (no blanks) OR mandatory if card is scanned OR optional if no card is scanned.
New check box			New box turns off insur co & subscriber box if "not enough info" is available
Done (Button)	N/A	N/A	This button will save the information entered and will close the current window. Place the user back to the IVP Patient Insurance Information Summary screen.
Done & Add New (Button)	N/A	N/A	This button will save the information entered and Place the user back into the IVP Patient Insurance Information Summary screen to select additional policy on file OR create new.
Cancel (no update) (Button)	N/A	N/A	This button will cancel the updating/creation of the current record and will close the current window. No information will be saved. Place the user back into the IVP Patient Insurance Information Summary screen.

3.2.3.1.4. IVP Entry Detail Information Screen

The next 5 screens shown (Figures 9 through 13) are part of the same window but show different tabs. All the information on these screens are related to an entry in the IVP Temporary File (aka Buffer).

3.2.3.1.4.1. Missing IVP Entries Screen (RSD 2.6.4)

3.2.3.1.4.2. Missing IV Patient Information Summary Screen

Patient: **LAST5, FIRST5 M5** SSN: **666-66-0005** DOB: **02/21/1955**

IVP Patient Insurance Info Summary

Patient Insurance Policies on File

Insurance	Group #	Effective Date	Exp. Date	Verified On	COB	Action
	XPZ102010	MM/DD/YYYY	MM/DD/YYYY	MM/DD/YYYY	PRIMARY	Review
	PLP10	MM/DD/YYYY	MM/DD/YYYY	MM/DD/YYYY	PRIMARY	Review

Temporary Patient IVP Entries

		eIV	Insurance	Group #	Sub. ID	Date Created	Source	Flag	Action
<input type="checkbox"/>				12345	50830-00	MM/DD/YYYY	IVP	+	Edit Delete
<input type="checkbox"/>				9090		MM/DD/YYYY	IVP	!	Edit Delete

Delete Checked

Create New

No Insurance

Not Enough Information

Refresh Information

3.2.3.1.4.3. Missing IVP Consolidated Screen



Patient's Existing Insurance				
	Insurance Company	Group #	Subscriber Id	Effective Expires
1		GRP NUM 12500	101325404	07/01/05
2	MEDICARE (WNR)	PART A	101325404	07/01/99
3	MEDICARE (WNR)	GRP NUM 9303	101325404	07/01/99

Any Company/Group Plan matches				
	Insurance Company	Group Name	Group Number	Type of Plan
4		GRP NUM 12500	101325404	PPO
5		gary	101325404	PPO
6	P	GRP NUM 12500	5404	PPO
7	AARP	GRP NUM 12500	101325404	HMO

Search

<this is robust search...Insurance Company Name, Group Name, Group Number, Type of Plan search happens on any single element or any combination of the 4. Including partial value search

Patient's Existing IVP Entry

		eIV	Insurance	Group #	Sub. ID	Date Created	Source	Flag	Action
<input type="checkbox"/>				12345	50830-00	MM/DD/YYYY	IVP	+	Edit Delete

3.2.3.1.4.4. IVP Entry Detail Information Screen – Insurance Company

Figure 9: IVP Entry Detail Information (Insurance Company Tab) Screen represents the window where the user can verify and update an IVP temporary entry Insurance Company information before accepting it as a permanent record; Table 13 describes each field on the screen in more details.

Patient: **LAST5, FIRST5 M5**
SSN: **666-66-0005**
DOB: **02/21/1955**

IVP Entry Detail Information

Insurance Company
Group Plan
Coverage
Patient Policy
Insurance Review
eIV Report
Insurance Card (image)

Insurance Company Change
Main Phone #
Billing Phone #
Pre-Certification Phone #
Fax #
Street Address 1:
Street Address 2:
Street Address 3:
City
State TEXAS
Zip Code
Reimbursement WILL REIMBURSE





 Save Entry
 Accept Entry
 Reject Entry
 Close

Figure 9: IVP Entry Detail Information (Insurance Company Tab)

Table 13: IVP Entry Detail Information (Insurance Company Tab)

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Insurance Company (Disabled TextBox)	INSURANCE BUFFER (#355.33)	INSURANCE COMPANY NAME(#20.01)	This is the Insurance Company Name. Although this is a TextBox, the Insurance Company name will not be editable.
Change (Button)	N/A	N/A	This button will be used for selecting a different Insurance Company.
Main Phone # (TextBox)	INSURANCE BUFFER (#355.33)	PHONE NUMBER (#20.02)	Insurance Company main phone number.
Billing Phone # (TextBox)	INSURANCE BUFFER (#355.33)	BILLING PHONE NUMBER (#20.03)	Insurance Company billing phone number.
Pre-Certification Phone (TextBox)#	INSURANCE BUFFER (#355.33)	PRECERTIFICATION PHONE NUMBER (#20.04)	Insurance Company pre-certification phone number.
Fax # (TextBox)	INSURANCE BUFFER (#355.33)	FAX NUMBER (#???)	Insurance Company Fax number.
Street Address 1 (TextBox)	INSURANCE BUFFER (#355.33)	STREET ADDRESS [LINE 1] (#21.01)	Insurance Company street address line 1.
Street Address 2 (TextBox)	INSURANCE BUFFER (#355.33)	STREET ADDRESS [LINE 2] (#21.02)	Insurance Company street address line 2.
City (TextBox)	INSURANCE BUFFER (#355.33)	CITY (#21.04)	Insurance Company city.
State (Dropdown List)	INSURANCE BUFFER (#355.33)	STATE (#21.05)	Insurance Company state.
Zip Code (TextBox)	INSURANCE BUFFER (#355.33)	ZIP CODE (#21.06)	Insurance Company zip code.
Reimbursement (Dropdown List)	INSURANCE BUFFER (#355.33)	REIMBURSE? (#20.05)	Indicates how this company reimburses the VA for care provided to its policy holders
Save Entry (Button)	N/A	N/A	This button allows the user to save updates made to the temporary IVP entry (Buffer).
Accept Entry (Button)	N/A	N/A	This button allows the user to accept the information in the IVP entry and update the Patient permanent Insurance record (#2.312)
Reject Entry (Button)	N/A	N/A	This button allows the user to reject an entry, which removes it from the IVP list permanently.
Close (Button)	N/A	N/A	This button closes the IVP Entry Detail window.

3.2.3.1.4.5. IVP Entry Detail Information Screen – Group Plan

Figure 10: IVP Entry Detail Information (Group Plan Tab) Screen represents the window where the user can verify and update an IVP temporary entry Group Plan information before accepting it as a permanent record; Table 14 describes each field on the screen in more details.

Patient: **LAST5, FIRST5 M5** SSN: **666-66-0005** DOB: **02/21/1955**

IVP Entry Detail Information

Insurance Company	Group Plan	Coverage	Patient Policy
Insurance Review		eIV Report	Insurance Card (image)

Group Name

Group Number

Banking ID #

Processor Control # (PCN)

Plan Type

Utilization Review Required? ☐ Yes ☐ No

Ambulatory Care Certification? ☐ Yes ☐ No

Pre-Certification Required? ☐ Yes ☐ No

Exclude Pre-Existing Condition ☐ Yes ☐ No

Benefits Assignable ☐ Yes ☐ No

Group Plan Comments

Plan Standard FTF

Plan Standard FTF Value

Plan File Time Frame

Save Entry

Accept Entry

Reject Entry

Close

Figure 10: IVP Entry Detail Information (Group Plan Tab)

Table 14: IVP Entry Detail Information (Group Plan Tab)

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Group Name (TextBox)	INSURANCE BUFFER (#355.33)	GROUP NAME (#40.02)	This is the Insurance Plan Group Name.

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Change (Button)	N/A	N/A	This button will be used for selecting an existing Group.
Group Number (TextBox)	INSURANCE BUFFER (#355.33)	GROUP NUMBER (#40.03)	This is the Insurance Plan Group Number.
Banking ID # (TextBox)	INSURANCE BUFFER (#355.33)	BANKING IDENTIFICATION NUMBER (#40.1)	This is the Insurance Plan Banking Identification Number (BIN) used for NCPDP transmissions.
Processor Control # (TextBox)	INSURANCE BUFFER (#355.33)	PROCESSOR CONTROL NUMBER (PCN) (#40.11)	This is the Processor Control Number (PCN) used for NCPDP transmissions.
Plan Type (Dropdown List)	INSURANCE BUFFER (#355.33)	TYPE OF PLAN (#40.09)	This is the type of the Insurance Plan.
Utilization Review Required (RadioButton)	INSURANCE BUFFER (#355.33)	UTILITIZATION REVIEW REQUIRED (#40.04)	This indicates if this plan requires Utilization Review for all billable cases.
Ambulatory Care Certification (RadioButton)	INSURANCE BUFFER (#355.33)	AMBULATORY CARE CERTIFICATION (#40.06)	This indicates if this plan requires certification for ambulatory care.
Pre- Certification Required (RadioButton)	INSURANCE BUFFER (#355.33)	PRECERTIFICATION REQUIRED (#40.05)	This indicates if this plan requires pre-certification.
Exclude Pre-Existing Condition (RadioButton)	INSURANCE BUFFER (#355.33)	EXCLUDE PREEXISTING CONDITION (#40.05)	This indicates if this plan excludes any pre-existing condition.
Benefits Assignable (RadioButton)	INSURANCE BUFFER (#355.33)	BENEFITS ASSIGNABLE (#40.08)	This indicates if this plan allows assignment of benefits.
Group Plan Comments (TextBox)	GROUP INSURANCE PLAN (#355.3)	COMMENTS (#11)	This is comments related to the Insurance Plan Group.
Plan Standard FTF (TextBox)	GROUP INSURANCE PLAN (#355.3)	PLAN STANDARD FTF (#.16)	This indicates the Plan has a standard filling time frame.
Plan Standard FTF Value (TextBox)	GROUP INSURANCE PLAN (#355.3)	PLAN STANDARD FTF VALUE (#.17)	This is the standard filling time frame value for the Plan.
Plan File Time Frame (TextBox)			Note: Will have to clarify source of this information with the business owner

3.2.3.1.4.6. IVP Entry Detail Information Screen – Patient Policy

Figure 11: IVP Entry Detail Information (Patient Policy Tab) Screen represents the window where the user can verify and update an IVP temporary entry Patient Policy information before accepting it as a permanent record; Table 15 describes each field on the screen in more details.

Patient: **LAST5, FIRST5 M5** SSN: **666-66-0005** DOB: **02/21/1955**

IVP Entry Detail Information

Insurance Company | Group Plan | Coverage | **Patient Policy** | Insurance Review | eIV Report | Insurance Card (image)

Effective Date: 05/20/2014

Expiration Date: 05/19/2015

Patient Relation to Subscriber: [dropdown]

Subscriber ID: [text box]

Patient ID: [text box]

Name of Subscriber: [text box]

Subscriber's DOB: 01/10/1955

Subscriber's SSN: [text box]

Subscriber's Sex: [dropdown]

Subscriber's Rank: [dropdown]

Subscriber's Branch: [dropdown]

Coordination of Benefits: [dropdown]

ESGHP? ☐ Yes ☐ No

Patient Policy Comments: [text area]

Policy Billable? ☐ Yes ☐ No

Save Entry Accept Entry Reject Entry Close

Figure 11: IVP Entry Detail Information (Patient Policy Tab)

Table 15: IVP Entry Detail Information (Patient Policy Tab)

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Effective Date (TextBox)	INSURANCE BUFFER (#355.33)	EFFECTIVE DATE (#60.02)	This is the effective date of the patient policy.
Expiration Date (TextBox)	INSURANCE BUFFER (#355.33)	EXPIRATION DATE (#60.03)	This is the expiration date of the patient policy.
Patient Relation to Subscriber (Dropdown list)	INSURANCE BUFFER (#355.33)	PT. RELATIONSHIP TO INSURED (#60.06)	This indicates the patient's relationship to the subscriber (or policy holder).
Subscriber ID (TextBox)	INSURANCE BUFFER (#355.33)	SUBSCRIBER ID (#60.04)	This is Subscriber's Policy Primary ID number.
Patient ID (TextBox)	INSURANCE BUFFER (#355.33)	PATIENT ID (#62.01)	This is the patient's primary ID number for this insurance company. This field will be present when the patient and the subscriber are different and the patient has a unique ID number.
Name of Subscriber (TextBox)	INSURANCE BUFFER (#355.33)	NAME OF INSURED (#60.07)	This is Subscriber's Name.
Subscriber's DOB (TextBox)	INSURANCE BUFFER (#355.33)	INSURED'S DOB (#60.08)	This is Subscriber's DOB.
Subscriber's SSN (TextBox)	INSURANCE BUFFER (#355.33)	INSURED'S SSN (#60.09)	This is Subscriber's SSN.
Subscriber's Sex (Dropdown list)	INSURANCE BUFFER (#355.33)	INSURED'S SEX (#60.13)	This is Subscriber's gender.
Subscriber's Rank (TextBox)	PATIENT (#2)	INSURED'S RANK (#3.03) in the INSURANCE TYPE multiple (#2.312)	This is the Military Rank of the subscriber.
Subscriber's Branch (TextBox)	PATIENT (#2)	INSURED'S BRANCH (#3.02) in the INSURANCE TYPE multiple (#2.312)	This is the Service Branch of the subscriber.
Coordination of Benefits (TextBox)	INSURANCE BUFFER (#355.33)	COORDINATION OF BENEFITS (#60.12)	This indicates the payment sequence this policy (PRIMARY, SECONDARY, TERTIARY)
ESGHP (RadioButton)	INSURANCE BUFFER (#355.33)	ESGHP (#61.01)	This indicates if the policy is part of an Employer Sponsored Group Health Plan.

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Patient Policy Comments (TextBox)	INSURANCE BUFFER (#355.33)	COMMENT - PATIENT POLICY (#1.08)	This is a short comment about this patient's policy. Note: This may have to be revisited since the customer has asked for historical comments.
Policy Billable? (RadioButton)	PATIENT (#2)	POLICY NOT BILLABLE (#3.04) in the INSURANCE TYPE multiple (#2.312)	This indicates whether claims should or should not be created against this policy.

3.2.3.1.4.7. IVP Entry Detail Information Screen – eIV Report

Figure 12: IVP Entry Detail Information (eIV Report Tab) Screen represents the window where the user can view the eIV Report for the policy.

Patient: LAST5, FIRST5 M5	SSN: 666-66-0005	DOB: 02/21/1955
----------------------------------	-------------------------	------------------------

IVP Entry Detail Information	
<div style="display: flex; border-bottom: 1px solid black; margin-bottom: 5px;"> Insurance Company Group Plan Coverage Patient Policy Insurance Review eIV Report Insurance Card (image) </div> <div style="display: flex;"> <div style="width: 50%; padding-right: 10px;"> <p>MESSAGE CONTROL ID: 999-999</p> <p>PATIENT: LAST5, FIRST5 M5</p> <p>PAYER: AETNA</p> <p>BUFFER ENTRY: JAN 10, 2014@10:11</p> <p>TRANSMISSION QUEUE: 1</p> <p>TRANSMISSION STATUS: TRANSMITTED</p> <p>DATE/TIME RECEIVED: MAR 11, 2014@09:00</p> <p>DATE/TIME CREATED: MAR 11, 2014@09:00</p> <p>TRACE NUMBER: 12345</p> <p>RESPONSE TYPE: Original</p> <p>SUBSCRIBER ID: KLA2003</p> <p>SUBSCRIBER NAME: LAST5, FIRST5 M5</p> <p>SUBSCRIBER DOB: 02/21/1955</p> <p>SUBSCRIBER SSN: 666-66-0005</p> <p>SUBSCRIBER SEX: M</p> <p>GROUP NAME: PEP3900</p> <p>GROUP NUMBER: GRP1010</p> <p>POLICY NUMBER: POL111111</p> <p>MEMBER ID: MBR9999</p> <p>PATIENT RELATION TO SUBSCRIBER: SELF</p> <p>EFFECTIVE DATE: JAN 01, 2013</p> <p>EXPIRATION DATE:</p> <p>COORDINATION OF BENEFITS: PRIMARY</p> </div> <div style="width: 50%;"> <p>ELIGIBILITY/BENEFIT INFO: CO-INSURANCE</p> <p>PERCENT: 90%</p> <p>COVERAGE LEVEL: SINGLE</p> <p>INSURANCE TYPE: PPO</p> <p>PLAN COVERAGE DESCRIPTION: FULL</p> <p>TIME PERIOD QUALIFIER: VISIT</p> <p>ELIGIBILITY/BENEFIT INFO: DEDUCTIBLE</p> <p>PERCENT: 10%</p> <p>COVERAGE LEVEL: SINGLE</p> <p>INSURANCE TYPE: PPO</p> <p>PLAN COVERAGE DESCRIPTION: FULL</p> <p>TIME PERIOD QUALIFIER: VISIT</p> <p>ELIGIBILITY/BENEFIT INFO: OUTPATIENT COPAY</p> <p>AMOUNT: \$25</p> <p>COVERAGE LEVEL: SINGLE</p> <p>INSURANCE TYPE: PPO</p> <p>PLAN COVERAGE DESCRIPTION: FULL</p> <p>TIME PERIOD QUALIFIER: VISIT</p> <p>ELIGIBILITY/BENEFIT INFO: EMERGENCY COPAY</p> <p>AMOUNT: \$100</p> <p>COVERAGE LEVEL: SINGLE</p> <p>INSURANCE TYPE: PPO</p> <p>PLAN COVERAGE DESCRIPTION: FULL</p> <p>TIME PERIOD QUALIFIER: VISIT</p> </div> </div>	

Save Entry

Accept Entry

Reject Entry

Close

Figure 12: IVP Entry Detail Information (Patient Policy Tab)

Table 16: IVP Entry Detail Information (Patient Policy Tab)

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
eIV Report (Tab)	N/A	N/A	The same information displayed in VistA eIV Insurance Report will be displayed here for the patient policy. This window will be read-only.

3.2.3.1.4.8. IVP Entry Detail Information Screen – Insurance Card

Figure 13: IVP Entry Detail Information (Insurance Card Tab) Screen represents the window where the user can view the image(s) of the patient's insurance card for this policy. It also allows the user to scan new images through this screen.

Patient: **LAST5, FIRST5 M5** SSN: **666-66-0005** DOB: **02/21/1955**

IVP Entry Detail Information

Insurance Company Group Plan Coverage Patient Policy Insurance Review eIV Report **Insurance Card (image)**

Front Back

Re-Scan Re-Scan

Save Entry Accept Entry Reject Entry Close

Figure 13: IVP Entry Detail Information (Insurance Card Tab)

Table 17: IVP Entry Detail Information (Patient Policy Tab)

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Front (Label/Image)	N/A	N/A	This shows the scanned image from the front of the patient's insurance card.
Back (Label/Image)	N/A	N/A	This shows the scanned image from the back of the patient's insurance card.

Graphical User Interface (GUI) Field	Table (Database Table that field connects to)	Field (Field in Table that the GUI field connects to)	Comments
Re-Scan (Button)	N/A	N/A	This button allows the user to re-scan a new image for the insurance card. If no image has been scanned before the button will say "Scan".

3.2.3.2. Application Report Interface

The reports will be included in a later version of this SDD.

3.2.3.3. Unmapped Data Element

N/A

3.3. Conceptual Infrastructure Design

The technology infrastructure to be used in this project has not been defined yet. The customer has expressed preference for a web-based solution, which will be evaluated and considered. The decision will take into account software licenses already in place for GUI development software (e.g., Delphi) and Database software (e.g., SQL Server).

3.3.1. System Criticality and High Availability

Since the application mission is not critical the system disaster recovery should be handled through the regular help desk support available (Remedy). The functionality being delivered by this new application is redundant via VistA direct access (terminal), which will minimize the consequences of a possible down time for this GUI application.

3.3.2. Special Technology

If any special technology was identified in Section 2.5.9 as part of this system, describe the device and the type of location at which it will be installed. This information may be provided using Table 12.

Table 12: Special Technology Requirements

Special Technology	Description	Notional Location	TRM Status
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Special Technology	Description	Notional Location	TRM Status
TWAIN compatible scanner hardware	The scanner will be used by the IVP users for scanning insurance cards. Such hardware should already be in existence and will not need to be purchased.	Each station where the patient insurance information will be captured.	No

3.3.3. Technology Locations

N/A

3.3.4. Conceptual Infrastructure Diagram

3.3.4.1. Location of Environments and External Interfaces

The new GUI software will duplicate the functionality current in VistA for capturing patient insurance information. However, the new software will provide a much more robust and expeditious tool for the process. Furthermore, it will have the capability of storing images from the patient's insurance card, which is not currently possible in VistA.

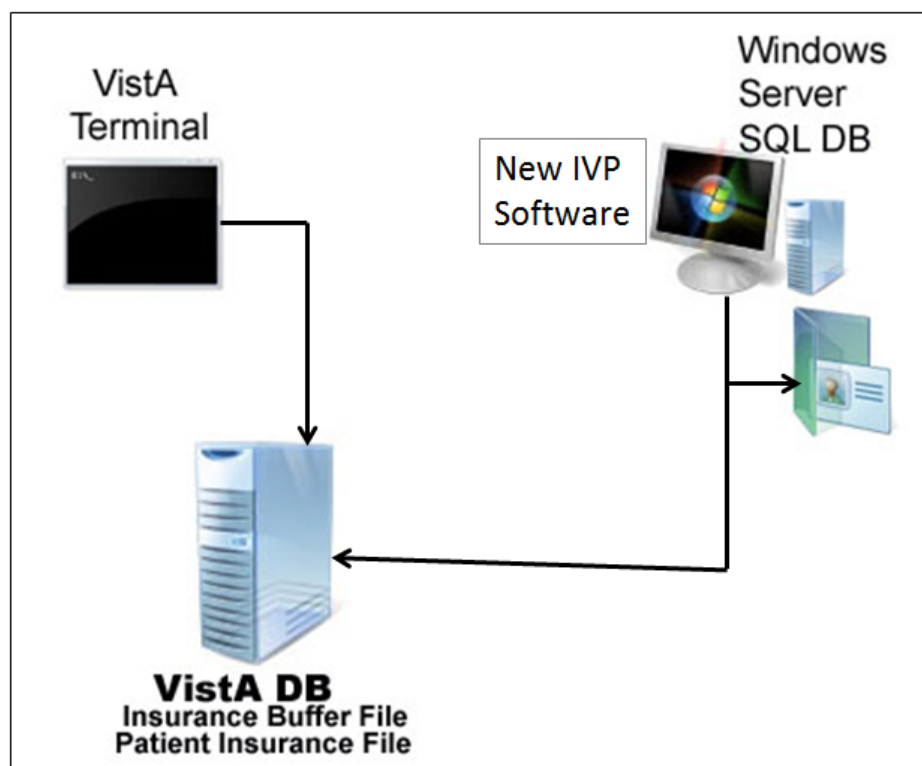


Figure 4: Sample Conceptual Networks and Environments

3.3.4.2. Conceptual Production String Diagram

N/A

4. System Architecture

4.1. Hardware Architecture

The new GUI software will likely require a Windows Server where it should be installed. However, given the fact the VA locations already have a similar vendor application running in production on VA provided hardware there should not be a need for acquiring new hardware for this project.

4.2. Software Architecture

The software is a new GUI application designed to streamline the process for capturing and processing patient's insurance information.

4.3. Network Architecture

N/A

4.4. Service Oriented Architecture / ESS

The software will be completely self-contained. It will use VistA as its main database source. Images files may have to be stored within existing VistA Imaging repositories, but it has not been decided yet. The GUI software will duplicate VistA functionality which is justified because of the benefits of a GUI interface for the process being automated.

4.5. Enterprise Architecture

The adherence to the VA Technical Reference Model (TRM) and Standards Profile (SP) will be followed and described in more details when all the technology components for this project are selected.

5. Data Design

5.1. DBMS Files

N/A

5.2. Non-DBMS Files

N/A

5.3. Data View

N/A

6. Detailed Design

6.1. Hardware Detailed Design

The new GUI software will likely require a Windows Server where it should be installed. However, given the fact the VA locations already have a similar vendor application running in production on VA provided hardware there should not be a need for acquiring new hardware for this project.

6.2. Software Detailed Design

The software is a new GUI application designed to streamline the process for capturing and processing patient's insurance information.

6.2.1.1. Design Element Tables

The software is a new GUI application and the goal will be to re-use existing Remote Procedure Calls (RPCs). There are no current plans for modifying other Mumps VistA components.

6.2.1.1.1. Routines (Entry Points)

N/A

6.2.1.1.2. Templates

N/A

6.2.1.1.3. Bulletins

N/A

6.2.1.1.4. Data Entries Affected by the Design

N/A

6.2.1.1.5. Unique Record(s)

N/A

6.2.1.1.6. File or Global Size Changes

N/A

6.2.1.1.7. Mail Groups

N/A

6.2.1.1.8. Security Keys

N/A

6.2.1.1.9. Options

N/A

6.2.1.1.10. Protocols

N/A

6.2.1.1.11. Remote Procedure Call (RPC)

Several Remote Procedure Calls (RPCs) will be necessary for interfacing the new GUI software with VistA. However, it is assumed that existing RPCs will be used.

6.2.1.1.12. Constants Defined in Interface

N/A

6.2.1.1.13. Variables Defined in Interface

N/A

6.2.1.1.14. Types Defined in Interface

N/A

6.2.1.1.15. GUI

All GUI classes will be newly developed for this software. No existing GUI software will be modified.

6.2.1.1.16. GUI Classes

N/A

6.2.1.1.17. Current Form

N/A

6.2.1.1.18. Modified Form

N/A

6.2.1.1.19. Components on Form

N/A

6.2.1.1.20. Events

N/A

6.2.1.1.21. Methods

N/A

6.2.1.1.22. Special References

N/A

6.2.1.1.23. Class Events

N/A

6.2.1.1.24. Class Methods

N/A

6.2.1.1.25. Class Properties

N/A

6.2.1.1.26. Uses Clause

N/A

6.2.1.1.27. Forms

N/A

6.2.1.1.28. Functions

N/A

6.2.1.1.29. Dialog

N/A

6.2.1.1.30. Help Frame

N/A

6.2.1.1.31. HL7 Application Parameter

N/A

6.2.1.1.32. HL7 Logical Link

N/A

6.2.1.1.33. COTS Interface

N/A

6.3. Network Detailed Design

N/A

6.4. Service Oriented Architecture / ESS Detailed Design

N/A

6.4.1. Service Description for <Consumed Service Name>

N/A

6.4.2. Service Design for <Provided Service Name>

N/A

7. External System Interface Design

N/A

7.1. Interface Architecture

N/A

7.2. Interface Detailed Design

N/A

8. Human-Machine Interface

Please, refer to section 3.2 for details on the GUI screens and data mappings.

9. Security and Privacy

9.1. Security

N/A

9.2. Privacy

The storing of images from the patient's insurance card outside VistA will take into account privacy and security requirements. A possible alternative is to utilize existing VistA Imaging repositories for holding the image files, which is assumed to be in compliance with VA privacy and security requirements.

Attachment A – Approval Signatures

This section is used to document the approval of the System Design Document. The review should be conducted face to face where signatures can be obtained ‘live’ during the review. If unable to conduct a face-to-face meeting then it should be held via LiveMeeting and concurrence captured during the meeting. The Scribe should add /es/name by each position cited. Example provided below.

The Chair of the governing Integrated Project Team (IPT), Business Sponsor, IT Program Manager, Project Manager, and the Co-chairs of the Architecture and Engineering Review Board (AERB) are required to sign.

Signed:

Date:

< *Integrated Project Team (IPT) Chair* >

Signed:

Date:

< *Business Sponsor* >

Signed:

Date:

< *IT Program Manager* >

Signed:

Date:

< *Project Manager* >

Signed:

Date:

Co-Chair of Architecture & Engineering Review Board (AERB)
Architecture, Strategy, and Design (ASD)

Signed:

Date:

Co-Chair of Architecture & Engineering Review Board (AERB)
Service, Delivery, and Engineering (SDE)