

# **Department of Veterans Affairs**

## **Non-VA Care Interface Support HCPS and IFCAP Bi-directional Interface**

### **System Design Document**



**March 2014**

**Version 1.3**

## Revision History

Note: The revision history cycle begins once changes or enhancements are requested after the System Design Document has been baselined.

CREATION DATE	VERSION No.	DESCRIPTION/COMMENTS	AUTHOR(s)	REVIEWER(s)	REVIEW TYPE	ISSUE DATE
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## Artifact Rationale

The System Design Document (SDD) is a dual-use document that provides the conceptual design as well as the as-built design. This document will be updated as the product is built, to reflect the as-built product. Per the Project Management Accountability System (PMAS) Guide, the SDD with conceptual design is required prior to the Milestone 1 Review. The as-built for each delivery must be incorporated prior to the Milestone 2 Review.

# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>7</b>
1.1	Purpose of This Document .....	7
1.2	Identification .....	7
1.2.1	Health Claims Processing Systems .....	7
1.2.2	Integrated Funds Distribution, Control Point Activity, Accounting and Procurement .....	8
1.3	Scope .....	8
1.4	Relationship to Other Plans .....	8
1.5	Methodology, Tools, and Techniques .....	9
1.6	Constraining Policies, Directives and Procedures .....	9
1.7	Constraints .....	9
1.8	Design Trade-offs .....	9
1.9	User Characteristics .....	10
1.10	User Problem Statement .....	10
<b>2</b>	<b>Background .....</b>	<b>10</b>
2.1	Overview of the System .....	10
2.2	Overview of the Business Process .....	11
2.2.1	HCPS Obligates Funds in IFCAP .....	11
2.3	Assumptions .....	12
2.4	Legacy System Retirement .....	12
<b>3</b>	<b>Conceptual Design.....</b>	<b>13</b>
3.1	Conceptual Application Design .....	13
3.1.1	Application Context .....	14
3.1.2	High-Level Application Design .....	17
3.1.3	Application Locations .....	20
3.1.4	Application Users .....	20
3.2	Conceptual Data Design.....	21
3.2.1	Project Conceptual Data Model .....	21
3.2.2	Database Information .....	22
3.2.3	User Interface Data Mapping .....	23
3.3	Conceptual Infrastructure Design .....	23
3.3.1	System Criticality and High Availability.....	23
3.3.2	Special Technology .....	23
3.3.3	Technology Locations.....	23
3.3.4	Conceptual Infrastructure Diagram.....	25
<b>4</b>	<b>System Architecture .....</b>	<b>26</b>
4.1	Hardware Architecture .....	26

4.2	Software Architecture.....	26
4.3	Communications Architecture.....	26
5	Data Design .....	26
5.1	DBMS Files .....	26
5.2	Non-DBMS Files .....	27
6	Detailed Design .....	27
6.1	Hardware Detailed Design.....	27
6.2	Software Detailed Design.....	27
6.2.1	Conceptual Design .....	27
6.2.2	Specific Requirements .....	29
6.3	Communications Detailed Design.....	40
6.3.1	Communications Methods .....	40
6.3.2	Performance Requirements .....	40
7	External Interface Design .....	41
7.1	Interface Architecture.....	41
7.2	Interface Detailed Design .....	41
7.2.1	Message/File Requirements.....	41
7.2.2	Data Assembly Characteristics .....	44
7.2.3	Interface Verification .....	66
8.	Human-Machine Interface .....	66
8.1	Interface Design Rules .....	66
8.2	Inputs.....	66
8.3	Outputs.....	66
8.4	Navigation Hierarchy .....	66
9.	System Integrity Controls .....	66
10.	Approval Signatures.....	67
A.	Additional Information.....	68
A.1.	RTM.....	68
A.2.	Packaging and Installation.....	68
A.3.	Design Metrics .....	68
A.4.	Acronym List and Glossary .....	68
A.5.	Required Technical Documents .....	69

## Figures

Figure 1: VA Provider Referral/Claims - HCPS Integration with CPRS and IFCAP .....	12
Figure 2: IFCAP Enhancements Overview .....	14
Figure 3: Application Context Diagram .....	14
Figure 4: High Level Application Design –HCPS and IFCAP .....	17
Figure 5: Project Conceptual Data Model.....	21
Figure 6: Conceptual Networks and Environments.....	25
Figure 7: Conceptual HCPS to IFCAP String Diagram.....	26

## Tables

Table 1: Scope Inclusions .....	8
Table 2: Scope Exclusion .....	8
Table 3: Application Context Description .....	15
Table 4: Objects in the High Level Application Design – HCPS and IFCAP.....	18
Table 5: Internal Data Stores-IFCAP .....	18
Table 6: Application Locations .....	20
Table 7: Application Users .....	20
Table 8: Database Inventory.....	22
Table 9: Technology Location Details .....	24
Table 10: IFCAP Package Versioning .....	28
Table 11: Routine PROHCP .....	30
Table 12: Security Keys .....	31
Table 13: Options – Manage FCP Threshold.....	32
Table 14: Options – Manage 1358 Threshold.....	33
Table 15: Protocol – PRC HCP DFT-P03 SERVER .....	34
Table 16: Protocol – PRC HCP DFT-P03 CLIENT .....	35
Table 17: HL7 Application Parameter – PRC HCP SEND.....	38
Table 18: HL7 Application Parameter – PRC HCP RECEIVE .....	38
Table 19: HL7 Logical Link - PRCHCP .....	38
Table 20: COTS Interface.....	39
Table 21: HL7 Message Definition .....	44
Table 22: HCPS to IFCAP Reserve Funding Requirements .....	45
Table 23: HCPS to IFCAP Liquidate Funding Requirements .....	47
Table 24: HCPS to IFCAP Re-open Completed Authorization Requirements .....	49
Table 25: HCPS to IFCAP Query Transaction Requirements.....	50
Table 26: IFCAP to HCPS Reserve Funding Requirements ACK^P03 .....	51
Table 27: IFCAP to HCPS Reserve Funding Requirements DFT^P11 .....	51
Table 28: IFCAP to HCPS Liquidate Funding Requirements DFT^P11 .....	52
Table 29: IFCAP to HCPS Re-open Completed Authorization.....	53
Table 30: IFCAP to HCPS Query Transaction .....	54
Table 31: IFCAP to HCPS Unsolicited Warnings/Alerts Requirements .....	54
Table 32: MSH - Message Header Segment.....	55
Table 33: EVN - Event Type Segment .....	56
Table 34: PID - Patient Identification Segment.....	56
Table 35: FT1 Financial Transaction Segment.....	57
Table 36: NTE - Notes and Comments Segment.....	58
Table 37: MSH - Message Header Segment for ACK .....	59
Table 38: MSA – Message Acknowledgement Segment.....	60
Table 39: ERR – Error Segment .....	60

<b>Table 40: HL7 Table 0357 - Message Error Condition Codes.....</b>	<b>61</b>
<b>Table 41: MSH - Message Header Segment.....</b>	<b>62</b>
<b>Table 42: EVN - Event Type Segment .....</b>	<b>62</b>
<b>Table 43: PID - Patient Identification Segment.....</b>	<b>62</b>
<b>Table 44: FT1 Financial Transaction Segment.....</b>	<b>64</b>
<b>Table 45: NTE - Notes and Comments Segment.....</b>	<b>65</b>
<b>Table 46: Acronym List.....</b>	<b>68</b>
<b>Table 47: Glossary .....</b>	<b>69</b>

# 1 Introduction

This documentation details the enhancements to be made to the Integrated Funds Distribution, Control Point Activity, Accounting, and Procurement (IFCAP) system to support a bi-directional interface with the Healthcare Claims Processing System (HCPS).

In order to meet the long term vision, the Chief Business Office (CBO) has partnered with the Department of Veterans Affairs (VA) Financial Services Center (FSC) to develop a centralized Healthcare Claims Processing System. HCPS will first be deployed to Indianapolis in Q2FY14, followed by incremental updates, and finally a complete national deployment by the end of 2015.

The current integration of multiple Veterans Health Information Systems and Technology Architecture (VistA) functionalities for Non-VA claims processing and referral/authorization is not sufficient to assure that appropriate estimation and obligation information is current, transparent and available for decision making during Non-VA referral/authorization and claims processing. In order to address this, VA is looking to automate interfaces between IFCAP and HCPS.

## 1.1 Purpose of This Document

This document specifies design elements required for the Non-VA Care Interface Support (NVCIS) in regard to the IFCAP application. This document is intended for the VA Purchased Care Business Office, FSC development team, and the Non-VA Care Claims Processing Enhancements development and integration team.

## 1.2 Identification

This document describes the interface between IFCAP and the HCPS.

In this interface, HCPS will send Detail Financial Transaction – DFT - DFT^P03 HL7 v2.5 messages to IFCAP. This message contains disbursement details which will trigger IFCAP processes to obligate funds and/or post payments to the Miscellaneous Obligation VA Form 1358. IFCAP will return acknowledgement messages to HCPS indicating whether the request was successful or unsuccessful.

The following systems and software packages apply to this document:

### 1.2.1 Health Claims Processing Systems

System	Details
Title	Health Claims Processing System
Abbreviation	HCPS
Version Number	Need version number from HCPS team.
Release Number	Need release number from HCPS team.
Point of Contact	

### 1.2.2 Integrated Funds Distribution, Control Point Activity, Accounting and Procurement

System	Details
Title	Integrated Funds Distribution, Control Point Activity, Accounting and Procurement
Abbreviation	IFCAP
Version number	5.1
Release number	PRC*5.1*173
Point of Contact	██████████ (IFCAP Technical Subject Matter Expert)

## 1.3 Scope

This document provides details on design requirements for the bidirectional IFCAP/HCPS interface. This document describes the Health Level 7 (HL7) interfaces required to facilitate integration of healthcare claims processing between IFCAP and HCPS.

**Table 1: Scope Inclusions**

Includes
VistA IFCAP Bidirectional Interface from/to HCPS
IFCAP Thresholds Enhancements
IFCAP reports (New and/or modified)

**Table 2: Scope Exclusion**

Excludes
Changes to HCPS software

## 1.4 Relationship to Other Plans

The following reference documents served as inputs to this System Design Document.

1. FY11-13 Health Care Efficiency Initiative Operating Plan
2. BRD\_IFCAP\_Non-VA\_Care\_HCP\_Pilot\_Interface\_2011-04-01\_V1.0008



BRD\_IFCAP\_Non-VA  
\_Care\_HCP\_Pilot\_Int

3. Business Architecture Document: IFCAP Interface





BADIFCAP Interface  
Chapter 2013-0614.r

#### 4. Requirements Specification Document



BADIFCAP Interface  
Chapter 2013-0614.r

#### 5. VHA Strategic Goals and Power of Performance Goals

[http://](#) [REDACTED]

#### 6. Project Management Accountability System (PMAS)

[http://](#) [REDACTED]

#### 7. ProPath

[http://](#) [REDACTED]

## 1.5 Methodology, Tools, and Techniques

The HCPS and IFCAP bi-directional interface will be developed using the waterfall approach.

## 1.6 Constraining Policies, Directives and Procedures

- Health Insurance Portability and Accountability Act (HIPAA) Compliance mandates for Electronic Data Interchange (EDI) transactions
- VA Technical Reference Model (TRM)
- American National Standards Institute (ANSI) X12 278 – Health Care Services Review standards
- VA Handbook 6500
- VA OM Financial Policies on 1358s

## 1.7 Constraints

The following constraints will affect this project:

- The Health Level 7 Version 2.5 standards
- VA Standards and Conventions for Massachusetts General Hospital Utility Multi-Programming System (MUMPS or just M) development

The following external partners and organizations must be able to accommodate the modifications made within the VistA IFCAP within the deadlines for the NVCIS project:

- Healthcare Claims Processing System
- Financial Services Center

## 1.8 Design Trade-offs

The interface design is required to conform to a defined set of requirements, and it is bound by the design constraints listed in section 1.7 above. Therefore, consideration of design trade-offs or alternatives are not applicable for the scope of this project.

## 1.9 User Characteristics

The Non-VA Care Interface Support will adopt the existing user community for Integrated Funds, Control Point, Accounting, and Procurement, and HCPS. The following table shows some of the primary and secondary users:

Name	Description
Primary Users	Control Point Clerks Control Point Officials Fiscal/Accounting
Secondary Users	VAMCs Business Office Chief Business Office (CBO) Information Resources Management (IRM) FSC Personnel Chief Financial Officers HCP/RAS users and supervisors

## 1.10 User Problem Statement

The current integration of multiple VistA functionalities for Non-VA claims processing and referral/authorization is not sufficient to assure that appropriate estimation and obligation information is current, transparent and available for decision making during Non-VA referral/authorization and claims processing.

HCPS does not have an interface with IFCAP to transmit disbursement detail to automatically post payments and/or manage obligations.

## 2 Background

The Fee Program is an umbrella for a number of programs supplementing VA provided care to eligible Veterans. It covers the entire range of health care services to include inpatient care, outpatient care, long term care, dental, and pharmacy. It is locally managed at approximately 150 VAMCs with guidance and limited oversight provided by a program office within the VHA Deputy CBO for Purchased Care. The Purchased Care Non-VA Care Program has seen exponential growth in the past five years, from \$3.8B in annual expenditures to an excess of \$4.8B in FY13. The purpose of the NVCIS project in regards to IFCAP is to integrate IFCAP with referral authorization and claim processing systems to automate justification, authorization, coordination, and documentation of fee care.

### 2.1 Overview of the System

VHA Chief Business Office for Purchased Care has developed a comprehensive set of requirements to outline a vision for the future state of the Purchased Care Program. In order to meet the long term business requirement, VA will need to execute full business process re-engineering, move to a one claim processing system, and make the organizational changes necessary to support these program requirements. The CBO is managing multiple programmatic

changes to meet both long-term needs as well as interim requirements in both care coordination and claims processing.

Claims processing covers the efficient processing, payment or denial of health care claims submitted by Non-VA Providers to include assurance that systems are in place to accurately adjudicate and pay claims.

In order to meet the long term vision, the CBO has partnered with the VA FSC to develop a centralized Healthcare Claims Processing System. HCPS will first be deployed to Indianapolis in Q2FY14, followed by incremental updates, and finally a complete national deployment by the end of 2015.

The HCPS system will share an interface with the IFCAP software. This interface consists of HL7 V. 2.5 Detailed Financial Transactions (DFT^P03) and Acknowledgement (ACK) messages.

HCPS will send a message to IFCAP to obligate funds for referrals received from CPRS.

The initial inbound DFT message shall post financial transaction data to the specified Fund Control Point's (FCP) 1358/Obligation ledger within IFCAP to obligate funds. IFCAP shall return an acknowledgement message, and upon successful processing of the message IFCAP will also return a DFT^P03 message indicating the fund availability.

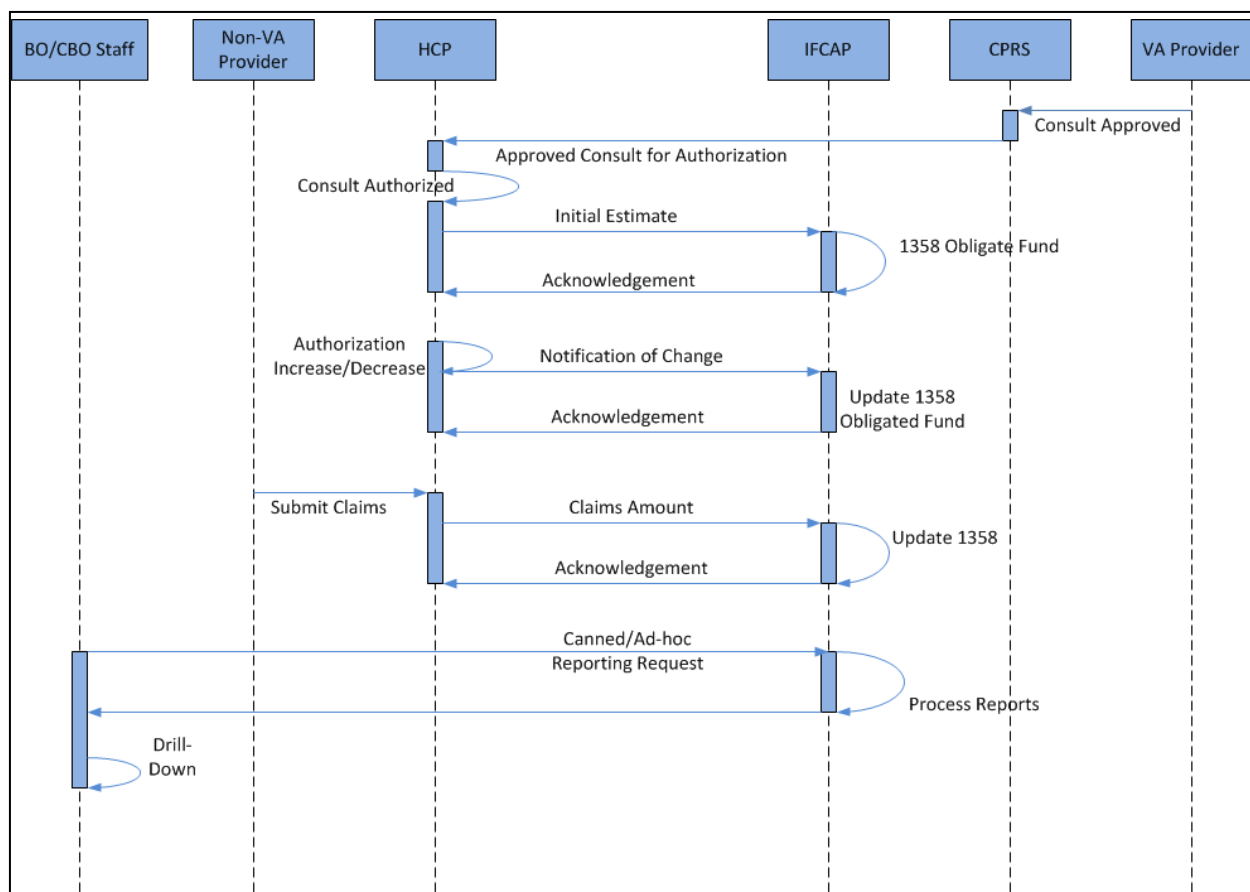
Upon receipt of a claim from a Non-VA Provider, HCPS will send a DFT^P03 message to IFCAP to drawdown funds reflecting the actual payment amount, or adjustments to the payment amount. IFCAP shall return an acknowledgement message indicating receipt of the DFT^P03 message.

## **2.2 Overview of the Business Process**

The Base Year enhancements of the NVCIS project with regards to IFCAP will focus on updating IFCAP with VA financial data in order for IFCAP to obligate and/or liquidate funds.

### **2.2.1 HCPS Obligates Funds in IFCAP**

HL7 Application Parameters will be used.



**Figure 1: VA Provider Referral/Claims - HCPS Integration with CPRS and IFCAP**

## 2.3 Assumptions

Development will occur within the VistA IFCAP package, namespace PRC for the Base year. This package is a Cache M-based product. Build components, necessary for the design, will be packaged into PRC patches to be released using the Forum National Patch Module (NPM).

## 2.4 Legacy System Retirement

N/A

## **3 Conceptual Design**

This section of the SDD provides details about the following topics:

- Conceptual Application Design
- Conceptual Data Design
- Conceptual Infrastructure Design.

### **3.1 Conceptual Application Design**

This section provides the conceptual design of the enhancement being produced by this project. A new interface designed to transmit initial estimates for Non-VA Care from HCPS to IFCAP will be implemented with this patch.

The system overview shows all four enhancements for the NVCIS Pilot Interface project: Computerized Patient Record System, Integrated Funds, Control point, Accounting, and Procurement, VistA Imaging and Foreign Address. This document focuses on the IFCAP Enhancements noted by System 3 in the following figure:

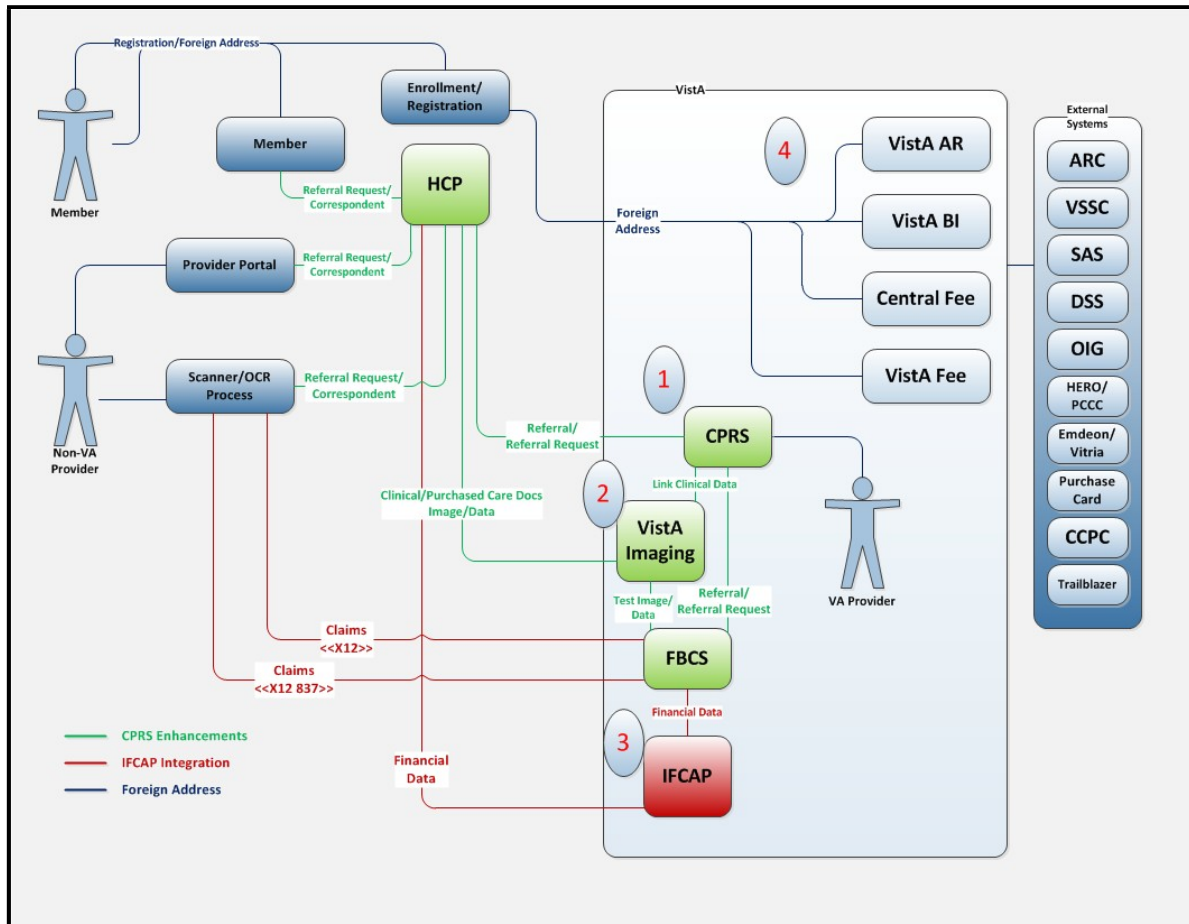


Figure 2: IFCAP Enhancements Overview

### 3.1.1 Application Context

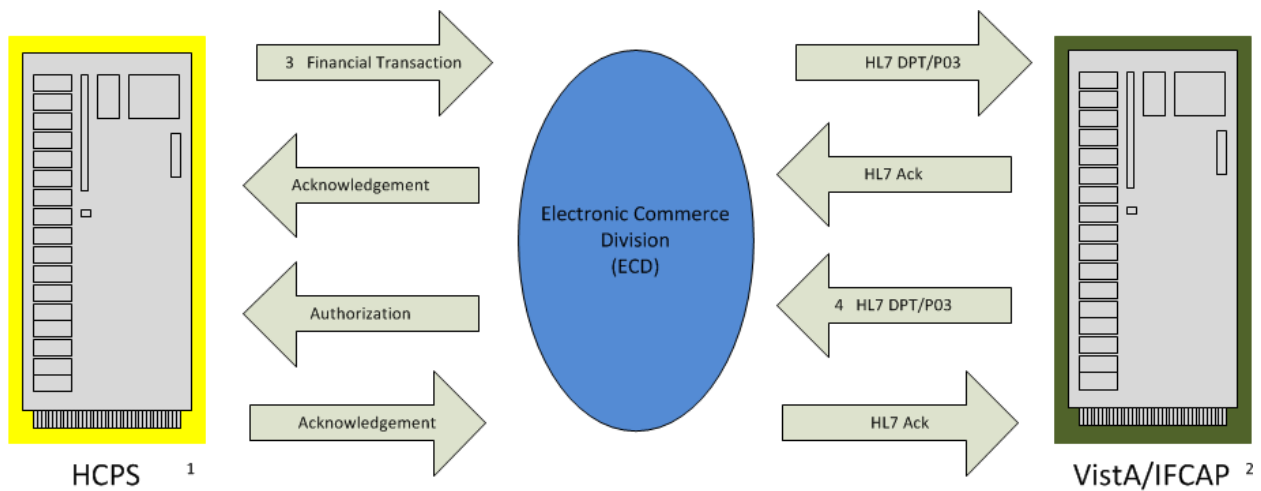


Figure 3: Application Context Diagram

**Table 3: Application Context Description****Object**

ID	Name	Description	Interface Name	Interface System
1	HCPS	COTS products that handle disbursement detail information.	XML	ECD
	ECD	Electronic Commerce Division (ECD) framework processes electronic messages across the VA WAN. The ECD packages handle all flow control for sending, receiving, error control, message recovery and acknowledgements for HL7 messages sent to VA systems from external systems, and provide secure messaging services for millions of messages across the VA enterprise.	HL7	VistA/IFCAP & HCPS
2	VistA/IFCAP	Class I software performing financial activities for purchased care.	HL7	VistA/IFCAP & ECD

**Interfaces External to OIT**

ID	Name	Related Object	Input Messages	Output Messages	External Party
3	From HCPS	HCPS	The HL7 DFT^P03 message shall transmit financial transaction data to the specified FCP's 1358/Obligation ledger within IFCAP	HL7 Commit Acknowledgement Message, Application Acknowledgement, or Application/Error message.	HCPS & ECD
4	To HCPS	VistA/IFCAP	The HL7 DFT^P03 message shall transmit financial status indicators, alerts/warnings to ECD/HCPS	HL7 Commit Acknowledgement Message.	HCPS/ECD

ID	Name	Related Object	Input Messages	Output Messages	External Party
4	To HCPS	VistA/IFCAP	Successful HL7 message containing Financial Transactions	HL7 DFT^P03 Message contains threshold and fund availability indicators, fund control point number, 1358 Obligation number, and IFCAP Authorization number.	

### Interfaces Internal to OIT

ID	Name	Related Object	Input Messages	Output Messages	Internal Party

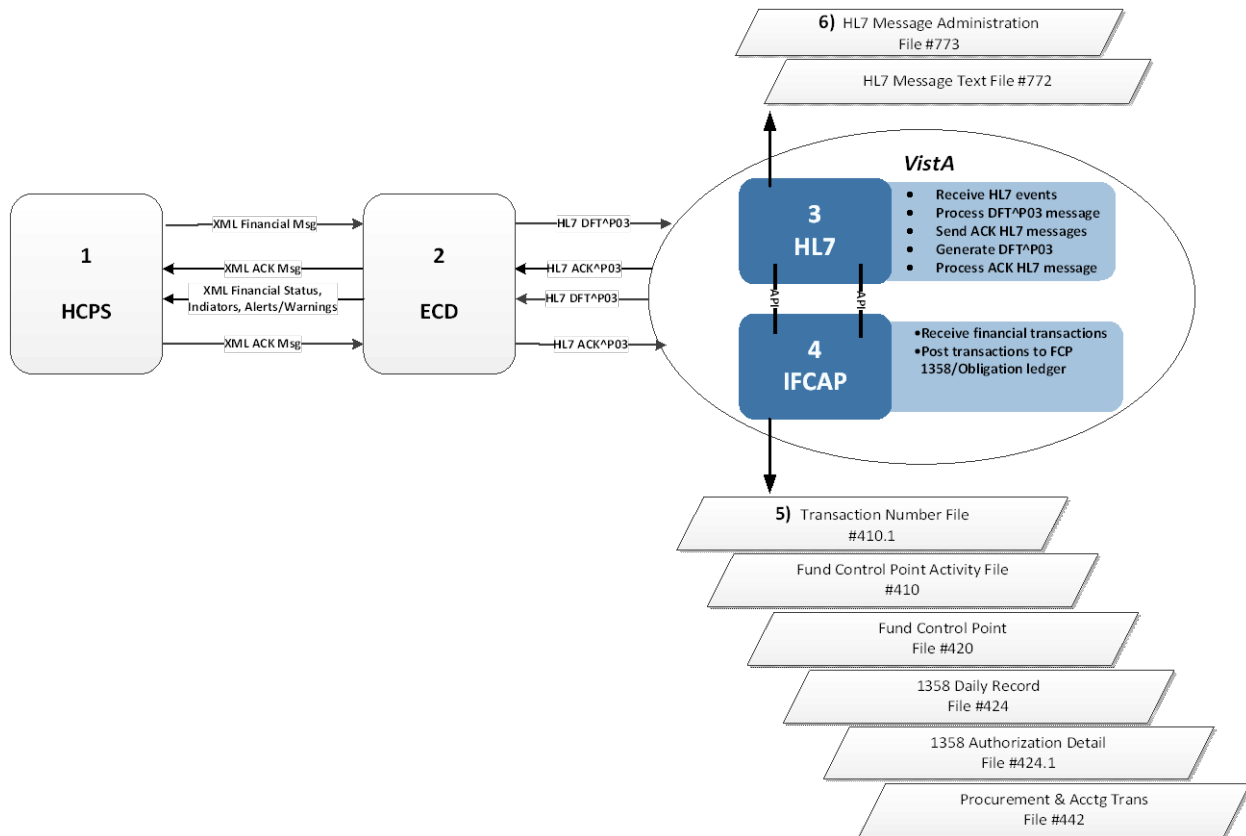
### Externally Shared Data Stores\*

ID	Name	Data Stored	Owner	Access

\* Table will be updated as development progresses.



### 3.1.2 High-Level Application Design



**Figure 4: High Level Application Design –HCPS and IFCAP**

**Table 4: Objects in the High Level Application Design – HCPS and IFCAP**

ID	Name	Description	Service or Legacy Code	External Interface Name	External Interface ID	Internal Interface Name	Internal Interface ID	SDP Sections 1&2
1	HCPS	Health Claims Processing Systems	Service	XML	4			
2	ECD	Process HL7 messages	Service	HL7	4			
3	VistA HL7 application	Process HL7 messages	Legacy	HL7	4	M APIs	3,6	To Be Modified
4	IFCAP	Integrated Funds Distribution, Control Point Activity, Accounting and Procurement	Legacy			M APIs	3	

**Table 5: Internal Data Stores-IFCAP**

ID	Name	Data Stored	Steward	Access
5	Transaction Number File #410.1	Contains the sequence numbers for the obligations	IFCAP	Read (R)
5	Fund Control Point Activity File #410	Contains information concerning each and every control point transaction	IFCAP	Read (R)
5	Fund Control Point File #420	Contains parameters that allow the IFCAP user to define and maintain separate balances for funding at their station.	IFCAP	Read (R)

ID	Name	Data Stored	Steward	Access
5	1358 Daily Record File #424	Contains a summary record of each authorization, obligation, and liquidation against a 1358 established in file 442. Fields: .01 Authorization #, .07 Date/Time, .08 User, .09 Completed Flag, .12 Authorization Amount, 4 Interface ID	IFCAP	Create (C) Update (U)
5	1358 Authorization Detail File #424.1	Contains detail history of each bill submitted for payment for each authorization on a 1358	IFCAP	Read (R)
5	Procurement & Accounting Transaction File #442	Contains both Purchase Order and Requisition data while the record is being processed, and as an on-line history record after the transaction/record has been completed. Fields: .01- Purchase Order Number, 1 - Fund Control Point,	IFCAP	Create (C) Update (U)
6	HL7 Message Administration File #773	Header information for outbound HL7 messages	HL7	Create (C)
6	HL7 Message Text File #772	HL7 Message text	HL7	Create (C)

### 3.1.3 Application Locations

The following applications are being modified by the NVCIS project:

**Table 6: Application Locations**

Application Component	Description	Location at Which Component is Run	Type
IFCAP Interface	Interface for Class 1 software performing authorizations, payments, and adjustments for purchased care	Existing local or regional Vista databases for VAMC	InterSystems Cache post-relational database.

### 3.1.4 Application Users

The following table identifies user roles of the individuals who will use the new functionality.

**Table 7: Application Users**

Application Component	Location	User
IFCAP	Local Vista	VA Providers (including residents, attending providers, and so forth), HCPS Clerks, VAMCs Business Office, Chief Business Office (CBO), Information Resources Management (IRM), FSC Personnel, Chief Financial Officers, HCP/RAS users and supervisors, Control Point Clerks, Control Point Officials, VA Business Office Mgrs will be using or consuming the data that originates from these application enhancements.

## 3.2 Conceptual Data Design

### 3.2.1 Project Conceptual Data Model

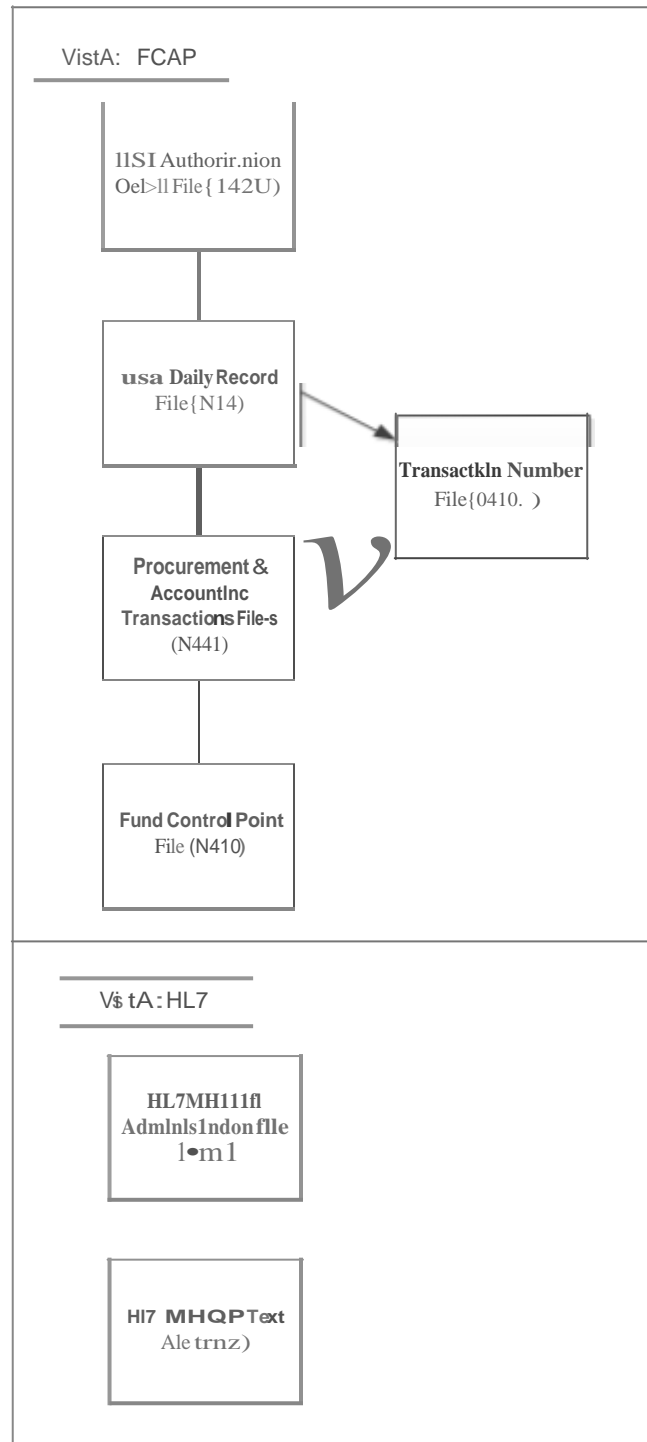


Figure 5: Project Conceptual Data Model

### 3.2.2 Database Information

The following table identifies all databases that will be created, replaced, interfaced with, or whose structure will be modified as part of this effort.

**Table 8: Database Inventory**

Database Name	Description	Type	Steward
Local VistA	Contains financial data	Interface	Local OIT

### **3.2.3 User Interface Data Mapping**

This section describes and defines the information that will be available for users of the product to be able to retrieve information from the database. At the time of this deliverable, modifications to IFCAP in support of HCPS reporting requirements have been deferred. The overall project team has agreed that as soon as reporting requirements are finalized, a change request (CR) will be submitted for approval. As Business Needs for the reporting functionality are determined and as the requirements and design are further refined, formal Change Requests will be created and submitted for approval and the Requirements Specification Document (RSD) and SDD will be updated to reflect these Business Needs. The scope of these reports is limited to Estimation/Obligation data currently available and will be run within the IFCAP system.

#### **3.2.3.1 Application Screen Interface**

N/A

#### **3.2.3.2 Application Report Interface**

N/A

#### **3.2.3.3 Unmapped Data Element**

N/A

## **3.3 Conceptual Infrastructure Design**

The infrastructure for the NVCIS project enhancements will not change. The existing VistA Cache database will be modified for the IFCAP application. The NVCIS project is dependent on HCPS development.

### **3.3.1 System Criticality and High Availability**

The existing IFCAP system currently in use at VA is being modified to include new HL7 messages. There are no new systems. The existing VistA availability including scheduled downtimes will not impact the NVCIS project enhancements.

### **3.3.2 Special Technology**

None required.

### **3.3.3 Technology Locations**

The following table describes various technology components that will be used.

**Table 9: Technology Location Details**

<b>Technology Component Production</b>	<b>Location</b>	<b>Usage (HCPS → IFCAP Interface)</b>
Workstations	Local VAMC's, HCPS in Austin	Receives financial data from HCPS containing initial estimated costs of Non-VA care and accepts financial transaction updates.
Interface Processors	VA datacenters	Existing infrastructure is being used to send messages to external systems
Legacy Mainframe	National or Regional Cache servers	Hosts VistA Cache
Legacy Application Server	InterSystems Cache	Existing InterSystems Cache dbs used for IFCAP
Legacy Databases	VistA IFCAP within VistA Cache db	Legacy application within VistA for IFCAP financial data processing
Other	ECD interface support at FSC	Routes HL7 messages between HCPS and VistA IFCAP

<b>Technology Component Certification</b>	<b>Location</b>	<b>Usage</b>

<b>Technology Component Education</b>	<b>Location</b>	<b>Usage</b>
	VistA Test and Production db	Training for application users will occur in existing VistA test and/or production accounts

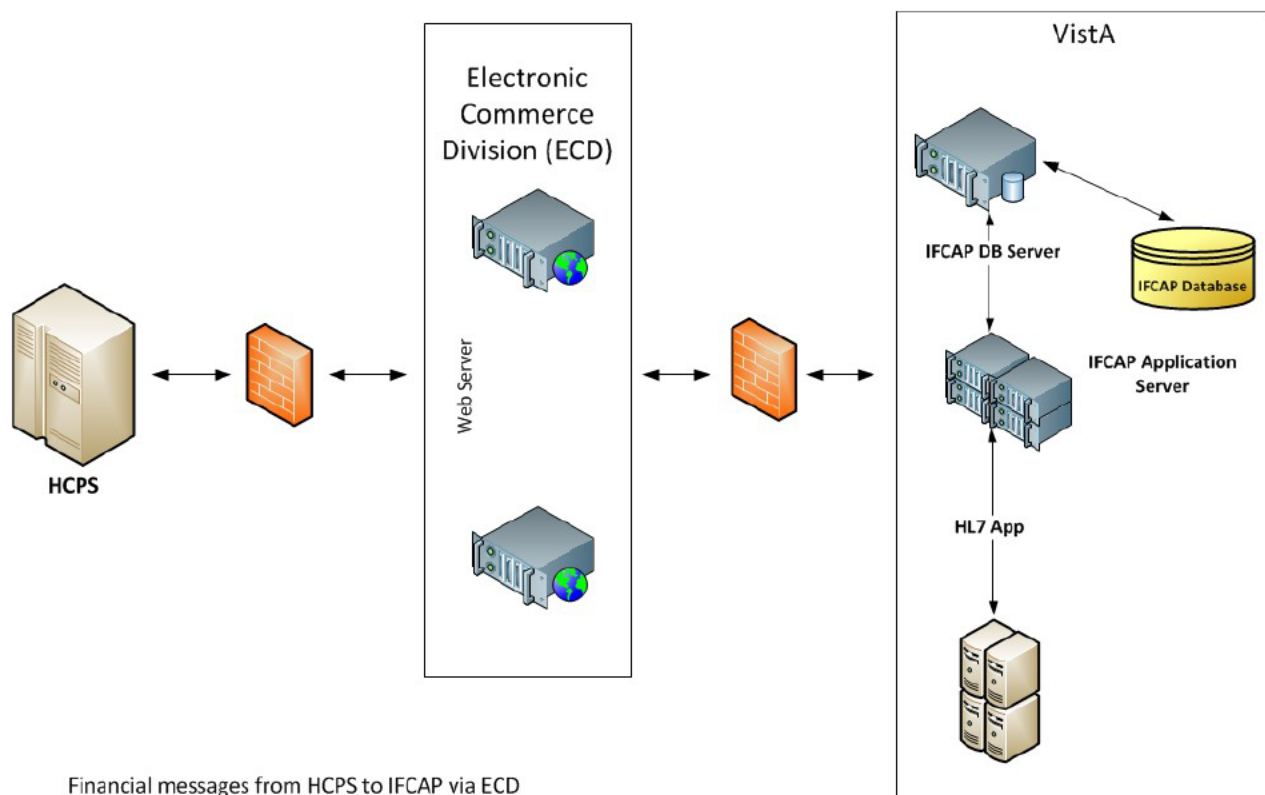
<b>Technology Component Test</b>	<b>Location</b>	<b>Usage</b>
	██████ Test Lab	Harris team internal QA will run test scripts to assure compliance to requirements; and conduct Component Integration Testing



Technology Component Development	Location	Usage
	██████	Development and unit testing of new interface and modifications made to IFCAP

### 3.3.4 Conceptual Infrastructure Diagram

The estimated authorization and payment information is transferred between the HCPS and the IFCAP system through DFT^P03 HL7 messages as shown in the following figure. An application acknowledgement will be returned to the sending application indicating whether the transaction was successful or unsuccessful. This new interface shall also support unsolicited DFT^P03 messages sent from IFCAP to HCPS as notifications on 1358 status changes or low funds.



**Figure 6: Conceptual Networks and Environments**

#### 3.3.4.1 Location of Environments and External Interfaces

VistA Cache instances are located at VA Medical Centers or co-located at Regional Data Centers (e.g., many Region 1 sites are hosted at the ████████). The ECD and HCPS are located in ████████ the FSC.

### 3.3.4.2 Conceptual Production String Diagram

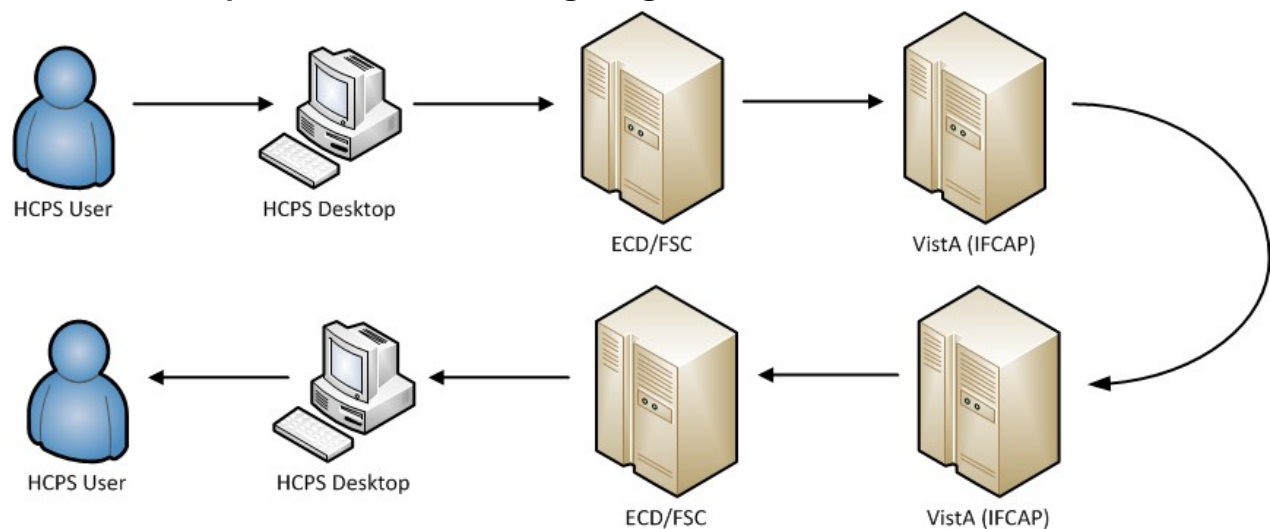


Figure 7: Conceptual HCPS to IFCAP String Diagram

## 4 System Architecture

The system architecture for the NVCIS project enhancements will not change. The existing VistA Cache database will be modified in the IFCAP application. The NVCIS project is dependent on HCPS for development of functionality that will provide for the exchange of information with the IFCAP interface.

### 4.1 Hardware Architecture

There are no hardware requirements for the NVCIS project enhancements as hardware configuration varies from site to site.

### 4.2 Software Architecture

There are no software architecture changes for the NVCIS project enhancements. The existing VistA Cache database will be modified using patches in the PRC\* namespace to provide PRC\* protocols and HL7 messages to be used/sent by HCPS and IFCAP. The NVCIS project is dependent on development by HCPS.

### 4.3 Communications Architecture

The NVCIS project enhancements do not require any new communication methods.

## 5 Data Design

### 5.1 DBMS Files

N/A

## 5.2 Non-DBMS Files

After receipt of inbound DFT message, the process shall post financial transaction data to the specified FCP's 1358/Obligation ledger within IFCAP. This results in the following files either having their entries updated or having new entries created:

1. TRANSACTION NUMBER file (#410.1),
2. 1358 DAILY RECORD (#424),
3. 1358 AUTHORIZATION DETAIL (#424.1), and the
4. PROCUREMENT & ACCOUNTING TRANSACTIONS (#442) file.

## 6 Detailed Design

This section describes the proposed design in detail. Provides the necessary information for the development team to integrate the hardware components and write the software code, so that the hardware and software components will provide a functional product.

### 6.1 Hardware Detailed Design

The NVCIS project enhancements use existing VistA databases and have no additional hardware requirements.

### 6.2 Software Detailed Design

This section of the SDD provides the following conceptual and detailed design associated with the software deliverable.

#### 6.2.1 Conceptual Design

This section introduces the conceptual information that establishes the basis for how the software will be built.

The conceptual design will allow Non-VA Providers to send the estimated costs of services provided through HCPS to VistA (IFCAP software), and accept updates to financial information.

##### 6.2.1.1 Product Perspective

VA implementation of HL7 requires understanding of event, server, and client Protocols, Applications, Logical Links, and other settings such as VistA HL7 Transport Layers and Lower Layer Protocols. New NVCIS protocols will be attached to the PRC HCP DFT-P03 event to capture financial information required to obligate and liquidate funds in IFCAP when Non-VA care referrals are approved, updated, or cancelled. The following new HL7 protocols were created for this interface:

- PRC HCP DFT-P03 SERVER
- PRC HCP DFT-P03 CLIENT
- PRC HCP SEND
- PRC HCP RECEIVE

When HL7 protocols PRC HCP DFT-P03 SERVER and PRC HCP DFT-P03 CLIENT are invoked, the sending (PRC HCP SEND) and receiving (PRC HCP RECEIVE) applications need to be active.

A new M routine PROHCP will handle all parsing and error checking of DFT financial data. After validation, where the FCP matches an existing IFCAP entry in the Fund Control Point file (#420), a valid obligation disbursement record will be filed to the Transaction Number (#410.1), the 1358 Daily Record (#424), the 1358 Authorization Detail (#424.1), and the Procurement & Accounting Transactions (#442) files.

#### **6.2.1.1.1 User Interfaces**

The IFCAP application utilizes a Character-based User Interface (CHUI).

To maintain consistency within and across VistA, the IFCAP user interface and design elements will conform to the SAC standards. The interface employs characteristics as close to MS Windows-based applications as possible. Users will find that some functionality may not be common to MS Windows-based applications, but common to VistA. Standard VA FileMan lookups are used at prompts when required.

#### **6.2.1.1.2 Hardware Interfaces**

N/A

#### **6.2.1.1.3 Software Interfaces**

This subsection specifies the use of other required software products (e.g., VA Kernel, VA FileMan, Windows NT); and interfaces with other applications or other systems such as commercial off-the-shelf (COTS) or national databases.

IFCAP requires the following versions (or higher) of VA software packages for proper implementation (See Table 10). The software listed is not included in this build and must be installed for the build to be completely functional:

**Table 10: IFCAP Package Versioning**

<b>SOFTWARE PACKAGE</b>	<b>VERSION NUMBER</b>
Accounts Receivable	4.5
Fee Basis	3.5
HL7	1.6
Integrated Funds Control, Accounting, and Procurement	5.1
Kernel	8.0
Mailman	7.1
RPC Broker (32-bit)	1.1
Toolkit	7.3
VA FileMan	22.0

#### **6.2.1.1.4 Communications Interfaces**

The following communication interfaces will be utilized during development:

- IFCAP-HCPS Interface – HL7

#### **6.2.1.1.5 HL7 Memory Constraints**

N/A

#### **6.2.1.1.6 Special Operations**

N/A

#### **6.2.1.2 Product Features**

A new bi-directional interface between HCPS and IFCAP shall provide the following capabilities:

- Receive disbursement detail information from HCPS via new HL7 protocols
- Automatically post payments to the Miscellaneous Obligation VA Form 1358
- Send financial transactions to HCPS
- Management of obligation thresholds for Non-VA Purchased Care program
- Provide option to configure and monitor thresholds at the Fund Control Point and/or Obligation levels at each station
- Provide alerts to HCPS when obligation balances fall below the threshold

#### **6.2.1.3 User Characteristics**

VA Providers (including residents, attending providers, and so forth), HCP Clerks, Fiscal Users, and IRM will be using these application enhancements.

#### **6.2.1.4 Dependencies and Constraints**

The following constraints will affect this project:

- HIPAA Compliance mandates for EDI transactions
- ANSI X12 278 – Health Care Services Review standards
- The HL7 Version 2.5 standards
- VA Standards and Conventions for MUMPS development
- VA TRM

The following external partners and organizations must be able to accommodate the modifications made within VistA IFCAP within the deadlines for the NVCIS project:

- HCPS
- FSC

### **6.2.2 Specific Requirements**

#### **6.2.2.1 Database Repository**

### 6.2.2.2 System Features

Existing VistA applications are being modified for this enhancement to support a bi-directional interface between HCPS and IFCAP.

### 6.2.2.3 Design Element Tables

#### 6.2.2.3.1 Routines (Entry Points)

Table 11: Routine PRCOHCP

Routines	Activities
Routine Name	PRCOHCP
Enhancement Category	<input checked="" type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change
RTM	
Related Options	None

Related Routines	Routines “Called By”	Routines “Called”
	None	PRCSUT31, PRCS58

Routines	Activities
Data Dictionary (DD) References	
Related Protocols	PRC HCP DFT-P03 CLIENT, PRC HCP DFT-P03 SERVER
Related Integration Control Registrations (ICRs)	
Data Passing	<input type="checkbox"/> Input <input type="checkbox"/> Output Reference <input type="checkbox"/> Both <input type="checkbox"/> Global Reference <input type="checkbox"/> Local
Input Attribute Name and Definition	Name: Definition:
Output Attribute Name and Definition	Name: Definition:

Current Logic
N/A

Modified Logic (Changes are in bold)
Process incoming DFT-P03 message from HCP.

### 6.2.2.3.2 Security Keys

**Table 12: Security Keys**

<b>Security Keys</b>	<b>Activities</b>
<b>Security Key Name</b>	PRCSCPO
<b>Enhancement Category</b>	<input type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input checked="" type="checkbox"/> No Change
<b>Related Options</b>	

<b>Related Routines</b>	<b>Routines “Called By”</b>	<b>Routines “Called”</b>

<b>Security Keys</b>	<b>Activities</b>
<b>Data Passing</b>	<input type="checkbox"/> Input <input type="checkbox"/> Output <input type="checkbox"/> Both <input type="checkbox"/> Global Reference <input type="checkbox"/> Local Reference
<b>Security Key Description</b>	
<b>Subordinate Keys</b>	
<b>Mutually Exclusive Keys</b>	
<b>Granting Condition Logic</b>	

<b>Current Logic</b>

<b>Modified Logic (Changes are in bold)</b>

<b>Security Keys</b>	<b>Activities</b>
<b>Hierarchical Precedence</b>	

### 6.2.2.3.3 Options

This patch will implement two new options:

- Manage FCP Threshold
- Manage 1358 Threshold

#### 6.2.2.3.3.1 MANAGE FCP THRESHOLD

To set the same threshold on all Purchased Care obligations within a Fund Control Point, a new menu option shall be implemented in the Funds Control Menu (PRCSMGR). The new menu option will be titled “Manage FCP Threshold”. Thresholds set up at the 1358 obligation level will override those set up at the FCP level. Access to this menu option will be limited by current functionality related to security key (PRCSCPO).

**Table 13: Options – Manage FCP Threshold**

Options	Activities
<b>Option Name</b>	PRC FCP THRESHOLD
<b>Enhancement Category</b>	<input checked="" type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change
<b>Associated Menu Options that will invoke this reference</b>	Funds Control Menu (PRCSMGR)
<b>Data Passing</b>	<input type="checkbox"/> Input <input type="checkbox"/> Output <input type="checkbox"/> Both <input type="checkbox"/> Global Reference <input type="checkbox"/> Local Reference
<b>Menu Text Description</b>	Manage FCP Threshold
<b>Option Type</b>	<input type="checkbox"/> Edit <input type="checkbox"/> Print <input checked="" type="checkbox"/> Menu <input type="checkbox"/> Inquire <input type="checkbox"/> Action <input type="checkbox"/> Run Routine <input type="checkbox"/> Other
<b>Associated Routine</b>	
<b>Option Definition</b>	This option will allow the same threshold to be set on all Purchased Care obligations within a Fund Control Point. Access to this option is limited to users holding the PRCSCPO security key. Furthermore, access to a particular fund control point is limited to users that are control point officials for that control point.

#### Current Entry Action Logic

N/A

#### Modified Entry Action Logic (Changes are in bold)



Current Exit Action Logic
N/A

Modified Exit Action Logic (Changes are in bold)

#### 6.2.2.3.3.2 MANAGE 1358 THRESHOLD

To set individual thresholds on a given obligation within a Fund Control Point, a new menu option shall be implemented in the 1358 Request Menu (PRCEC 1358 FCP PROCESSING). The new menu option will be titled “Manage 1358 Threshold”. Thresholds set up at the 1358 obligation level will override those set up at the FCP level.

**Table 14: Options – Manage 1358 Threshold**

Options	Activities
<b>Option Name</b>	PRC 1358 THRESHOLD
<b>Enhancement Category</b>	<input checked="" type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change
<b>Associated Menu Options that will invoke this reference</b>	1358 Request Menu (PRCEC 1358 FCP PROCESSING)
<b>Data Passing</b>	<input type="checkbox"/> Input <input type="checkbox"/> Output <input type="checkbox"/> Both <input type="checkbox"/> Global Reference <input type="checkbox"/> Local Reference
<b>Menu Text Description</b>	Manage 1358 Threshold
<b>Option Type</b>	<input type="checkbox"/> Edit <input type="checkbox"/> Print <input checked="" type="checkbox"/> Menu <input type="checkbox"/> Inquire <input type="checkbox"/> Action <input type="checkbox"/> Run Routine <input type="checkbox"/> Other
<b>Associated Routine</b>	
<b>Option Definition</b>	This option will allow individual thresholds to be set on a given obligation within a Fund Control Point. Access to this option is limited to users holding the PRCSPO security key.

Current Entry Action Logic
N/A

<b>Modified Entry Action Logic (Changes are in bold)</b>

<b>Current Exit Action Logic</b>
N/A

<b>Modified Exit Action Logic (Changes are in bold)</b>

#### 6.2.2.3.4 Protocols

**Table 15: Protocol – PRC HCP DFT-P03 SERVER**

<b>Protocols</b>	<b>Activities</b>
<b>Protocol Name</b>	PRC HCP DFT-P03 SERVER
<b>Enhancement Category</b>	<input checked="" type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change
<b>Associated Protocols</b>	PRC HCP DFT-P03 CLIENT
<b>Data Passing</b>	<input type="checkbox"/> Input <input type="checkbox"/> Output <input type="checkbox"/> Both <input type="checkbox"/> Global Reference <input type="checkbox"/> Local Reference
<b>Item Text Description</b>	HCP to IFCAP DFT-P03 Server
<b>Protocol Type</b>	<input checked="" type="checkbox"/> Action <input type="checkbox"/> Menu <input type="checkbox"/> Protocol <input type="checkbox"/> Protocol Menu <input type="checkbox"/> Limited Protocol <input type="checkbox"/> Extended Action <input type="checkbox"/> Dialog <input type="checkbox"/> Other
<b>Associated Routine</b>	N/A

<b>Current Entry Action Logic</b>
N/A

<b>Modified Entry Action Logic (Changes are in bold)</b>

<b>Current Exit Action Logic</b>
N/A

<b>Modified Exit Action Logic (Changes are in bold)</b>
---

<b>Modified Exit Action Logic (Changes are in bold)</b>

**Table 16: Protocol – PRC HCP DFT-P03 CLIENT**

<b>Protocols</b>	<b>Activities</b>
<b>Protocol Name</b>	PRC HCP DFT-P03 CLIENT
<b>Enhancement Category</b>	<input checked="" type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change
<b>Associated Protocols</b>	PRC HCP DFT-P03 SERVER
<b>Data Passing</b>	<input type="checkbox"/> Input <input type="checkbox"/> Output <input type="checkbox"/> Both <input type="checkbox"/> Global Reference <input checked="" type="checkbox"/> Local Reference
<b>Item Text Description</b>	IFCAP to HCP DFT-P03 Client
<b>Protocol Type</b>	<input type="checkbox"/> Action <input type="checkbox"/> Menu <input checked="" type="checkbox"/> Protocol <input type="checkbox"/> Protocol Menu <input type="checkbox"/> Limited Protocol <input type="checkbox"/> Extended Action <input type="checkbox"/> Dialog <input type="checkbox"/> Other
<b>Associated Routine</b>	PRCOHCP

<b>Current Entry Action Logic</b>
N/A

<b>Modified Entry Action Logic (Changes are in bold)</b>

<b>Current Exit Action Logic</b>
N/A

<b>Modified Exit Action Logic (Changes are in bold)</b>

**NOTE: To accommodate req #18, PROCESSING ROUTINE (field #771 in PROTOCOL file #101) will be initially set to “D REJECT^PRCOHCP” as a default during patch installation.**

#### **6.2.2.3.5 Remote Procedure Call (RPC)**

The NVCIS project enhancements do not require any new communication methods. The HL7 interface to HCPS will modify the PRC (IFCAP) namespace to add HL7 components and use the existing VistA HL7 package for communications.

#### **6.2.2.3.6 Constants Defined in Interface**

N/A

#### **6.2.2.3.7 Variables Defined in Interface**

N/A

#### **6.2.2.3.8 Types Defined in Interface**

N/A

#### **6.2.2.3.9 GUI**

N/A

#### **6.2.2.3.10 GUI Classes**

N/A

#### **6.2.2.3.11 Current Form**

N/A

#### **6.2.2.3.12 Modified Form**

N/A

#### **6.2.2.3.13 Components on Form**

N/A

#### **6.2.2.3.14 Events**

N/A

#### **6.2.2.3.15 Methods**

N/A

#### **6.2.2.3.16 Special References**

N/A

#### **6.2.2.3.17 Class Events**

N/A

**6.2.2.3.18 Class Methods**

N/A

**6.2.2.3.19 Class Properties**

N/A

**6.2.2.3.20 Uses Clause**

N/A

**6.2.2.3.21 Forms**

N/A

**6.2.2.3.22 Functions**

N/A

**6.2.2.3.23 Dialog**

N/A

**6.2.2.3.24 Help Frame**

N/A

### 6.2.2.3.25 HL7 Application Parameter

**Table 17: HL7 Application Parameter – PRC HCP SEND**

HL7 Application Parameter Name	PRC HCP SEND	
Enhancement Category	<input checked="" type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change	
Application Status	<input checked="" type="checkbox"/> Active <input type="checkbox"/> Inactive <input type="checkbox"/> Active <input type="checkbox"/> Inactive	
Facility Name	Site Number for the VAMC	
Country Code	USA	
HL7 Field Separator		
HL7 Encoding Characters	^~\&	
Mail Group	None	

**Table 18: HL7 Application Parameter – PRC HCP RECEIVE**

HL7 Application Parameter Name	PRC HCP RECEIVE	
Enhancement Category	<input checked="" type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change	
Application Status	<input checked="" type="checkbox"/> Active <input type="checkbox"/> Inactive <input type="checkbox"/> Active <input type="checkbox"/> Inactive	
Facility Name	Site Number for HCP	
Country Code	USA	
HL7 Field Separator		
HL7 Encoding Characters	^~\&	
Mail Group	None	

### 6.2.2.3.26 HL7 Logical Link

**Table 19: HL7 Logical Link - PRCHCP**

HL7 Logical Link	Description	
HL7 Logical Link Parameter Name	PRCHCP	
Enhancement Category	<input checked="" type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change	
Enhancement Category	Current	Modified
Node	N/A	PRCHCP

HL7 Logical Link	Description	
Institution	N/A	N/A
Domain	N/A	N/A
Autostart	N/A	Disabled
Queue Size	N/A	10
LLP Type	N/A	TCP

**NOTE:** To accommodate req #18, Autostart (field #4.5 of HL LOGICAL LINK file #870) will be set to Disabled. In addition to this, TCP/IP ADDRESS (field #400.01) and TCP/IP PORT (field #400.02) will also be set to NULL. In order for outbound HL7 messages to be sent to HCP, these fields will need to be manually configured/edited by the VistA site.

#### 6.2.2.3.27 COTS Interface

Table 20: COTS Interface

COTS Interface	Description
Communication Method: HL7	The HL7 interface to HCPS will modify the PRC (IFCAP) namespace to add HL7 components and use the existing VistA HL7 package for communications.
Application Interface	

#### 6.2.2.3.28 Data Dictionaries/Field Definitions

FCP Threshold Amount for Non-VA Purchased Care

FCP Threshold Percentage for Non-VA Purchased Care

1358 Obligation Threshold Amount

1358 Obligation Threshold Percentage

## 6.3 Communications Detailed Design

The NVCIS project enhancements do not require any new communication methods. The HL7 interface from HCPS will modify the PRC (IFCAP) namespace to add HL7 components and use the existing VistA HL7 package for communications.

Communication between IFCAP and HCPS will take place through new HL7 v2.5 messages sent from HCPS to IFCAP when a referral for Non-VA Care has been approved. IFCAP shall return an ACK message automatically after the message has been parsed and error checked.

### 6.3.1 Communications Methods

HCPS and IFCAP communicate through the VistA HL7 interface using TCP/IP asynchronous communication mediated by the ECD. To initiate a HL7 interface, an application needs to populate an HL7 message header with the sending and receiving information. The ECD framework processes electronic messages across the VA WAN. There are no changes in the ECD to IFCAP communication method for this project, only the data contained within the HL7 message will be modified.

VistA HL7 handles all flow control for sending, receiving, error control, message recovery, and commit acknowledgements for HL7 messages sent from VA system to system. The data will not overflow any VistA HL7 parameters for the maximum length of the message or a segment.

### 6.3.2 Performance Requirements

Transmission of the HL7 v2.5 REF messages from HCPS and IFCAP will take place on a near real-time basis after Non-VA Care IFCAP events are triggered within HCPS and/or VistA. This transmission will be for a single record and will not adversely affect the VA network.

Processing time is dependent on VA network capabilities. These are outside the control of the NVCIS project. See the [VistA HL7 manuals](#) for information on retries, timeouts, and network issues. Typically once the number of retries is exceeded the link is shut down, saving the messages in the queue to be processed once technical issues with the interface are resolved. For benchmarking of typical VistA → VA network system HL7 messages contact the HL7 Administration team or FSC administrators receiving HL7 messages from other VistA packages (e.g., Integrated Billing).



## 7 External Interface Design

The IFCAP enhancement will include specifications for the HL7 message to be sent from HCPS to VistA IFCAP.

### 7.1 Interface Architecture

Interfaces being created or modified by the NVCIS project include:

- New HL7 messages from HCPS to IFCAP; and
- New HL7 messages from IFCAP to HCPS

### 7.2 Interface Detailed Design

Financial data pertaining to the 1358/Obligation will be sent from HCPS to IFCAP via the ECD using a DFT HL7 message. The DFT^P03 transaction message will contain information related to estimated and/or adjustments to authorizations, or requests to liquidate funding. Refer to [Section 7.2.2.3 HCPS → IFCAP](#) for more detailed information.

Upon successful reception/processing of the DFT transaction, an HL7 commit acknowledgement (ACK) message will be returned to the HCPS. If the DFT transaction is unsuccessful then an application error (AE) containing the reason for the unsuccessful event will be returned to HCPS. The ACK message is automatically sent after the HL7 message from HCPS to IFCAP has been parsed and error checked. Error message detailing the reason for the unsuccessful establishment of an estimate will be returned in the ERR segment of the acknowledgement message.

In addition, IFCAP shall respond with a DFT^P11 transaction message as indicated [in Section 7.2.2.4 VistA IFCAP → HCPS](#)

These messages require the appropriate fields to be in the messages when they are sent to assure they are handled properly by the receiving systems.

#### 7.2.1 Message/File Requirements

##### 7.2.1.1 HL7 v2.5 DFT^P03 message format

(Note: Only those segments highlighted in blue will be used).

##### DFT^P03

<u>Segment Name</u>	<u>Detail Financial Transaction</u>
MSH	Message Header
[ { SFT } ]	Software Segment
EVN	Event Type
PID	Patient Identification
[ PD1 ]	Additional Demographics
[ { ROL } ]	Role
[ PV1 ]	Patient Visit
[ PV2 ]	Patient Visit - Additional Info

<b><u>Segment Name</u></b>	<b><u>Detail Financial Transaction</u></b>
[ { ROL } ]	Role
[ { DB1 } ]	Disability Information
[ {	--- COMMON_ORDER begin
[ ORC ]	Common Order (across all FT1s)
[ {	--- TIMING_QUANTITY begin
TQ1	Timing/Quantity
[ { TQ2 } ]	Timing/Quantity Order Sequence
}]	--- TIMING_QUANTITY end
[	--- ORDER begin
OBR	Order Detail Segment
[ { NTE } ]	Notes and Comments (on Order Detail)
]	--- ORDER end
[ {	--- OBSERVATION begin
OBX	Observations / Result
[ { NTE } ]	Notes and Comments (on Result)
}]	--- OBSERVATION end
}]	--- COMMON_ORDER end
{	--- FINANCIAL begin
<a href="#">FT1</a>	Financial Transaction
[ <a href="#">NTE</a> ]	Notes and Comments (on line item - FT1 - above)
[ {	--- FINANCIAL_PROCEDURE begin
<a href="#">PR1</a>	Procedure
[ { ROL } ]	Role
}]	--- FINANCIAL_PROCEDURE end
[ {	--- FINANCIAL_COMMON ORDER begin
[ ORC ]	Common Order (specific to above FT1)
[ {	--- FINANCIAL_TIMING_QUANTITY begin
TQ1	Timing/Quantity
[ { TQ2 } ]	Timing/Quantity Order Sequence
}]	--- FINANCIAL_TIMING_QUANTITY end
[	--- FINANCIAL_ORDER begin
OBR	Order Detail Segment

<u>Segment Name</u>	<u>Detail Financial Transaction</u>
[ { NTE } ]	Notes and Comments (on Order Detail)
]	--- FINANCIAL_ORDER end
[ {	--- FINANCIAL_OBSERVATION begin
OBX	Observations / Result
[ { NTE } ]	Notes and Comments (on Result)
}]	--- FINANCIAL_OBSERVATION end
}}	--- FINANCIAL_COMMON ORDER end
}	--- FINANCIAL end
[ { <u>DG1</u> } ]	Diagnosis (global across all FT1s)
[ <u>DRG</u> ]	Diagnosis Related Group
[ { <u>GT1</u> } ]	Guarantor (global across all FT1s)
[ {	--- INSURANCE begin
<u>IN1</u>	Insurance (global across all FT1s)
[ <u>IN2</u> ]	Insurance - Additional Info.
[ { <u>IN3</u> } ]	Insurance - Add'l Info. - Cert.
[ { <u>ROL</u> } ]	Role
}}	--- INSURANCE end
[ <u>ACC</u> ]	Accident Information

#### 7.2.1.2 HL7 v2.5 DFT^ACK message format

(Note: Only those segments highlighted in blue will be used).

##### DFT^ACK

<u>Segment Name</u>	<u>General Acknowledgment</u>
<u>MSH</u>	Message Header
[ { <u>SFT</u> } ]	Software Segment
<u>MSA</u>	Message Acknowledgment
[ { <u>ERR</u> } ]	Error

## 7.2.2 Data Assembly Characteristics

The HCPS communicates to IFCAP through DFT^P03 HL7 messages.

The following tables contain the HL7 message definition for the HL7 messages:

**Table 21: HL7 Message Definition**

Column Heading	Description
SEQ	HL7 sequence#
LEN	Field Length
DT	Data Type
R/O	R=Require, O=Optional, C=Conditional, NS=Not supported, B=Backward compatible (Not Required)
Element Name	Example of expected data
VistA Description	Information about the VistA data for the element or hard-coded data

### 7.2.2.1 Data Assembly Characteristics – ACK Message

A standard HL7 v2.5 ACK message will be returned to HCPS for each IFCAP message received.

The ACK message will contain the following standard segments:

MSH – Message Header	REQUIRED
MSA – Message Acknowledgment	REQUIRED
ERR – Error	OPTION

### 7.2.2.2 Data Assembly Characteristics – DFT Message

A standard HL7 v2.5 DFT message will be sent from HCPS to IFCAP to obligate and/or liquidate funds. IFCAP will return a DFT message upon request from HCPS.

The DFT message will contain the following standard segments:

MSH – Message Header	REQUIRED
EVN – Event Type	REQUIRED
PID – Patient Identification	REQUIRED
FT1 – Financial Transaction	REQUIRED
NTE – Notes and Comments (on line item FT1 above)	REQUIRED

### 7.2.2.3 HCPS → VistA (IFCAP)

HCPS will send detailed financial transactions to IFCAP to obligate funding and/or liquidate funding for the Non-VA Purchased Care program. This section attempts to tie requirements to specific design elements. Refer to the RSD for details related to the functional requirement(s) listed below. **Note: Not all field values associated with each requirement are documented in this section.** The data fields documented in this section are intended to provide a quick overview of significant information required to support each requirement.

#### 7.2.2.3.1 HCPS → IFCAP Reserve Funding

HCPS will send funding authorization information to IFCAP to set aside an estimated amount to support Non-VA purchased care for each Veteran referral.

- **DFT^P03** will be sent from HCPS to reserve funding. HCPS shall provide the Fund Control Point (FCP), 1358 Obligation/CNumber, HCPS Authorization Id, Estimated Dollar Amount, Last 4 of the Patients SSN, Patients Name, Authorization Begin and Authorization End Dates, and CPRS Consult ID.

**Table 22: HCPS to IFCAP Reserve Funding Requirements**

Requirement	Short Description	Significant Data Fields Examples
I-HCP-6.1	Send Authorization info to IFCAP	PDI.3=Last 4 of SSN ^ ICNVCHECKSUM PDI.5 Patients Name FT1.2 = 1358 Oblg/CNumber FT1.4 = Auth From/To Dates FT1.6 = VAAU FT1.7 = HCPS Auth ID #^^^^^ FT1.11 = Estimated Amt NTE.3 = Consult ID ^ FCP
I-HCP-13.1	IFCAP shall receive authorization increase requests	FT1.2 = 1358 Oblg/CNumber FT1.6 = AJ FT1.7 = HCPS Auth ID #^^^^^ FT.11 = New Authorization Amt FT1.31 IFCAP Auth Sequence #

Requirement	Short Description	Significant Data Fields Examples
I-HCP-13.2	IFCAP shall receive authorization decrease requests	FT1.2 = 1358 Oblg/CNumber FT1.6 = AJ FT1.7 = HCPS Auth ID #^^^^^ FT.11 = New Authorization Amt FT1.31 IFCAP Auth Sequence #
I-HCP-16.1	Set Status to Complete when “zeroing out” an existing Authorization Upon Request	FT1.2 = 1358 Oblg/CNumber FT1.6 = VAAU FT1.7 = HCPS Auth ID #^^^^^Completed Flag (Authorization) = 1 (Complete) FT.11 = \$0.00 FT1.31 IFCAP Auth Sequence #
I-HCP-16.2	Set Balance to 0 when “zeroing out” an existing Authorization Upon Request	FT1.2 = 1358 Oblg/CNumber FT1.6 =VAAU FT1.7 = HCPS Auth ID #^^^^^Completed Flag (Authorization) = 1 (Complete) FT.11 = \$0.00 FT1.31 IFCAP Auth Sequence #

- **ACK^P03** will be sent to HCPS from IFCAP to acknowledge receipt of the inbound DFT^P03 message for all the Requirements listed above. IFCAP will also respond to I-HCP-6.1 with a DFT^P11 (I-HCP-6.2, 6.3 or 6.4) which will include the IFCAP Authorization Number and the HCPS Authorization Number associated with the referral.

#### 7.2.2.3.2 HCPS → IFCAP Liquidate Funding

HCPS will send actual payment information to IFCAP upon receipt of a claim (invoice) from a Non-VA Provider.

- **DFT^P03** will be sent from HCPS when they are ready to pay Non-VA Providers. HCPS shall provide the Fund Control Point (FCP), 1358 Obligation, IFCAP Authorization Number, Actual Payment Amount, HCPS Claims Id Number, HCPS Authorization Id, Last 4 SSN, patients name, and Partial/Final Payment Indicator. Refer to the RSD for details related to the functional requirement(s):

**Table 23: HCPS to IFCAP Liquidate Funding Requirements**

Requirement	Short Description	Significant Data Fields Examples
I-HCP-7.1	Send Claims Payment and Obligation info to IFCAP	PDI.3=Last 4 of SSN ^ ICNVCHECKSUM PDI.5 Patients Name FT1.2 = 1358 Oblg/CNumber FT1.4 = OPT – Actual Date of Service IPT - Service Beg/End Dates FT1.6 = PY FT1.7 = The following fields: HCPS Auth ID #^^^^Partial/Final Payment (0 or empty=Partial / 1=Final)^ FT.11 = Actual \$ Amount FT1.30 – HCPS Claims ID # FT1.31 IFCAP Auth Sequence #
I-HCP-10.1	Post a Payment to an existing 1358 Upon Request	FT1.2 = 1358 Oblg/CNumber FT1.4 = OPT – Actual Date of Service IPT-Service Beg/End Dates FT1.6 = PY FT1.7 = HCPS Auth ID #^^^^Partial/Final Payment^ (Partial=0 or empty / Final=1) FT.11 = Actual \$ Amount FT1.30 HCPS Claim ID # FT1.31 IFCAP Auth Sequence #
I-HCP-10.2	Post a Credit (negative amount) to an existing 1358 Upon Request,	FT1.2 = 1358 Oblg/CNumber FT1.4 = OPT – Actual Service Date IPT-Service Beg/End Dates FT1.6 = AJ FT1.7 = HCPS Auth ID #^^^^Partial/Final Payment^ (Partial=0 or empty / Final=1) FT.11 = Negative \$ Amount FT1.30 HCPS Claim ID # FT1.31 IFCAP Auth Sequence #

Requirement	Short Description	Significant Data Fields Examples
I-HCP-11.1	Zero out the Authorization Balance when Posting Final Payment	FT1.2 = 1358 Oblg/CNumber FT1.4 = OPT – Actual Service Date IPT - Service Beg/End Dates FT1.6 = PY FT1.7 = HCPS Auth ID #^^^^Partial/Final Payment^ (Final = 1) FT.11 = Actual \$ Amount FT1.30 HCPS Claim ID # FT1.31 IFCAP Auth Sequence #
I-HCP-11.2	Complete the Authorization when Posting Final Payment	FT1.2 = 1358 Oblg/CNumber FT1.4 = OPT – Actual Service Date IPT -Service Beg/End Dates FT1.6 = PY FT1.7 = HCPS Auth ID #^^^^Partial/Final Payment^ Completed Flag (Final Pymt = 1; Completed Auth Flag = 1)  FT.11 = Actual \$ Amount FT1.30 HCPS Claim ID # FT1.31 IFCAP Auth Sequence #

- **ACK^P03** will be sent to HCPS from IFCAP to acknowledge receipt of the inbound DFT^P03 message for all the requirements listed above. IFCAP will respond to I-HCP-7.1, 10.1, 10.2 with a DFT^P11 which will include the IFCAP Authorization Number and the HCPS Authorization Number associated with the payment transaction.

#### 7.2.2.3.3 HCPS → IFCAP Re-open Completed Authorization

HCPS will send payment adjustment information to IFCAP to re-open a completed authorization when necessary to post a payment. In this case, the IFCAP authorization has previously processed a final payment, and released any left over funding back to the obligation balance.

Refer to the RSD for details related to the functional requirements:



**Table 24: HCPS to IFCAP Re-open Completed Authorization Requirements**

Requirement	Short Description	Significant Data Fields Examples
I-HCP-10.3	Reopen a completed authorization when necessary to post a payment	FT1.2 = 1358 Oblg/CNumber FT1.4 = OPT – Actual Service Date IPT - Service Beg/End Dates FT1.6 = PY FT1.7 = HCPS Auth ID # ^^^^ Partial/Final Pmt Flag = (0 or null=Partial / 1=Final)^ FT.11 = Actual \$ Amt FT1.30 HCPS Claim ID # FT1.31 IFCAP Auth Sequence #
I-HCP-10.4	Re-open a completed authorization when necessary to post a credit	FT1.2 =1358 Oblg/CNumber FT1.4 = OPT – Actual Service Date IPT - Service Beg/End Dates FT1.6 = PY FT1.7 = HCPS Auth ID # ^^^^ Partial/Final Pmt Flag = (0 or null=Partial / 1=Final)^ FT.11 = Actual \$ Amt FT1.30 HCPS Claim ID # FT1.31 IFCAP Auth Sequence #

- **ACK^P03** will be sent to HCPS from IFCAP to acknowledge receipt of the inbound DFT^P03 message.

#### 7.2.2.3.4 HCPS → IFCAP Query Transactions

HCPS will send a detailed financial payment transaction to IFCAP requesting the status of a particular 1358 Obligation, or IFCAP Authorization be returned. A new valid value for the FT1.6 Transaction Type field to support this functionality will require approval from the HL7 Administrators.

- **DFT^P03** will be sent from HCPS to trigger IFCAP to respond with the status of a 1358 Obligation.

**Table 25: HCPS to IFCAP Query Transaction Requirements**

Requirement	Short Description	Significant Data Fields Examples
I-HCP-12.1	Return Status of 1358 Obligation Upon Request	FT1.6 = VAOQ FT1.2 = 1358 Oblg/CNumber
I-HCP-20.1	Return Status of an existing Authorization Upon Request	FT1.6 = VAAQ FT1.2 1358 Oblg/CNumber FT1.31 = IFCAP Auth Sequence #

- **ACK^P03** will be sent to HCPS from IFCAP to acknowledge receipt of the DFT^P03 query. IFCAP will also respond with a DFT^P11 which will include the status of the request.

#### 7.2.2.4 VistA (IFCAP) → HCPS

IFCAP will send an acknowledgement back to HCPS upon receipt of a detailed financial transaction(s) to obligate and/or liquidate funding for the Non-VA Purchased Care program. In addition to the acknowledgement message, IFCAP will also return a DFT^P03 message containing fund availability and/or threshold indicators, and status of a 1358 Obligation at the time funds are reserved or liquidated.

This section attempts to tie requirements to specific design elements. Refer to the RSD for details related to the functional requirement(s) listed below. Note: Not all field values associated with each requirement are documented in this section. The data fields documented in this section are intended to provide a quick overview of significant information required to support each requirement.

##### 7.2.2.4.1 IFCAP → HCPS Reserve Funding

Receipt of a DFT^P03 transaction from HCPS will trigger IFCAP to reserve funding. IFCAP shall set aside an estimated amount to support Non-VA purchased care for each authorization sent from HCPS and successfully processed in IFCAP. Refer to the RSD for details related to the functional requirement; I-HCP-6.1: Send Authorization info to IFCAP.

- **ACK^P03** will be returned to HCPS to acknowledge receipt of the inbound DFT^P03 message. Application acknowledgements, “AA”, “AE”, and “AR” will be utilized.
  - If funds are not available when the authorization transaction is received in IFCAP, IFCAP will return an “AE” (Application Ack) in MSA.1 – Acknowledgement Code.
  - If the DFT^P03 message cannot be processed in IFCAP, IFCAP will return an “AR” (Application Error) in MSA.1 – Acknowledgement Code; and include the optional ERR-Error Segment.

**Table 26: IFCAP to HCPS Reserve Funding Requirements ACK^P03**

Requirement	Short Description	Significant Data Fields Examples
I-HCP-6.4	Funds Not Available	MSA.1 = AE ERR.3 = HL7 Error Code ^ Error Description ERR.4 = E (Error) FT1.2 = 1358 Oblg/CNumber FT1.6 = VAAU FT1.7 = HCPS Auth ID # ^^Funds Available=0 (NO)^^ FT1.31 IFCAP Auth Sequence #

- **DFT^P11** will be returned to HCPS upon successful completion of the inbound DFT^P03 message. Refer to the RSD for details related to the functional requirement(s):

**Table 27: IFCAP to HCPS Reserve Funding Requirements DFT^P11**

Requirement	Short Description	Significant Data Fields Examples
I-HCP-6.2	Funds Are Available	FT1.2 = 1358 Oblg/CNumber FT1.6 = VAAU FT1.7 HCPS Auth ID # ^^Funds Available=1 (YES)^^ FT1.31 IFCAP Auth Sequence #
I-HCP-6.3	Funds Are Available – Funds Below Threshold	FT1.2 = 1358 Oblg/CNumber FT1.6 = VAAU FT1.7 HCPS Auth ID # ^^Funds Available=1 (YES)^Funds Below Threshold=1 (YES)^ FT1.31 IFCAP Auth Sequence #
I-HCP-6.4	Funds Not Available	FT1.2 = 1358 Oblg/CNumber FT1.6 = VAAU FT1.7 HCPS Auth ID # ^^Funds Available=0 (NO)^^ FT1.31 IFCAP Auth Sequence #

#### 7.2.2.4.2 IFCAP → HCPS Liquidate Funding

Receipt of a DFT^P03 transaction with an appropriate FT1.6 Transaction Type code reflecting payment information (“PY”) from HCPS will trigger IFCAP to liquidate funding against an IFCAP Authorization. HCPS will send actual payment information to IFCAP upon receipt of a claim (invoice) from a Non-VA Provider, triggering an adjustment or final liquidation of funds.

- **DFT^P03** will be received from HCPS when they are ready to pay Non-VA Providers. Refer to the RSD for details related to the functional requirement(s):
- **ACK^P03** will be returned from IFCAP to acknowledge receipt of the inbound DFT^P03 message. Application acknowledgements, “AA”, “AE”, and “AR” will be utilized. .
  - If funds are not available when the authorization transaction is received in IFCAP, IFCAP will return an “AA” (Application Ack) in MSA.1 – Acknowledgement Code. Refer to RSD for details related to the functional requirement(s): I-HCP-6.4: Funds Not Available
  - If the DFT^P03 message cannot be processed in IFCAP, IFCAP will return an “AE” (Application Error) in MSA.1 – Acknowledgement Code; and include the optional ERR-Error Segment.
- **DFT^P11** will be returned to HCPS upon successful completion of the inbound DFT^P03 message. The returned DFT^P11 message will contain fund status, availability and threshold information. Refer to the RSD for details related to the functional requirement(s):

**Table 28: IFCAP to HCPS Liquidate Funding Requirements DFT^P11**

Requirement	Short Description	Significant Data Fields Examples
I-HCP-7.2	Funds Are Available	FT1.2 = 1358 Oblg/CNumber FT1.6 = PY FT1.7 HCPS Auth ID # ^^Funds Available=1 (YES)^^^ FT1.31 IFCAP Auth Sequence #
I-HCP-7.3	Funds Are Available – Funds Below Threshold	FT1.2 = 1358 Oblg/CNumber FT1.6 = PY FT1.7 HCPS Auth ID # ^^Funds Available=1 (YES)^Funds Below Threshold=1 (YES)^^ FT1.31 IFCAP Auth Sequence #
I-HCP-7.4	Funds Not Available	ACK^P03 fields: MSA.1 = AE ERR.3 = HL7 Error Code ^ Error

Requirement	Short Description	Significant Data Fields Examples
		Description  DFT^P11 fields: FT1.2 = 1358 Oblg/CNumber FT1.6 = PY FT1.7 = HCPS Auth ID # ^^Funds Available=0 (NO) FT1.31 IFCAP Auth Sequence #

**Note:** I-HCP-7.2, 7.3, and 7.4 are IFCAP's response to I-HCP-7.1, 10.1, and 10.2

#### 7.2.2.4.3 IFCAP → HCPS Re-open Completed Authorization

HCPS will send payment adjustment information to IFCAP to re-open a completed authorization when necessary to post a payment/credit. In this case, the IFCAP authorization has previously processed a final payment indicator, and released any left over funding back to the obligation balance. IFCAP will respond to HCPS inbound DFT^P03 with an ACK^P03.

Refer to the RSD for details related to the functional requirements:

**Table 29: IFCAP to HCPS Re-open Completed Authorization**

Requirement	Short Description	Significant Data Fields Examples
I-HCP-10.3	Re-open a completed authorization when necessary to post a payment,	MSA.1 = AA, AE or AR  If AE or AR: ERR.3 = HL7 Error Code ^ Error Message ERR.4 = E (error)
I-HCP-10.4	Re-open a completed authorization when necessary to post a credit,	MSA.1 = AA, AE or AR  If AE or AR: ERR.3 = HL7 Error Code ^ Error Message ERR.4 = E (error)

#### 7.2.2.4.4 IFCAP → HCPS Query Transactions

IFCAP will respond to HCPS requests for the status of a particular 1358 Obligation, or IFCAP Authorization.

**Table 30: IFCAP to HCPS Query Transaction**

Requirement	Short Description	Significant Data Fields Examples
I-HCP-12.1	Return Status of 1358 Obligation Upon Request	FT1.2 = 1358 Oblg/CNumber FT1.6 = VAOQ FT1.7 = ^Obligation Status <sup>^^^</sup>  Obligation Status Values: 40=Transaction Complete 45=Cancelled Order 100=Obligated – 1358 105=Cancelled - 1358
I-HCP-20.1	Return Status of an existing Authorization Upon Request	FT1.2 = 1358 Oblg/CNumber FT1.6 = VAOQ FT1.7=^^^Completed Flag (1=Complete / 0=Incomplete) FT1.31 = IFCAP Auth Sequence #

#### 7.2.2.4.5 IFCAP → HCPS Unsolicited Warnings/Alerts

IFCAP will create unsolicited messages to notify HCPS when certain conditions are present in IFCAP. Refer to RSD for details related to the functional requirements:

**Table 31: IFCAP to HCPS Unsolicited Warnings/Alerts Requirements**

Requirement	Short Description	Significant Data Fields Examples
I-HCP-15	Warn HCP when the Status of a 1358 Obligation of Interest to HCP is changed	FT1.2= 1358 Oblg/CNumber FT1.6= VASC FT1.7=^Obligation Status <sup>^^^</sup>



Requirement	Short Description	Significant Data Fields Examples
		Obligation Status values: 40=Transaction Complete 100=Obligated – 1358 105=Cancelled – 1358 45=Cancelled Order Null=Invalid Status

#### 7.2.2.4.6 DFT^P03 Message

The following tables provide examples and/or notes related to the HL7 messages that will flow between HCPS and IFCAP.

MSH - Message Header Segment as received from HCPS follows:

**Table 32: MSH - Message Header Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	Vista DESCRIPTION
1	1	ST	R	Field Separator		Field Separator
2	4	ST	R	Encoding Characters	^~\&	Encoding Characters
3	15	HD	R	Sending Application	PRC HCP SEND	Sending Application
4	20	HD	R	Sending Facility	200	Sending station's facility number
5	30	HD	R	Receiving Application	PRC HCP RECEIVE	Receiving Facility
6	0	HD	NS	Receiving Facility	500	Not Supported
7	26	TS	R	Date/Time Of Message	20120203120912-0500	System date/time generated by the sender.
8	0	ST	NS	Security		Not supported
9	7	MSG	R	Message Type	DFT^P03	Message Type ^ Message Event
10	20	ST	R	Message Control ID	70018202	Facility and sequence number automatically generated by the sender.
11	1	PT	R	Processing ID	P	P for Production, T for Test
12	8	VID	R	Version ID	2.5	2.5
13	0	NM	NS	Sequence Number		Not supported
14	0	ST	NS	Continuation Pointer		Not supported
15	2	ID	R	Accept Acknowledgment Type	NE	NE
16	2	ID	R	Application Acknowledgment Type	AL	AL
17	3	ID	R	Country Code	USA	USA
18	0	ID	NS	Character Set		Not supported
19	0	CE	NS	Principal Language Of		Not supported

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
				Message		
20	0	ID	NS	Alternate Character Set Handling Scheme		Not supported
21	0	EI	NS	Message Profile Identifier		Not supported

**Table 33: EVN - Event Type Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	3	ID	R	Event Type Code	P03	MSH.9 event type will be used – kept for backward compatibility
2	26	TS	R	Recorded Date/Time	20120203120838-0500	Event Date and Time
3	0	TS	NS	Date/Time Planned Event		Not supported
4	3	IS	O	Event Reason Code	A	Authorization Request
5	0	XCN	NS	Operator ID		Not supported
6	0	TS	NS	Event Occurred		Not supported
7	0	HD	NS	Event Facility		Not supported

**Table 34: PID - Patient Identification Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	0	SI	NS	Set ID - PID	1	Set ID - PID
2	0	CX	NS	Patient ID		Not supported
3	250	CX	R	Patient Identifier List	9999^5004400231V123112	Last 4 of the SSN ^ ID number is patient Integration Control Number (ICN) and its Checksum in the following format: ICNVCHECKSUM.
4	0	CX	NS	Alternate Patient ID - PID		Not supported
5	0	XPN	R	Patient Name	PRCPATIENT^TEST	Last Name^First Name
6	0	XPN	NS	Mother's Maiden Name		Not supported
7	0	TS	NS	Date/Time of Birth		Not supported
8	0	IS	NS	Administrative Sex		Not supported
9	0	XPN	NS	Patient Alias		Not supported
10	0	CE	NS	Race		Not supported
11	0	XAD	NS	Patient Address		Not supported
12	0	IS	NS	County Code		Not supported
13	0	XTN	NS	Phone Number - Home		Not supported
14	0	XTN	NS	Phone Number - Business		Not supported
15	0	CE	NS	Primary Language		Not supported
16	0	CE	NS	Marital Status		Not supported
17	0	CE	NS	Religion		Not supported
18	0	CX	NS	Patient Account Number		Not supported
19	0	ST	NS	SSN Number - Patient		Not supported
20	0	DLN	NS	Driver's License Number - Patient		Not supported
21	0	CX	NS	Mother's Identifier		Not supported



SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
22	0	CE	NS	Ethnic Group		Not supported
23	0	ST	NS	Birth Place		Not supported
24	0	ID	NS	Multiple Birth Indicator		Not supported
25	0	NM	NS	Birth Order		Not supported
26	0	CE	NS	Citizenship		Not supported
27	0	CE	NS	Veterans Military Status		Not supported
28	0	CE	NS	Nationality		Not supported
29	0	TS	NS	Patient Death Date and Time		Not supported
30	0	ID	NS	Patient Death Indicator		Not supported
31	0	ID	NS	Identity Unknown Indicator		Not supported
32	0	IS	NS	Identity Reliability Code		Not supported
33	0	TS	NS	Last Update Date/Time		Not supported
34	0	HD	NS	Last Update Facility		Not supported
35	0	CE	NS	Species Code		Not supported
36	0	CE	NS	Breed Code		Not supported
37	0	ST	NS	Strain		Not supported
38	0	CE	NS	Production Class Code		Not supported
39	0	CWE	NS	Tribal Citizenship		Not supported

**Table 35: FT1 Financial Transaction Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	0	SI	NS	Set ID - FT1		Not Supported
2	12	ST	R	Transaction ID		1358 Obligation/CNumber Interface ID - file #424/field #4
3	0	ST	NS	Transaction Batch ID		Not Supported
4	53	DR	R	Transaction Date	20120203170312-0500	Auth Begin Date ^ Auth End Date – Filed by EN2^PRCS58 API
5	0	TS	NS	Transaction Posting Date		Not Supported
6	8	IS	R	Transaction Type	VAAU	VAAU (Authorization) is expected for this field. Value will be added to 0017 Transaction Type user table.
7	250	CE	R	Transaction Code		1 - HCPS Auth ID # 2 - Obligation Status 3 – Funds Available 4 – Funds Below Threshold 5 – Partial/Final Payment 6 - Completed Flag (Auth)- file #424/field #.09
8	40	ST	NS	Transaction Description		Not Supported
9	40	ST	NS	Transaction Description - Alternate		Not Supported
10	0	NM	NS	Transaction Quantity		Not Supported
11	12	CP	R	Transaction Amount Extended	775.00	Estimated Dollar Amount – file#424/field .12 –
12	0	CP	NS	Transaction Amount Unit		Not Supported
13	250	CE	NS	Department Code		Not Supported
14	0	CE	NS	Insurance Plan		Not Supported
15	0	CP	NS	Insurance Amount		Not Supported
16	0	PL	NS	Assigned Patient Location		Not Supported
17	0	IS	NS	Fee Schedule		Not Supported

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	Vista DESCRIPTION
18	0	IS	NS	Patient Type		Not Supported
19	0	CE	NS	Diagnosis Code - FT1		Not Supported
20	250	XCN	NS	Performed By Code		
21	0	XCN	NS	Ordered By Code		Not Supported
22	0	CP	NS	Unit Cost		Not Supported
23	0	EI	NS	Filler Order Number		Not Supported
24	250	XCN	R	Entered By Code	HCIFCAP^AUTO	User – file#200
25	0	CE	NS	Procedure Code		Not Supported
26	0	CE	NS	Procedure Code Modifier		Not Supported
27	0	CE	NS	Advanced Beneficiary Notice Code		Not Supported
28	0	CWE	NS	Medically Necessary Duplicate Procedure Reason		Not Supported
29	0	CNE	NS	NDC Code		Not Supported
30	0	CX	NS	Payment Reference ID		Not Supported
31	0	SI	NS	Transaction Reference Key	1	IFCAP Auth Sequence # (1 to 4 digits) - Empty for 6.1 / Required for 16.1, 16.2

**NOTE:** For req #16.1 and 16.2, FT1.11 will contain 0.00 (zero) for the dollar amount.

**Table 36: NTE - Notes and Comments Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	Vista DESCRIPTION
1	4	SI	O	Set ID - NTE	1	Sequence number if additional NTE segments
2	8	ID	O	Source of Comment		Not Supported
3	78	FT	O	Comment	12345678^038	Consult ID^FCP
4	0	CE	NS	Comment Type		Not Supported

**Example Inbound DFT^P03 HL7 message**

```
MSH|^~\&|HCP-IFCAP^|700^|IFCAP-HCP^|500^|20120203120912-0500^||DFT^P03|70018202|P^|2.5^|||NE|AL|USA
EVN|P03|20120203120838-0500^|A
PID|||5004400231V123112^
FT1|1|500C30012||20120203170312-0500^20120205170312-0500||VAAU|^|775.00|<HCP Claim ID>|0001
NTE|1|| 12345678^038
```

#### 7.2.2.4.1 DFT^ACK Message

Upon successful reception/processing of the DFT^P03 message an HL7 acknowledgement (ACK) message will be returned to the HCPS system.

MSH - Message Header Segment as sent to HCPS follows:

**Table 37: MSH - Message Header Segment for ACK**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	1	ST	R	Field Separator		Field Separator
2	4	ST	R	Encoding Characters	^~\&	Encoding Characters
3	15	ST	R	Sending Application	PRC HCP SEND	Sending Application
4	20	ST	R	Sending Facility	500	Sending station's facility number 500=IFCAP to HCP
5	30	ST	R	Receiving Application	PRC HCP RECEIVE	Receiving Facility
6	0	ST	NS	Receiving Facility	200	Receiving station's facility number 200=HCP to IFCAP
7	26	TS	R	Date/Time Of Message	20120203121108-0500	System date/time generated by the sender.
8	0	ST	NS	Security		Not supported
9	7	C M	R	Message Type	DFT^ACK	Message Type ^ Message Event
10	20	ST	R	Message Control ID	2838388833	Control ID from sending site
11	1	ID	R	Processing ID	P	P for Production, T for Test
12	8	ID	R	Version ID	2.5	HL7 Version
13	0	N M	NS	Sequence Number		Not supported
14	0	ST	NS	Continuation Pointer		Not supported
15	2	ID	R	Accept Acknowledgment Type	AL	Accept-level acknowledgement required NE – for I-HCP-11.1, 11.2, 13.1, 13.2, 16.1,16.2
16	2	ID	R	Application Acknowledgment Type	NE	Application-level acknowledgement required
17	3	ID	R	Country Code	USA	USA
18	0	ID	NS	Character Set		Not supported
19	0	CE	NS	Principal Language Of Message		Not supported
20	0	ID	NS	Alternate Character Set Handling Scheme		Not supported
21	0	EI	NS	Message Profile Identifier		Not supported

MSA – Message Acknowledgement Segment as sent to HCPS follows:

**Table 38: MSA – Message Acknowledgement Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	2	ID	R	Acknowledgment Code	AA	Application-level acknowledgement AA, AE or AR
2	20	ST	R	Message Control ID	70018202	Control Id from MSH of original inbound message
3	0	ST	NS	Text Message		Not supported
4	0	NM	O	Expected Sequence Number		Not supported
5			NS	Delayed Acknowledgment Type		Not supported
6	0	CE	NS	Error Condition		Not supported – ERR segment

ERR – Error Segment as sent to HCPS follows:

**Table 39: ERR – Error Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	0	ELD	NS	Error Code and Location		Not Supported
2	18	ERL	O	Error Location		Segment/field containing error
3	705	CWE	R	HL7 Error Code	207^ <i>Authorization not found</i>	HL7 error Code (Tb1 0357) ^ Error Message from IFCAP
4	2	ID	R	Severity	E	Transaction was unsuccessful
5	0	CWE	NS	Application Error Code		Not supported
6	0	ST	NS	Application Error Parameter		Not supported
7	0	TX	NS	Diagnostic Information		Not supported
8	0	TX	NS	User Message		Not supported
9	0	IS	NS	Inform Person Indicator		Not supported
10	0	CWE	NS	Override Type		Not supported
11	0	CWE	NS	Override Reason Code		Not supported
12	0	XTN	NS	Help Desk Contact Point		Not supported
1	0	ELD	NS	Error Code and Location		Not supported

### Example Outbound DFT^ACK HL7 message

```
MSH|^~\&|PRC HCP SEND|500|PRC HCP RECEIVE|200|20120203121002-
0500||DFT^ACK|2838388833|P|2.5|||AL|NE|USA
MSA|AA|70018202
MSH|^~\&|PRC HCP SEND|500|PRC HCP RECEIVE|200|20120203121002-
0500||DFT^ACK|2838388889|P|2.5|||AL|NE|USA
MSA|AE|70018203
```

ERR||FT1^1^3^|207^Authorization Not Found^0357|E|||Established

**Table 40: HL7 Table 0357 - Message Error Condition Codes**

Value	Description	Comment
0	Message Accepted	Success. Optional, as the AA conveys success. Used for systems that must always return a status code.
100	Segment Sequence Error	Error: The message segments were not in proper order, or required segments are missing.
101	Required Field Missing	Error: A required field is missing from a segment.
102	Data Type Error	Error: The field contained data of the wrong data type, e.g., an NM field contained "FOO".
103	Table Value Not Found	Error: A field of data type ID or IS was compared against the corresponding table, and no match was found.
200	Unsupported Message Type	Rejection: The Message Type is not supported.
201	Unsupported Event Code	Rejection: The Event Code is not supported.
202	Unsupported Processing ID	Rejection: The Processing ID is not supported.
203	Unsupported Version ID	Rejection: The Version ID is not supported.
204	Unknown Key Identifier	Rejection: The ID of the patient, order, etc., was not found. Used for transactions <i>other than</i> additions, e.g., transfer of a non-existent patient.
205	Duplicate Key Identifier	Rejection: The ID of the patient, order, etc., already exists. Used in response to addition transactions (Admit, New Order, etc.)
206	Application Record Locked	Rejection: The transaction could not be performed at the application storage level, e.g., database locked.
207	Application Internal Error	Rejection: A catchall for internal errors not explicitly covered by other codes.

#### **7.2.2.4.2 DFT^P11 Returned Message**

Upon successful processing of the inbound DFT^P03 message, IFCAP shall return a detailed financial transaction (DFT^P11) that includes information about fund availability and threshold management.

MSH - Message Header Segment sent to HCPS follows:

**Table 41: MSH - Message Header Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	1	ST	R	Field Separator		Field Separator
2	4	ST	R	Encoding Characters	^~\&	Encoding Characters
3	15	HD	R	Sending Application	PRC HCP SEND	Sending Application
4	20	HD	R	Sending Facility	500	Sending station's facility number
5	30	HD	R	Receiving Application	PRC HCP RECEIVE	Receiving Facility
6	0	HD	NS	Receiving Facility	200	Not Supported
7	26	TS	R	Date/Time Of Message	20120203120912-0500	System date/time generated by the sender.
8	0	ST	NS	Security		Not supported
9	7	MSG	R	Message Type	DFT^P03	Message Type ^ Message Event
10	20	ST	R	Message Control ID	70018202	Facility and sequence number automatically generated by the sender.
11	1	PT	R	Processing ID	P	P for Production, T for Test
12	8	VID	R	Version ID	2.5	2.5
13	0	NM	NS	Sequence Number		Not supported
14	0	ST	NS	Continuation Pointer		Not supported
15	2	ID	R	Accept Acknowledgment Type	AL	AL
16	2	ID	R	Application Acknowledgment Type	AL	AL
17	3	ID	R	Country Code	USA	USA
18	0	ID	NS	Character Set		Not supported
19	0	CE	NS	Principal Language Of Message		Not supported
20	0	ID	NS	Alternate Character Set Handling Scheme		Not supported
21	0	EI	NS	Message Profile Identifier		Not supported

**Table 42: EVN - Event Type Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	3	ID	R	Event Type Code	P03	MSH.9 event type will be used – kept for backward compatibility
2	26	TS	R	Recorded Date/Time	20120203120838-0500	Event Date and Time
3	0	TS	NS	Date/Time Planned Event		Not supported
4	3	IS	O	Event Reason Code	A	Authorization Request
5	0	XCN	NS	Operator ID		Not supported
6	0	TS	NS	Event Occurred		Not supported
7	0	HD	NS	Event Facility		Not supported

**Table 43: PID - Patient Identification Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	0	SI	NS	Set ID - PID		Not supported



SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
2	0	CX	NS	Patient ID		Not supported
3	250	CX	R	Patient Identifier List	9999^5004400231V123112	Last 4 of SSN ^ ID number is patient Integration Control Number (ICN) and its Checksum in the following formatICNV CHECKSUM.
4	0	CX	NS	Alternate Patient ID - PID		Not supported
5	0	XP	R	Patient Name	PRCPATIENT^TEST	Last Name^First Name
6	0	XP	NS	Mother's Maiden Name		Not supported
7	0	TS	NS	Date/Time of Birth		Not supported
8	0	IS	NS	Administrative Sex		Not supported
9	0	XP	NS	Patient Alias		Not supported
10	0	CE	NS	Race		Not supported
11	0	XAD	NS	Patient Address		Not supported
12	0	IS	NS	County Code		Not supported
13	0	XTN	NS	Phone Number - Home		Not supported
14	0	XTN	NS	Phone Number - Business		Not supported
15	0	CE	NS	Primary Language		Not supported
16	0	CE	NS	Marital Status		Not supported
17	0	CE	NS	Religion		Not supported
18	0	CX	NS	Patient Account Number		Not supported
19	0	ST	NS	SSN Number - Patient		Not supported
20	0	DLN	NS	Driver's License Number - Patient		Not supported
21	0	CX	NS	Mother's Identifier		Not supported
22	0	CE	NS	Ethnic Group		Not supported
23	0	ST	NS	Birth Place		Not supported
24	0	ID	NS	Multiple Birth Indicator		Not supported
25	0	NM	NS	Birth Order		Not supported
26	0	CE	NS	Citizenship		Not supported
27	0	CE	NS	Veterans Military Status		Not supported
28	0	CE	NS	Nationality		Not supported
29	0	TS	NS	Patient Death Date and Time		Not supported
30	0	ID	NS	Patient Death Indicator		Not supported
31	0	ID	NS	Identity Unknown Indicator		Not supported
32	0	IS	NS	Identity Reliability Code		Not supported
33	0	TS	NS	Last Update Date/Time		Not supported
34	0	HD	NS	Last Update Facility		Not supported
35	0	CE	NS	Species Code		Not supported

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
36	0	CE	NS	Breed Code		Not supported
37	0	ST	NS	Strain		Not supported
38	0	CE	NS	Production Class Code		Not supported
39	0	CWE	NS	Tribal Citizenship		Not supported

**Table 44: FT1 Financial Transaction Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	0	SI	NS	Set ID - FT1	1	
2	12	ST	R	Transaction ID	500-C30012	1358 Oblg/CNumber Interface ID - file #424/field #4
3	0	ST	NS	Transaction Batch ID		Not Supported
4	53	DR	R	Transaction Date		Not needed on return message
5	0	TS	NS	Transaction Posting Date		Not Supported
6	0	IS	R	Transaction Type	VAAU	AU (Authorization) is expected for this field. Value may need to be added to 0017 Transaction Type user table.
7	250	CE	R	Transaction Code	500-2013-01^^1^^^ Example of I-HCP-6.2	1 - HCPS Auth ID # 2 - Obligation Status 3 - Funds Available 4 - Funds Below Threshold 5 - Partial/Final Payment 6 - Completed Flag - file #424/field #.09
8	40	ST	NS	Transaction Description		Not Supported
9	40	ST	NS	Transaction Description - Alternate		Not Supported
10	0	NM	NS	Transaction Quantity		Not Supported
11	12	CP	R	Transaction Amount Extended		Not required in the return message
12	0	CP	NS	Transaction Amount Unit		Not Supported
13	250	CE	R	Department Code		Not Supported
14	0	CE	NS	Insurance Plan		Not Supported
15	0	CP	NS	Insurance Amount		Not Supported
16	0	PL	NS	Assigned Patient Location		Not Supported
17	0	IS	NS	Fee Schedule		Not Supported
18	0	IS	NS	Patient Type		Not Supported
19	0	CE	NS	Diagnosis Code - FT1		Not Supported
20	0	XCN	R	Performed By Code		
21	0	XCN	NS	Ordered By Code		Not Supported



SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
22	0	CP	NS	Unit Cost		Not Supported
23	0	EI	NS	Filler Order Number		Not Supported
24	0	XCN	R	Entered By Code	HCPIFCAP^AUTO	User – file#200
25	0	CE	NS	Procedure Code		Not Supported
26	0	CE	NS	Procedure Code Modifier		Not Supported
27	0	CE	NS	Advanced Beneficiary Notice Code		Not Supported
28	0	CWE	NS	Medically Necessary Duplicate Procedure Reason		Not Supported
29	0	CNE	NS	NDC Code		Not Supported
30	0	CX	NS	Payment Reference ID		Not Supported
31	0	SI	NS	Transaction Reference Key 1		IFCAP Auth Sequence # # (1 to 4 digits)

**NOTE:** For req #20, Completed Flag (sub-field #6 of FT1.7) will either contain 1 (Completed) or 0 (Incomplete).

**Table 45: NTE - Notes and Comments Segment**

SEQ	LEN	DT	R/O	ELEMENT NAME	EXAMPLE	VistA DESCRIPTION
1	4	SI	O	Set ID - NTE	1	Sequence number if additional NTE segments
2	8	ID	O	Source of Comment		Placer is source of comment
3	78	FT	O	Comment		Not needed on return message
4	0	CE	NS	Comment Type		Not Supported

### Example Outbound DFT^P11 HL7 message

```

MSH|^~\&|PRC HCP SEND^|500^| PRC HCP RECEIVE^|200^|20120203120912-
0500^||DFT^P11|70018202|P^|2.5^||NE|AL|USA

EVN|P11|20120203120838-0500^|A

PID|||1234^5004400231V123112||PRCPATIENT^TEST

FT1|1|500-C30012|||VAAU|500-C45006^1^1^|HCPIFCAP^AUTO|1

NTE|1||

```

### **7.2.3 Interface Verification**

The NVCIS Project team will create an extensive suite of tests to verify the functionality of the interfaces described in this document. This suite includes a granular unit test, functional tests, round-trip write/read tests, and integration tests in a deployed environment. Test scripts will use inspection and review of the transactions to/from the systems involved in this effort.

## **8. Human-Machine Interface**

N/A

### **8.1 Interface Design Rules**

N/A

### **8.2 Inputs**

N/A

### **8.3 Outputs**

N/A

### **8.4 Navigation Hierarchy**

N/A

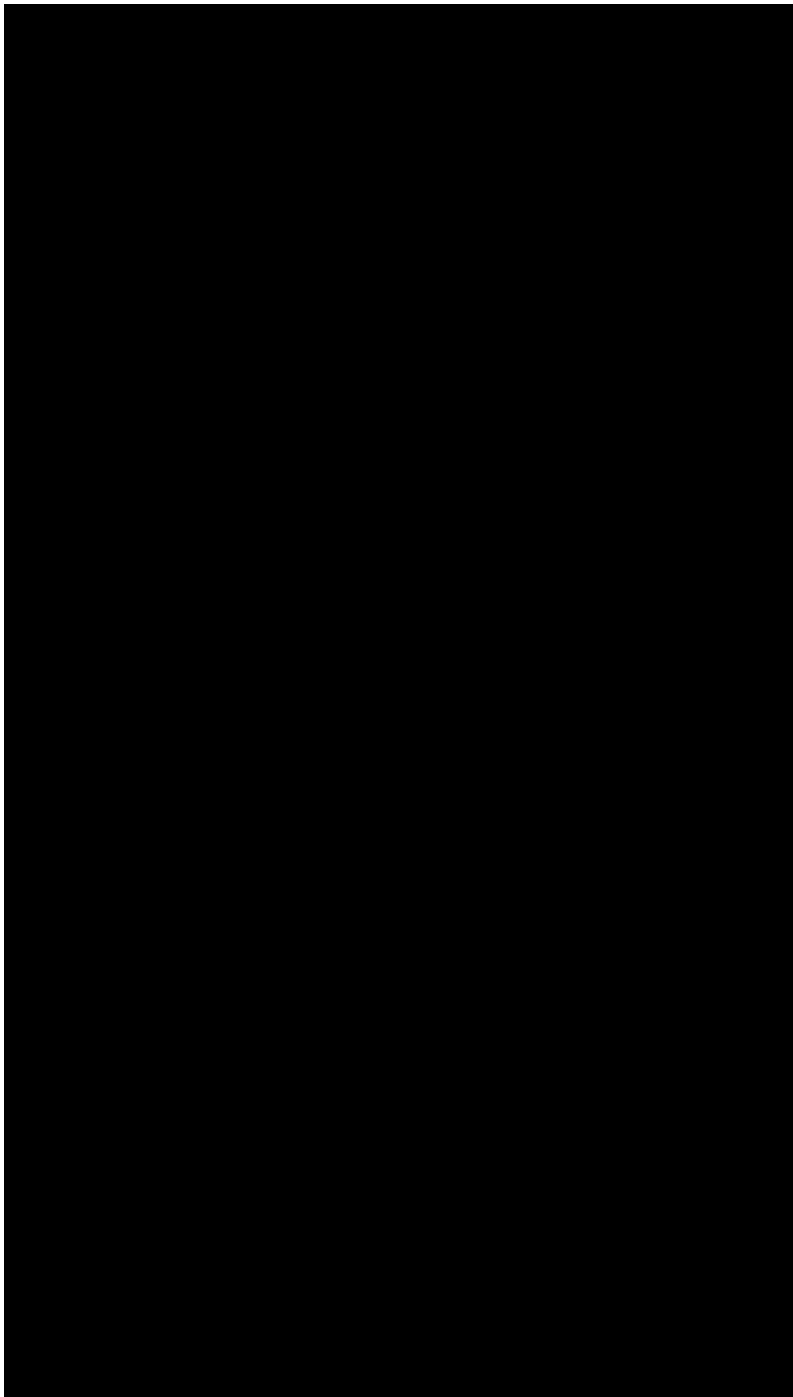
## **9. System Integrity Controls**

The design for the NVCIS enhancement uses existing HL7 interface and communications with security measures in place for this technology within VA.

## 10. Approval Signatures

The signature below is an acknowledgement that the signatory understands the purpose and content of this document.

Signed: \_\_\_\_\_



Business Sponsor

Date

Date

Date

Date

Date

Date

## A. Additional Information

### A.1. RTM

[Non-VA Care Enhancements Team Library RTMs](#)

### A.2. Packaging and Installation

N/A

### A.3. Design Metrics

N/A

### A.4. Acronym List and Glossary

Table 46: Acronym List

Term	Definition
AA	Accept Acknowledgement
ACK	HL7 Acknowledgement Message
AE	Application Error
ANSI	American National Standards Institute
API	Application Programming Interfaces
CBO	Chief Business Office
CHUI	Character-based User Interface
COTS	Commercial-Off-The-Shelf
CPRS	Computerized Patient Record System
ECD	Electronic Commerce Division
FB	VistA Fee Basis
FBCS	Fee Basis Claims System
FSC	Financial Services Center
GUI	Graphical User Interface
HCPS	Healthcare Claims Processing System
HIPAA	Health Insurance Portability and Accountability Act
HL7	Health Level 7
IFCAP	Integrated Funds Distribution, Control Point Activity, Accounting, and Procurement
IRM	Information Resources Management
M	Massachusetts General Hospital Utility Multi-Programming System (also known as MUMPS)

Term	Definition
NPM	National Patch Module
NVCIS	Non-VA Interface Support Program
OIT	Office of Information and Technology
PRC	Package Name for IFCAP within VistA
RPC Broker	Remote Procedure Call Broker
SAC	Standards and Conventions
TRM	Technical Reference Model
VA	Department of Veterans Affairs
VHA	Veterans Health Administration
VistA	Veterans Health Information Systems and Technology Architecture

**Table 47: Glossary**

Term	Meaning
Post-relational database	A multi-dimensional array that supports direct global access/manipulation, SQL access and manipulation, and object access and manipulation. The database is geared for heavy volume transaction processing using sophisticated standard indexes and bit-map indexes.

## A.5. Required Technical Documents

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

- Requirements Specification Document
- Requirements Traceability Matrix
- System Design Document
- Interface Control Document
- Primary Developer checklist
- Secondary Developer Checklist
- Software Quality Assurance (SQA) Checklist
- Product Component Testing Results
- Software Source Code
- Master Test Plan

- Test Evaluation Document
- Production Operations Manual
- User Guide
- Technical Manual
- Security Guide
- CI/ST Defect Log
- CI/ST Evaluation Summary
- CI/ST Execution Log
- User Functionality Defect Tracking Spreadsheet
- User Functionality Defect Log
- User Functionality Evaluation Summary
- User Functionality Execution Log
- Deployment Plan
- Version Description Document
- Defect Resolution Plan
- Defect/Fix Status Report
- Final Software Source Code
- Initial Operating Capability Entry Request and Exit Summary
- Package/Patch Completion Transition Document
- National Deployment Addendum Issue Brief
- Software Release Request
- Knowledge Transfer Training Material