VHA Fix-the-Phones Initiative-Desktop Agent

**Work Effort Unique Identifying #20111102**

Business Requirements Document



Initial Scope Documented December 2011

Pilot Scope Documented April 2012

Pilot Scope Revised March 2014

Pilot Phases Revised January 2015

Revision History

1. The revision history cycle begins once changes or enhancements are requested after the initial Business Requirements Document has been completed.

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| --- | --- | --- |
| Date | Description | Author |
| 11/7/11 | Initial version. This document is versioned in the Clear Case tool. | Cheryl Sklar |
| Date BRD submitted to Business Owner(s) and Enterprise Systems Management Portfolio Manager for sign-off | Approved version | Business Owners:  Anne Kreutzer (12/20/2011)  Carol Montalva (12/21/2011)  Health System Portfolio Manager:  Shawn Faherty (12/21/2011) |
| Date BRD submitted to Customer Advocate for sign-off | Customer Advocate Name (date of approval) |
| Date BRD submitted to OIT for sign-off | Guy Esten (12/21/2011) |
| 12/15/2011 | Technical Writing Review | Louise Goler-Brittain |
| 12/16/2011 | Peer Review | Pawan Goyal |
| 12/19/2011 | Management Review | Linda Hebert |
| April 2012 | Pilot Scope Documented | Unknown |
| 3/5/2014 | Pilot Scope Updated | Patricia Moran |
| 1/27/2015 | Pilot Phases Updated | Patricia Moran / Marcia Stanfield |
| 1/28/2015 | Revised pilot phases reviewed with call center / PACT staff; clarifications, minor revisions to language and phase updates | Patricia Moran |

Table of Contents

[1. Purpose 1](#_Toc381785785)

[2. Overview 1](#_Toc381785786)

[3. Customer and Primary Stakeholders 3](#_Toc381785787)

[4. Scope 4](#_Toc381785788)

[5. Goals, Objectives and Outcome Measures 4](#_Toc381785789)

[6. Enterprise Need/Justification 5](#_Toc381785790)

[7. Requirements 6](#_Toc381785791)

[7.1. Business Needs/Owner Requirements 6](#_Toc381785792)

[7.2. Non-Functional Requirements](#_Toc381785793) 18

[7.2.1. Performance, Capacity, and Availability Requirements](#_Toc381785794) 20

[7.3. Known Interfaces 2](#_Toc381785795)1

[7.4. Related Projects or Work Efforts 21](#_Toc381785796)

[8. Other Considerations 21](#_Toc381785797)

[8.1. Alternatives 21](#_Toc381785798)

[8.2. Assumptions 21](#_Toc381785799)

[8.3. Dependencies 22](#_Toc381785800)

[8.4. Constraints 22](#_Toc381785801)

[8.5. Business Risks and Mitigation 22](#_Toc381785802)

[Appendix A. References 24](#_Toc381785803)

[Appendix B. Models 25](#_Toc381785804)

[Appendix C. Stakeholders, Primary/Secondary Users, and Workgroups 27](#_Toc381785805)

[Stakeholders 27](#_Toc381785806)

[Primary and Secondary Users 29](#_Toc381785807)

[Appendix D. Enterprise Requirements 30](#_Toc381785808)

[Appendix E. Acronyms and Abbreviations 31](#_Toc381785809)

[Appendix F. Business Needs Removed: Out of Scope for Pilot 33](#_Toc381785810)

[Appendix G. Non-Functional Needs Removed: Out of Scope for Pilot 43](#_Toc381785811)

[Appendix H. VRM CRM Unified Desktop Lessons Learned](#_Toc381785811) 44

[Appendix I. Approval Signatures 4](#_Toc381785812)5

Business Requirements Document

Pilot Scope defined\*

# Purpose

The Business Requirements Document (BRD) is authored by the business community for the purpose of capturing and describing the business needs of the customer/business owner. The BRD provides insight into the AS IS and TO BE business area, identifying stakeholders and profiling primary and secondary user communities. It identifies what capabilities the stakeholders and the target users need and why these needs exist, providing a focused overview of the request requirements, constraints, and Information Technology (IT) options considered. This document does not state the development methodology. The intended audience for this document is the Office of Information and Technology (OIT).

**\*See Appendices F and G for all requirements that will not be included in the Pilot. This scope is based on discussions with key business and IT stakeholders as well as based on the experience of the VRM CRM team estimates to stay in scope of initial budget.**

# Overview

VACO Chief Business Office, Systems Management in support of the VHA Fix-the-Phones (FTP) initiative, the VHA Patient Aligned Care Team (PACT) Call Center Pilot program and the newly created Access and Clinic Administrative Program (ACAP, 10NA) under which VHA telephone systems and call center operations including triage, queuing and standard operating procedures falls, are requesting development of a Customer Relationship Management (CRM) desktop software application. The PACT Call Center Pilot, as one of the pathways of Fix-the-Phones, has consistently identified the need for a fully functioning CRM capability. ACAP serves as VHA’s business owner and manager, in collaboration with the VA Office of Information and Technology, in matters regarding appointment scheduling software and communications hardware and software. CRM will support the work done by call center agents to provide timely, consistent access to care, resolve Veterans questions and requests for information and services. The ability of call centers to efficiently and effectively provide telephone care services supports ACAP’s key charge of enabling a transition from a face-to-face appointment model to a sustained relationship model using multiple forms of access and engagement. Veterans utilize telephone contacts, not just as an alternative to in-person visits, but at times as the preferred method of meeting their healthcare needs. From a Veteran’s perspective, telephone access to Department of Veterans Affairs (VA) health services has historically been a frustrating experience involving dropped calls, long wait times, and convoluted pathways before the Veteran is put into contact with an employee capable of resolving the patient’s inquiry. Additionally, since 2005, the VA Office of Inspector General issued 11 reports highlighting access related problems, some of which site continued delays in promised improvements. The Government Accountability Office issued a report released in January 2013 indicating that high call volumes and a lack of staff dedicated to answering telephones impeded timely scheduling of medical appointments. Thus, ACAP was established in August 2013 as the single functional Central Office entity to focus on business process, metrics, and enabling technologies for improving Veterans’ access to outpatient care. ACAP’s goals fully support VA’s Strategic Plan FY2014 – FY2020 Framework and priority goals which include access, evolving VA information technology capabilities to meet emerging customer service/empowerment expectations, enhancing productivity and improving efficiency.

Previously, at the direction of the Secretary of VA, a Telephone Transformation Survey was conducted in December 2010. A 106-item survey was sent to the 56 national call centers and a 45-item survey was sent to 153 medical centers to gather information about processes, technology, management, and metrics. In terms of national call center survey responses, 90% of call centers reported that they do not measure first call resolution[[1]](#footnote-1) rate, 77% reported no scheduling software or tools to support management of fluctuating call volume, 42% reported a call abandonment rate[[2]](#footnote-2) of greater than 10%, and 25% reported an average speed of response of greater than one minute. In terms of monitoring the quality of call responses, 51% of medical centers and 42% of national call centers did not review calls for quality. Overall, the survey results indicated that a majority of call centers lacked the tools and standardized processes needed to comply with the VHA Directive and URAC certification requirements. (URAC, prior to 1996 was known as the Utilization Review Accreditation Committee. Since 1996, it is known simply as URAC.)

According to the “Telephone Service for Clinical Care” VHA Directive (2007-033), providing access to telephone care 24 hours a day, 7 days a week (24/7) is a VHA Care Service Standard. Benchmarks for telephone service identified in this directive include a recommendation to comply with the URAC Health Care Standards. URAC standards require, on average, a phone call to be answered by a live person within 30 seconds and a caller abandonment rate of less than 5 percent. The Directive also establishes policy for after-hour telephone access (Weekend, Holiday, Evening, Night (WHEN)). VHA wide FY2013 results indicated that calls were answered at an average of 104 seconds, and the average abandonment rate was 12.9%, significantly exceeding URAC standards. FY2014 results as of March 1, 2014 indicated that calls were answered at an average of 107 seconds and the average abandonment rate was 11.6%, still well in excess of URAC standards.

Veterans contact VHA call centers to obtain a variety of services, such as scheduling/changing appointments, requests for medication refills, contacts with providers, and disease/symptom advice. Currently call center agents use several different software applications to support call management but none of them provides a fully satisfactory enterprise level solution.

The TeleCare Record Manager (TRM Plus) is a Document Storage Systems (DSS) vendor product that provides call agents view-only access to information in Veterans Health Information Systems and Technology Architecture (VistA) and the Computerized Patient Record System (CPRS) including demographics, medications, postings, discharge summaries, consults, health summaries, radiology results, laboratory results, allergies, immunizations, and reports available in CPRS. It also provides the ability to generate TRM Plus notes and limited reporting capabilities. Non-clinical call agents are often the first line of contact. They document preliminary information about the call and identify calls that need clinical call agent call center staff follow-up. These documents become available to clinical call agents as “Suspended Notes” in TRM Plus for further action.

In order to identify which patients need follow-up, clinical call agents enter their credentials, open a separate instance of TRM Plus for each facility covered by the call center, and select the “restore suspend notes” option. As there is no consolidated work queue, clinical call agents are required to repeat this process multiple times each day to determine if there are any patients in need of clinical follow-up. When the clinical call agent returns the phone call, information about the caller and Veteran entered by the non-clinical call agent in TRM Plus is validated. TRM Plus supports workflow when demographic changes are identified, because entries saved in TRM Plus will automatically update the information in VistA. TRM Plus provides limited capabilities to categorize issues.

The clinical call agent accesses protocols that guide assessment and documentation about the Veteran as well as previous encounters by selecting the Veterans Health Gateway (VHG) icon within the TRM Plus software application. VHG is a Data Systems Hardware Incorporated (DSHI) vendor product for which DSS is the primary contractor. VHG auto generates a note about the call as the clinical call agent selects patient responses to specific questions. It is used to document patient education as well as additional patient-specific documentation. The clinical call agent also selects the appropriate diagnosis codes in VHG. Procedure codes are automatically assigned by the VHG application as a background process. The output of a clinical call agent’s phone interaction process are progress notes in TRM Plus and CPRS that are automatically generated when signed by the clinical call agent.

Limitations of TRM Plus and VHG have been identified, including the inability to save information in VHG or TRM Plus so that it can be retrieved and edited, the inability to directly schedule an appointment or renew a medication when appropriate, and the inability to directly contact a provider. URAC standards require a suspended notes report, but the one provided has been reported by call center staff to be inaccurate. It also cannot be exported to other applications like Excel for further validation and analysis of the data. Other reports needed for management of staffing resources have been reported to be manually intensive, insufficient and/or inaccurate.

The Call Log Reporter (CLR) software is available for staff to view a list of Veterans who have contacted the call center. Like TRM Plus, there is a specific icon for each facility and agents must log into each application separately. Information that can be retrieved includes the date/time of call, name of patient, physician, chief complaint, call type, telephone number, call agent, and facility. While information can be sorted, sorting can only occur by a single, not multiple columns. Additionally, the entire file must be exported as there are no options to export individual records thus PACT teams and/or call center staff must sift through all records. It is also not possible to determine if a nurse has taken any action in response to a call. CLR must also be refreshed each time before running reports which can be time consuming.

Veterans Integrated Service Network (VISN) 12 has developed and implemented the Message Manager; a secure, web-based tool used to convey a message on behalf of a Veteran to a predefined destination, such as a Patient Aligned Care Team (PACT). It provides a team-based approach to message management, tracks message activity, and provides reports on performance. However, usage of this application is limited to VISN 12 as it is Class III software.

Other tools to enhance communications between call centers and PACT as well as between integrated call centers themselves include My Health*e*Vet secure administrative messaging, Microsoft Outlook, Microsoft Lync, VistA Mail Man (including the graphical user interface (GUI), and CPRS alerts. None of these tools have sufficient attributes required by end users to be viable in an integrated call center environment.

The aforementioned business owners have identified the need for development of the single desktop view that call agents can use to view and record relevant information and resolve Veteran calls. The single desktop view will eliminate the need for call agents to access multiple systems and will provide single sign on functionality to enable increased compliance with URAC standards.

# Customer and Primary Stakeholders

Carol Chipman, Associate Director, Telephone Access and Contact Management, 10NA12, is the Lead for this request that is aligned under ACAP and the VHA Fix-the-Phones initiative. Review [Appendix C](#AppendixC) for a complete list of primary and secondary stakeholders.

# Scope

This request will address the following areas relative to the CRM single desktop view:

* Provide a secure, round-trip, user friendly communications tool to be used for communications between call centers and PACT and between call center staffs. This tool must meet basic user defined attributes.
* Launch Veterans Health Gateway (VHG), a Data Systems Hardware Incorporated (DSHI) vendor clinical triage product for which Document Storage Systems (DSS) is the primary contractor.
* Embed other essential links used by call center staff.
* Provide the call agent with information about needs and outcomes of previous calls, help to direct the Veteran to the agent that can best help them resolve their current problem, and capture information about how the current call was handled and dispositioned.
* Automated algorithms to guide call resolution will be included in the knowledge base required by call agents. Knowledge base support is expected to facilitate resolution of calls related to symptoms, medications, appointment scheduling/cancellations, prosthetics/durable medical equipment, requests information, requests for returned phone calls, test results, etc.
* Regarding patient appointment scheduling, display a patient’s primary care provider, and available appointments, by location, with that provider within a user defined date range. Additionally, display available appointments for other primary care providers, by location, within a user defined date range if a patient’s primary care provider has no appointments available in the specified time frame.
* Customer satisfaction functionality will allow callers to rate their call experience and managers to gather meaningful statistics about the calls for use in enhancing future services.

# Goals, Objectives and Outcome Measures

| Goal/Objective and Desired Outcome | Impact | Measurement |
| --- | --- | --- |
| Enhanced patient identification | Eliminate the need for Veterans to provide additional basic information about themselves and the reason for their call multiple times, enhancing Veteran satisfaction with telephone services | Enhanced patient identification information either through caller identification/matching functionality or via information that the caller input, would be available to call agents 90% of the time. |
| Provide call agents with information about the reason and outcome of previous calls. | Provide timely resolution of the current call as the Veteran will not need to repeat information electronically available. | Information about previous calls is available to call agents 90% of the time. |
| Route the Veteran to the most appropriate call agent (for example, administrative, nursing, or pharmacy). (Post Auto Attendant) | Streamlined pathway to call resolution | * The call agent will be able to view all of the details from the previous call agent 100% of the time. * The Veteran will not be re-routed to another agent, unless an additional problem is reported, 85% of the time. |
| Provide information about the outcome of the current call. | Information about call outcomes can be used to modify policies and procedures. | Veterans report that they are satisfied and/or very satisfied with the manner in which their call was addressed 75% of the time via complaints/compliments expressed during the call and via an automated survey taken at the end of the call. |
| Knowledge based algorithms standardize call agent interactions. | Veterans receive the most appropriate/consistent direction/interaction with call agents. | * Call agents follow automated algorithms 90% of the time. * Knowledge based algorithms result in a first time call resolution rate of 68% per the industry benchmark. |
| Enable effective and efficient management of call agents. | Staffing can be adjusted to meet times of high call volume. | Comply with the following URAC standards:   * Average speed of answer by a live person within 30 seconds * Abandonment rate of less than 5% (excludes calls abandoned within the first 30 seconds of when a live person could answer the call). * The average call back time by the nurse is 30 minutes. |
| Monitor and report on call center performance | * Supervisors/Administrators are able to take proactive and corrective actions to improve call quality, when appropriate. * Support future planning from workload optimization and quality improvement perspective | Able to monitor and report on the performance indicators such first call resolution, Veteran satisfaction survey results, etc. When integrated with the telephone system, powerful reports can be generated that will enable improved strategic planning and workforce management. |

# Enterprise Need/Justification

This request is primarily aligned with the Fix-the-Phones initiative, and Acess and Clinic Administrative Program, but is also supported by the following major initiatives:

* + Build Veterans Relationship Management (VRM), (enable convenient, seamless interactions)
  + Enhancing the Veteran experience and access to health care (EVEAH)
  + New Models of Care, (centers of excellence in primary care education to lead patient-centered inter-professional teams that provide coordinated longitudinal care), and
  + Healthcare Efficiency. (Creating organizational value by reducing cost while maintaining quality).

Additionally, on July 17, 2009, the Secretary of the Department of Veterans Affairs challenged that “Leveraging the power of Information Technology to accelerate and modernize the delivery of benefits and services to our nation’s Veterans is essential to transforming VA to a 21st century organization that is people-centric, results-driven, and forward thinking.”

Build Veterans Relationship Management (VRM) is an enterprise wide effort to improve the telephone experience of Veterans who contact the VA. VRM is developing tools to support call centers. Any tools developed for Fix-the-Phones should be compatible with VRM tools to allow for the sharing of information across the enterprise in order to enhance customer service and the reporting of VA enterprise wide telephone contact metrics.

My Health***e***Vet (MHV) is a web-based application that creates a new, online environment where Veterans, family, and clinicians may come together to optimize Veterans’ health care. This web technology combines essential health record information enhanced by online health resources to enable and encourage patient/clinician collaboration. Secure Messaging through My Health***e***Vet is a web-based message system that allows participating VA patients and VA health care teams to communicate non-urgent, health related information in a private and safe computer environment. Secure Messaging provides a virtual technology alternative to face-to-face and telephone encounters between VA patients and their VA clinical and business areas. It is anticipated that as more Veterans use MHV and as the functionality available on MHV is enhanced and fully implemented, the need for Veterans to use the telephone system is expected to decrease. The relevant references are available in [Appendix A](#AppendixA).

# Requirements

## Business Needs/Owner Requirements

**NOTE: Some business requirements have been moved to Appendix F as they were deemed out of scope for the Pilot.**

| Business Need (BN) | OWNR  Number | Owner Requirement (OWNR) | Phase\* | Priority\*\* |
| --- | --- | --- | --- | --- |
| BN 1: Adhere to the Enterprise Level requirements within the Enterprise Requirements Management (ERM) Repository and as specifically addressed in [Appendix D](#Ent_Req) of this document. | | | | |
| BN 3: Consolidated Views of Veteran Information  Provide the ability for the call agent to automatically viewinformation from a single desktop view. | | | | |
|  | 3.1 | Provide the ability for the call agent to automatically view the following demographic information about the Veteran in a single desktop view as a snapshot. | Phase 1 | High |
| 3.1.1 | Full name | Phase 1 | High |
| 3.1.2 | Social Security Number (SSN)[[3]](#footnote-3) | Phase 1 | High |
| 3.1.3 | Date of Birth | Phase 1 | High |
| 3.1.4 | All Veteran telephone numbers | Phase 1 | High |
| 3.1.5 | Current address | Phase 1 | High |
| 3.1.6 | e-mail address | Phase 3 | Low |
| 3.1.7 | MyHealtheVet (MHV) Information  Status of Veteran Authentication in MHV | Phase 3 | High |
| 3.1.8 | MyHealtheVet (MHV) Information  Status of Veteran Opt-In to MHV secure messaging | Phase 3 | High |
| 3.1.9 | Eligibility Status  Veteran’s Eligibility status, including eligibility for Dental services (from VistA) | Phase 1 | High |
| 3.1.10 | Notification to eligibility of the need to pre-register and what information is needed. | Phase 3 | High |
| 3.1.11 | Information indicating Service connected disabilities and Special Treatment Authority conditions, e.g., Combat Veteran, Agent Orange (from VistA) | Phase 1 | High |
| 3.1.12 | Next of kin Information | Phase 1 | High |
| 3.1.13 | Power of attorney/durable power of attorney Information | Phase 3 | High |
| 3.1.14 | Information indicating whether there is a need for additional eligibility information such as insurance verification. (from VistA) | Phase 1 | High |
| 3.1.15 | Active Release of Information (ROI) forms  Active Release of Information (ROI) forms to include a list of the providers/agencies, dates ROI is active, if information has been sent the date it was sent/received. (Requires interface with DSS ROI Plus software.) | Phase 3 | Low |
| 3.1.16 | Patient record flags | Phase 1 | High |
| 3.1.17 | Name of facility | Phase 1 | High |
| 3.1.18 | VISN number/name | Phase 1 | High |
| 3.1.19 | Name of PACT | Phase 1 | High |
| 3.1.20 | MHV secure messaging assignment | Phase 3 | High |
| 3.1.21 | Primary Care Provider  Name of primary care provider (PCP)/House staff/surrogate providing coverage | Phase 1 | High |
| 3.1.22 | Appointment Protocols  Provide the ability to view a description of appointment protocols that are specific to the facility. (Do not display appointment protocols that are not available at the facility (for example incorporate a smart/knowledge system)). | Phase 3 | High |
| 3.1.23 | Person Search  Provide the ability for the call agent to search for another patient by entering their name and social security number and/or Electronic Data Interchange Personal Identifier (EDIPI). | Phase 1 | High |
| 3.2 | Communication Preference > View  Provide the ability for the call agent to view the patient’s preferred communication method (for example, telephone or e-mail). | Phase 2 | High |
| 3.2.1 | Communication Preference > Update  Provide the ability for the call agent to update the patient’s preferred communication method (for example, telephone or e-mail). | Phase 2 | High |
| 3.3 | Appointment Scheduling > View  Provide the ability for the call agent to automatically view the following appointment/scheduling information in a single desktop view. | Phase 3 | High |
| 3.3.1 | Appointment Scheduling > View  Future appointments | Phase 3 | High |
| 3.3.2 | Appointment Scheduling > View  Last PCP appointment | Phase 3 | High |
| 3.3.3 | Appointment Scheduling  PCP availability within the next 72 hours as a default and/or within a user defined time frame. | Phase 3 | High |
| 3.3.4 | Transportation Services Info (Shuttle)  Display information about available shuttle services if Veteran requires shuttle transportation services (Volunteer Transportation Network, e.g. DAV). | Phase 2 | Medium |
| 3.3.5 | Transportation Services Info  Veteran is wheelchair-bound | Phase 3 | Medium |
| 3.3.6 | Transportation Services Info  Veteran has a cognitive, speech, and/or hearing impairment. | Phase 3 | High |
| 3.3.7 | Urgent Care Visit Info  Date, time and reason of most recent urgent care visit (from VistA) | Phase 1 | High |
| 3.3.8 | Emergency Visit Info  Date, time and reason of most recent emergency visit. (from VistA) | Phase 1 | High |
| 3.3.9 | Inpatient Discharge Info  Date, time and reason of most recent inpatient discharge. (from VistA) | Phase 1 | High |
| 3.4 | Prescription and Medication Info  Provide the ability for the call agent to automatically view the following prescription information in a single desktop view: | Phase 3 | High |
| 3.4.1 | Prescription and Medication Info  Prescription numbers | Phase 3 | High |
| 3.4.2 | Prescription and Medication Info  List of active medications | Phase 3 | High |
| 3.4.3 | Prescription and Medication Info  List of expired medications | Phase 3 | High |
| 3.4.4 | Prescription and Medication Info  List of discontinued medications | Phase 3 | High |
| 3.4.5 | Prescription and Medication Info  List/status of medications mailed or being processed by the Consolidated Mail Outpatient Pharmacy (CMOP). | Phase 3 | High |
| 3.4.6 | Prescription and Medication Info  Medication delivery information: date medication shipped, anticipated arrival | Phase 3 | High |
| 3.4.7 | Prescription and Medication Info  List of Non-VA medications | Phase 3 | High |
| 3.4.8 | Prescription and Medication > Refill Info  Number of refills available | Phase 3 | High |
| 3.4.9 | Prescription and Medication Info  Last date medication filled | Phase 3 | High |
| 3.4.10 | Prescription and Medication Info  Name of provider who wrote order (primary care or other provider) | Phase 3 | High |
| 3.4.11 | Prescription and Medication Info  Provide the ability for the clinical call agent to sort prescription information from a single desktop view by multiple fields (for example, sort by status (active, expired, discontinued), and then by date ordered). | Phase 3 | High |
| 3.4.12 | Prescription and Medication Info  Provide ability for the clinical call agent to use a visual means of identifying expired and/or discontinued medications (for example gray-out this information). | Phase 3 | Medium |
| 3.5 | Provide the ability for the call agent to view the following other information in a single desktop view: | Phase 2 | High |
| 3.5.1 | Consultation Information  Show all consults (with ability to sort by status - pending, active, completed, and cancelled) | Phase 2 | High |
| 3.5.2 | Lab and Diagnostic Test Info  All orders for lab tests | Phase 3 | High |
| 3.5.3 | Lab and Diagnostic Test Info  All orders for other diagnostic tests | Phase 3 | High |
| 3.5.4 | Lab and Diagnostic Test Info  All pathology tests | Phase 3 | High |
| 3.5.5 | Lab and Diagnostic Test Info  All radiology reports | Phase 3 | High |
| 3.5.6 | All progress notes[[4]](#footnote-4) and addenda | Phase 3 | High |
| 3.5.7 | All discharge summaries | Phase 3 | High |
| 3.5.8 | All previous encounters | Phase 3 | High |
| 3.5.9 | All allergies | Phase 3 | High |
| 3.5.10 | All vital signs | Phase 3 | High |
| 3.5.11 | All immunizations | Phase 3 | High |
| 3.5.12 | Problem list | Phase 3 | High |
| 3.5.13 | Postings/special messages (such as advance directives, clinical warnings, restricted/sensitive records warning, etc.). | Phase 1 | High |
| 3.5.14 | Contact History Notes  All telephone call messages[[5]](#footnote-5) (stored in CRM) | Phase 1 | High |
| 3.5.15 | Secure Messaging  Provide the ability for the call agent to view MHV secure messages that the patient has sent or received. | Phase 3 | Medium |
| 3.5.16 | Provide the ability for the call agent to sort other information in the single desktop in the same manner as this information can be sorted in VistA/CPRS. | Phase 2 | High |
| 3.5.17 | Provide the ability for the call agent to specify the date range for displaying information in the single desktop view. | Phase 2 | High |
| 3.6 | Chronic Illnesses Info view  As a clinical call agent when a patient calls I want the system to indicate that the patient has Chronic Illnesses such as diabetes or Chronic Obstructive Pulmonary Disease (COPD),  As a clinical call agent when a patient with Chronic Illnesses calls I want the system to indicate if the illness needs to be evaluated and the frequency of the evaluation (for example, quarterly, yearly, every other year)  ~~For patients with chronic illnesses such as diabetes or Chronic Obstructive Pulmonary Disease (COPD), provide the ability for the clinical call agent to view a list of items that need to be evaluated/renewed on a regular basis (for example, quarterly, yearly, every other year).~~ | Phase 3 | Low |
| 3.8 | Clinical Reminders.  Provide the ability for the clinical call agent to view clinical reminders. | Phase 3 | High |
| 3.9 | Tele-health Link  Provide the ability for the clinical call agent to access a link to Telehealth programs. | Phase 3 | Medium |
| 3.10 | Dashboard / Snapshot Info of Interactions  Provide the ability for the call agent to view a quick snapshot of the following information about a specific patient: contact history, visits, phone calls, triages, and calls from providers. | Phase 3 | High |
| 3.11 | Search  Provide the ability for the call agent to search historical data using a variety of search characteristics such as the caller’s phone number, caller’s name, date of birth, call agent name, etc. | Phase 3 | High |
| 3.12 | Call Back > view Caller Info  Provide the ability for the clinical call agent to view information about the callers waiting for a call back in the single desktop view. | Phase 3 | High |
| 3.12.1 | Call Back > View Caller list  Provide the ability for the clinical call agent to view a list of the callers waiting for a call back in the single desktop view. | Phase 3 | High |
| 3.12.2 | Provide the ability for the clinical call agent to view the chief complaint ~~compliant~~ of callers waiting for a call back in the single desktop view. | Phase 3 | High |
| 3.13 | Requests  Provide the ability for the user to view all requests within a specified date/time range in the single desktop view. | Phase 1 | High |
| 3.13.1 | Requests > completed requests  Provide the ability for the user to view a list of completed requests by date/time range in the single desktop view. | Phase 1 | High |
| 3.13.2 | Requests > completed request  Provide the ability for the user to select a specific completed call request to view in the single desktop view. | Phase 1 | High |
| 3.13.3 | Requests > open requests  Provide the ability for the user to view a list of open call requests (not completed) by date/time range in the single desktop view. | Phase 1 | High |
| 3.13.4 | Requests > Open requests  Provide the ability for the user to select a specific open request (not completed) to view in the single desktop view. | Phase 1 | High |
| BN 4: Notes History  Provide the user information about previous agent-assisted calls. | | | | |
|  | 4.1 | Call history  Provide the ability for the user to view the following information about previous calls for the current caller: | Phase 1 | High |
| 4.1.2 | Date of call | Phase 1 | High |
| 4.1.2 | Time of call | Phase 1 | High |
| 4.1.3 | Reason(s) for call | Phase 1 | High |
| 4.1.4 | Call Type (scheduling, information, pharmacy, clinical, PCP visits, specialty clinic, telephone visits, etc.) | Phase 1 | High |
| 4.1.5 | Outcome of call (preselected categories: follow-up, completed/resolved, unresolved, etc.) | Phase 1 | High |
| 4.1.6 | Type of call (Duplicate of 4.1.4 – ignore) | Phase 1 | High |
| 4.1.7 | Name of agent | Phase 1 | High |
| 4.1.8 | Call history > Sort  Provide the ability for the user to sort the information about previous calls using predetermined fields (e.g., date of call, time of call, reason for call, outcome of call, etc.). | Phase 1 | High |
| 4.1.9 | Call history > Sort  Provide the ability for the user to sort the information about previous calls using multiple fields. | Phase 1 | High |
| BN 5: Update Veteran information: Provide the ability for the user to update the following Veteran information directly from the single desktop view. | | | | |
|  | 5.1 | Telephone numbers | Phase 2 | High |
| 5.2 | Current address, including temporary address | Phase 2 | High |
| 5.3 | e-mail address | Phase 2 | High |
| ~~5.4~~ | ~~Next of kin~~  (Only eligibility staff is allowed to change the next of kin.) | ~~Phase 2~~ | ~~High~~ |
| BN 6: Call Notes  Provide the ability for the user to document information about the call using the single desktop view. | | | | |
|  | 6.1 | Provide the ability for the user to document the following information about the current call: | Phase 1 | High |
| 6.1.1 | Call Notes  Reason(s) for call from a predefined list and a free text entry. | Phase 1 | High |
| 6.1.2 | Type (scheduling, information, pharmacy, clinical. etc.) from a predefined list and free text entry. | Phase 1 | High |
| 6.1.3 | Outcome of call from a predefined list and free text entry. | Phase 1 | High |
| 6.1.4 | First call resolution (was the call resolved the first time or were additional calls and/or other actions required). | Phase 1 | High |
| 6.1.5 | Provide the ability for the user to retrieve the date, time, and duration of the call as well as the information directly entered by the user. | Phase 2 | High |
| 6.2 | Provide the ability for the user to document requests and have option to either push requests into CPRS or keep in CRM as a workflow item (task to be assigned). | Phase 2 | High |
| 6.2.1 | Requests> Pre-population  Provide the ability for the user to use standardized templates to prepopulate fields when creating the request. | Phase 2 | High |
| 6.2.2 | Requests> Suspend  Provide the ability for the user to “suspend” (not sign-off on) clinical requests pushed to CPRS. | Phase 2 | High |
| 6.2.3 | Requests> Forwarding  Provide the ability for the user to forward a non-clinical request to other identified staff as a workflow item (FYI or task to be re-assigned). | Phase 2 | High |
| 6.2.4 | Requests > Priority  Provide the ability for the ~~non-clinical~~ user to indicate the priority of the request sent to another user. | Phase 2 | Medium |
| 6.2.5 | Requests > Change Status  Provide the ability for the user to change the status of ~~non-clinical~~ requests (workflow items), for example, open, closed, on-hold. | Phase 2 | High |
| BN 8: Schedule Appointments  Provide the ability for the user to process appointments from the single desktop view. | | | | |
|  | 8.1 | Schedule Appointment  Provide the ability for the user to schedule an appointment using the single desktop view, instead of having to separately access the VistA scheduling application. | Phase 3 | High |
| 8.2 | Schedule Appointment > Mental Health Appointment Alerts  Provide the ability for the user to view an informational warning/alert on the single desktop view when he/she needs to schedule a mental health appointment for more than 14 days after the Veteran’s call. | Phase 3 | High |
| 8.3 | Schedule Appointment > PCP’s schedule Availability  Provide the ability for the user to view the PCP’s schedule on the single desktop view to determine availability of the PCP, surrogate, house staff. | Phase 3 | High |
| 8.3.1 | Schedule Appointment > PCP schedules by location  Provide the ability for the call center agent to view PCP schedules by location to determine availability. | Phase 3 | High |
| 8.4 | Schedule Appointment > warning /alert Provide the ability for the user to view an informational warning/alert Patient Service Assistant/Medical Service Assistant/PACT on the single desktop view when an appointment is being made for someone other than the PCP/surrogate. | Phase 3 | High |
| 8.5 | Schedule Appointment > DAV transportation Alert  If the Veteran needs DAV transportation/ shuttle, provide the ability to only allow the user to make appointments using the single desktop view that conform to the dates/times when DAV services are available. | Phase 3 | Medium |
| 8.6 | Schedule Appointment > DAV transportation booking  If Veteran needs DAV transportation, provide the ability for the user to send a message from the single desktop view directly to DAV to arrange the transportation. | Phase 3 | Medium |
| 8.7 | Schedule Appointment > special services informational warning / alert,  Provide the ability for the user to view an informational warning/alert on the single desktop view when a Veteran requires special services, such as due to traumatic brain injury or history of violence, so that the Veteran is managed appropriately. | Phase 3 | High |
| 8.7.1 | Schedule Appointment > Special Services Protocols  Provide the ability to automatically direct the user to the applicable forms/protocols when the Veteran requires special services. | Phase 3 | Low |
| 8.8 | Schedule Appointment > Follow-up Appointment Notification  Provide the ability for the user to use the single desktop view to notify the PACT if the follow-up appointment is being scheduled beyond the provider’s ordered timeframe. | Phase 3 | High |
| 8.9 | Schedule Appointment > Pre-Registration Required Alert.  Provide the ability for the user to use the single desktop view to notify the nurse scheduling the appointment when pre-registration is required. | Phase 3 | Low |
| 8.10 | Schedule Appointment > Pre-Registration Required Alert  Provide the ability for the clinical user to use the single desktop view to alert appropriate staff when pre-registration is required. | Phase 3 | High |
| 8.11 | Provide the ability for the user to view the patient’s preferred method of communication of appointments. | Phase 3 | High |
| 8.12 | Schedule Appointment > Send Appointment letter  Provide the ability ~~to~~ for the user to use the single desktop view to communicate the appointment letter to the Veteran (such as via the postal service or secure messaging). | Phase 3 | Medium |
| 8.13 | Schedule Appointment > Print Appointment letter  Provide the ability for the user to use the single desktop view to print the appointment letter, when appropriate. | Phase 3 | High |
| 8.14 | Schedule Appointment > Print Appointment letter  Provide the ability for the user to use the single desktop view to print newly created appointment letters within a specified time frame (establish business rules). | Phase 3 | High |
| 8.15 | Communication Preference > Update preference  Provide the ability for the user to update the patient’s preferred method of communication of appointments. | Phase 3 | High |
| BN 11: Protocols for Direct Resolution  Provide the ability for the user to use protocols to direct resolution of the call. **(Knowledge Base Business Need)** | | | | |
|  | 11.1 | Protocols > Enrollment in VHA  Provide the ability for the user to view prompts/questions to assist the Veteran with enrollment in VHA. | Phase 3 | Medium |
| 11.2 | Protocols > symptoms / diseases related  Provide the ability for the user to view prompts/questions to re-direct Veteran calls about symptoms/diseases. | Phase 3 | High |
| 11.3 | Protocols > Medication-Related  Provide the ability for the user to view prompts/questions to resolve or re-direct Veteran calls about medication-related questions/requests. | Phase 3 | High |
| 11.4 | Protocols > Appointments -Related  Provide the ability for the user to view prompts/questions to resolve Veterans calls about appointments. | Phase 3 | Medium |
| 11.5 | Protocols > Clinician -Related  Provide the ability for the user to view prompts to resolve Veteran requests for a clinician to return his/her phone call. | Phase 3 | High |
| 11.6 | Knowledge Base > Call Resolution  Provide the ability for the user to view prompts to resolve other Veteran calls using a Knowledge Base. | Phase 3 | High |
| 11.6.2 | Knowledge Base > instructions/business rules  Provide the ability for the user to search for information about instructions/business rules about a specific topic using a word or phrase. | Phase 3 | High |
| 11.6.3 | Knowledge Base > Search View  Provide the ability for the user to view the information retrieved from a search. | Phase 3 | High |
| 11.6.4 | Knowledge Base > print Result  Provide the ability for the user to print the information retrieved from a search. | Phase 3 | High |
| 11.6.5 | Knowledge Base > copy/paste information  Provide the ability for the user to copy/paste the information retrieved from a search. | Phase 3 | High |
| 11.6.6 | Knowledge Base > copy/paste to patient correspondence  Provide the ability for the user to export to the patient (via letter, secure email, or secure messaging or text messaging) the information retrieved from a search (for example warning signs, home care instructions, etc.). | Phase 3 | Medium |
| 11.6.7 | Knowledge Base > registration, authentication, and opting etc  Provide the ability for the user to review protocols/scripts for registration, authentication, and opting into MHV secure messaging. | Phase 3 | High |
| 11.7 | Knowledge Base > Suicide Prevention Hotline, scripts etc  Provide the ability for the user to access information about the VA Suicide Prevention Hotline, including a script and guidance for resolution of the call. | Phase 3 | High |
| BN 12: Workflow Task Assignment  Provide the ability for the user to use the single desktop view to assign a task (by sending “secure” messages[[6]](#footnote-6)) to PACT members, teams, groups, and individual providers (nurse, pharmacist, physician, etc.) and to other call center staff. **(Communication Tool)** | | | | |
|  | 12.1 | Provide the ability for the user to include the following information in the request:  ~~As the system a user will only be allowed to generate a secure message when they are inside a veterans record~~  ~~As the System when a user selects to send a Veteran a Secure message I will prepopulate the message with certain info extracted from the Veterans record~~ | Phase 1 | High |
| 12.1.1 | Workflow Task Assignment> name of recipient’s facility  Provide the ability for the user to select the name of the request recipient’s facility from a list. | Phase 1 | High |
| 12.1.2 | Workflow Task Assignment> select name of recipient  Provide the ability for the user to select the name of the recipient (team, group, and/or individual) from a list. | Phase 1 | High |
| 12.1.3 | Workflow Task Assignment>  Provide the ability for the user to view the SSN that will be included in the request. | Phase 1 | High |
| 12.1.4 | Workflow Task Assignment>  Provide the ability for the user to view the full name of the patient that will be included in the request. | Phase 1 | High |
| 12.1.5 | Workflow Task Assignment>  Provide the ability for the user to view and edit the patient’s phone number that will be included in the request. | Phase 1 | High |
| 12.1.6 | Workflow Task Assignment>  Provide the ability for the user to enter/edit the preferred method of response (for example telephone call, secure messaging). | Phase 1 | High |
| 12.1.7 | Workflow Task Assignment>  Provide the ability for the user to enter/edit when/if the response is expected. | Phase 1 | High |
| 12.1.8 | Workflow Task Assignment>  Provide the ability for the user to enter/edit the type of request (for example, medication renewal, referral, appointment). | Phase 1 | High |
| 12.1.9 | Workflow Task Assignment>  Provide the ability for the user to enter/edit comments. | Phase 1 | High |
| 12.1.10 | Workflow Task Assignment>  Provide the ability for the user to use templates based upon the request type. | Phase 1 | High |
| 12.1.11 | Workflow Task Assignment>  Provide the ability for the user to pre-populate the information in the request where appropriate/information is available. | Phase 1 | High |
| 12.1.12 | Workflow Task Assignment>  Provide the ability for the user to edit the text of the request. | Phase 1 | High |
| 12.1.13 | Workflow Task Assignment>  Provide the ability for the user to enter/edit the status of request (for example, open, completed, on-hold, etc.). | Phase 1 | High |
| 12.3 | Workflow Task Assignment>  Provide the ability for the recipient of the request to ~~securely~~ document a response to the request. | Phase 1 | High |
| 12.4 | Workflow Task Assignment>  Provide the ability for the recipient of the request to ~~securely~~ change the status of the request to closed/completed. | Phase 1 | High |
| 12.5 | Workflow Task Assignment>  Provide the ability for the user to view the recipient’s response to the request from the single desktop view. | Phase 1 | High |
| 12.6 | Workflow Task Assignment>  Provide the ability for the user and recipient to search for requests sent. | Phase 1 | High |
| 12.6.1 | Workflow Task Assignment>  Provide the ability for the user and recipient to search for his/her requests sent. | Phase 1 | High |
| 12.6.2 | Workflow Task Assignment>  Provide the ability for the user and recipient to search for all requests sent. | Phase 1 | High |
| 12.6.3 | Workflow Task Assignment>  Provide the ability for the user and recipient to search for open/not completed requests sent. | Phase 1 | High |
| 12.6.4 | Workflow Task Assignment>  Provide the ability for the user and recipient to search for all requests sent on behalf of a specific patient. | Phase 1 | High |
| 12.6.5 | Workflow Task Assignment>  Provide the ability for the user and recipient to search for all requests sent within a specific date/time range. | Phase 1 | High |
| 12.7 | Workflow Task Reports > Performance Reports  Provide the ability to generate performance reports of communication with PACT/individual provider and/or call center staff. | Phase 1 | High |
| 12.7.1 | Workflow Task Reports >  Provide the ability for the administrator to generate a report by PACT, individual provider, group, or call center staff and date of the total number of requests (workflow items), number of open requests, and number of closed/resolved requests. | Phase 1 | High |
| 12.7.2 | Workflow Task Reports >  Provide the ability for the administrator to generate a completion report by PACT, individual provider, group, or call center staff of the number and response times of requests (workflow items) by user-defined date and time range. | Phase 1 | High |
| 12.7.3 | Workflow Task Reports >  Provide the ability for the administrator to generate a report of the types of request (workflow item) received by date (for example, medication renewal, medication question, request for referral, appointment-related requests, laboratory orders, test results, requests from the nurse, and other). | Phase 1 | High |
|  | 12.7.5 | Workflow Task Reports >  Provide the ability for automatic escalation of a request (workflow item) if no response is received within the required time frame. | Phase 1 | High |
| BN 14: Reports >  Provide the ability to create ad hoc, standardized, on demand and/or scheduled recurring reports by individual/multiple users. | | | | |
|  | 14.1 | Reports > individual interaction  Provide the ability to view/print a report of an individual interaction. | Phase 1 | High |
| 14.2 | Reports > multiple interactions  Provide the ability to view/print a report of multiple calls with the same caller. | Phase 1 | High |
| 14.3 | Reports > Provide the ability to view/print a report of interactions received/processed by an individual user/multiple agents at a specified time period, such as a day or week. | Phase 1 | High |
| 14.4 | Reports >  Provide the ability to view/print ad hoc individual user/multiple agents reports. | Phase 1 | High |
| 14.5 | Reports >  Provide the ability to create additional standard reports by agent/multiple agents. | Phase 1 | High |
| 14.6 | Reports >  Provide the ability to create additional ad hoc reports by agent/multiple agents. | Phase 1 | High |
|  | 14.7 | Reports >  Provide the ability for the user to schedule ad hoc and/or standardized reports to run automatically on a user determined recurring basis. | Phase 1 | High |
|  | 14.8 | Reports >  Provide the ability for the user to determine where recurring (queued) reports will be sent. | Phase 1 | High |
| BN 17: Caller Feedback  Provide the ability for users to process additional caller feedback. | | | | |
|  | 17.1 | Caller Feedback  Provide the ability for the user to document caller feedback, such as compliments and complaints in the single desktop agent. | Phase 1 | Medium |
| BN 18: On-line help information  Provide on-line user support. | | | | |
|  | 18.1 | On-line CRM help information  Provide the ability for the user to view on-line help information to guide them through specific actions, such as creating a request. | Phase 1 | High |
| 18.1.1 | On-line CRM help information > Search  Provide the ability for the user to search for on-line help by key word. | Phase 1 | High |
| 18.1.2 | On-line CRM help information > Print  Provide the ability for the user to print on-line help information. | Phase 1 | High |
| BN 19: Admin management  Provide the ability for supervisor/administrator management. | | | | |
|  | 19.1 | Admin management > Coding of calls.  Provide the ability for the supervisor/administrator to set defaults for coding of calls with encounter information. | Phase 1 | High |
| 19.4 | Admin management > drop down lists  Provide the ability for the supervisor/administrator to enter, edit and delete choices in drop down lists or other data input/output GUI widgets used by users. | Phase 1 | High |
| 19.8 | Admin management > Default Reports  Provide the ability for the supervisor/administrator to create reports of defaults, standard request subjects, etc. | Phase 1 | High |
| 19.9 | Admin management > grant access/assign privileges  Provide the ability for the supervisor/administrator to grant access/assign privileges to users to perform actions within the single desktop view. | Phase 1 | High |

**\*All listed requirements are needed by the business community. The Pilot was parsed into phases to communicate a sense of urgency and order regarding specific requirements to the technical community. The order of importance begins with Phase 1 requirements.**

**\*\*The Priority is a mechanism to communicate a sense of urgency within a phase to the technical community if the requirements are to be parsed into phases. The order of importance within phases begins with those that are designated as High priority.**

## Non-Functional Requirements

**NOTE: Some non-functional requirements have been moved to Appendix G as they were deemed out of scope for the Pilot.**

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| **Operational Environment Requirements** |
| The primary and back-up sites for data storage shall be the same sites used for the VistA/CPRS application(s). |
| The primary and back-up sites for data storage for the single desktop view are to be determined. |
| The system shall respond to user actions in 2 seconds or less in 90% of the attempts, and never more than 5 seconds, excluding large data mining activities. |
| Maintenance, including maintenance of externally developed software incorporated into the single desktop view, shall be scheduled during off peak hours or in conjunction with relevant VistA maintenance schedules. |
| 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. |
| Provide a real-time monitoring solution during the maintenance windows or when technical issues/problems occur which may require a preventative back-up. |
| 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 one week prior to the scheduled event. |
| When/if lapses in system/update availability occur, users would use a web-based contingency alternative. |
| **Usability/User Interface Requirements** |
| Include Human Factors Engineering input in user-centered design, research, and testing activities. |
| User acceptance testing personnel shall include users and administrators that are able to confirm acceptable changes to their workflow. |
| The application shall include user prompts to guide the use of the application so that minimal technical support is needed by the user. |
| The application shall provide single sign on access to other applications (VistA, CPRS, etc.) from within the CRM application. |
| A technical training curriculum shall be developed and delivered to all levels of staff users. |
| The training curriculum shall state the expected training time for primary users and secondary users to become productive at using the single desktop view. |
| All training curricula, user manuals and other training tools shall be updated by a Fix-the-Phones Office that is to be determined and delivered to all levels of users. The curricula shall include all aspects of the view and all changes to processes and procedures. |
| Provide the ability for the user to customize their view of the single desktop view using graphics, such as color codes. |
| **Documentation Requirements** |
| Updates shall be made, as necessary, to applicable user manuals and other training tools and shall be delivered to all levels of users. If no user documentation exists, it shall be produced. |
| Updates shall be made, as necessary, to the applicable technical documentation including Operations and Maintenance (OM) Plans related to the VistA and CPRS application(s) located on the VA Software Documentation Library. If no User or OM documentation exists, it shall be produced. |
| **Implementation Requirements** |
| An implementation plan shall be developed for all aspects of the single desktop view. |
| Technical Help Desk support shall be provided for users to obtain assistance with the single desktop view. |
| The IT solution shall be designed to comply with the applicable approved Enterprise Service Level Agreements (SLA). |
| The implementation (software capability) of all Phase 1 requirements must be complete within six months of contract award. Implementation dates for Phases 2 and 3 will be determined during the Phase 1 development period. |
| At least quarterly meetings will be held with the software vendor to identify problems/issues/concerns that can be addressed to comply with URAC standards. |
| **Data Protection/Back-up/Archive Requirements** |
| Provide a back-up plan for when the system is brought off-line for maintenance or technical issues/problems. |
| Data protection measures, such as back-up intervals and redundancy shall be consistent with systems categorized as critical. |
| Provide real-time access and archiving of the database. |
| **Data Quality/Assurance** |
| A monitoring process shall be provided to insure that data is accurate and up-to-date and provides accurate alerts for malfunctions while minimizing false alarms. |
| **User Access/Security Requirements** |
| Due to patient safety considerations, data protection measures such as backup intervals and/or redundancy shall be consistent with systems categorized as critical. |
| Ensure the proposed solution meets all VHA Security, Privacy and Identity Management requirements including [VA Handbook 6500](http://DNS.URL/vapubs/viewPublication.asp?Pub_ID=364&FType=2). (See Enterprise Requirements Appendix). |

The table below defines the different levels of user access to the single desktop view:

| Name | Description | Single Desktop View |
| --- | --- | --- |
| Primary Users | Users | View options available to both non-clinical and clinical users. Messaging options are available to both non-clinical and clinical users. |
| Non-clinical users | View caller information, update demographic information, document messages, send call information to other users, no access to clinically-related options. |
| Clinical users | Document clinical assessments, schedule appointments, renew medications, document progress notes, access to clinically-related options. |
| Supervisors/Administrators | Access to all functionality available to non-clinical and clinical users. Generate workload reports, change work assignments in response to increased/decreased workload, review patient satisfaction results and take corrective actions as appropriate, monitor individual user calls and take corrective actions where appropriate. |
| Secondary Users | Facility clerical and clinical staff | Read only |
| System Administrators/Automated Data Processing Application Coordinator (ADPAC) | Full control |

### Performance, Capacity, and Availability Requirements

#### Performance

|  |
| --- |
| If this is a system modification, how many users does the current system support? |
| This is an entirely new system. |
| How many users will the new system (or system modification) support? |
| For the Pilot, there are approximately 41 non-clinical call center agents, 36 clinical call center agents, and approximately 520 PACT users.  In terms of future capacity planning, it is anticipated that there will be approximately 14,000 users of the new system. All nurses working in the clinics will be able to view information about calls as described in BN 20. |
| What is the predicted annual growth in the number of system users? |
| Annual growth per year is estimated to be 5%. |

#### Capacity

|  |
| --- |
| What is the predicted size (average) of a typical business transaction? |
| The size of a typical transaction is on average 324 words. This will include the need to retrieve information from a number of different applications such as VistA/CPRS (including remote data), and MHV. A record generated by the single desktop view will include both structured information (Veteran caller, date/time, user information…etc.) and unstructured note information. |
| What is the predicted number of transactions per hour (day, or other time period)? |
| There are currently over 40 million phone calls per year nationally. There were 34,826,848 calls in FY2011; 38,666,015 calls in FY2012, and 40,356,546 calls in FY2013. The number of calls received during the peak day of the week and the peak time of day is not known at this time. |
| Is the transaction profile expected to change (grow) over time? |
| It is expected that the call volume will increase by 20-30% due to hidden demand as these individuals are calling directly into a clinic. Nationwide calls are expected to increase by 5% for the next 5 years. |
| What are the dependencies, interactions, and interfaces with other systems? |
| There are currently interactions with VistA/CPRS, TRM Plus and CLR. At a minimum, it is expected that the new system will have interfaces with VistA/CPRS and MHV and that clinical users can launch VHG from CRM. |
| **What is the process for planning/adjusting capacity?** |
| The process has not been developed at this time. Workforce Management capabilities are scheduled to be implemented in the Call Centers as part of a later phase of the PACT Pilot project. |
| **Does the update require a surge capacity that would be different from the base application?** |
| The call volume increases on minor federal holidays (Columbus Day and Veterans Day), day after a holiday, on Mondays, and between 8:00 am-10:00am and 4:00 pm-6:00pm. WHEN centers are expected to support an increased call volume in the event of an epidemic/pandemic. |

#### Availability

|  |
| --- |
| Describe when the envisioned system will need to be available (business hours only, weekends, holidays, etc.) to support the business. |
| The functionality must be available on a 24 hour a day 7 days a week basis. |

## Known Interfaces

This is the business community’s best understanding of known interfaces and may not be a comprehensive listing. All required interfaces will be stated as Business Needs in [Section 7.1](#SECTION7_1).

There are currently interfaces between TRM Plus and VHG, TRM Plus and CPRS/VistA, and TRM Plus and CLR applications.

## Related Projects or Work Efforts

**Chief Business Office (CBO) Customer Relationship Management (CRM) Integration**  
[20070419](http://DNS.URL/nsrd/Tab_GeneralInfoview.asp?RequestID=20070419)

The Health Revenue Center (HRC) is requesting a Customer Relationship Management (CRM) solution to enable the HRC, Health Eligibility Center (HEC) and Health Administration Center (HAC) to interact with Veterans, medical centers, Veterans Benefits Administration (VBA), National Cemetery Administration (NCA) and other agencies to provide personalized service. The status of this request is open.

Veterans Health Administration (VHA) PACT Call Center Pilots are requesting a Customer Relationship Management (CRM) to provide a Veteran-centric solution to support the PACT model of care and improve customer satisfaction by increasing call center agent efficiency and facilitating first call resolution. CRM will support the work done by call center agents to provide timely, consistent access to care, resolve Veterans questions and requests for information and services.

# Other Considerations

## Alternatives

* Prototyping is an alternative that can be used to further define and refine the business requirements. It was effectively used by VBA in the development of their call center software.
* Alternatives include enhancement and/or replacement of the TRM Plus, VHG, and CLR applications.

## Assumptions

* Users will be able to use the single desktop view to take actions in VistA/CPRS, depending upon their access and permissions, without a separate log-on.
* The single desktop view will provide automatic patient context with VistA/CPRS.
* The single desktop view will comply with VA Directive 6507 on “Reducing the Use of Social Security Numbers” as appropriate.
* VA has made the decision to implement the Microsoft Customer Relationships Management (CRM) software. VBA has already developed and is in the process of implementing its call center software that was developed using Microsoft CRM. Lessons learned from the VBA experience with Microsoft CRM will be incorporated into this project. Lessons learned from efforts to develop Microsoft Dynamics CRM in the Veterans Integrated Service Network (VISN) 21 PACT Call Center Pilot in FY2012 through the first week of December 2013 will also be incorporated into this project.
* Veteran Personal Identifiable Information (PII) and Personal Health Information (PHI) will be protected in accordance with VA Privacy Practices.
* Secure messaging in VHA is associated with MHV. For this request, “secure” messages are not intended to be associated with MHV but are messages that are sent in a “secure” manner. “Secure” messaging functionality will be consolidated for the end user to eliminate the need for the end user to access and use multiple tools.
* Workforce management staff will use information provided by the IT solution to identify and adjust the skills and preferences of call center agents as appropriate.
* The requirement to display the Veteran’s SSN may need to be modified to comply with the enterprise SSN reduction/elimination efforts.
* The facility and/or call center will have the ability and network bandwidth to support transmission of data, including screen captures and call recordings.
* The facility will have the ability to support the solution via its own internal telephony infrastructure.
* There will be adequate rack space in the computer room, as well as adequate power, grounding, and cooling.
* There will be an appropriate amount of system redundancy to support the system availability and reliability requirements.

## Dependencies

* This request is one piece of a complex initiative to transform the VA telephone system. The effort to create the single desktop view may be impacted by other components of the effort to create a high-performing telephone service.
* Develop processes that ensure impacts to contact volumes and handle times are promptly reflected in forecasts and mechanisms are in place to effectively adjust staffing accordingly.

## Constraints

Phase 1 of the pilot implementation needs to be completed within six months of the contract award. Delivery of future phases will be determined during Phase 1 development.

## Business Risks and Mitigation

**Business Risk**: Insufficient time to fully develop/define the business requirements.

**Mitigation**: Consider including prototyping. Incorporate lessons learned from VBA and HRC. Continue to engage key stakeholders in defining and refining business requirements.

**Business Risk**: It is not known if the solution will be developed for one contact center, a contact center at each facility, or some combination of the two approaches. These decisions will impact workforce management requirements.

**Mitigation**: Monitor solution to ensure that requirements are modified when a decision is made about the organizational approach.

**Business Risk**: At this time it is not known if the call center(s) will have dedicated workforce management staff.

**Mitigation**: Modify requirements when the decision is made about the need for dedicated workforce management staff.

**Business Risk**: Need to transition, retire, and/or integrate existing applications.

**Mitigation**: Develop and execute thorough change management, implementation, and training plans.

Appendix A. References

* DSS TeleCare Record Manager (TRM Plus)  
  <http://www.dssinc.com/dss-telecare.htm?id=tt>
* Veterans Health Gateway

<http://www.dssinc.com/dshi_vhg.htm?id=hbh>

* Microsoft Dynamics CRM web site  
  <http://www.microsoft.com/en-us/dynamics/default.aspx>
* My Health***e***Vet Product Home  
  [My HealtheVet Product Home](http://DNS.URL/MYHEALTHEVET/index.asp)
* Veterans Relationship Management

<http://DNS.URL/VRM/>

* VA Handbook 1101.10 - Patient Aligned Care Team (PACT) Handbook

<http://DNS.URL/vhapublications/ViewPublication.asp?pub_ID=2977>

* Reducing the Use of Social Security Numbers, VA Directive 6507  
  <http://DNS.URL/vapubs/viewPublication.asp?Pub_ID=417&FType=2>
* Acceptable Uses of the Social Security Number (SSN) and the VA SSN Review Board

[http:/DNS.URL/vapubs/viewPublication.asp?Pub\_ID=573&FType=2](http://DNS.URL/vapubs/viewPublication.asp?Pub_ID=573&FType=2)

* Telephone Service for Clinical Care, VHA Directive 2007-033, October 11, 2007  
  <http://DNS.URL/vhapublications/ViewPublication.asp?pub_ID=1605>
* URAC Health Call Center Accreditation  
  <https://www.urac.org/accreditation-and-measurement/accreditation-and-measurement/>
* VA Handbook 6500 - Information Security Program  
  <http://DNS.URL/vapubs/viewPublication.asp?Pub_ID=638&FType>=2
* VA Directive 6500 - Managing Information Security Risk: VA Information Security Program

<http://DNS.URL/vapubs/viewPublication.asp?Pub_ID=637&FType=2>

* VHA Fix-the-Phones Initiative – Desktop Agent New Service Request (NSR)  
  <http://DNS.URL/nsrd/Tab_GeneralInfoview.asp?RequestID=20111102>
* The Department of Veterans Affairs (VA) FY 2014-2020 Strategic Plan <http://DNS.URL/performance>

Appendix B. Models





Appendix C. Stakeholders, Primary/Secondary Users, and Workgroups

## Stakeholders

| Type of Stakeholder | Description | Responsibilities |
| --- | --- | --- |
| Requester | * Sheila M. Cullen Director, VA Sierra Pacific Network (VISN 21) | Submitted request. Submits business requirements. Monitors progress of request. Contributes to BRD development. |
| Endorser | * Philip Matkovsky Assistant Deputy Under Secretary for Health/Administrative Operations | Endorsed this request. Provides strategic direction to the program. Elicits executive support and funding. Monitors the progress and time lines. |
| Business Owner(s)/Program Office(s) | * Carol Chipman Associate Director, Telephone Access and Contact Management (10NA12)   Fix-the-Phones Business Sponsor   * M. Scott Ballard   Program Manager  Chief Business Office (Systems Management) Fix-the-Phones Initiative Lead | Provides final approval of BRD with sign-off authority. Provides strategic direction to the program. Elicits executive support and funding. Monitors the progress and time lines. |
| Business Subject Matter Expert(s) (SME) | * Rose Mary Bucher, RN Supervisor, VA Sierra Nevada Health Care System Centralized Communications Center * Paula Clawson, RN Manager, Telephone Care Program Call Center, VA Palo Alto Health Care System * Elizabeth K. Blohm, Chief Benefits & Data Management Service, VA Northern California Health Care System * Cyndee Costello Network Telecommunications Manager, Providence VAMC * Pamela Mayberry Supervisor, Telephone Call Center, Erie VAMC * James Bonk Manager, Health Information Call Center, Eastern Colorado Health Care Services (ECHCS), Denver , CO * Diane L. Mathews Nurse Manager, Madison, VA Hospital * Leslie Swink Telcare Program Director, Lake City VAMC * Kevin Baker Associate Director, Customer Experience, VA Health Resource Center * Matthew Eutitis Associate Director, Health Resource Center, Topeka, Kansas * Geoffrey Davies Supervisory Management Analyst, Workforce Management, Health Resource Center | Provide background on current system and processes. Describe features of current systems, including known problems. Identify features of enhancement. |
| Technical SME(s) | * William L. Harris, Chief Information Officer, VA Sierra Pacific Network * Jack R. Smith, Chief Information Officer, VA Sierra Nevada Health Care System * Matthew G. Montano, Chief Information Officer, VA Palo Alto Health Care System * Thomas Puckett Chief Information Office, Health Resource Center, Topeka, Kansas * Susan Nelson Compliance, Advisory, and Security Engineering (CASE) Team Lead, Health Care Security Requirements, Health Information, Office of Informatics and Analystics | Provide technical background information about the current software and requested enhancements. |
| User SME(s) | * Randy Allen Carroll Lead Medical Support Assistant, Telephone Care Program Call Center, VA Palo Alto Health Care System * Jeffrey Lee Holmes   Medical Support Assistant Supervisor, VA Sierra Nevada Health Care System   * Rose Mary Bucher, RN   Supervisor, Centralized Communications Center,VA Sierra Nevada Health Care System   * Paula Clawson, RN   Manager, Telephone Care Program Call Center, VA Palo Alto Health Care System | Ensure that the enhancements will account for current business processes and existing software capabilities. |

## Primary and Secondary Users

|  |  |  |
| --- | --- | --- |
| Primary Users | Users | Receive/process calls, document actions |
| Primary Users | Supervisors/Administrators | Monitor calls, adjust staffing, change processes and procedures in response to performance, and provide training. |
| Secondary Users | Facility staff | View information about calls. |

Appendix D. Enterprise Requirements

Below is a subset of Enterprise-level Requirements that are of particular interest to the business community. These requirements MUST be addressed within each project resulting from this work effort. If OIT cannot address these Enterprise-level requirements, the Business Owners responsible for each area MUST be engaged in any waiver discussions prior to any decisions being made. This section is not meant to be a comprehensive list of all Enterprise-level requirements that may apply to this work effort and should not preclude the technical community from reviewing all Enterprise-level requirements, and identifying others that should apply to this work effort as well.

Enterprise-level requirements are contained in the VA Enterprise Requirements Management (ERM) Repository.  To contact the ERM program personnel, gain access to the ERM repository and to obtain the comprehensive allocation of Enterprise-level requirements for the project development iteration, contact [VA OIT OED SE Enterprise Requirements Management](mailto:P.PIIII). ([mailto:VHA 10P7B Service Coordination SRM Team](mailto:PII.PII) )

|  |  |
| --- | --- |
| Requirement Type | Description |
| Security | All VA security requirements will be adhered to. Based on Federal Information Processing Standard (FIPS) 199 and National Institute of Standards and Technology (NIST) SP 800-60, recommended Security Categorization is High.  The Security Categorization will drive the initial set of minimal security controls required for the information system. Minimum security control requirements are addressed in NIST SP 800-53 and VA Handbook 6500, Appendix D. |
| Privacy | All VA Privacy requirements will be adhered to. Efforts that involve the collection and maintenance of individually identifiable information must be covered by a Privacy Act system of records notice. |
| 508 Compliance | All Section 508 requirements will be adhered to. |
| Executive Order | All executive order requirements will be adhered to. |
| Identity Management | All Enterprise Identity Management requirements will be adhered to. These requirements are applicable to any application that adds, updates, or performs lookups on persons. |
| Terminology Services | Application/services shall reference the Standard Data Services (SDS) as the authoritative source to access non-clinical reference terminology. |
| Terminology Services | Application/Services shall use the VA Enterprise Terminology Services (VETS) as the authoritative source to access clinical reference terminology. |
| Terminology Services | Applications recording the assessments and care delivered in response to an Emergency Department visit shall conform to standards defined by the VHA-endorsed version of C 28 – Health Information Technology Standards Panel (HITSP) Emergency Care Summary Document Using Integrating the Healthcare Enterprise (IHE) Emergency Department Encounter Summary (EDES) Component. |
| Terminology Services | Applications exchanging data summarizing a patient’s medical status shall conform to standards defined by the VHA-endorsed version of C 32 – HITSP Summary Documents Using Health Level Seven (HL7) Continuity of Care Document (CCD) Component. |

Appendix E. Acronyms and Abbreviations

| Term | Definition |
| --- | --- |
| ADPAC | Automated Data Processing Application Coordinator |
| AHT | Average Handle Time |
| ANR | Automated Notification Reporting |
| ASA | Average Speed of Answer |
| BN | Business Need |
| BRD | Business Requirements Document |
| CA | Certification and Accreditation |
| CASE | Compliance, Advisory, and Security Engineering |
| CCD | Continuity of Care Document |
| CH | Calls Handled |
| CIO | Chief Information Officer |
| CLR | Call Log Reporter |
| CMOP | Consolidated Mail Outpatient Pharmacy |
| COPD | Chronic Obstructive Pulmonary Disease |
| CPRS | Computerized Patient Record System |
| CPT | Current Procedural Terminology |
| CRM | Customer Relationship Management |
| DAV | Disabled American Veteran |
| DSHI | Data Systems Hardware Incorporated |
| DSS | Document Storage Systems |
| ECHCS | Eastern Colorado Health Care Services |
| EDES | Emergency Department Encounter Summary |
| ERM | Enterprise Requirements Management |
| ESM | Enterprise Systems Management |
| EVEAH | Enhancing the Veteran Experience and Access to Healthcare |
| FIPS | Federal Information Processing Standard |
| HAC | Health Administration Center |
| HEC | Health Eligibility Center |
| HIG | Health Information Governance |
| HITSP | Health Information Technology Standards Panel |
| HL7 | Health Level Seven |
| HRC | Health Revenue Center |
| IHE | Integrating he Healthcare Enterprise |
| IT | Information Technology |
| IVR | Interactive Voice Response |
| LOINC | Logical Observation Identifiers, Names, and Codes |
| NCA | National Cemetery Administration |
| NIST | National Institute of Standards and Technology |
| NSR | New Service Request |
| NTRT | New Term Rapid Turnaround |
| MHV | My Health***e***Vet |
| OHI | Office of Health Information |
| OIT | Office of Information and Technology |
| OM | Operations and Maintenance |
| OWNR | Owner Requirement |
| PACT | Patient Aligned Care Team |
| PCP | Primary Care Provider |
| PHI | Personal Health Information |
| PII | Personal Identifiable Information |
| RAEM | Requirements Analysis and Engineering Management |
| ROI | Release of Information |
| SDS | Standard Data Services |
| SLA | Service Level Agreements |
| SME | Subject Matter Expert |
| SNOMED CT | Systematized Nomenclature of Medicine Clinical Terms |
| SSN | Social Security Number |
| STS | Standards and Terminology Services |
| THT | Total Handle Time |
| TRM Plus | TeleCare Record Manager Plus |
| URAC | Utilization Review Accreditation Committee until 1996; now known only as URAC |
| VA | Department of Veterans Affairs |
| VAMC | VA Medical Center |
| VBA | Veterans Benefits Administration |
| VETS | VA Enterprise Terminology Services |
| VHA | Veterans Health Administration |
| VHG | Veterans Health Gateway |
| VISN | Veterans Integrated Service Network |
| VistA | Veterans Health Information Systems and Technology Architecture |
| VRM | Veterans Relationship Management |
| WHEN | Weekend, Holiday, Evening Night |

Appendix F. Business Needs Removed: Out of Scope for Pilot

| Business Need (BN) | OWNR  Number | Owner Requirement (OWNR) | Phase | Priority\* |
| --- | --- | --- | --- | --- |
| BN 2: Provide the ability for the user to automatically identify the Veteran caller from the single desktop view. | | | | |
|  | 2.1 | Provide the ability for the user to automatically view the phone number that the Veteran is using to make the current call. |  | High |
|  | 2.2 | Provide the user the ability to automatically view the Veteran’s home phone number, if the Veteran is using a different phone number to place the current call. |  | High |
|  | 2.3 | Provide the ability for the user to automatically view the Veteran’s photograph, if available. |  | Low |
| BN 4: Provide the user information about previous agent-assisted calls.Note: **Not all items in BN 4 were removed from the scope of this pilot.** | | | | |
|  | 4.2 | Provide the ability to view information about calls identified for follow-up. |  | High |
|  | 4.2.2 | Provide the ability to document who should provide the follow-up. |  | High |
|  | 4.2.3 | Provide the ability to document when follow-up should occur. |  | High |
|  | 4.2.4 | Provide the ability to document the date, time, and outcome of follow-up. |  | High |
|  | 4.2.5 | Provide the ability to generate a report of calls requiring follow-up and the status/outcome of follow-up. |  | High |
|  | 4.3 | Provide the ability for the user to view current average hold time for all routing queues. |  | High |
| BN 5: Provide the ability for the user to update the following Veteran information directly from the single desktop view. Note: **Not all items in BN 5 were removed from the scope of this pilot.** | | | | |
|  | 5.5 | Service connection and Special Treatment Authority, such as Agent Orange, Combat Veteran | Phase 2 | High |
| BN 6: Provide the ability for the user to document information about the call using the single desktop view. Note: **Not all items in BN 6 were removed from the scope of this pilot.** | | | | |
|  | 6.2.6 | Provide the ability for the user to view the average amount of time it takes to answer a call within a specified date/time range. |  | Medium |
|  | 6.2.7 | Provide the ability for the user to view the average amount of time it takes to handle a call within a specified date/time range. |  | Medium |
|  | 6.2.8 | Provide the ability for the user to view a rolling accrual of the average amount of time it is taking to handle calls. |  | Medium |
| BN 7: Provide the ability to prioritize calls | | | | |
|  | 7.1 | Provide the ability for the user to designate the priority status of each call using the single desktop view. |  | High |
| 7.2 | Provide the ability to dynamically route each call to the appropriate individual/group using the single desktop view. |  | High |
| 7.3 | Provide the ability for the recipient of the call to view information about the priority status of the call from the single desktop view. |  | High |
| BN 9: Provide the ability for the clinical user to renew a medication in CPRS/VistA from the single desktop view. | | | | |
|  | 9.1 | Provide the ability for the clinical user to renew the medication from the single desktop view. |  | High |
| 9.2 | Provide the ability for the clinical user to view a list of medications in the single desktop view that can be refilled. |  | High |
| 9.3 | Provide the ability for the clinical user to refill one or more medications via the single desktop view. |  | High |
| 9.4 | Provide the ability for the user to view the same patient in the single desktop view and in CPRS and VistA (maintain patient context). |  | High |
| BN 10: Provide the ability for the clinical user to document a progress note or addendum in CPRS from the single desktop view. | | | | |
|  | 10.1 | Provide the ability for the clinical user to document a progress note or addendum in CPRS by entering the information in the single desktop view. |  | High |
| 10.1.1 | Provide the ability for the clinical user to import medication information into the progress note. |  | High |
| 10.2 | Provide the ability for the clinical user to preview the progress note in the single desktop view before it is saved in CPRS. |  | High |
| 10.3 | Provide the ability for the clinical user to edit the progress note in the single desktop view before it is saved in CPRS. |  | High |
| 10.4 | Provide the ability for the clinical user to print the progress note in the single desktop view. |  | High |
| 10.5 | Provide the ability for the clinical user to save a draft of the progress note in the single desktop view before it is saved in CPRS. |  | High |
| 10.6 | Provide the ability for the clinical user to retrieve a draft progress note in the single desktop view before it is saved in CPRS. |  | High |
| 10.7 | Provide the ability for the clinical user to sign the progress note in the single desktop view. |  | High |
| 10.8 | Provide the ability for the clinical user to save the signed progress note created in the single desktop view in CPRS. |  | High |
| 10.9 | Provide the ability for the clinical user to view the signed and saved progress note in the single desktop view. |  | High |
| BN 11: Provide the ability for the user to use protocols to direct resolution of the call. (Knowledge Base Business Need) **Note: Not all items in BN 11 were removed from the scope of this pilot.** | | | | |
|  | 11.1.1 | Provide the ability for the user to document resolution of the Veteran’s questions about enrollment by selecting responses to prompts/questions. |  | Medium |
| 11.2.1 | Provide the ability for the user to be directed to view the most recent progress notes related to urgent care, emergency, and/or inpatient discharge. |  | Medium |
| 11.2.2 | Provide the ability for the user to specify a date range to view the most recent progress notes related to urgent care, emergency, and/or inpatient discharge. |  | Medium |
| 11.2.3 | Provide the ability for the clinical user to document the resolution of the patient’s symptoms/diseases by selecting responses to prompts/questions. |  | High |
| 11.2.4 | Provide the ability for the clinical user to view prompts/questions to resolve Veteran calls about symptoms/diseases (such as VHG triage algorithms.) |  | High |
| 11.3.1 | Provide the ability for the clinical user to document resolution of the patient’s medication-related questions/requests by selecting responses to prompts/questions. |  | High |
| 11.4.1 | Provide the ability for the user to document the resolution of the patient’s questions/requests about appointments by selecting responses to prompts/questions. |  | Medium |
| 11.5.1 | Provide the ability for the user to document the resolution of the patient’s request for a clinician to return his/her call by selecting responses to prompts/questions. |  | High |
| 11.6.1 | Provide the ability for the user to document resolution of other Veteran calls by selecting responses to prompts/questions. |  | High |
| 11.6.8 | If the patient is registered in MHV, provide the ability to incorporate this information into the prompts/scripts viewed by the user. |  | High |
| 11.6.9 | If the patient is authenticated in MHV, provide the ability to incorporate this information into the prompts/scripts viewed by the user. |  | High |
| 11.6.10 | If the patient is opted into MHV secure messaging, provide the ability to incorporate this information into the prompts/scripts viewed by the user. |  | High |
| 11.8 | Provide the ability for the clinical user to view supportive literature such as MicroMedix, Lippincott Manual, employee education, MHV, Veterans Health Library, and accepted abbreviations. |  | High |
| 11.9 | Provide the ability for the clinical user to send the Veteran (using their preferred method) a summary of the call (symptoms, disposition, care advice, message to contact call center if there any additional needs). |  | High |
| 11.10 | Provide the ability to standardize the information given/sent to the caller. |  | High |
| BN 12: Provide the ability for the user to use the single desktop view to send “secure” messages[[7]](#footnote-7) to PACT members and individual providers (nurse, pharmacist, physician, etc.) and to other call center staff. (Communication Tool) Note: **Not all items in BN 12 were removed from the scope of this pilot.** | | | | |
|  | 12.1.13 | Provide the ability for the user to create text from speech for high volume message creators. |  | Low |
| 12.2 | Provide the ability for the PACT/individual provider to receive an optional (turn-off) informational alert/notification when a message has been created, sent, assigned, and/or changed. |  | Medium |
| 12.7.4 | Provide the ability for the clinical user to generate a report of the time lapse between when a response was requested from the PACT/individual provider (patient may have requested a response at a particular time of day) and the time when the provider attempted to reach the patient. |  | High |
| BN 13: Provide the ability for the user to create a record for a non-registered patient. | | | | |
|  | 13.1 | Provide the ability to enter the following information about a non-registered patient: |  | High |
| 13.1.1 | Full name |  | High |
| 13.1.2 | SSN |  | High |
| 13.1.3 | Date of birth |  | High |
| 13.1.4 | Gender (select choices) |  | High |
| 13.1.5 | Contact phone number |  | High |
| 13.1.6 | Street address |  | High |
| 13.1.7 | City |  | High |
| 13.1.8 | State |  | High |
| 13.1.9 | Zip code (populate city, state and county by entering zip code) |  | High |
| 13.1.10 | County |  | High |
| 13.1.11 | Authentication in MHV |  | High |
| 13.1.12 | Opted into MHV secure messaging |  | High |
| 13.1.13 | Email address |  | High |
| 13.2 | Provide the ability for the user to send a message (such as an email) to staff to register the non-registered patient. |  | High |
| 13.3 | Provide the ability for the user to create a call message for a non-registered patient in the single desktop view. |  | High |
| 13.3.1 | Provide the ability for the clinical user to save the call message created in the single desktop view for the non-registered patient into CPRS when the patient is registered. |  | High |
| 13.4 | Provide the ability to create a record for this patient in VistA/CPRS when the patient is registered. |  | High |
| 13.5 | Provide the ability for the user to prioritize the call from a patient who has not been registered (refer the call to a clinical user). |  | High |
| 13.6 | Provide the ability for the clinical user to use the protocols (such as VHG triage algorithms) on the single desktop view to resolve the call. |  | High |
| BN 15: Provide the ability to create workforce management reports. | | | | |
|  | 15.1 | Provide the ability to view/print a report of the number of call messages and the number of appointments set-up…etc. |  | High |
| 15.2 | Provide the ability to create an audio recording of all calls. |  | High |
| 15.3 | Provide the ability to capture all key strokes input by the user during the call. |  | High |
| 15.3.1 | Provide the ability to view a video that captures all of the key strokes input by the user during the call. |  | High |
| 15.3.2 | Provide the ability to capture the amount of time between key stokes. |  | Medium |
| 15.3.3 | Provide the ability to screen capture the user’s desktop. |  | High |
| 15.4 | Provide the ability to view/print detailed call information. |  | High |
| 15.4.1 | Provide the ability to view/print the date of the call |  | High |
| 15.4.2 | Provide the ability to view/print the time of the call. |  | High |
| 15.4.3 | Provide the ability view/print information about the type of service requested by the Veteran |  | High |
| 15.4.5 | Provide the ability to mark/identify a call that was not handled correctly. |  | High |
| 15.4.6 | Provide the ability identify the corrective action recommended when a call was not handled correctly. |  | High |
| 15.5 | Provide the ability to create reports of direct (agent assisted) and indirect (self-service-Interactive Voice Response (IVR)) customer interactions within a specific date and time frame. |  | High |
| 15.5.1 | Provide the ability to create a report of the number of internal calls (transferred to an agent), number of external calls (calls received from a Veteran), and number of unique contacts (number of contacts with a given Veteran). |  | High |
| 15.5.2 | Provide the ability to create a report of the amount of time of each call session (Total Handle Time (THT)). |  | High |
| 15.5.3 | Provide the ability to create a report of the average amount of time it takes to answer a call within a specified date/time range (Average Speed of Answer (ASA)). |  | High |
| 15.5.4 | Provide the ability to create a report by user of the average amount of time it takes to handle a call within a specified date/time range (Average Handle Time (AHT)). |  | High |
| 15.5.5 | Provide the ability to create a report of calls that were resolved without having to transfer the caller to another individual (first call resolution). |  | High |
| 15.5.6 | Provide the ability to create a report of the percentage of calls answered within threshold.[[8]](#footnote-8) |  | High |
| 15.5.7 | Provide the ability to create a report of the number of calls abandoned after threshold divided by calls received. |  | High |
| 15.5.8 | Provide the ability to create a report of the number of inbound calls received. |  | High |
| 15.5.9 | Provide the ability to create a report of the number of calls in the queue. |  | High |
| 15.5.10 | Provide the ability to create a report of the number of calls answered by an agent. |  | High |
| 15.5.11 | Provide the ability to create a report of the number of calls handled divided by the number of calls offered to the queue. |  | High |
| 15.5.12 | Provide the ability to create blockage rate reports.[[9]](#footnote-9) |  | High |
| 15.5.13 | Provide the ability to create a report of the total talk time plus the total hold time plus the after call handling time divided by the number of calls handled per agent (Total Handle Time/Calls Handled (THT/CH)). |  | High |
| 15.5.14 | Provide the ability to create a report of the amount of time between when the non-clinical user refers the call to a clinical user and the time when the clinical user returns the call to the Veteran (suspended notes report). |  | High |
| 15.5.15 | Provide the ability to create a report of the outcome of the call by the type of the call. |  | Medium |
| 15.5.16 | Provide the ability to create additional standard reports. |  | High |
| 15.5.17 | Provide the ability to view/print ad hoc workforce management reports. |  | High |
| 15.6 | Provide the ability to perform data mining actions. |  | High |
| 15.7 | Provide the ability to view information to forecast workforce staffing needs. |  | High |
| 15.8 | Provide the ability to create call center agent profiles. |  | High |
| 15.8.1 | Provide the ability to identify skills of call center agents. |  | High |
| 15.8.2 | Provide the ability to update call center agent profiles. |  | High |
| 15.9 | Provide the ability to route calls based upon the skills of the individual call center agent. |  | High |
| 15.10 | Provide the ability to view a real-time “wall board”[[10]](#footnote-10) of all of the calls, for example the calls in the queue, average response time…etc. |  | High |
| 15.11 | Provide the ability for the supervisor/administrator to print a real-time dashboard of the status of all calls. |  | High |
| 15.12 | Provide the ability to generate quality management reports. |  | High |
| 15.12.1 | Provide the ability to view quality management data collection forms. |  | High |
| 15.12.2 | Provide the ability to record information on quality management forms. |  | High |
| 15.12.3 | Provide the ability for the individual user to view their own completed quality management forms |  | High |
| 15.12.4 | Provide the ability for the administrator/supervisor to view completed quality management forms of the teams of users that they supervise. |  | High |
| BN 16: Provide the ability to evaluate caller satisfaction. | | | | |
|  | 16.1 | Provide the ability to present the customer with a customer satisfaction survey at the end of the call (questions to be asked verbally; responses to be accepted verbally and by phone key pad). |  | High |
| 16.2 | Provide the ability to set the frequency/randomness of the customer satisfaction survey. |  | High |
| 16.3 | Provide the ability to alert the supervisor/administrator that a call back to the customer is needed. |  | High |
| 16.2 | Provide the ability to create a report of customer satisfaction survey information |  | High |
| 16.3 | Provide the ability to export satisfaction survey information to another application, such as Excel, so that information can be further manipulated. |  | High |
| BN 17: Provide the ability for users to process additional caller feedback. **Note: Not all items in BN 17 were removed from the scope of this pilot.** | | | | |
|  | 17.2 | Provide the ability for the user to send a message about caller feedback to the appropriate person/department. |  | Medium |
| 17.3 | Provide the ability for the user to document the response received from the appropriate person/department. |  | Medium |
| BN 19: Provide the ability for supervisor/administrator management. **Note: Not all items in BN 17 were removed from the scope of this pilot.** | | | | |
|  | 19.2 | Provide the ability for the supervisor/administrator to establish standard note titles. |  | High |
| 19.3 | Provide the ability for the supervisor/administrator to communicate messages to staff via the single desktop view. |  | High |
| 19.5 | Provide the ability for the supervisor/administrator to enter, edit and delete the type of call categories to be used by the user, for example call back, suicide, mental health, drug interaction…etc. |  | High |
| 19.6 | Provide the ability for the supervisor/administrator to enter, edit and delete caller areas to be used by the user, for example the names of the facilities/clinics where the patient is being seen/will be seen. |  | High |
| 19.7 | Provide the ability for the supervisor/administrator to enter, edit and delete the caller response categories to be used by the user, for example contact 911, call back, schedule an appointment…etc. |  | High |
| 19.10 | Provide the ability for the supervisor/administrator to create customized clinical user reports for example: date, time, name, chief complaint, PCP, call types, triage disposition, name of user, facility, length of call. |  | High |
| BN 20: Provide the ability for facility staff to monitor calls and call resolution. | | | | |
|  | 20.1 | Provide the ability for facility (administrative and clinical) staff to view summary information about calls involving patients at their facility. |  | High |
| 20.1.1 | Provide the ability for facility staff to view the outcome of calls involving patients at their facility. |  | High |
| 20.1.2 | Provide the ability for facility staff to sort summary information about calls involving patients at their facility. |  | High |
| 20.1.3 | Provide the ability for facility staff to export summary information about calls into another application such as Excel. |  | High |
| 20.1.4 | Provide the ability for facility staff to print all information, including summary information about calls. |  | High |

Appendix G. Non-Functional Needs Removed: Out of Scope for Pilot

|  |
| --- |
| **Operational Environment Requirements** |
| Provide storage and retrieval off key stroke data, voice recordings, and video images. |
| Provide the ability to determine the CPT code as a background process. |
| The system shall respond to user actions in 2 seconds or less in 90% of the attempts, and never more than 5 seconds, excluding large data mining activities. |
| The system shall broadcast alerts to the end users of VistA and CPRS down time and facility closings. |
| **Usability/User Interface Requirements** |
| Provide the ability to accept Veteran information provided via a key pad or voice. |
| Resolve Veteran calls by routing them through the smallest number of choices possible. |

Appendix H. Veterans Relationship Management CRM Unified Desktop Lessons Learned Report

Throughout each project life cycle, lessons are learned and opportunities for improvement are discovered. As part of a continuous improvement process, documenting lessons learned from previous projects help project teams discover root causes of problems that occurred and avoid those problems in later project stages or future projects.

The objectives of the report embedded below are to gather all relevant information for improved planning of later project stages and future projects, improving implementation of new projects, and preventing or minimizing risks for future projects

The Lessons Learned Report documents items identified as successes, challenges or lessons learned that occur throughout the life of a project.



Appendix H. Approval Signatures

The requirements defined in this document are the high level business requirements necessary to meet the strategic goals and operational plans of the Enhancing the Veteran Experience and Access to Healthcare (EVEAH) Transformational Initiative*.* Further elaboration to these requirements will be done in more detailed artifacts.

**Business Owner**

Signifies that the customer approves the documented requirements, that they adequately represent the customers desired needs, and that the customer agrees with the defined scope.

Signed: Date:

**From:** Montalva, Carroll W.   
**Sent:** Wednesday, December 21, 2011 12:48 PM  
**To:** Sklar, Cheryl (Hines OIFO); Piskura, Jr, Edward S.; Faherty, Shawn  
**Cc:** Rucker, Negest J. (WBB); Eulie, Philip; Hebert, Linda; Dagen, Leslie  
**Subject:** RE: Approval of NSR documents for 20111102 VHA Fix-the-Phones Initiative - Desktop Agent

Guy has indicated his approval, as has Anne. I approve to go forward, as well. Thanks, Carroll

Anne Kreutzer

**From:** Kreutzer, Anne B.   
**Sent:** Tuesday, December 20, 2011 11:14 AM  
**To:** Sklar, Cheryl (Hines OIFO)  
**Subject:** Approve: Approval of NSR documents for 20111102 VHA Fix-the-Phones Initiative - Desktop Agent

Approve, pending Habermann’s review.

Business Liaison

Signifies appropriate identification and engagement of necessary stakeholders and the confirmation and commitment to quality assurance and communication of business requirements to meet stakeholder expectations.

Signed: Date:

Health Enterprise Systems Manager (for VHA)

**From:** Faherty, Shawn   
**Sent:** Wednesday, December 21, 2011 1:10 PM  
**To:** Sklar, Cheryl (Hines OIFO); Piskura, Jr, Edward S.  
**Cc:** Rucker, Negest J. (WBB)  
**Subject:** Re: Approval of NSR documents for 20111102 VHA Fix-the-Phones Initiative - Desktop Agent

I approve. Thanks for staying after this one.   
  
  
Thumbed from my bberry

Customer Advocate

Confirms that the request merits consideration and review by the Business Intake Review Board.

Signed: Date:

<<Customer Advocate Name and title>>

Additional signature for out-of-cycle requests processed through the Business Intake Review Board: Deputy Chief Officer for Health Systems (VHA)

Include approval message attachments HERE

**Office of Information and Technology (OIT)**

Indicates agreement that the requirements have been received, are clear, understandable, and are documented sufficiently to facilitate project planning when the project is approved and funded. It is understood that negotiations may need to occur with the business during project planning as a result of technical reviews and feasibility.

Signed: Date:

Guy Esten, Director, OIT

**From:** Esten, Guy   
**Sent:** Wednesday, December 21, 2011 9:49 AM  
**To:** Sklar, Cheryl (Hines OIFO)  
**Subject:** Approve: Approval of NSR documents for 20111102 VHA Fix-the-Phones Initiative - Desktop Agent

1. First call resolution are calls that do not require the Veteran to initiate follow-up calls to resolve their request. [↑](#footnote-ref-1)
2. Call abandonment occurs when Veterans hang-up the phone before they are able to talk with a call agent. [↑](#footnote-ref-2)
3. This requirement may need to be modified in the future to align with enterprise efforts to reduce/eliminate use of the SSN. [↑](#footnote-ref-3)
4. These are progress notes from CPRS. [↑](#footnote-ref-4)
5. The TRM Plus application refers to these as notes. They are identified as call messages in this document to distinguish them from CPRS progress notes. [↑](#footnote-ref-5)
6. Secure messaging in VHA is associated with MHV. For this request, “secure” messages are not intended to be associated with MHV but are messages that are sent in a “secure” manner. [↑](#footnote-ref-6)
7. Secure messaging in VHA is associated with MHV. For this request, “secure” messages are not intended to be associated with MHV but are messages that are sent in a “secure” manner. [↑](#footnote-ref-7)
8. An example of a threshold is the URAC standard that calls are answered within 30 seconds. If the caller disconnects before the 30 second threshold, then that call is not counted. [↑](#footnote-ref-8)
9. Blockage occurs when callers get a fast busy signal. [↑](#footnote-ref-9)
10. The “wall board” is a scrolling display of real-time phone statuses such as agents available to take calls, calls in queue, longest waiting call, and agents in work mode (logged in but unavailable to take calls due to other activities such as completing a call message or taking a break). [↑](#footnote-ref-10)