Medical Appointment Scheduling System (MASS)
Work Effort Unique Identifying #20070570

Business Requirements Document

November 2014

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1.   Purpose

The Business Requirements Document (BRD) and the associated VHA Business Blueprint is authored by the business community for the purpose of capturing and describing the business needs of the customer/business owner identified within the New Service Request (NSR) # 20070570 Medical Appointment Scheduling System (MASS)[1]. The VHA Business Blueprint provides organizational context for this MASS BRD to include a Framework, which depicts the overall capabilities desired for the future state and a glossary that applies to both of the business requirements documents.

2.   Overview

The Access and Clinic Administrative Program (ACAP) is the single entity responsible for defining, standardizing and coordinating system-wide administrative clinic operations and management. The scope of ACAP includes outpatient access optimization through standardization and workload capacity alignment, and call center operations to include triage, queuing and standard operating procedures. Specialty Care clinic access will include the aforementioned plus consult management, including establishment of tracking and monitoring standards. The ACAP Executive Director will serve as VHA's business owner and manager in collaboration with the Department of Veterans Affairs (VA) OI&T in matters regarding the Medical Appointment Scheduling System project.

The ACAP will bridge the gaps and disconnects between policy and operations necessary to comprehensively define and coordinate the transformation of clinic operations which will require standardization through policies that are consistently implemented, performance measures that are reliable and actionable and reporting structures that facilitate accountability. These initiatives will result in fundamental business processes that promulgate standardization of scheduling practices across VA Healthcare systems and proactively and strategically focus on systemic improvements to Veterans' access to care.

Key drivers for implementing a new scheduling capability are recommendations from multiple Government Accountability Office (GAO) and Office of Inspector General (OIG) reports (Appendix A), excessive wait times, and VA's need to address Veterans' access issues.

Modern scheduling capabilities are critical to the VHA's transformation to patient centered care for both outpatient and inpatient services. In the current system, there is limited ability to adapt to changing care delivery modes such as home based healthcare, telehealth and phone/email/web, and to provide resource-based scheduling. VHA requires the ability to manage one of its most expensive resources, the healthcare providers' time.   This requires integrated information systems that allow administrators and managers to balance the provider supply with patient demand. The current Veterans Health Information Systems and Technology Architecture (VistA) Scheduling application does not provide the capabilities necessary to meet these new needs.

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[1] http://vista.med.va.gov/nsrd/Tab_GeneralInfoView.asp?RequestID=20070570

An enterprise scheduling solution is needed to provide consistent, seamless, timely and high-quality scheduling interactions for patients, providers and VHA scheduling staff. The solution should provide access to resources and patient information for all patients scheduling. Currently:

o VHA Medical Scheduling is extensive, with over 100 million appointments made in FY2014 by over 50,000 staff at 150+ medical centers, and 700+ Community Based Outpatient Centers (CBOCs).
o Users of the current process(es) are unable to reliably and consistently manage provider availability which impedes efficient use of resources and understates available supply and demand of patient services.
o Significant time and resources are spent identifying and collecting data required for day-to-day management, quality assurance and auditing.
o There is inadequate information exchanged between clinic stakeholders both internal and external to VHA.
o Notifications are not performed in a consistent automated process, resulting in missed appointments or available appointment slots that could be filled.
o Veterans' scheduling needs and performance are not captured and communicated effectively. This is especially true for established patients who require urgent appointments. No electronic system to track and manage these requests currently exists.
o The process for linking and associating appointments is manual and inconsistent; opportunities for more efficient care are lost.
o There are inadequate integral business rules to efficiently distribute scheduling responsibilities among schedulers and staff and to manage resources in accordance with demand.

VHA seeks to:

o Establish seamless patient centered scheduling services.
o Implement resource based scheduling.
o Improve management of supply and demand.
o Standardize business rules and data collection.
o Implement standardized scheduling policies in part through designing a standardized software configuration.
o Enable better virtual function and geographic coverage through scheduling by call centers
o Increase scheduler resource utilization.
o Reduce scheduling errors.
o Improve the availability of scheduling information in order to better manage appointment supply and demand.
o Standardize information sharing and data exchanges both internal and external to the VHA.
o Meet Congressional reporting requirements including addressing the concerns of the GAO, OIG, and other external stakeholders.

3. Scope

VA intends to deliver core scheduling capabilities within the first two years and remaining capabilities within the five year project period.

Core capabilities consist of developing, configuring and implementing a resource-centric medical appointment scheduling solution to include:

o Configuring standard national operating parameters that can be tailored to meet local needs.
o Managing requests for care. Storing the date of the request and preferred date for the appointment for subsequent reporting.
o Managing appointments with the ability to execute, monitor and report on appointment, cancellation, reschedule and notification processes.
o Managing Veteran patient information to include patient preference and special needs information.
o Coordinating care to include monitoring of appointment check-in activities, encounter events, check-out activities and associating ancillary appointments.
o Integrating services across the VA Medical Centers, VISNs, or regional boundaries.
o Producing capacity management reports for resources and work force utilization throughout the scheduling operation.

The scheduling capabilities outlined in this BRD will enable Veteran-centered care to:

o Standardize and improve scheduling processes and workflows
o Provide the ability for all organizational levels to manage demand, supply and utilization of resources
o Provide the capability to standardize data and business rules across the enterprise
o Enable efficient centralized and decentralized scheduling programs
o Enable greater automation, efficiency, reliability and oversight
o Meet Congressional and other external stakeholder reporting requirements

Core capabilities will preserve Veteran self-service and support systemic consumers such as Clinical Video Teleconference (CVT) and Disability Examination and Assessment Program (DEAP). Future capabilities will include Non-VA Care appointments and other systemic consumers which will be incrementally implemented over the period of performance. Further details related to the core capabilities and non-core or future capabilities are located in the Business Needs Matrix in the VHA Business Blueprint document.

4. Customer and Primary Stakeholders

The primary stakeholder for this request is VHA's Access and Clinic Administration Program Office, led by Dr. Michael Davies. Review Appendix B for the complete list of primary and secondary stakeholders.

5. Goals/Objectives and Outcome Measures

The goals/objectives below are the projected state of affairs that VHA is trying to achieve:

Goal/Objective	Desired Outcome	Impact to Business	Measurement
Enterprise MASS	• Improved Veteran service through appropriate, timely,	• Satisfaction will increase for the Veteran, and staff.	• VA seeks to adopt industry metrics, as

Goal/Objective	Desired Outcome	Impact to Business	Measurement

	and efficient appointment and visit scheduling.
	• Enable patients to request or view information via the Internet.
	• Improved utilization of provider and clinic resources including equipment and rooms.
	• Accurate, maintainable system and user documentation.
	• A formalized repository of scheduling business rules maintainable without developer intervention to promote standardization of business practices across VHA.
	• User intuitive Graphical User Interfaces (GUIs).
	• Open connectivity enabling seamless upgrades and enhancements.
	• Improved IT infrastructure IT supporting VHA's new models of care.
	• Linkage with Computerized Patient Record System (CPRS) and other VistA packages to provide a seamless interface to clinicians and clerical staff.
		• Veteran's access to timely healthcare will increase due to the efficiency and effectiveness of the replacement scheduling system.
		• Improved utilization of VHA healthcare resources.
		• Improve utilization of staff and equipment utilization and allocation.
		• Improved Veteran satisfaction.
		• Increased Veteran access to manage their own care through self-help capabilities.
		• The data capture and retrieval will:
		  - Ensure that Veterans receive healthcare in a more timely manner;
		  - Make health care related information more readily available for the Veteran, clinic staff and other interested organizations; and,
		  - Generate more exact data reporting, analysis and dissemination.
			applicable.
			• Up to 20% increase patient satisfaction with scheduling.
			• 100% capture of resource supply.
			• 100% capture of patient wait time.

6. Enterprise Need/Justification

Current systems cannot accurately and adequately track and manage appointment supply and demand, which has resulted in appointment delays for Veterans. Thus, VHA has not been able to optimally manage their most expensive resource – clinicians. In addition, VHA has been

forced to adopt less reliable non-traditional wait time measures and adapt the current system to collect data through high touch, inefficient and complex business processes. In some cases, patients may have been at risk for health consequences due to delays in care.

VHA is now operating under legal mandates to implement long needed modern technology to remedy the current state.

7. Business Requirements

7.1. Themes, Epics (Needs), User Narratives (Business Requirements)

The requirements table below provides a list of the high level business needs for the MASS.

Project MASS Business Needs Table

Identifier	Business Needs
BN1	**MASS Set-up Capability** - The MASS Setup capability establishes system operating parameters, such as: provider, facility, and equipment, care coordination agreements, notification templates, business rules, alerts, workflow, and system access. While facility, provider and business rules are established at the national level, other parameters such as workflow, alerts and templates may be tailored at VISN and facility levels per security and policy constraints yet still meet national standards to ensure accurate data exchanges and consistent reporting results.
BN2	**Veteran Information Management Capability** - The Veteran Information Management capability provides access to authoritative Veteran-related information (such as enrollment, eligibility, benefits, and registration). The capability accommodates access to this information across business units or organizations inside VA/VHA, with geographically dispersed health care location across VA regions, between VA and community based partners, and with other government partners. Veteran special needs and preferences shall be accessible and able to be updated.
BN3	**Request Management Capability** - The Request Management capability triggers the scheduling process with a request for care from a Veteran, or a provider on behalf of a Veteran. The Veteran's preferred date is one of the key components to be captured during the request process. Requests are entered from a variety of input sources (such as web, mobile, email, phone, and other communication modes) creating a standard view of information to be processed, tracked and reported.
BN4	**Appointment Management Capability** - The Appointment Management capability highlights the need to view the availability of all resources and services across facilities, time zones and scheduling horizons from a single graphical representation screen in order to instantly schedule an appointment within the Veteran's preferred date. (Note: A scheduling horizon is how far out on a schedule an appointment can be made, such as a 3 month scheduling horizon.) This capability allows for flexibility to cancel and reschedule appointments, and also includes standardizing the notifications process to issue messages to Veterans and their families, and other stakeholders.

Identifier	Business Needs
BN5	**Coordinate Associated and Occasion of Service Capability** - The Coordinate Associated and Occasion of Services capability fosters open access between VA facilities and outside VA to promote effective information sharing between stakeholders. The ability to view available enterprise resources allows for the coordination and fulfillment of requests (such as C&P process, telehealth, fee basis, IDES, ancillary, travel and medical records). The ability to coordinate care and communicate with other government partners will provide more options, and track care across agencies.
BN6	**Encounter of Care Management Capability** - The Encounter of Care Management capability summarizes the life cycle of an appointment and merges it with the medical treatment information. These activities contribute to the spectrum of metrics used in wait-time reporting, capacity and resource planning, and follow-up activities to reach continuity of care goals.
BN7	**Report Management Capability** - Report Management is an overarching business capability which uses data from the scheduling application and/or interfacing systems (internal and external) to provide managers with a coherent view of both supply and demand. Data is used to produce reports from the service line level to the national level and may be exported/shared with external partners.
BN8	**Existing VistA Reporting and DSS Coding Capabilities** - Current VistA reporting and DSS coding must continue to support non-scheduling business processes as it currently does today
BN9	Adhere to the Enterprise Level requirements as specifically addressed in Appendix C of this document.

7.2. Known Interfaces and Data Sources

This is the business community's understanding of key known interfaces and is not a comprehensive listing.

Name of Application	Description of Current Application	Interface Type	Existing Functionality	Deliverables
Identity and Access Management	Offers a VHA enterprise wide service for verifying Veteran Identity (housed in the MVI)	Automated	Yes	Verified Veteran identities will be automatically incorporated.
CPRS and Vista Evolution eHMP	Provides an integrated patient record system for clinicians, managers, quality assurance staff, and researchers. Its primary goal is to create a fast and easy-to-use product that gives physicians enough information through clinical reminders, results reporting, and expert system feedback to make better decisions regarding orders and treatment.	Automated	Yes	Scheduling information will be automatically incorporated.

Name of Application	Description of Current Application	Interface Type	Existing Functionality	Deliverables
Enrollment System	An external authoritative source for determining medical benefits eligibility and enrollment (E&E) information for all beneficiaries.	Automated	Yes	Incorporate the entry/storage of the patient's preferred facility information
My Health*e*Vet	A web-based application that creates a new, online environment where Veterans, family, and clinicians may come together to optimize Veterans' health care	Automated	Yes	Scheduling information will be automatically incorporated
PCMM	An application to maintain primary care information	Automated	No	Provides primary care provider information
VistA Legacy Scheduling	Current VHA scheduling capabilities	Automated	Yes	Provide current VistA reporting and DSS coding must continue to support non-scheduling business processes as it currently does today
Veteran Point of Service	Provide veteran with kiosk self service capabilities, including scheduling	API	Yes	Scheduling capabilities will be integrated
Audiocare	Provides veteran with audio of scheduling information	Automated	Yes	Transmit/provide appointment information to product
CDW	VHA Corporate Data Warehouse	Automated	Yes	Provide scheduling and appointment data to data marts
Connected Health mobile application platform	Mobile application that allows Veterans to request appointments via mobile device	API	No	Provide appointment information
VistA Admitting, Discharge and Transfer (ADT) and Bed Management Solution (BMS)	ADT supports administrative functions related to patient admission, discharge, transfer, and registration. BMS provides the capability to manage bed availability at the facility, VISN and national levels.	Automated	Yes	Provide inpatient services information

8.   Non-Functional Requirements

Functional requirements describe all of the things that a system must be able to perform—that is, the system behavior. All other requirements are non-functional. The non-functional requirements will be addressed in the technical requirements, which will be attached to the Performance Work Statement.

9.   Other Considerations

9.1.   Alternatives

Following are alternatives that VHA stakeholders perceive as available:

o   Acquire a Commercial-Off-The-Shelf (COTS) scheduling solution – select a vendor/ product that satisfies VHA Medical Appointment Scheduling needs and allows for customizations and integration with internal VHA systems and business entities external VHA.

o   Develop in-house medical appointment scheduling solution.

o   Outsource VHA Medical Appointment Scheduling.

o   Maintain status quo

9.2. Assumptions

Key Stakeholder	Name	Description
Resources	Funding	Appropriate funding will be made available to complete analysis, planning, design, development, testing, deployment and integration of the features and capabilities of the MASS.
Resources	LOB Support	LOB's will provide knowledgeable resources to participate in ongoing analysis, oversight and testing/verification of the MASS.
Program Management	Management of Features and Capabilities	There will need to be a program management structure to manage and orchestrate the features and capabilities of the MASS.
Cross-Administration Coordination of Initiatives	Cross Business Process, Project, and Technology Dependencies	A Cross-Functional Team will be established that will ensure that external VA business processes, projects, and technology dependencies align with the MASS.
Governance	Project Scope	Scope and Vision will be used to define and bound establishment of project(s) to perform implementation of the MASS.
Governance	Change Control	Any changes to project(s) scope will be reflected in a change to Scope and Vision document and will trigger change control procedures requiring executive sign-off.
Governance	Business Review	VHA stakeholders and the ACAP will provide review/approval of design-development artifacts, to include iteration/release plans, design artifacts, and traceability artifacts.
Governance	Business Architecture Review	Eventual business architecture artifacts derived from identified features will be subject to review/approval by the Stakeholders and the ACAP.
VHA	Governance	The proposed changes to the capabilities and features will affect processes and work task. This will require the ACAP to re-evaluate the organization of teams and resources to ensure that they align the new features and capabilities.
OIT	OIT Process	OIT will work with Business Stakeholder and the ACAP to develop artifacts as prescribed by the OIT Analysis, Design, Development, and Deployment process.
VAMC	Business Process(es)	• During implementation, all field resources required to configure resources would be required to assess their current clinic configurations and the appropriate representation within the new resource centric model. Special attention will need to be paid to those clinics that currently support workload capture. • The business process would ensure that patients are notified of "what they do next" after the current appointment has concluded. • Resource sets should be defined and scheduled as such. Resource sets identify all resources necessary to satisfy the requirements of a given patient appointment.

Key Stakeholder	Name	Description
		• The business process should allow for the development of walk-in clinics for urgent care and "walk-ins" that can be setup on less than a 24-hour notice. • The business process should separate workload capture from appointment scheduling activities. • Cancelled C&P exams can be rescheduled by the hospital. • Consider modifying the way that "unscheduled" patient appointments are identified (important for travel reimbursement, metrics, etc.).

9.3. Dependencies

Component	Dependency	Comments
Enrollment System (ES)	There is a dependency on the integration with the ES for consuming information needed to determine eligibility.	There will be an ongoing challenge to ensure coordination between the MASS and ES.
VistA	There is a dependency on the integration with VistA packages.	There will be an ongoing to challenge to ensure coordination between the decoupling of VistA Scheduling and other VistA packages.
MVI	Veteran Identify Verification	Integration with the Identity and Access Management Service is required to verify Veteran Identity.

9.4. Constraints

VHA is a large, complex enterprise so organization change will take a considerable amount of time. There will be directives and policies that need to be changed before new processes can be implemented.

9.5. Business Risks and Mitigation

Business Risk	Mitigation
Enterprise Architecture	
1. If the interfaces to other systems are not fully understood by the scheduling solution providers, there may be substantial rework required, resulting in cost overruns or degraded performance.	Close coordination between the scheduling and VistA Evolution activities and the development of Scheduling solution architecture prior to the acquisition.
Scheduling Solution and COTS Products	
1. Because business operations of the VA are governed by congressional bodies, mandates that push system requirements beyond the capabilities of COTS scheduling solutions may lead to failed implementation or deployment.	All deviations from an "out-of the-box" solution will be closely monitored and explicitly approved by the appropriate VHA authority.
Standardization and Local Autonomy	
1. If VHA does not implement a commonly accepted strategy for data standardization, efforts to achieve broad-scale data standardization may have false starts or fail to achieve the needed result.	VHA will establish a data standardization working group prior to contract award.
2. Because the present operating environment allows for a great degree of autonomy at each facility, if the scheduling solution requires too much standardization, there will be resistance to change – threatening successful deployment.	VHA will trade the needs of national standardization against local facility needs in a solution adoption plan that will be approved by the Governance Board.
3. Because local implementations that support scheduling today vary so much, if the new functionality requires a great level of localization at each site, then the effort to successfully deploy the capability at each site may be cost-prohibitive.	VHA will trade the needs of national standardization against local facility needs in a solution adoption plan that will be approved by the Governance Board.
Governance	
1. If the VA is not configured to support timely decisions, then the cost of implementing a COTS-based system will become prohibitive.	A VA governance board of stakeholders who can enforce a decision will be established for the MASS project.
Testing	
1. Because of the diversity of IT Production Environments supported by VistA throughout the VA, if sufficient information is not provided to test the implementation and deployment of scheduling software, integration testing will be time-consuming, expensive and difficult to plan.	A test plan will be developed that will be approved by the Governance Board.
Adoption	
1. Because scheduling functionality may represent a more substantial change to some users than to others, seemingly minor mismatches in	VHA will develop and communicate a concept of operations that addresses mismatches among user needs and expectations that will be adjudicated by the

Business Risk	Mitigation
expectations (e.g., sequence of work steps or required data fields) may inhibit adoption, leading to a failed deployment.	governance board. The phased approach should also help lessen adoption issues.
Deployment	
1. Because of the complex nature of this project, if the strategy for broad-scale deployment is not understood, local sites may be unable to begin the process of setting expectations – leading to potentially unpleasant surprises, and risk of failed deployment at the local level.	A deployment plan will be approved by the Governance Board.
Sustainment	
1. If the total cost of ownership is not well understood until late in development, then deployment may be delayed or the effort abandoned.	Independent cost assessment will address costs across the life of the solution.

Appendix A   References

The list below consists of documents referenced elsewhere in this document:

NSR #20070570 Medical Appointment Scheduling System
http://vista.med.va.gov/nsrd/Tab_LinksView.asp?RequestID=20070570

CBO Revenue Operational Reports Website (Trend Reports – Outpatient Encounters – FY09-10)
http://vaww.diagm.arc.med.va.gov/

CPRS Home Page
http://vista.med.va.gov/cprs/

Department of Veterans Affairs, Office of Inspector General, Audit of Veterans Health Administration's Efforts to Reduce Unused Outpatient Appointments (Report No. 08-00879-36)

http://www.va.gov/oig/52/reports/2009/VAOIG-08-00879-36.pdf

Department of Veterans Affairs, Health Services Research and Development Service, "The Health Care System for Veterans: An Interim Report"

Department of Veteran Affairs, "Strategic Plan Refresh FY 2011 – FY 2015"

Department of Veterans Affairs Veterans Health Information Technology Common Services/Identity Management Service, "Person Service Identity Management (PSIM) Interface Control Document Version 2.2.1", December 2010
http://tspr.vista.med.va.gov/warboard/ProjectDocs/MVI/PSIM_Interface_Control_Document.pdf

Department of Veteran Affairs, Memorandum, Project Management Accountability System Guide v 2.0, VAIQ 7023849, Department of Veteran Affairs Strategic Plan. (2010-2014)

Department of Veterans Affairs, Office of Health Information Health Data and Informatics National Data Systems, VHA Corporate Databases Monograph, 2010

GAO Report, Audit of the Veterans Health Administration's Outpatient Scheduling Procedures (Report No. 04-02887)
http://www.va.gov/oig/52/reports/2005/VAOIG-04-02887-169.pdf

GAO Report, Audit of the Veterans Health Administration's Outpatient Waiting Times (Report No. 07-00616-199)
http://www.va.gov/oig/52/reports/2007/vaoig-07-00616-199.pdf

GAO Report, Information Technology – Management Improvements Are Essential to VA's Second Effort to Replace Its Outpatient Scheduling System (Report No. GAO-10-579)
http://www.gao.gov/new.items/d10579.pdf

GAO Report, Major Management Challenges and Program Risks – Department of Veterans Affairs (Report No. GAO-01-255)
http://www.gao.gov/pas/2001/d01255.pdf

GAO Report, VA Health Care Status of Efforts to Improve Efficiency and Access (Report No. GAO/HEHS-98-48)
http://www.gao.gov/archive/1998/he98048.pdf

GAO Report, VA Hospitals – Issues and Challenges for the Future (Report No. GAO/HEHS-98-32)
http://www.gao.gov/archive/1998/he98032.pdf

GAO Report (HEHS-00-90) to the Ranking Democratic Member, Committee on Veterans Affairs, House of Representatives, Veterans Health Care, VA Needs Better Data on Extent and Causes of Waiting Times, May 1, 2000
http://www.gao.gov/archive/2000/he00090.pdf

United States Government Accountability Office Report to the Ranking Member, Committee on Veterans' Affairs, U.S. Senate, "Information Technology Management Improvements Are Essential to VA's Second Effort to Replace Its Outpatient Scheduling System, GAO 10-579, May 2010
http://www.gao.gov/new.items/d11141r.pdf

VA Handbook 6500 – Information Security Program

VA OIG, Audit of Veterans Health Administration's Efforts to Reduce Unused Outpatient Appointments (Report No. 08-00879-36):
http://www.va.gov/oig/52/reports/2009/VAOIG-08-00879-36.pdf

VA OIG, Review of the Award and Administration of Task Orders Issued by the Department of Veterans Affairs for the Replacement Scheduling Application Development Program (RSA) (Report No. 09-01926-207)
http://www.va.gov/oig/52/reports/2009/VAOIG-09-01926-207.pdf

VA OIG, Review of Interagency Agreement between the Department of Veterans Affairs and Department of Navy, Space Naval and Warfare Systems Center (SPAWAR) (Report No. 09-01213-142)
http://www.va.gov/oig/52/reports/2009/VAOIG-09-01926-207.pdf

Veterans Health Administration, "Business Reference Architecture", July 2011 Architecture Release,
http://vaww.esm.infoshare.va.gov/sites/ba/default.aspx

Veterans Health Administration, Directive "Consult Policy", 2008-056, September 16, 2008,
http://www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=1765

VHA Directive 2010-027, VHA Outpatient Scheduling Processes and Procedures
http://vaww1.va.gov/vhapublications/ViewPublication.asp?pub_ID=2252

Appendix B Stakeholders, Users, and Workgroups

Stakeholders

Type of Stakeholder	Description	Responsibilities
Endorser Business Owner Requester	Michael Davies, MD, Executive Director, Access and Clinic Administration Program (ACAP)	Endorsed this request. Provides strategic direction to the program. Elicits executive support and funding. Monitors the progress and time lines. Provides final approval of BRD with Sign Off Authority.
Business Subject Matter Expert(s) (SME)	• Dr. Adam Darkin, Chief Consultant for Care Coordination (Telehealth) • Dr. William Gunnar, National Director, Surgery Quality and Workflow	Represents the business interests of the organization. Provides background and describe features on current systems and processes. Identifies proposed features for the new system.
Office of Information Technology	Chris Minardi, Program Manager, OIT	As directed by the Chief Information Officer (CIO), OIT delivers available adaptable, secure and cost effective technology services to the VA and acts as a steward for all VA's IT assets and resources.

Primary and Secondary Users

Information included in the table below represents the functional roles/actors of the future scheduling system. Actors are notional, role-based persons that accomplish activities. They described according to the **roles** they perform, not the titles they possess. This is necessary when individuals perform many roles, when different individuals within an organization perform the same role (e.g., providers who choose to schedule patients for themselves are playing the role of "scheduler," not "provider" while doing so), or when job titles and/or responsibilities are subject to change.

Name	Description	Responsibilities
Primary Users	Front Desk	Role associated with managing the flow of patients arriving for medical care, to include checking them in and out.
Primary Users	Patient	Role associated with a person requesting medical care from the VHA.
Secondary Users	Provider	Role associated with providing medical care to patients. Providers normally perform the medical treatment, document the encounter, determine the need for follow-up appointments, and order required ancillary tests. This role also includes support personnel who assist in conducting portions of these tasks.

Name	Description	Responsibilities
Primary Users	Registration/Patient Information Manager	Role associated with establishing patient eligibility, initial assignment, demographic and other patient-centric information.
Primary Users	Schedule Administrator	Role associated with creating individual schedules for a medical section (e.g., ophthalmology) and establishing initial/standard configuration settings for all schedules within a service. Persons in this role are responsible for definition of, maintenance of, and compliance with service/section-level configuration settings.
Secondary Users	Scheduler	Role associated with personalizing the settings for an individual schedule and booking patients into defined appointment slots. This role could be accomplished by providers whose appointments are kept in the schedule and/or by the clerk who makes appointments in the schedule.
Primary Users	Scheduling Component System Administrator	Role associated with installing, establishing the initial configuration, and maintaining the scheduling component for a medical treatment facility or group of associated medical treatment facilities sharing a single installation.
Primary Users	System Administrator	Role associated with implementing within the scheduling component the system and schedule configuration decisions of the managers.
Primary Users	Timer	Role associated with triggering routine or automated activities. This is often used, for example, to trigger regularly produced reports.
Primary Users	Triager	Role associated with validating appointment requests (i.e., establishing appropriateness and urgency).
Secondary Users	Associated Services Administrator	Role associated with coordinating associated VHA medical services with patient appointments. This role is multi-representational, encompassing the coordination of patient appointments with patient transportation; ancillary services; encounter documentation and transcription services; primary care management; patient records; and the VBA. It represents the many faces that are not directly involved in scheduling the patient appointment, but may require coordination when a patient has been scheduled for an appointment.
Secondary Users	Management	Role associated with organizing, managing, and establishing standards for a VISN, System, Facility, or Service's resources. The management role represents any policy maker above the section level of the organization but below the VHA level. They define, at the appropriate level, scheduling component and/or individual schedule configurations. These persons also request and/or receive reports describing the status and/or performance of the medical services under their span of control.
Secondary Users	Section Chief	Role associated with organizing, managing, and establishing standards for, a single section's resources.
Secondary Users	Technician	Role associated with performing ancillary tests.
Secondary Users	VHA Management	Role associated with organizing, managing, and establishing standards for all VHA resources.

Appendix C   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:VHA 10P7B Service Coordination SRM Team)

Identifier	Requirement Type	Description
ENTR15	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 Moderate[2]. 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.
ENTR2	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.
ENTR3	508 Compliance	All Section 508 requirements will be adhered to.
ENTR4	Executive Order	All executive order requirements will be adhered to.
ENTR5	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.

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[2] Used the same rating provided in the April 2011 version of the BRD.

Appendix D   Acronyms and Abbreviations

Term	Definition
ACAP	Access and Clinic Administration Program
AITC	Austin Information Technology Center
ANR	Automated Notification Reporting
BPIC	Business Performance Improvement Committee
BN	Business Need
BRCD	Business Requirements Change Document
BRD	Business Requirements Document
C&P	Compensation and Pension
CA	Certification and Accreditation
CBO	Chief Business Office
CBOC	Community Based Outpatient Center
CDC	Centers for Disease Control and Prevention
CDW	Corporate Data Warehouse
CIO	Chief Information Officer
COTS	Commercial-Off-The-Shelf
CPRS	Computerized Record System
CVT	Clinical Video Telehealth
DB	Database
DoD	Department of Defense
DSS	Decision Support Systems
EHR	Electronic Health Record
ERM	Enterprise Requirements Management
ES	Enrollment System
ESM	Enterprise Systems Manager
EWL	Electronic Wait List
FIPS	Federal Information Processing Standard
FTE	Full-Time Equivalent
FY	Fiscal Year
GAO	Government Accountability Office
GUI	Graphical User Interface
HCSR	Health Care Security Requirements
HEC	Health Eligibility Center

Term	Definition
HIPAA	Health Insurance Portability and Accountability Act
HL7	Health Level 7
HSC	Health Systems Committee
HSI	Health Systems Informatics
IDES	Integrated Disability Evaluation System
IFC	Inter-Facility Consult
IHS	Indian Health Services
IT	Information Technology
LOB	Line of Business
MASS	Medical Appointment Scheduling System
MPI	Master Patient Index
MRI	Magnetic Resonance Imaging
MVI	Master Veteran Index
NEAR	New Enrollee Appointment Request
NIH	National Institutes of Health
NIST	National Institute of Standards and Technology
NFR	Non-Functionary Requirements
NSR	New Service Request
OIG	Office of Inspector General
OI&T	Office of Information and Technology
OWNR	Owner Requirement
PACT	Patient Aligned Care Team
PAIT	Patient Appointment Information Transmission
PCMM	Primary Care Management Module
PRF	Patient Record Flag
PSIM	Person Service Identity Management
RDM	Requirements Development and Management
RFP	Request for Proposal
SIM	Strategic Investment Management
SLA	Service Level Agreement
SME	Subject Matter Expert
SPAWAR	Space Naval and Warfare Systems Center
VA	Department of Veterans Affairs

Term	Definition
VACO	VA Central Office
VAMC	VA Medical Center
VBA	Veterans Benefit Administration
VHA	Veterans Health Administration
VISN	Veteran Integrated Service Network
VistA	Veterans Health Information Systems and Technology Architecture
VSSC	VHA Support Service Center

Appendix E   VHA Business Blueprint Document

See attached VHA Business Blueprint Document_Nov 2014

Appendix F   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 ACAP Program Office. Further elaboration to these requirements may 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:

_____

Michael Davies, MD, Executive Director, ACAP   Date

Include approval message attachments HERE

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:

_____

Rod Laster, Portfolio Manager, Business Informatics   Date

Include approval message attachments HERE

Office of Information and Technology

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 Owner during project planning as a result of technical reviews and feasibility.

Signed:

_____

Gerry J. Lowe, Program Manager, OIT   Date

Include approval message attachments HERE