Scheduling-Centric Functional Requirements - Attachment A

3 months ago

ATTACHMENT A

SCHEDULING-CENTRIC FUNCTIONAL REQUIREMENTS

Business Need (BN) Revised Owner Number Owner Requirement (OWNR)

BN 1: Manage National Medical Scheduling Setup – The scheduling system shall provide the capability to configure and manage business rules and standards at an national level including establishing parameters for role-based user access and security and supporting a process to monitor and evaluate results of audit reports.

 1.1 The system shall have the capability to provide integrated, electronic access to and from other VistA applications.

 1.2 Maintain and Modify Scheduling Configuration – The system shall provide the capability to establish and maintain national, VISN, VAMC, clinic, provider-level configuration standards. Configuration shall be enabled for facility-level within business rules and parameters.

 1.2.1 The system shall have the capability to provide on-line help.

 1.2.2 The system shall have the capability to maintain an audit trail of changes to resource configuration

 1.2.3 The system shall have the capability to create, modify, and delete configurable business rules that are used in the scheduling process.

 1.2.4 The system shall provide the capability to configure resources at the National, VISN, facility, clinic and provider levels.

 1.2.5 The system shall provide synchronization with individual (patient or provider) Office Automation calendar for multiple types of end user devices, including mobile applications irrespective of operating system.

 1.3 Flexible Appointment Scheduling – The scheduling system shall provide the capability to configure schedule parameters.

 1.3.1 The system shall allow configuration of scheduling to accommodate holidays.

 1.3.2 The system shall allow flexible schedule options for urgent care and walk-in appointments.

 1.3.3 The system shall allow scheduling between facilities located in different time zones.

 1.3.4 The system shall have the capability to allow users to specify timing relationships between activities (eg, coordinate multiple activities in specified order).

 1.3.5 The system shall be configurable to display only available resources.

 1.3.6 The system shall have the capability to allow users to define a standard set of appointment types with default appointment lengths.

 1.3.7 The system shall have the capability to search for available appointments using specific parameters and to

display results for multiple resources in a single view.

1.4 User Access – The system shall provide the ability to maintain and modify user access.

1.4.1 The system shall provide role-based security for access control and provide improved remote access for Veterans to make and view appointments over the internet, email and other mobile devices.

1.4.2 The system shall have the ability to create, configure, and maintain role-based user (staff and veteran) access and authorization.

1.4.3 The system shall allow configuration and tailoring of user access roles at the national, VISN, facility, clinic, and provider levels based on business rules and policies.

1.4.4 The system shall have the capability to enforce rules concerning what roles can overbook appointments for a service or resource.

1.4.5 The system shall have the capability to allow, in certain circumstances, Veterans to schedule appointments via remote access mechanisms such as phone, internet, email and other mobile devices.

1.5 Resources and Groups – The system shall provide the capability to create, modify, manage, delete, and report on resources and groups.

1.6 Audit Trails – The system shall have the capability to display business and technical audit trails.

1.6.1 The system shall provide the ability to record data to produce audit trails for items including: user access activities, modifications to schedules

1.7 Templates – The system shall have the capability to create, modify, change status, and manage of templates which include notifications, letters, and scheduling events. The system shall allow the templates to be shared and saved.

1.7.1 The system shall allow the templates to be shared.

1.7.2 The system shall allow the templates to be saved.

1.8 The system shall allow for the configuration of notifications, flags and alerts for scheduling process.

BN 2: Manage Veteran Information - The system shall have the ability to access and manage, update and maintain accurate Veteran information. Veteran special needs and preferences shall be accessible and able to be updated in "real-time".

2.1 The system shall have the capability to provide alerts if patient information is missing, out of date, or requires verification (e.g., eligibility, means test, demographics)

2.2 The system shall have the capability to maintain and present appointment information (past and future) within a specified date range (e.g., including appointments kept, providers, cancellations and no-show history)

2.3 The system shall have the capability to display eligibility information necessary for appropriate scheduling

2.4 The system shall have the ability to notify/inform schedulers of patient preferences

2.5 The system shall have the capability to receive notification of deceased patients and allow the authorized user to

cancel future appointments/ancillary services/orders once notification has been received from an authoritative source

2.6 The system shall have the capability to establish and update patient information (enrollment status, eligibility, demographics, preferences and special needs, means test status, provider assignments, etc.)

2.7 The system shall have the capability to allow patient appointments with multiple providers at multiple facilities

2.8 The system shall provide the ability to identify and verify the identification of the Veteran

2.9 The system shall support user configuration preferences for data display and entry screens within security and standards constraints

BN 3: Manage Request – Through the use of a calendar view, the scheduler is able to view all providers, services, facilities, and Veterans from a variety of calendar views such as: daily, weekly, monthly with multiple providers, services or facilities in view on a single screen. The scheduling system shall accommodate appointment requests from multiple inputs sources, including Veterans and providers via different sources such as MyHeatheVet, walk-ins, email and other communication modes. This forms the basis of non-solicited demand.   Solicited demand emerges in the form of unfulfilled appointments based on missed opportunities or requests outside the scheduling appointment horizon.

3.1 Variable Appointment Types and Lengths – The system shall have the capability to allow variable appointment types and variable appointment lengths [e.g., Compensation & Pension (C&P), Mental Health Clinic (MHC), Primary Care Clinic (PCC), New, Follow-up, Pre-op, Post-op)].

3.1.1 The scheduling system shall display any other scheduled or requested appointments for the patient when an appointment is requested.

3.1.2 The system shall have the capability to allow users to schedule an appointment for a specific, user-defined, length of time, based on role-based access rules;

3.1.3 The system shall have the capability to establish recurring appointments.

3.1.4 The system shall provide the ability to verify patient information, display eligibility, and display a warning if there is an inconsistency between service requested and eligibility.

3.2 Appointment Selection – The system shall have the capability to manage the appointment selection process.

3.3 Providers Per Schedule – The system shall have the capability to coordinate appointment scheduling based on resource availability.

3.4 Access Restrictions for Scheduling Appointments – The system shall have the capability to filter available appointments based on patient preferences, appointment availability, geographic considerations, facility, date range, resource type, and other special needs.

3.5 Waiting Lists - The system shall provide the capability to process various lists.

3.5.1 The system shall have the capability to provide a waiting list that appears when making or canceling appointments.

3.5.2 The system shall apply configurable business rules to the management of a long-term appointment request list.

3.5.3 The system shall have the capability to maintain a list of patients that can fill a cancelled appointment on short notice.

3.5.4 The system shall have the capability to provide users the ability to view available appointments beyond one year.

3.5.5 The system shall have the capability to maintain an electronic waiting list.

3.6 Appointment Rescheduling –The system shall identify appointments to be rescheduled and route them automatically to the reschedule status or pending list

3.6.1 The system shall have the capability to disposition rebooking of no-shows.

3.6.2 The system shall have the capability to link associated appointments so that if one is cancelled, all linked appointments can be dispositioned together.

3.6.3 The system shall be capable of finding and displaying available appointment slots due to appointment cancellations, additional resources, etc. based upon configuration parameters

3.6.4 The system shall have the capability to permit automatic rebooking of patients into comparable appointment slots

3.6.5 The system shall have the capability to merge, purge, or distribute scheduled appointments from one resource to another.

3.7 Optimize Resource Utilization – The system shall incorporate mechanisms that support optimization of resources.

3.7.1 The system shall have the capability to capture the coded reason for cancellations /no-shows, e.g., death of patient, lack of transportation, snow day.

3.7.2 The system shall have the capability to book or cancel recurring appointments (e.g., recurring appointments to same resource) all at once.

3.7.3 The system shall have the capability to provide users the capability to view available appointments based on configuration parameters

3.7.4 The system shall have the capability to receive notification of expired/deceased patients from authoritative source and take appropriate action such as cancel future appointments/ancillary services/orders, etc.

3.7.5 The system shall have the capability to detect and notify users if patients have similar appointments (service; provider) scheduled close together (e.g., possible duplicate or both can be seen at one time).

3.7.6 The system shall check availability and status of all resources, including telecommunications system availability, for a clinical video telehealth session.

3.8 Appointment Requests – The system shall have the capability to manage appointment requests.

3.8.1 The system shall have the ability to place Veterans on an appointment list which is accessible throughout the

scheduling process.

3.8.2 The system shall have the ability to merge, purge, or distribute scheduled appointments from one resource to another when emergency scheduling changes occur.

3.8.3 The system shall have the ability to capture attempts to contact patient.

BN 4: Manage Appointment – Through the use of a calendar view, the scheduler is able to view all providers, services, facilities, and Veterans from a variety of calendar views such as: daily, weekly, monthly with multiple providers, services or facilities in view on a single screen.

4.1 The system shall have the ability to display co-pay requirements

4.1.1 The scheduling system will display patient special needs and preferences when an appointment is requested and made.

4.1.2 The system should allow configuration to require approved authorizations prior to processing an appointment request.

4.1.3 The system shall have the capability to create and manage various appointment types.

4.1.4 The system shall have the capability to manage scheduling process, such as overbooking, no shows, cancels, re-schedules, etc…

4.1.5 The system shall support the ability to change or edit appointments as necessary.

4.1.6 The system shall have the capability to configure and enforce business rules at the clinical service level, clinic level, provider, and appointment type level (e.g., females in Obstetrics/Gynecology clinic).

4.1.7 The system shall provide the ability for providers to request appointments.

4.2 Linking – The system shall have the ability to automatically link relevant appointments/resources.

4.2.1 The system shall have the capability to provide alerts when ancillary tests/specialty consults have been scheduled/missed.

4.2.2 The system shall have the capability to search for the available appointment across multiple resources.

4.2.3 The system shall have the capability to provide information to assist schedulers to consolidate appointments in one day when possible (e.g., flag the fact that a patient is scheduled to show up +X days of desired new appointment date).

4.2.4 The system shall have the capability to create, re-schedule, or cancel recurring appointments all at once with appropriate desired date

4.2.5 The system shall have the capability to define individual schedules in terms of a single resource or as a pre-defined set of multiple resources

4.2.6 The system shall have the capability to create groups of resources for scheduling a single event (e.g., room, equipment, and ancillary staff).

4.2.7 The system shall have the capability to cancel/restore resources and all linked appointments over multiple days

(not just one day at a time).

4.3 Assign and Configure Time Slots – The system shall provide the capacity to assign and configure time slots for appointments.

4.3.1 The system shall have the capability to block time slots in user-defined increments

4.3.2 The system shall have the capability to present alerts and reminders for a variety of reasons (e.g., eligibility not verified, means test or insurance information out of date).

4.3.3 The system should have the capability to support automated coordination and consolidation (e.g., onto one day) of multiple appointments per patient.

4.3.4 The system shall be capable of changing appointment types for an appointment or a request at any time (within business constraints).

4.3.5 The system shall have the capability to configure the amount of time allowed between appointments for a patient with multiple appointments.

4.3.6 The system shall not permit booking appointments into invalid time slots based upon configured business rules.

4.4 System Prompt Patient Notifications – The system will provide the ability to establish and provide appointment notifications.

4.4.1 The system shall have the capability to generate a list of future appointment reminders.

4.4.2 The system shall have the capability to produce appointment notifications in a variety of formats (e.g., letter, phone, e-mail, text messaging, pending appointment list, or card). Each option shall be capable of being enabled or disabled based upon patient preferences.

4.4.3 The system shall have the capability to filter/select appointment notifications based on user defined criteria

4.4.4 The system shall have the capability to tailor appointment notifications to meet specific clinic needs.

4.4.5 The system shall have the capability to provide configurable notification requests such as: alerting staff when to contact patients about upcoming appointments.

BN 5: Coordinate Associated and Occasions of Service – The scheduling system shall provide schedulers the ability to coordinate medical services throughout the VA, for other agencies, with private practices, and for various delivery modes and causes.

5.1 External Data Exchange - The system shall have the capability to provide secure, automated interfaces with external systems for data exchange.

5.1.1 The system shall have the ability to allow inter-facility scheduling, including non-VA facilities

5.1.2 The system shall have the capability to link unscheduled CPRS consults to the scheduling system for viewing.

5.1.3 The system shall have the capability to support coordinating multiple appointments (e.g., provide information helpful in scheduling all appointments on one day, multidisciplinary team appointments).

5.2 The system shall provide the ability to allow display of primary and associate providers designated by facilities

5.2.1 Ability to schedule a patient and resource on both the VistA system where the health care resource is located and the VistA system where the Veteran is located. This combination should be handled across VistA systems and time zones as appropriate as a synchronized event.

5.2.2 The system shall provide the capability to capture and to select locations of patient and healthcare resources, including non-VA facilities (e.g., Veteran home, DoD, academic affiliate, contract provider, etc.).

5.2.3 The system shall provide the ability to create, cancel and update Clinical Video Telehealth (CVT) appointment sets (patient and provider) as a single event (to prevent creation of orphans), including the following resources:

•CVT Rooms

•CVT Equipment

•Telepresenter

5.2.4 The system shall provide the ability to modify a CVT appointment pair (patient and provider) as needed to prevent creation of orphans or to correct errors.

5.3 Ancillary Services – The system shall have the capability to accommodate different service types such as C&P, ancillary services and specialty services.

5.3.1 The system shall have the capability to link ancillary tests to appointments (if they are changed, ancillary tests can be updated without canceling order and re-ordering).

5.3.2 The system shall have the capability to link ancillary tests to appointments.

5.3.3 The system shall provide the capability to establish links to activities that require coordination with appointments (e.g., ancillary services).

5.3.4 The system shall have the capability to coordinate appointments with related ancillary services.

5.4 The system shall have the capability to provide a patient preference field that informs clerks to special transportation concerns or other issues that limit availability (e.g., specific days and times).

BN 6: Manage Encounter of Care – The system will have the capability to differentiate between encounter data and appointment data. The encounter data is not tracked by the scheduler, but by providers in the electronic health record.

6.1 The system shall have the capability to provide check-in, check-out, cancellation reasons, and no-show data.

6.2 The system shall have the capability to provide facility-wide visibility for a patient (i.e. checked-in or out, in treatment room etc.).

6.3 The system shall provide statistics for appointments such as: no-shows, left without being seen, etc.

BN 7: Reporting – The system should have the capability to produce, display and format reports, and should be able to be saved in various formats such as PDF, CSV, etc. Reports containing personally identifiable information that are required to be transmitted, retrieved, viewed, or printed meet all VA Handbook 6500 requirements. These reports

represent the as-is process. It is expected that report requirements will be further defined with the business owners throughout the system development and acquisition process.

7.1 General Reporting Needs

7.1.1 Ad Hoc Reports – The system shall have the capability to support user-created ad hoc report generation (without re-programming) and provide the capability to save the report definition for future use and to save the reports in various standard exportable formats.

7.1.2 The system shall have the capability to report on scheduling measures and metrics across the VHA at many levels, including but not limited to National, VISN, Facility/Station/Clinic/Community-Based Outpatient Clinic (CBOC), and shall have the capability to "roll-up" data from the most granular level (i.e. clinic or station level) to the highest level for reporting purposes (i.e. National level) as defined by the business.

7.1.3 The system shall have the capability to establish and ensure the use of consistent metrics and measures across different areas of the VHA; i.e., ensure that all business level facilities measure, capture and report the same data in the same ways.

7.2 Operational reports are generated by a facility, VISN, station or clinic to facilitate day to day operations. These can range from printing daily appointment lists for a clinic to printing a listing of patients who missed appointments or who left without being seen. Operational reports are also generated to track performance metrics, access to care metrics, utilization of staff, workload measurement/workload leveling and workload planning.

7.2.1 The system shall have the capability to generate and display a work list based on unfulfilled appointments at the operational level to capture the source of a request, type of request, and status of a request along a timeline. Work list (queue) is automatically updated based on tasks that need to be completed by the scheduler.