



Health Digital

A division of ACCESS Health International

Microservice Specification

‘Appointment & Scheduling’



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1. Functional Area –Appointment & Scheduling

1.1. Purpose

This document describes the Business Requirements Specifications (BRS) for Appointment & Scheduling in a primary care and specialist care setting.

1.2. Intended Audience

This document is intended for the Product Engineering team to commence development of 'Appointment & Scheduling' microservice and the audience would comprise of

- 1.2.1. Development, Design & Implementation Team which may include Architects, Designers, Developers, and Business Analysts
- 1.2.2. Key stakeholders in the government at central and state levels

1.3. Overview

This microservice deals with various functionalities for managing patient appointment & scheduling for primary care and specialist care setting. Patient appointment & scheduling is an important and critical process to efficiently manage the patient's and doctor's time; and effectively manage institutional processes and resources.

1.4. Scope & Not in Scope

Functionality scope includes:

- Create Appointment - walk-in; online portal; telephonic/ call center
- Create Recurring Appointment
- Appointment Check-in
- Appointment Confirmation
- Cancellation of Appointment
- Rescheduling of Appointment
- Appointment Lookup
- Create OP Schedule (Doctor's Roster)
- Update OP Schedule
- Cancel OP Schedule

1.5. Create Appointment

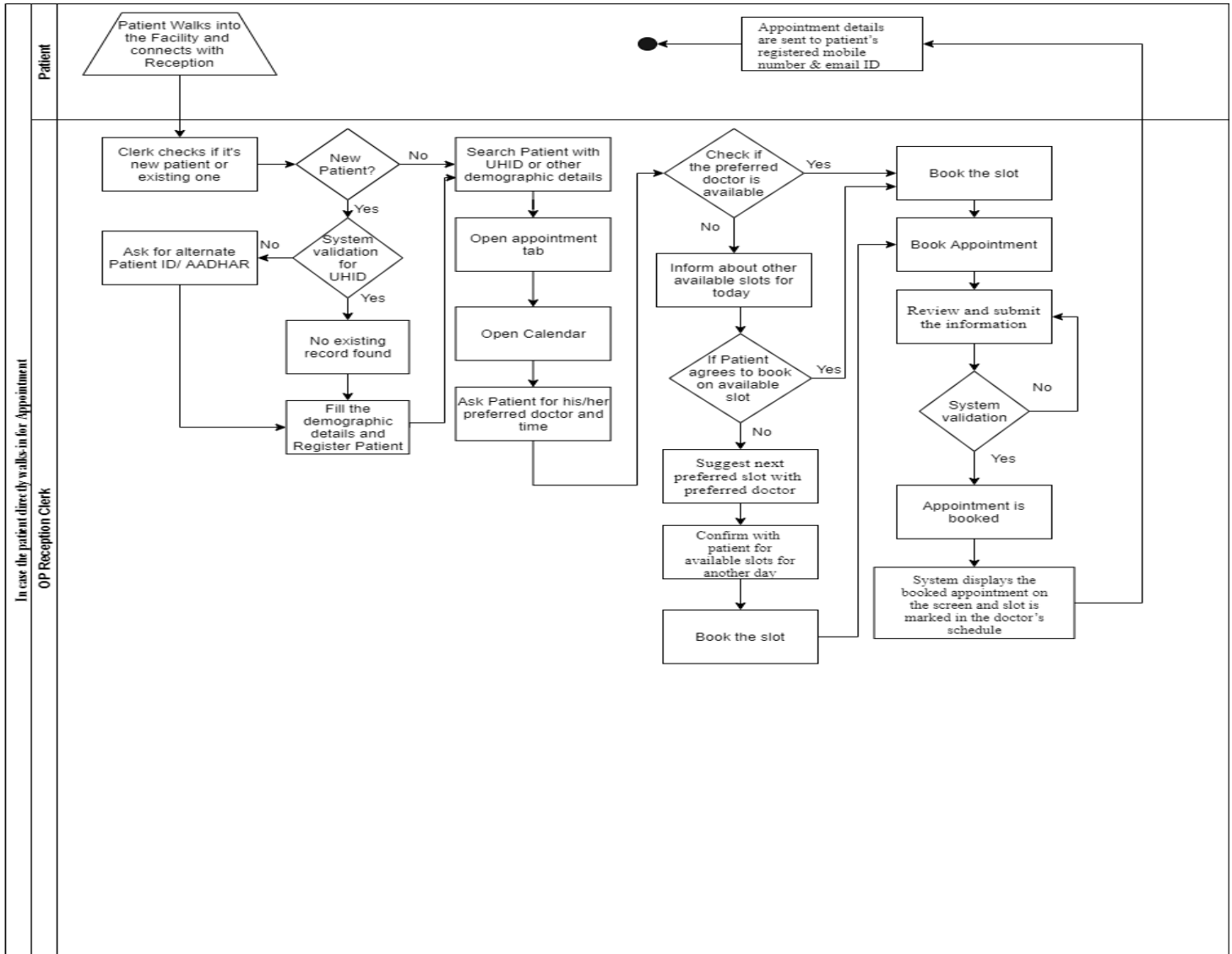
1.5.1. Business Process Flow for Create Appointment - Walk In; Online Portal; Telephonic/ Call Center

Description	<p>Appointments hold great value particularly in the planning of the daily work schedule of an institution. An efficient appointment system encourages organized attendance and better resource management. The system contributes positively to the improving accessibility of patient and consequently their satisfaction.</p> <p>Time being a major constraint especially for working individuals in urban settings, a patient may want to reduce the waiting time and skip queues at a facility. Similarly, for a facility, time management, patient scheduling and resource management are critical processes. Hence, online appointment has become a value-added service for the patient to reduce waiting; and for the clinic to understand the inflow of patients in advance.</p> <p>Telephonic/ call center appointment is useful for patients who may call up either a universal helpline or call center of a facility or the facility's reception desk to enquire about a service they are looking for. Alternatively, it may also be useful for patients who may have book an appointment on the online portal but have limited internet access.</p> <p>Patient appointment is the process to secure a convenient day and time with the chosen provider and/ or at a chosen facility. It can be done by directly walking into a facility or through an online portal or by telephoning a call center/ reception of a facility. Securing an appointment by walking in may not give the flexibility to a patient of an immediate consultation. They may have to navigate through the existing queues within the system and may lose crucial time.</p>
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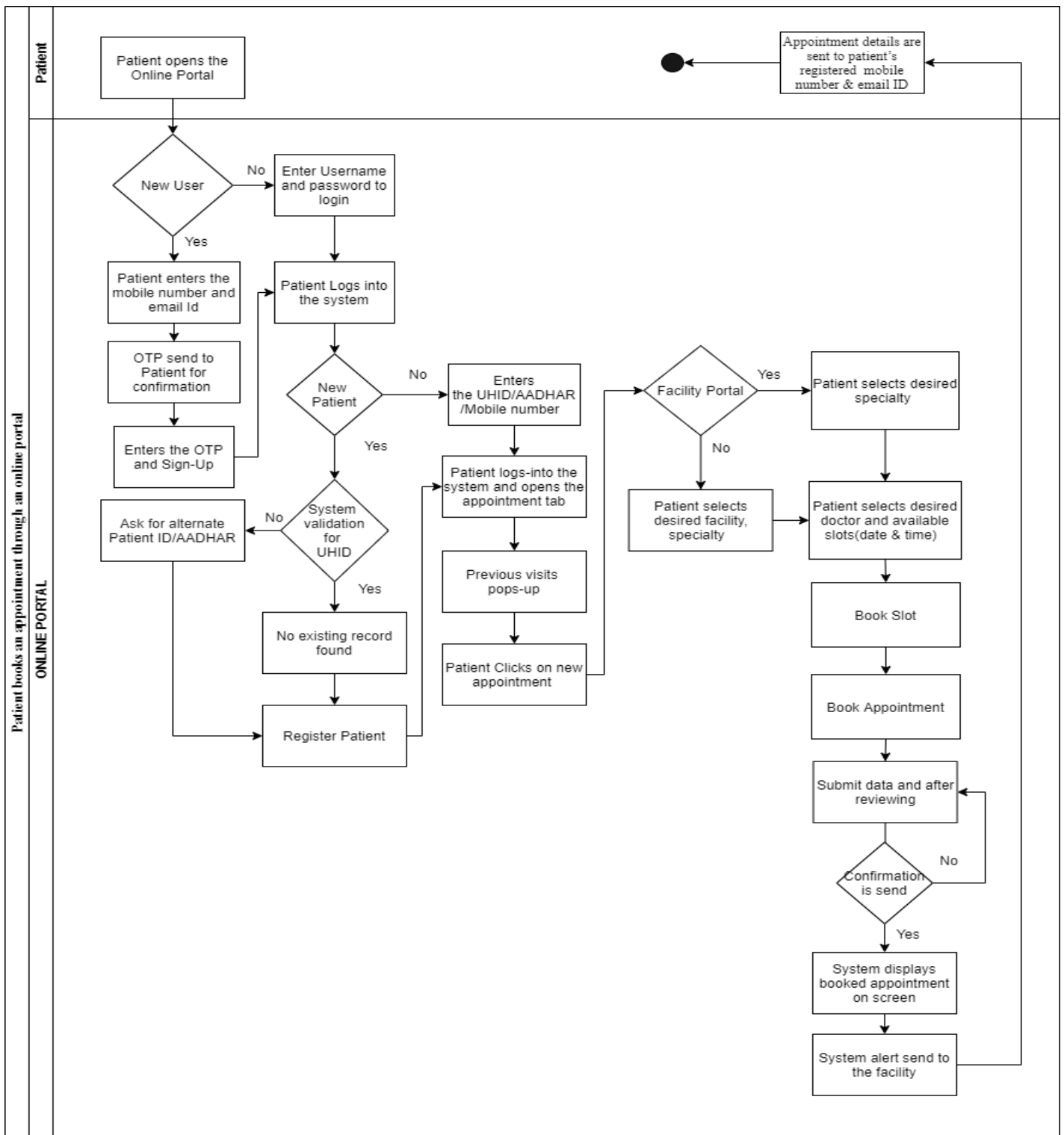
	Patient appointment means selecting a required facility and/ or provider by the patient or their family; selecting a convenient available slot and uniquely identifying themselves for securing an appointment.
Users	OP Reception Clerk, Call Center Personnel, Nurse, Doctor, Patient
Pre-requisites	Online Portal, Call Center
Business Process Details	<p>A one-time appointment process involves capturing the unique identification details either through UHID/ unique local identifier/ AADHAR/ mobile number; selecting the desired hospital and/ or provider; and selecting the desired (from currently available slots) date and time.</p> <p>A patient's appointment may be secured in three different ways. First is a direct walk in, where in the patient may connect with the reception clerk and ask them for an appointment of their preferred specialty and doctor (if they are available for the day). Second is through an online portal (universal/ facility), wherein the patient may book an appointment from available slots of their desired facility and/ or provider. Third is through a telephonic call wherein the patient may telephone a call center or the facility's reception to book an appointment for an available slot.</p>
Steps	<p>In case the patient directly walks-in</p> <ul style="list-style-type: none"> • A patient comes to avail a service at the facility • OP receptionist/ clerk confirms if it is a new patient and whether they have already been registered • Post registration or if already registered, ask patient for department and doctor preference • Check for preferred doctor's availability for the day and click on visit management • If the preferred doctor is not available for the day, check with patient for appointment with an alternate doctor • Upon agreement, click on visit management & service request for another relevant doctor • If the patient wants an appointment with the preferred doctor, then look for available slots for another day from the doctor's schedule • Confirm with patient for available slots for another day • Upon confirmation, book appointment • System displays the booked appointment on the screen and slot is marked in the doctor's schedule • Appointment details are sent to patient's mobile number & email ID <p>In case the patient books an appointment through an online portal</p> <ul style="list-style-type: none"> • A patient opens the universal online portal or the online portal of the desired facility • Patient goes to book appointment tab and enters their identification details – UHID/ AADHAR/ mobile number/unique local identifier • In case universal portal, patient selects the desired facility, specialty and doctor and selects the available convenient slot (date and time) • In case facility portal, patient selects the desired specialty and doctor and selects the available convenient slot (date and time) • Upon selection, patient reviews the selected slot and click book appointment • System displays the booked appointment on the screen • Appointment details are sent to patient's registered mobile number & email ID; and a system alert to the relevant facility <p>In case the patient books an appointment through a telephone</p> <ul style="list-style-type: none"> • Patient calls up either a universal helpline or call center of a facility or the facility's reception desk • The call center personnel or registration clerk or receptionist opens the appointment booking screen • Asks for patient's identification details, preferred facility and/ or specialist and/ or doctor; and desired date and time for the appointment • Checks for available slots and conveys to patient • Confirm selected slot and book an appointment • Appointment details are sent to patient's registered mobile number & email ID; and a system alert to the relevant facility

Outputs	<ul style="list-style-type: none"> Appointment Number Email/ WhatsApp/ SMS
Messages & Alerts	<ul style="list-style-type: none"> Message to relevant provider/ department for patient appointment Message to patient/ family member for appointment

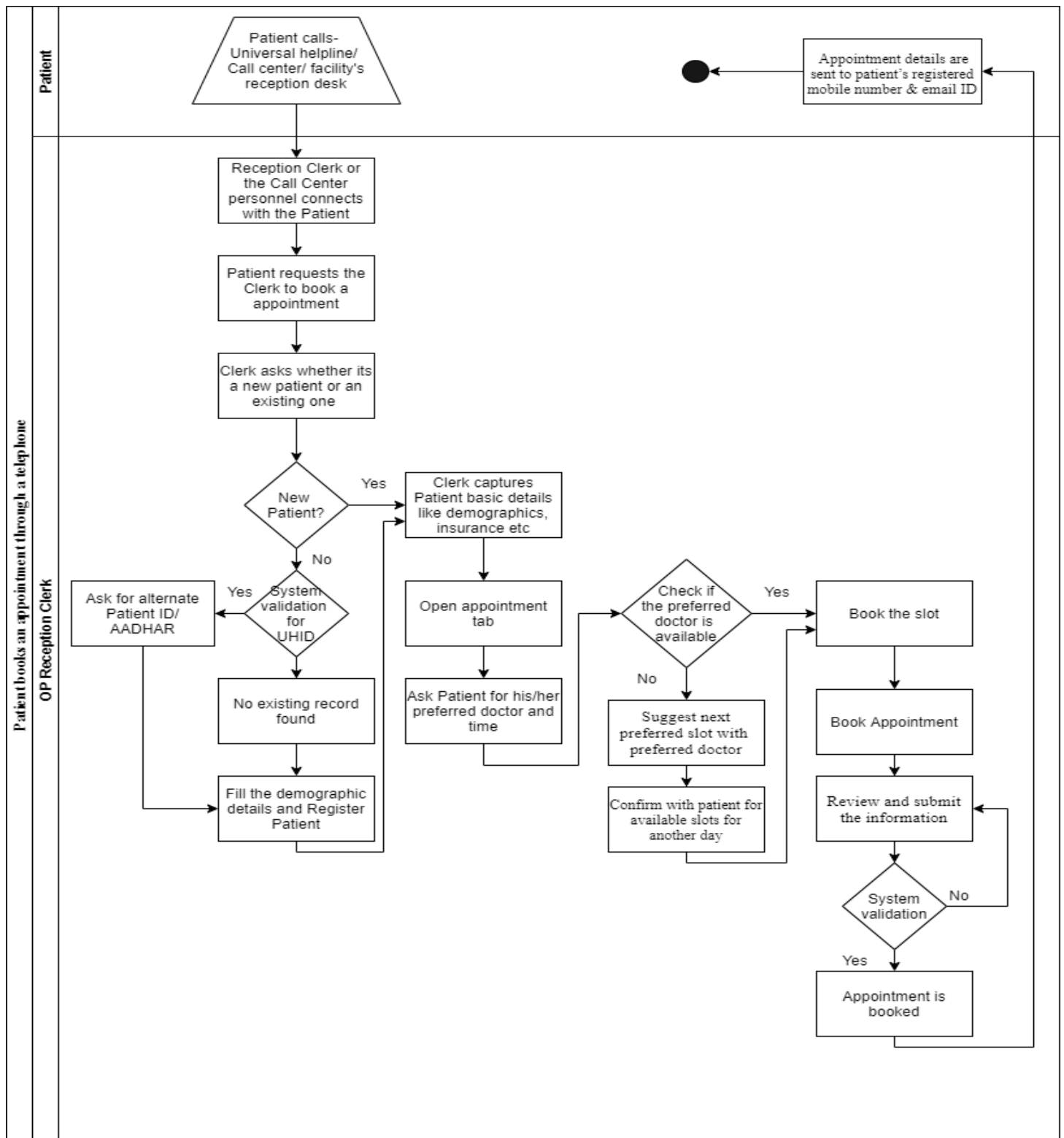
Visio: In case the patient directly walks-in



Visio: In case the patient books an appointment through an online portal



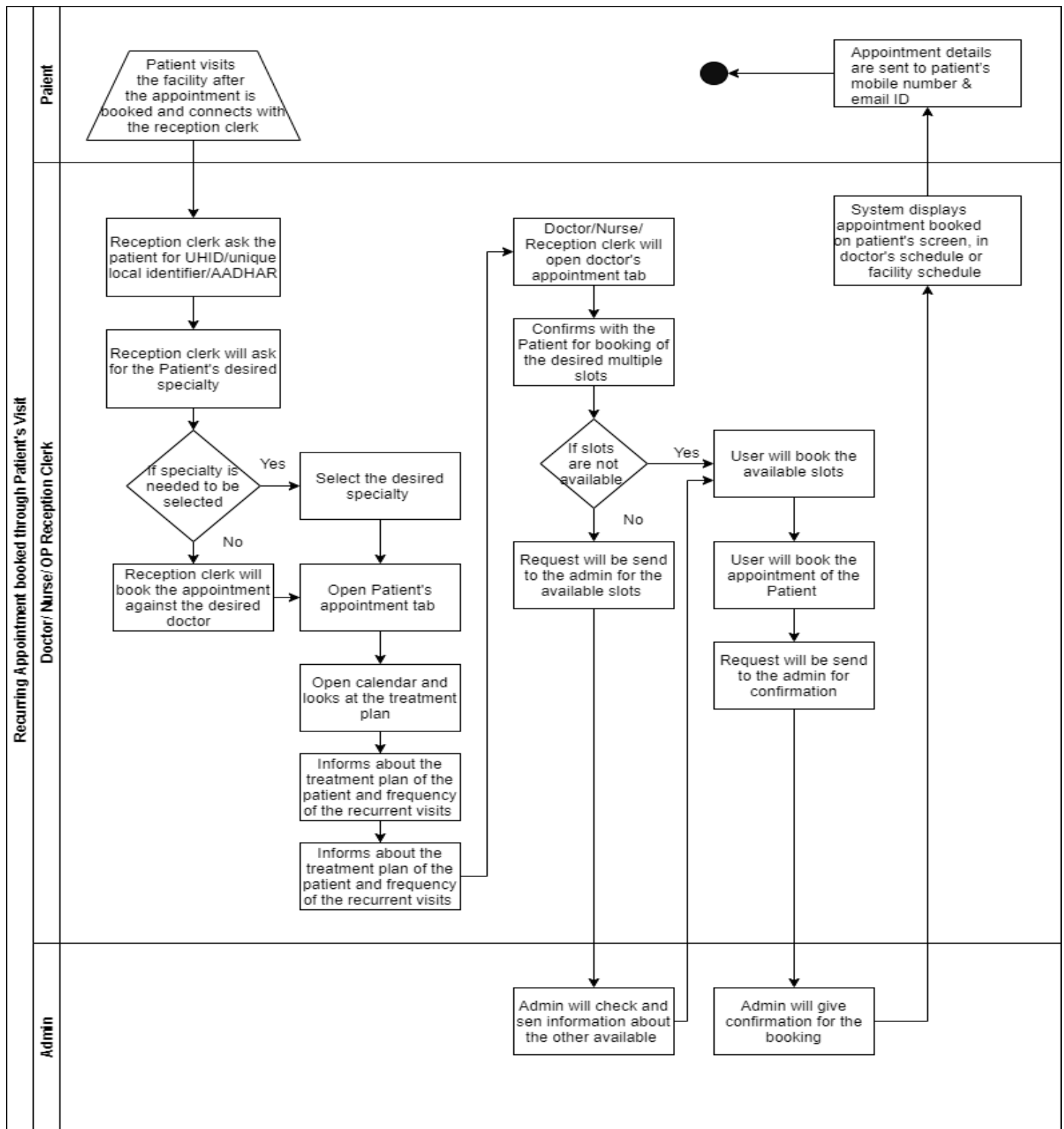
Visio: In case the patient books an appointment through a telephone



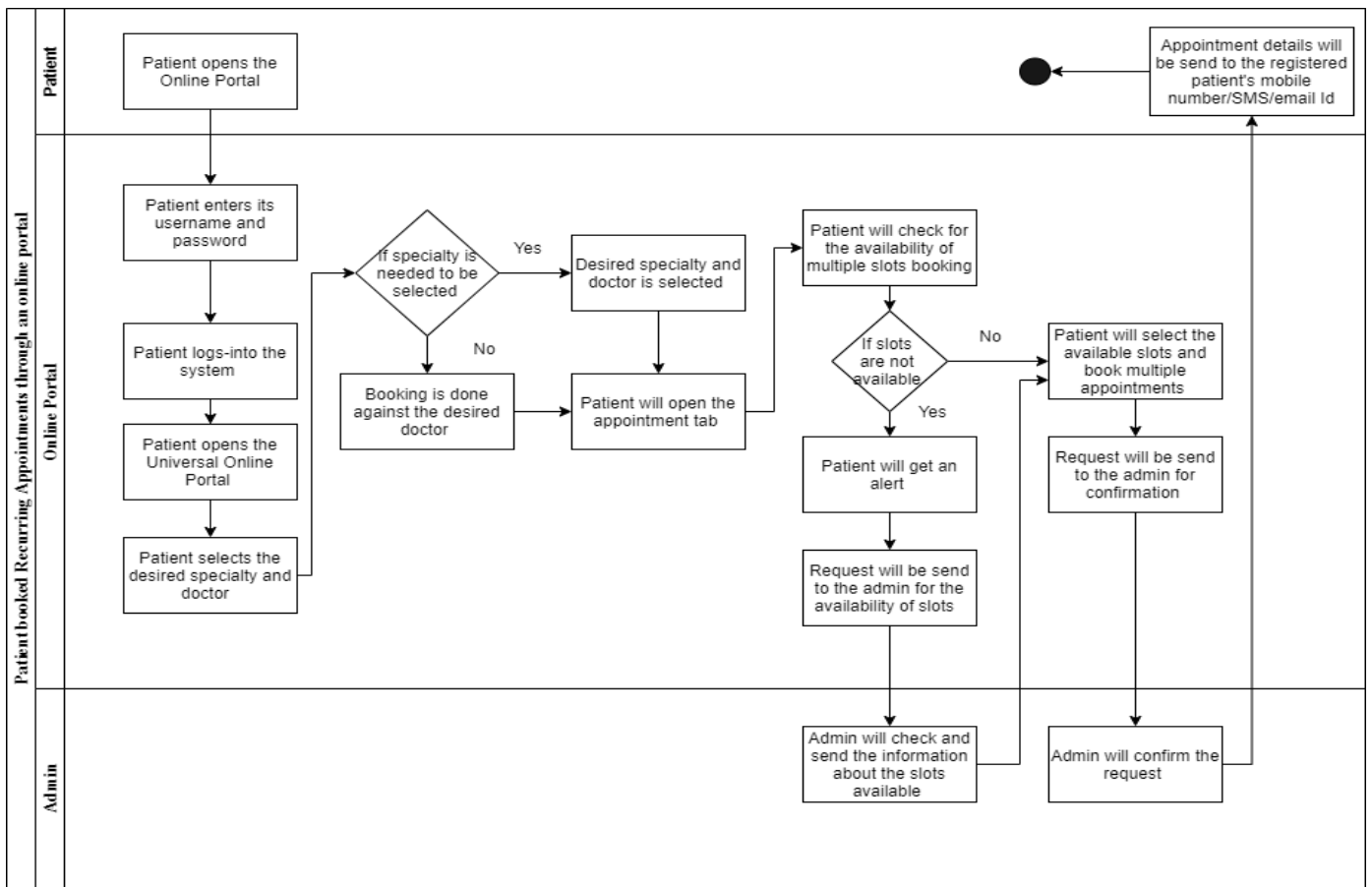
1.5.2 Business Process Flow to Create Recurring Appointment

Description	<p>Chronic disease patients and patients seeking post-operative care often require frequent visits to a provider/ facility. As a result, they may need to book multiple appointments over the course of their treatment which may stretch not only in months but in years.</p> <p>Recurring appointment is the process to secure multiple convenient available slots (day and time) over time with the chosen provider and/ or at a chosen facility for long treatment plans. It can be directly generated by the provider in consensus with the patient; or it can be generated by the reception clerk in consensus with the doctor's treatment plan and patient's convenience. Alternately, the patient may also book the convenient slots through the online portal.</p>
Users	OP Reception Clerk, Nurse, Doctor, Patient
Pre-requisites	<ul style="list-style-type: none"> Existing patient on a treatment plan Online Portal
Business Process Details	<p>A recurring appointment process involves capturing the unique identification details either through UHID/ unique local identifier/ AADHAR/ mobile number; selecting the desired slots over time; in consensus with the patient's treatment plan.</p> <p>A recurring appointment may be secured in three different ways. Firstly, it may be done by the patient's consulting doctor as per the treatment plan in order to ensure patient's compliance & adherence to the treatment. Secondly, as per the doctor's advice, the reception clerk may generate multiple appointments in accordance with the patient's convenience and the treatment plan. Thirdly, patients may want to book their recurring appointments themselves through the online portal when they have better visibility of their routine schedules.</p>
Steps	<p>In case the recurring appointments are being booked during patient visit to the facility</p> <ul style="list-style-type: none"> Doctor/ Nurse/ Reception Clerk conveys to the patient about the treatment plan and the frequency of the required recurrent visits Doctor opens the calendar under 'My Appointments' or the Nurse/ Reception Clerk open the respective doctor's roster Upon consensus with the patient, books multiple appointments as per the treatment plan System displays the booked appointments on the screen under the patient's account; in the doctor's schedule; in the facilities schedule/ calendar Appointment details are sent to patient's registered mobile number & email ID <p>In case the recurring appointments are booked through an online portal</p> <ul style="list-style-type: none"> A patient opens the universal online portal or the online portal of the desired facility Patient goes to book appointment tab and enters their identification details – UHID/ AADHAR/ mobile number In case universal portal, patient selects the desired facility, specialty and doctor and selects the multiple convenient available slots (date and time) In case facility portal, patient selects the desired specialty and doctor and selects the multiple convenient available slots (date and time) Upon selection, patient reviews the selected slot and click book multiple appointment System displays the booked appointments on the screen Appointment details are sent to patient's registered mobile number & email ID; and a system alert to the relevant facility
Outputs	<ul style="list-style-type: none"> Appointment Number Email/ WhatsApp/ SMS
Messages & Alerts	<ul style="list-style-type: none"> Message to relevant provider/ department for multiple appointments of the same patient Message to patient/ family member for multiple appointments

Visio: In case the recurring appointments are being booked during patient visit to the facility



Visio: In case the recurring appointments are booked through an online portal

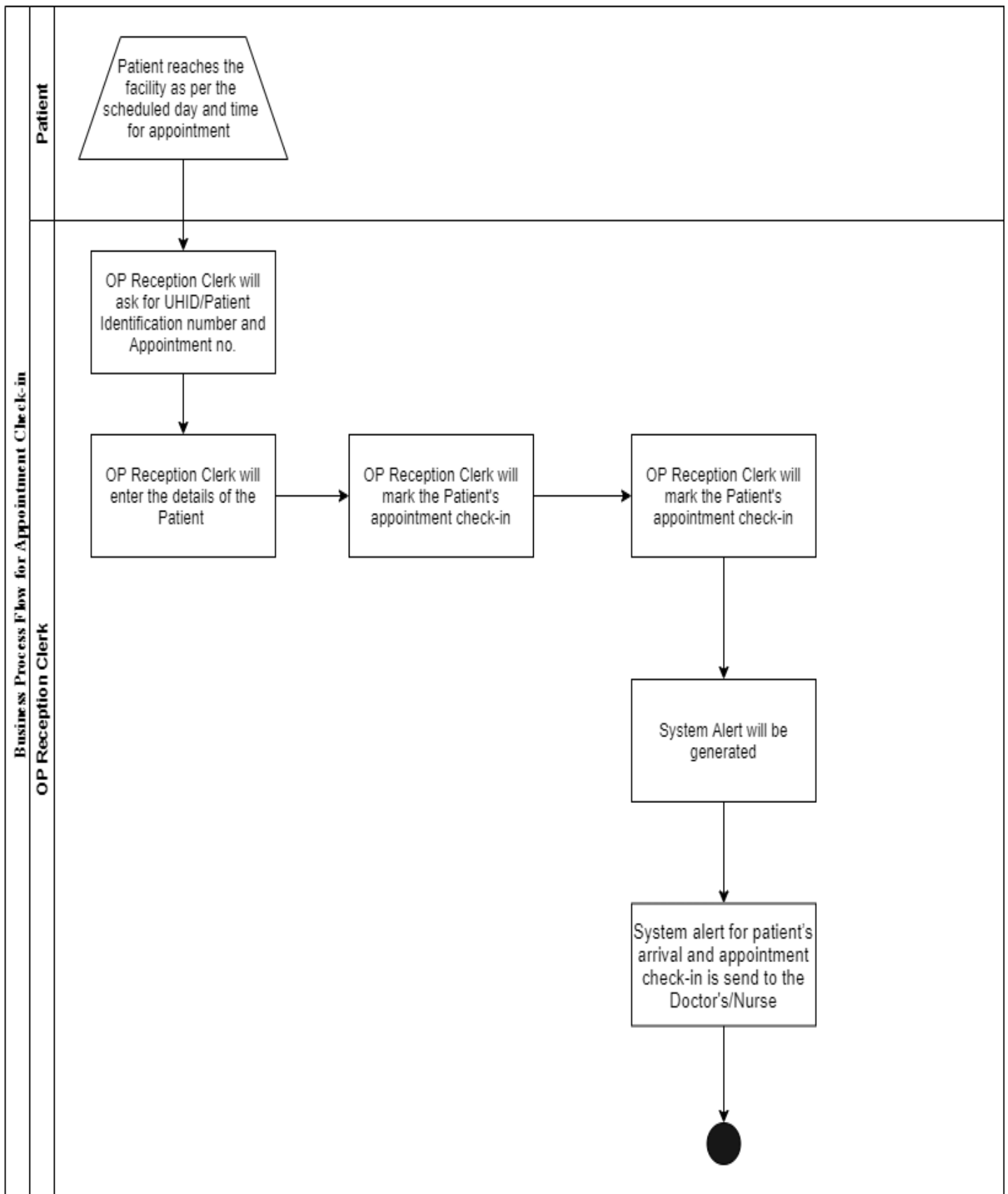


1.6. Other Appointment Processes

1.6.1. Business Process Flow for Appointment Check-in

Description	Appointment Check-in is done once the patient arrives on the scheduled day and time for the appointment. A minimal time period flexibility (may vary facility wise) may be applicable to a booked appointment before cancelling/ rescheduling it.
Users	OP Reception Clerk
Pre-requisites	Existing appointment
Business Process Details	A booked appointment is accepted once the patient arrives at the scheduled day and time. A rule engine based minimum time period flexibility may be set for creating a system alert for cancellation/ rescheduling of the booked appointment.
Steps	<ul style="list-style-type: none"> • Patient reaches the facility on the scheduled day and time for the appointment and connects with the reception clerk • OP reception clerk asks for patient's identification details and appointment number • Upon receiving the patient's details, OP reception clerk checks in the appointment • Doctor/ Nurse will receive a system alert for patient's arrival and appointment check-in
Outputs	<ul style="list-style-type: none"> • Appointment Check-in
Messages & Alerts	<ul style="list-style-type: none"> • Message to doctor/ nurse for patient's arrival and appointment check-in

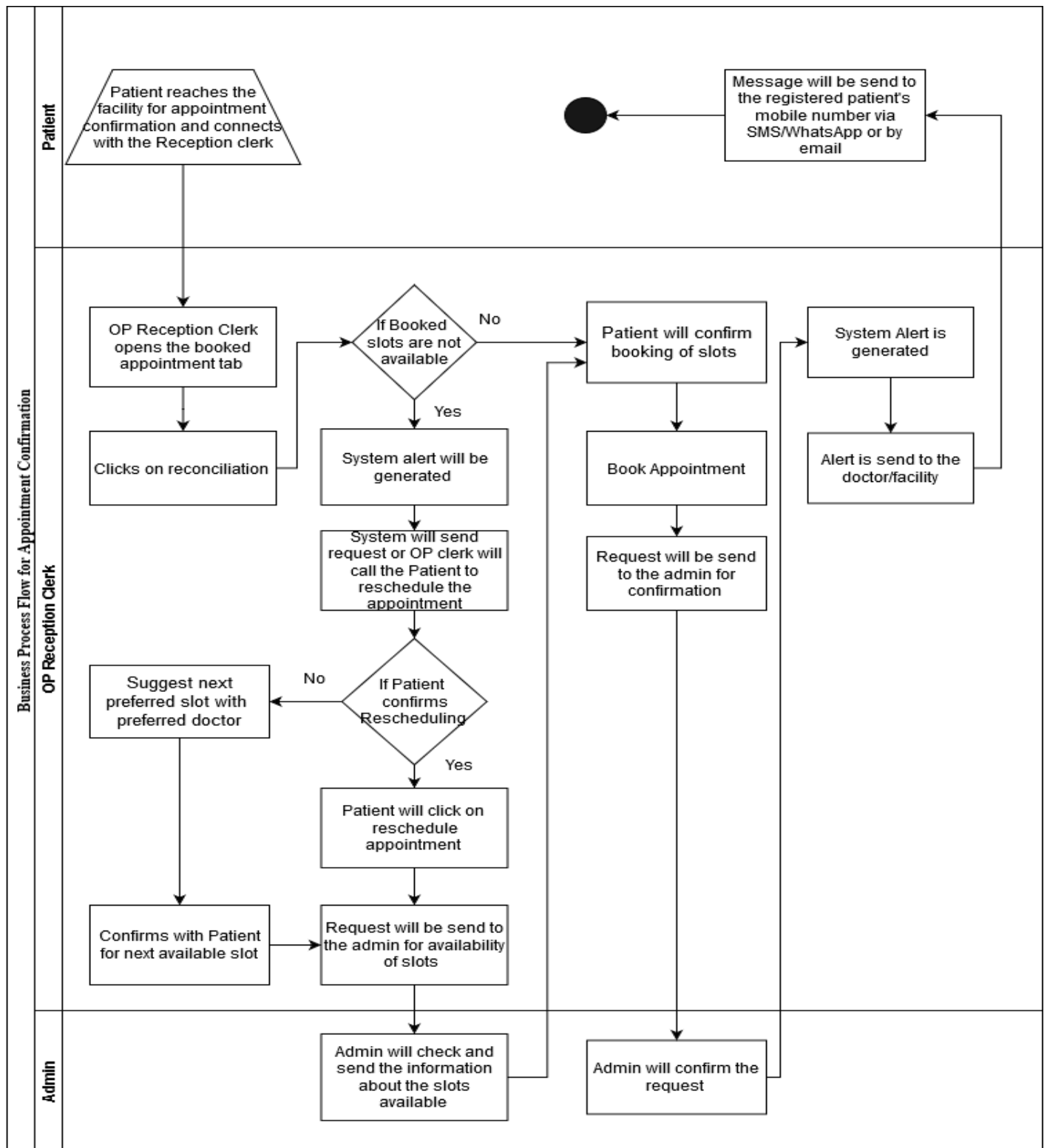
Visio: Business Process Flow for Appointment Check-In



1.6.2. Business Process Flow for Appointment Confirmation

Description	<p>Appointment confirmation is the reconciliation of the booked appointment for a patient with the available slots in the preferred facility. This is particularly useful in ecosystems where different systems may not be integrated or may be integrated but not in real time. As a result, it may be possible that an available slot is visible on an online portal or on an appointment screen but may not be available on the backend system.</p> <p>The process includes appointment booking by a patient/ clerk, which is then reconciled with the facility's information system for a final confirmation.</p>
Users	OP Reception Clerk
Pre-requisites	Existing appointment
Business Process Details	<p>A booked appointment is confirmed when the facility's information system confirms the available slot for the booking. It generally involves reconciling the booked slot information with the available slots in the information system of the facility. Upon reconciliation, a confirmation or request for rescheduling message is sent to the patient.</p> <p>The confirmation time period may be dependent on whether the systems are integrated with each other and the frequency of update on different information systems.</p>
Steps	<ul style="list-style-type: none"> • Facility's information system receives the booked appointment information • OP reception clerk opens the booked appointment tab and click on reconciliation with the system • Upon reconciliation with the available slot, the system will send a confirmation SMS/ WhatsApp/ Email to the patient and to the relevant stakeholder • Upon non-availability of the booked slot, the system will send a rescheduling request to the patient • Upon rescheduling request, the OP reception clerk may also call up the patient to reschedule their appointment on call
Outputs	<ul style="list-style-type: none"> • Confirmed appointment • Request for Rescheduling of Appointment • SMS/ WhatsApp/ Email
Messages & Alerts	<ul style="list-style-type: none"> • System alert for confirmation of appointment to the doctor/ nurse/ patient • Message to the patient/ family for confirmation/ rescheduling of appointment

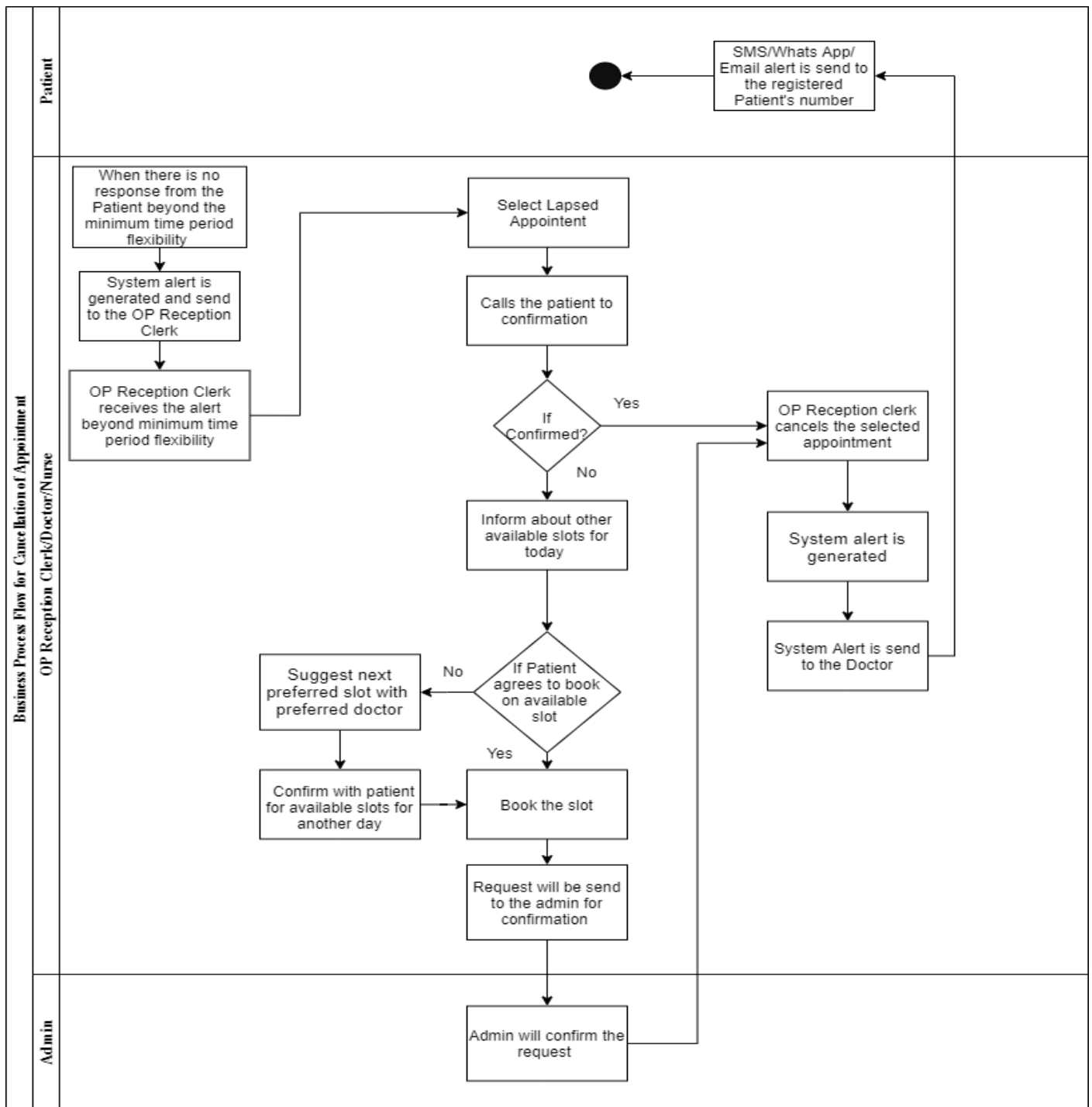
Visio Business Process Flow for Appointment Confirmation



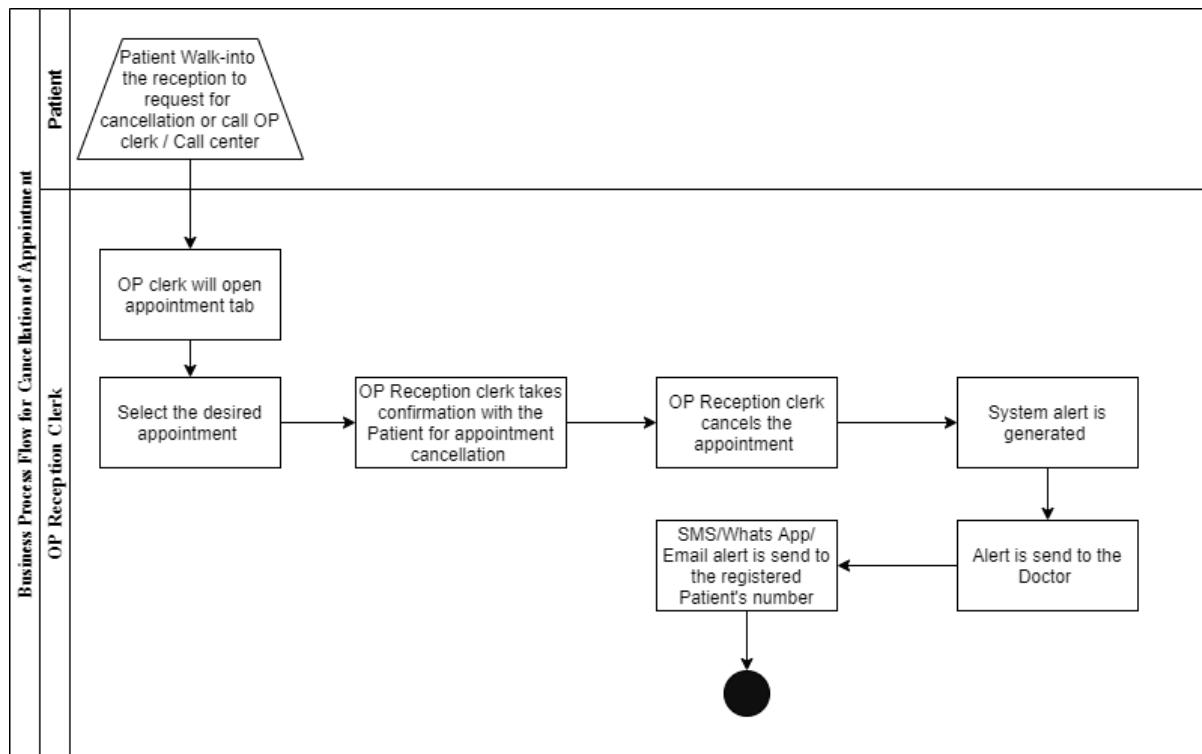
1.6.3 Business Process Flow for Cancellation of Appointment

Description	<p>Cancellation of Appointment is done when either there is</p> <ul style="list-style-type: none"> • a no show from the patient on the scheduled day and time or • upon patient's request for cancellation or rescheduling or upon patient's cancelling their appointment online. A minimal time period flexibility may be applicable to a booked appointment before cancelling/ rescheduling it.
Users	OP Reception Clerk, Patient, Doctor, Nurse, Call Center Personnel
Pre-requisites	<ul style="list-style-type: none"> • Existing appointment • Online Portal
Business Process Details	<p>A booked appointment may be cancelled if the patient doesn't show up beyond the minimal time period flexibility applicable to the organization. The minimal time period may be different for different facilities. A rule engine basis a minimal time period flexibility may be set for creating a system alert for cancellation of the booked appointment.</p> <p>The patient may also call up the reception desk to cancel or reschedule the meeting. Alternately, the patient may go to the online portal and cancel the meeting by themselves.</p>
Steps	<p>If there is no show from the patient</p> <ul style="list-style-type: none"> • OP reception clerk may get a system alert beyond the minimum time period flexibility • Opens the appointment tab, select the lapsed appointment and calls patient to confirm the no show and request for cancellation • Upon confirmation of cancellation or no response from the patient, the OP reception clerk cancels the selected appointment • Upon cancellation, the doctor will get a system alert • Upon cancellation, the patient will get an SMS/ WhatsApp/ Email alert on cancellation <p>If there is a patient's request for cancellation</p> <ul style="list-style-type: none"> • OP reception clerk/ Call center personnel may get a call from the patient or the patient can directly walk-into the reception clerk and request for cancellation • Opens the appointment tab, select the desired appointment • Upon confirmation of cancellation, the OP reception clerk/ Call center personnel cancel the appointment • Upon cancellation, facility/ doctor will get a system alert • Upon cancellation, the patient will get an SMS/ WhatsApp/ Email alert on cancellation <p>If the patient cancels the appointment online</p> <ul style="list-style-type: none"> • A patient opens the universal online portal or the online portal of the desired facility • In case universal portal, patient selects the desired facility • Goes to appointment tab and look for booked appointments • Selects the desired appointment and cancels it • The system will pop up an alert before final confirmation of cancellation • Upon cancellation, the patient will receive the cancellation details • Upon cancellation, facility/ doctor will get a system alert
Outputs	<ul style="list-style-type: none"> • Cancelled Appointment • Email/ WhatsApp/ SMS
Messages & Alerts	<ul style="list-style-type: none"> • Message to relevant stakeholder upon cancellation of appointment • Message to patient/ family member upon cancellation of appointment

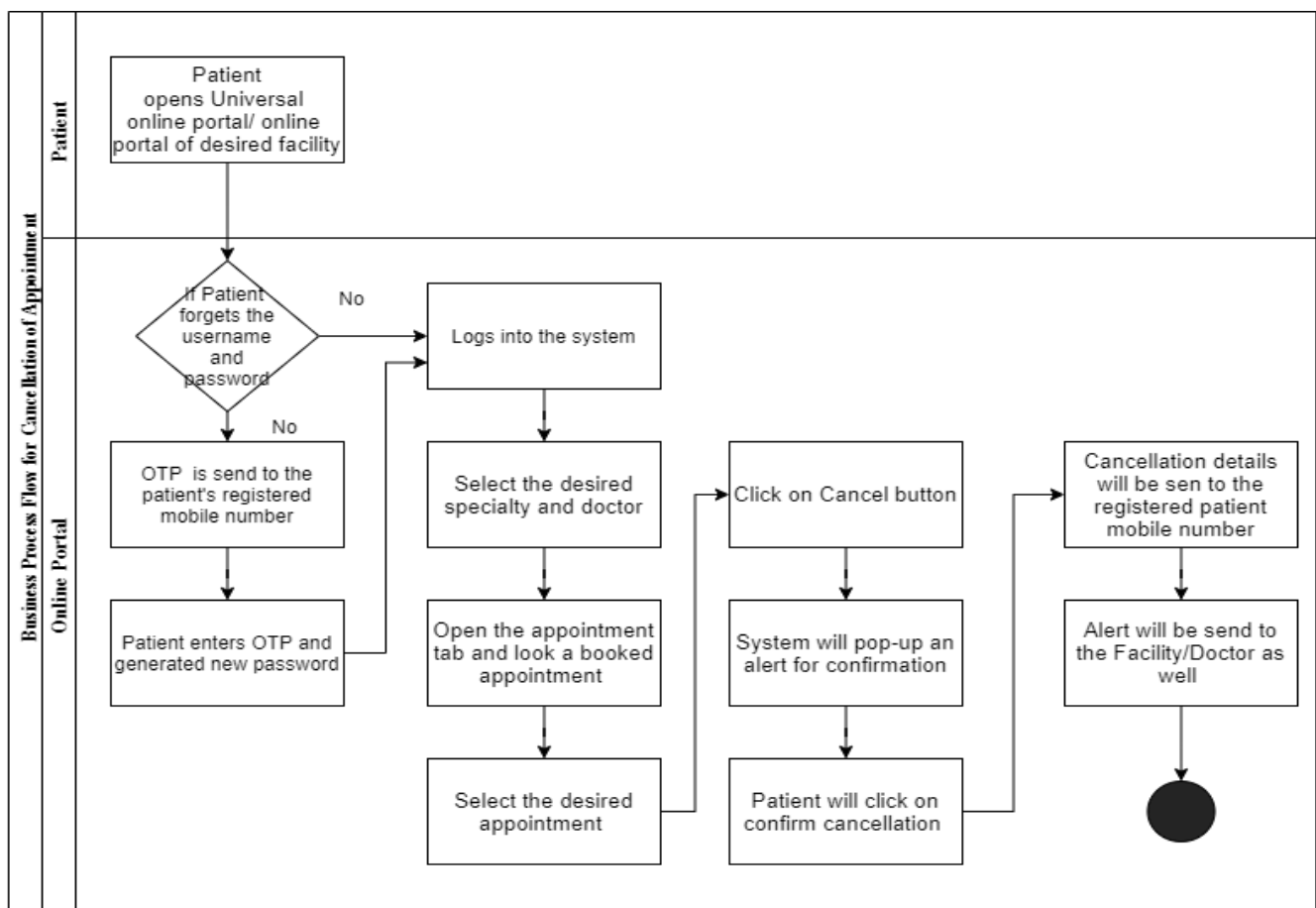
Visio: If there is no show from the patient



Visio: If there's a patient's request for cancellation



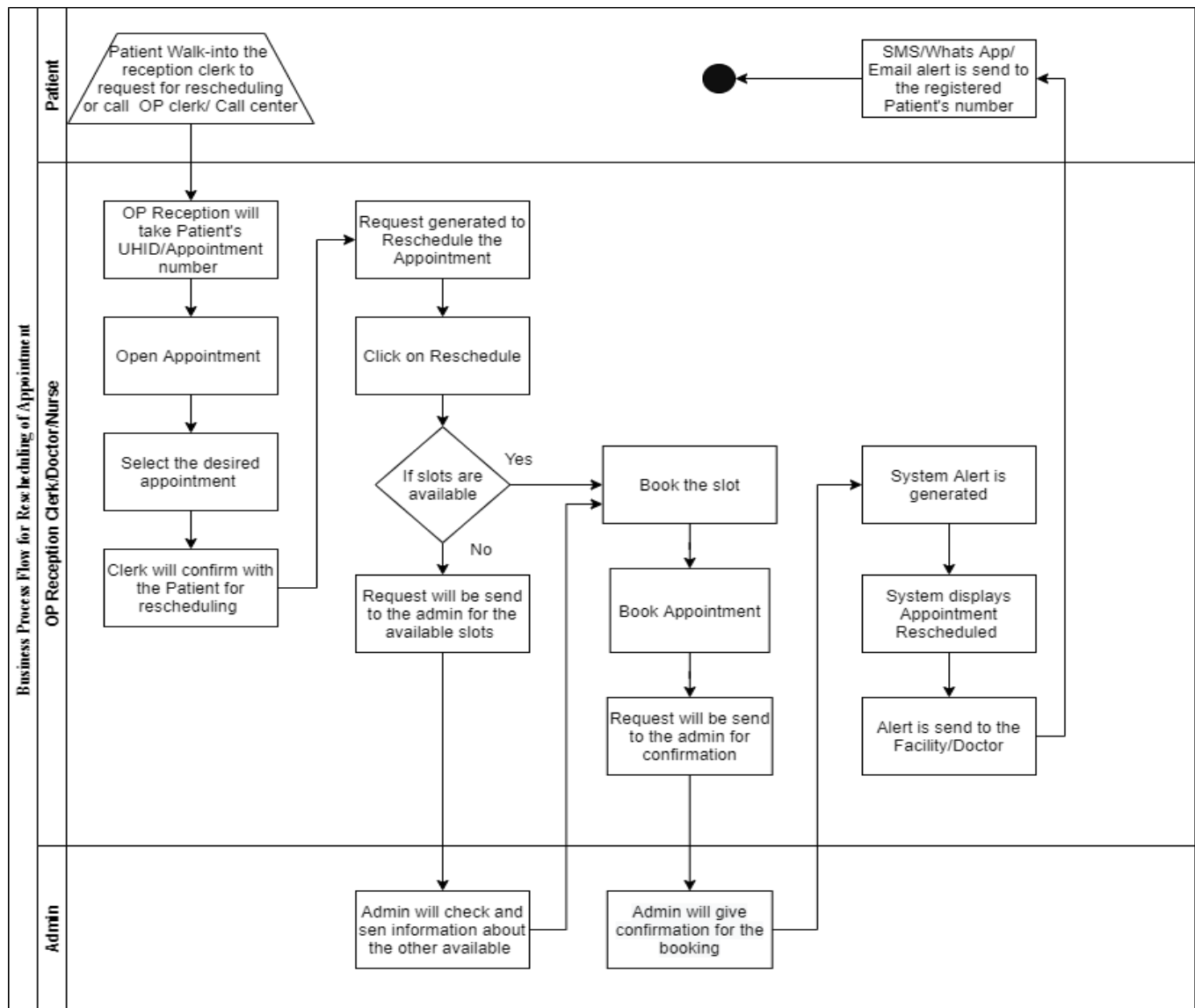
Visio: If the patient cancels the appointment online



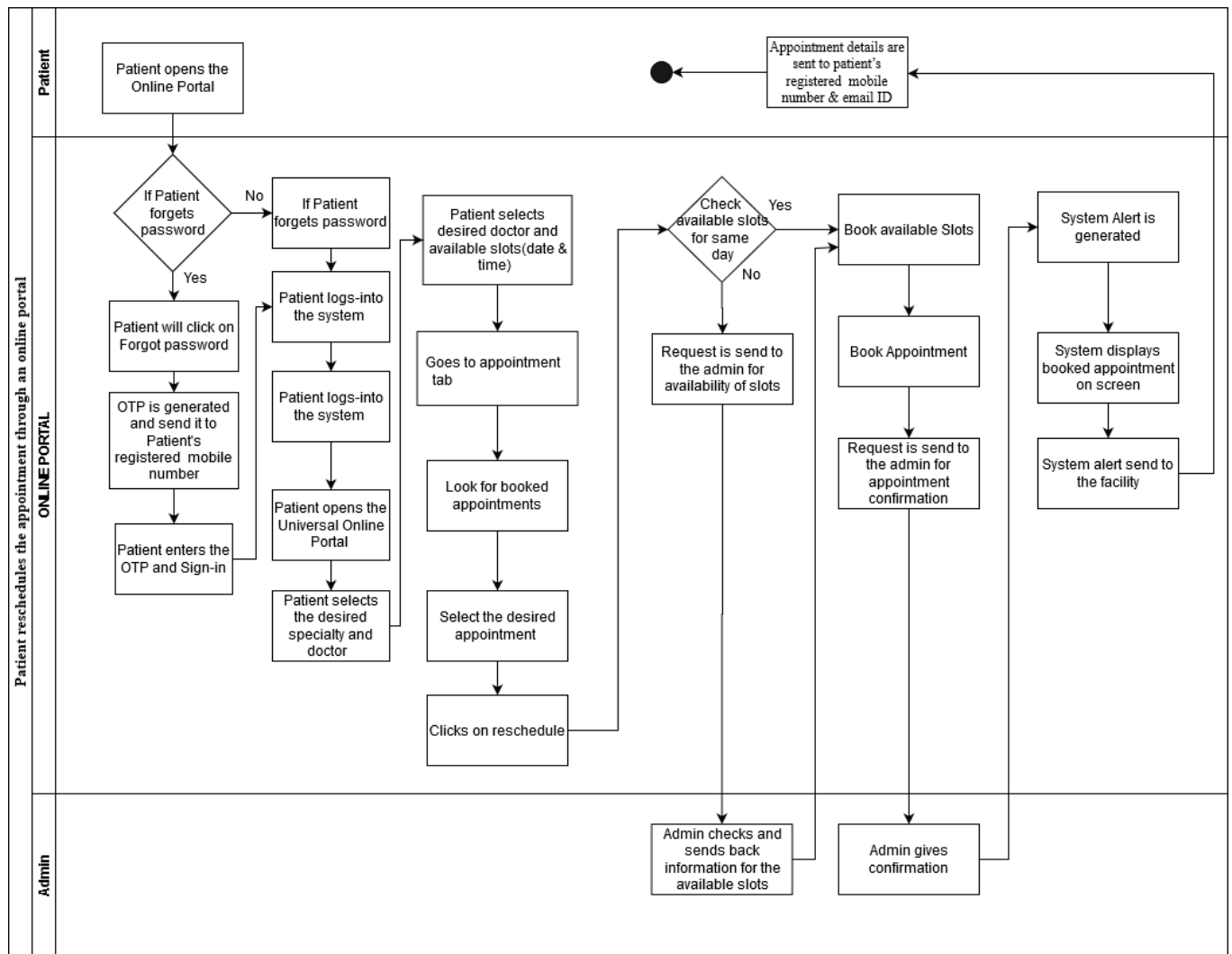
1.6.4. Business Process Flow for Rescheduling of Appointment

Description	<p>Rescheduling of Appointment is done</p> <ul style="list-style-type: none"> • upon patient's request for rescheduling or • upon patient's rescheduling their appointment online • upon doctor's request for rescheduling
Users	OP Reception Clerk, Patient, Doctor, Nurse
Pre-requisites	<ul style="list-style-type: none"> • Existing appointment • Online Portal
Business Process Details	Booked appointments may be rescheduled if the patient may call up the reception desk to reschedule the meeting. Alternately, the patient may go to the online portal and reschedule the meeting by themselves. A doctor may also reschedule one or multiple appointments in a day or across days if they are unavailable for the booked slots.
Steps	<p>If there is a patient's request for rescheduling</p> <ul style="list-style-type: none"> • OP reception clerk/ Call center personnel may get a call from the patient or the patient can directly walk into the reception clerk and request for rescheduling • Opens the appointment tab, select the desired appointment • Upon confirmation of rescheduling, the OP reception clerk/ Call center personnel click on reschedule • OP reception clerk/ call center employee asks the patient for suitable date and time • Confirm with patient for available slots for another day • Upon confirmation, reschedule appointment • System displays the rescheduled appointment on the screen • Upon rescheduling, facility/ doctor will get a system alert • Upon rescheduling, the patient will get an SMS/ WhatsApp/ Email alert <p>If the patient reschedules the appointment online</p> <ul style="list-style-type: none"> • A patient opens the universal online portal or the online portal of the desired facility • In case universal portal, patient selects the desired facility • Goes to appointment tab and look for booked appointments • Selects the desired appointment and click on reschedule • The system will pop up an alert before final confirmation of rescheduling • Upon confirmation, patient opens the available slots for the desired day • Selects a convenient available slot for the day • Upon selection, patient reviews the selected slot and click book appointment • System displays the booked appointment on the screen • Rescheduled Appointment details are sent to patient's mobile number & email ID • A system alert is sent to the relevant facility <p>If the doctor requests for a reschedule of his appointments</p> <ul style="list-style-type: none"> • Doctor opens the 'My Appointments' Tab or request the Nurse/ Administrative Personnel to reschedule the selected slots • Doctor/ Nurse/ Administrative Personnel selects the desired slots • Upon reviewing/ confirmation of the selected slots and cancel the slots for rescheduling • Upon rescheduling, the patient will receive the rescheduling details • Upon rescheduling, doctor will get a system alert
Outputs	<ul style="list-style-type: none"> • Rescheduled Appointment • Email/ WhatsApp/ SMS
Messages & Alerts	<ul style="list-style-type: none"> • Message to relevant stakeholder upon rescheduling of appointment • Message to patient/ family member upon rescheduling of appointment

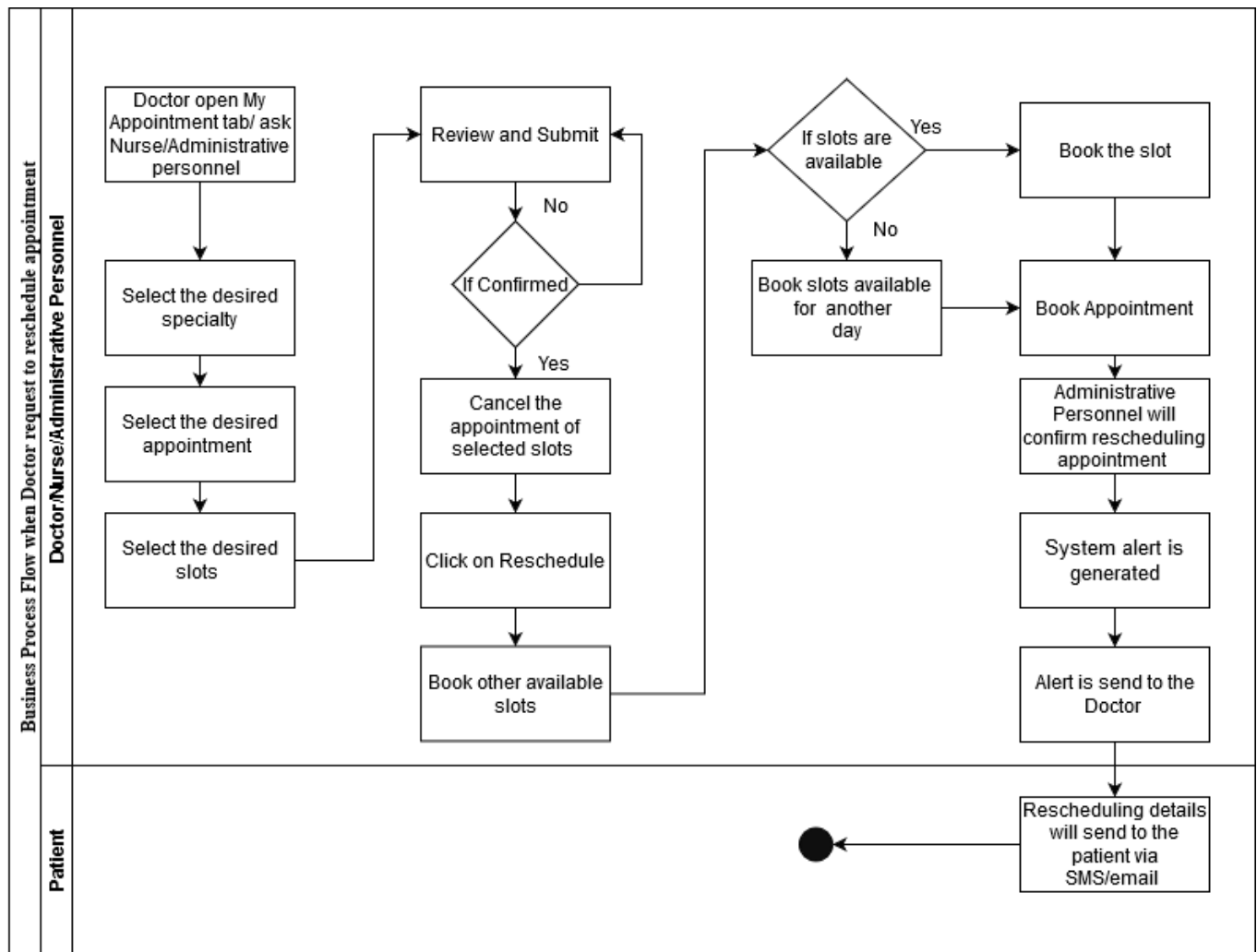
Visio If there is a patient's request for rescheduling



Visio: If the patient reschedules the appointment online



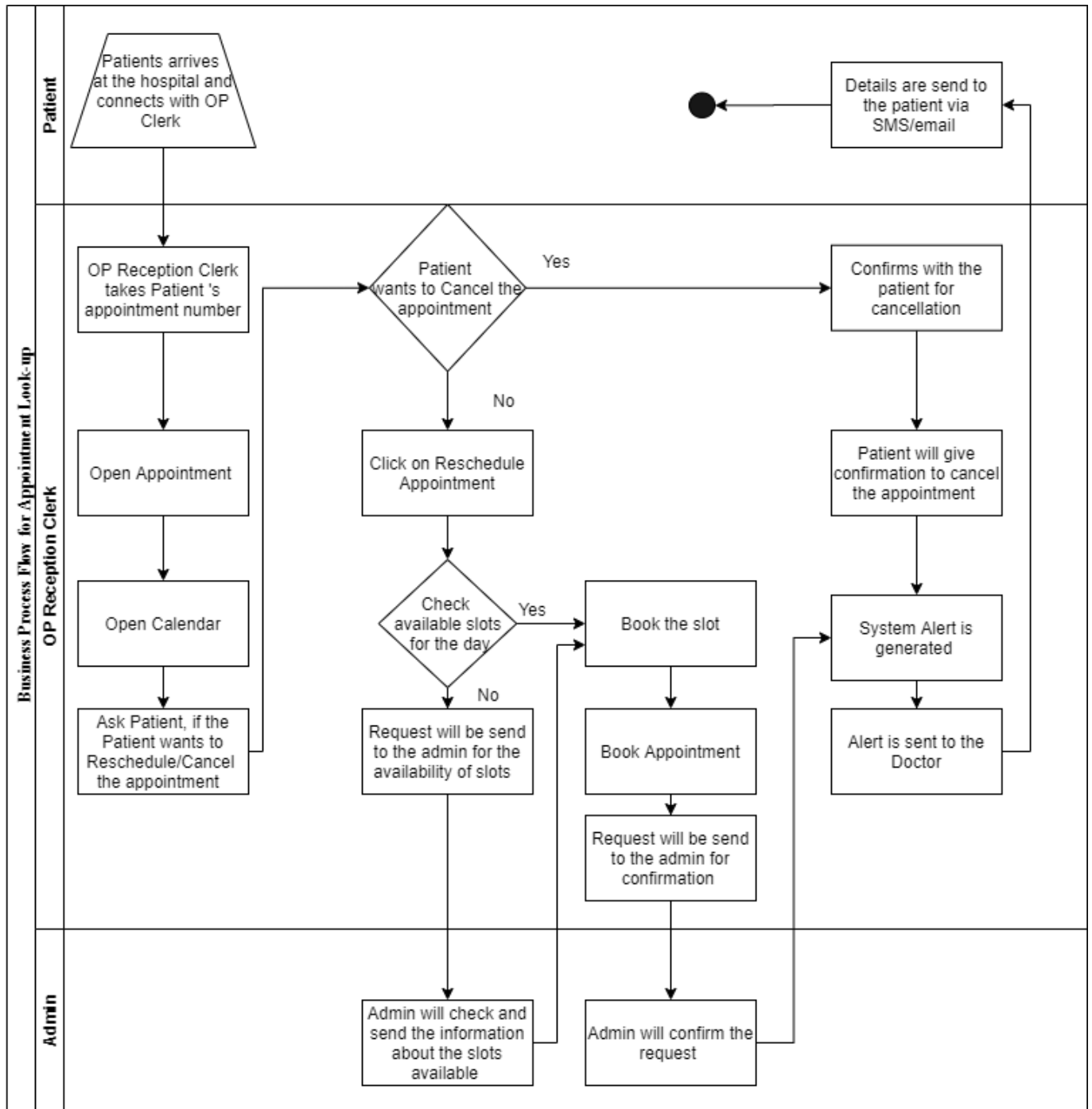
Visio: If the doctor requests for a reschedule of his appointments



1.6.5. Business Process Flow for Appointment Look-up

Description	Appointment Look-up may be needed to internally look for an existing appointment for check-in, cancellation or rescheduling
Users	OP Reception Clerk
Pre-requisites	New Appointment
Business Process Details	Upon patient's arrival in the facility, a booked appointment may need to be checked in to further patient's processes. In cases, where either there is a no show of the patient or there is a request for cancellation/ rescheduling; the appointment need to be looked up to take an action accordingly.
Steps	<ul style="list-style-type: none"> • Patient arrives at the facility for the appointment and connects with the OP reception clerk or calls up the OP reception clerk to cancel or reschedule • OP reception clerk asks for the appointment number from patient and looks up for the appointment in the appointment tab to take necessary action
Outputs	<ul style="list-style-type: none"> • Finding Appointment
Messages & Alerts	<ul style="list-style-type: none"> • System alert on finding an appointment or not finding an appointment

Visio Appointment Look Up

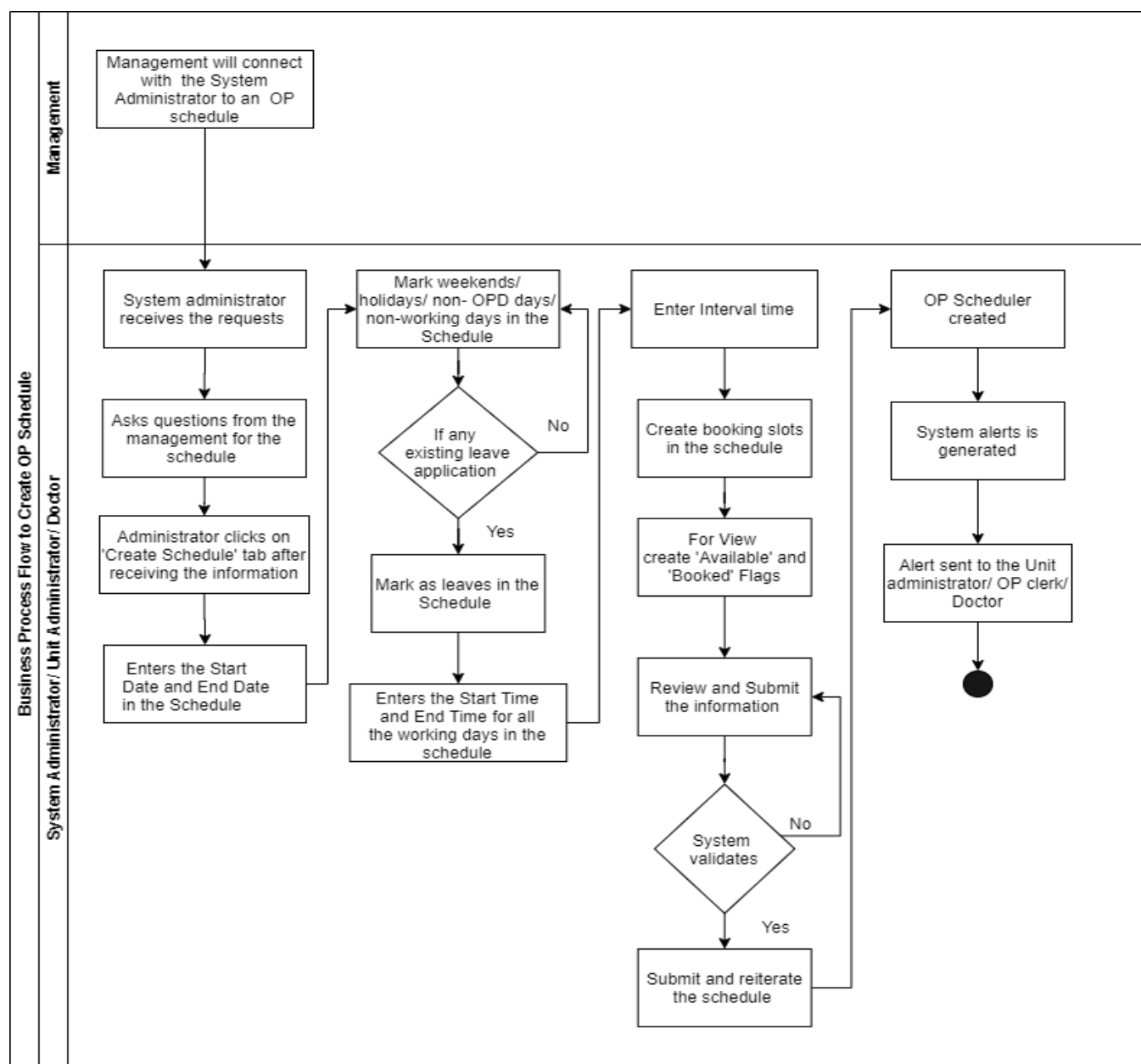


1.7. Scheduling

1.7.1 Business Process Flow for Create OP Schedule

Description	<p>Scheduling aims to improve the match between healthcare resources (doctors, nurses, rooms, equipment, medicines) and patient needs. A good scheduling system reduces waits for patients while also improving the utilization of critical resources. It does this by tracking the availability of resources, projecting future demands for service and automating the assignment of resources to needs.</p> <p>A solution may help: schedulers to set appointments and assign resources, doctors who may wish to input preferences and constraints, patients who sometimes book their own appointments, management who monitor and control performance as well as allocate resources, for communication among and between departments, so that the arrival of patients and allocation of resources can be anticipated with greater accuracy.</p> <p>Create OP Schedule is the process to create a doctor's roster for a given period (weeks/ months) which would also involve the daily roster for that given period. It involves considering the working and non-working days; working and non-working hours; interval period between two appointments, etc.</p>
Users	OP Reception Clerk, Doctor, Nurse, Unit Administrator, System Administrator
Pre-requisites	None
Business Process Details	<p>Creating an OP scheduler for a doctor usually involves considering of the following</p> <ul style="list-style-type: none">• Start and End Date for the Scheduler• OPD working and Non-working days of the Doctor• Start Time and End Time during the day for the Doctor• Non-working hours/ break time during the day for the Doctor• Agreed interval time for the Doctor <p>Basis the above details, a customized scheduler can be prepared for each doctor</p>
Steps	<ul style="list-style-type: none">• System Administrator will receive a request from the management to create an OP Scheduler for a given doctor• Upon receiving the request, the system administrator will ask for the details from the management basis which the schedule would be created• Upon receiving the information, the administrator will click on 'Create Schedule' tab• Enters the Start Date and End Date in the Schedule• Mark weekends/ holidays/ non- OPD days/ non-working days for the doctor in the schedule. If there is information on existing leave application, they may also be marked as leaves in the schedule• Enters the Start Time and End Time for a working day and applies to all the working days in the schedule• Enters the interval time and create booking slots in the schedule• Also create 'Available' and 'Booked' Flags for viewing• Review and match the information provided by the management for a particular doctor• Submits and reiterate the schedule• Unit Administrator, Doctor and the OP reception clerk will get a system alert for OP schedule creation
Outputs	<ul style="list-style-type: none">• OP Schedule
Messages & Alerts	<ul style="list-style-type: none">• Message to relevant provider/ department and OP reception clerk for OP Schedule creation

Visio Create OP Schedule

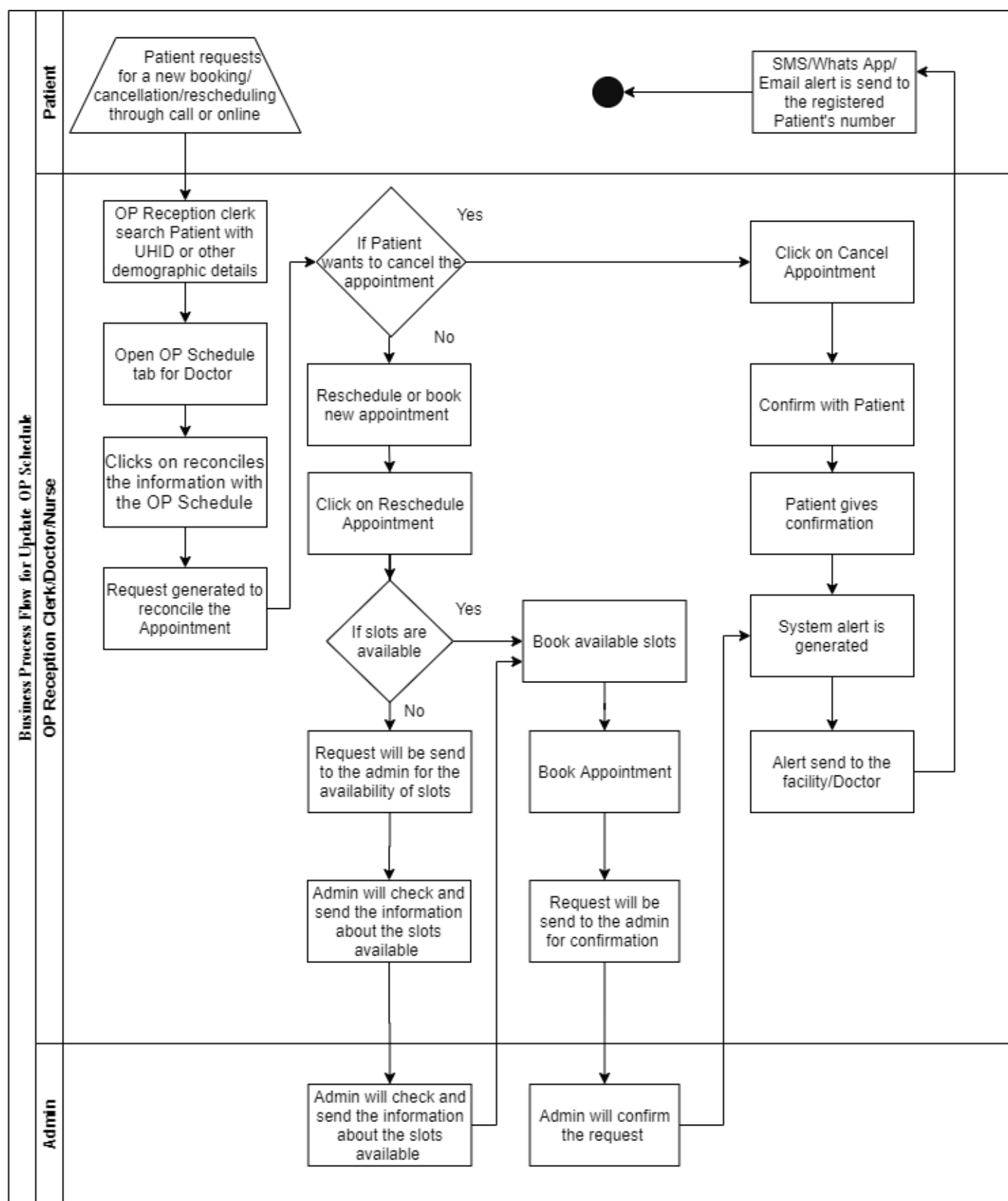


1.7.2. Business Process Flow for Update OP Schedule

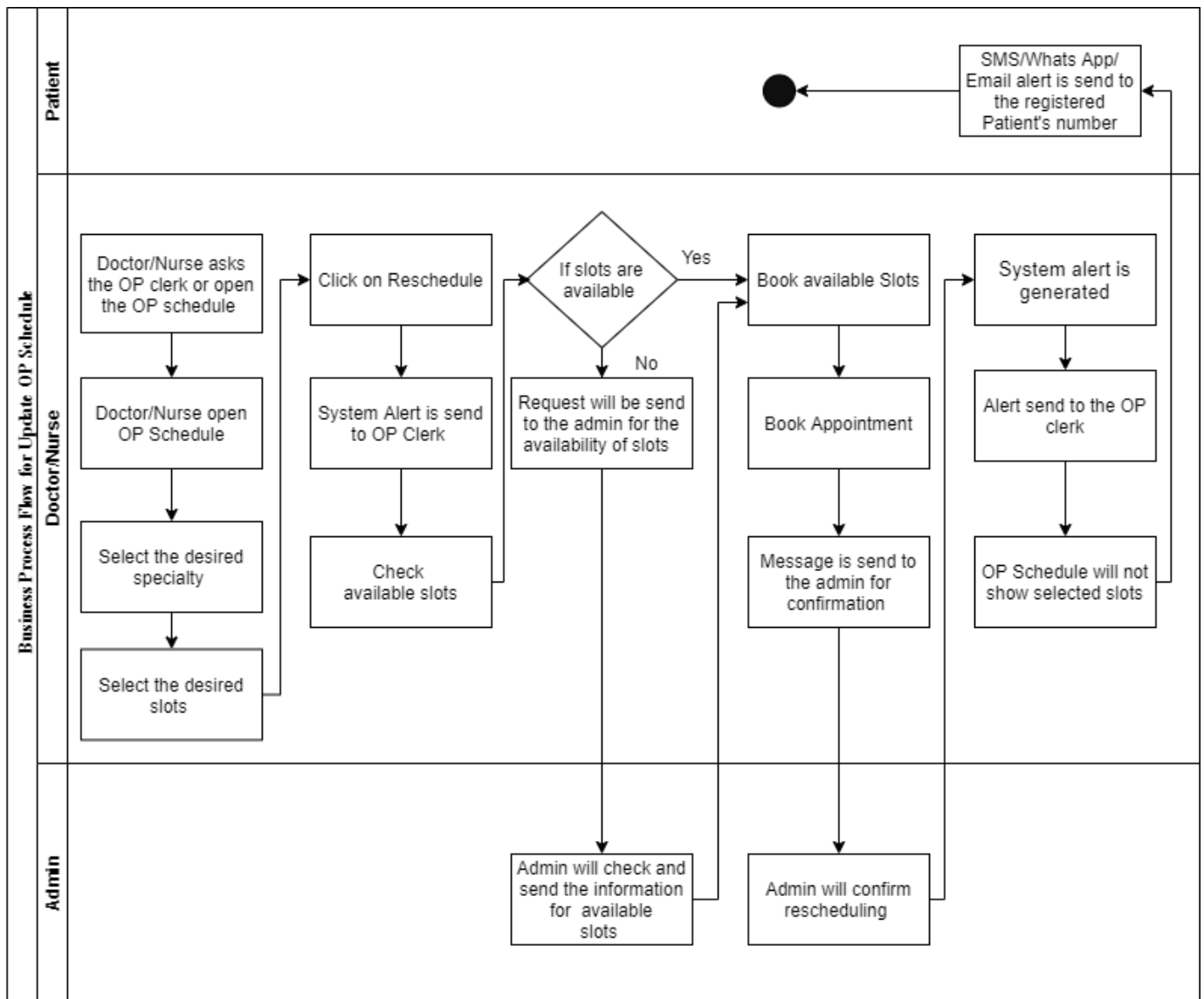
Description	Update OP Schedule is the process to update an information on the OP schedule of the doctor basis if an appointment has been cancelled or rescheduled either by the patient or the doctor; or if a new appointment has been booked against an available slot.
Users	OP Reception Clerk, Doctor, Nurse
Pre-requisites	Existing Appointment
Business Process Details	Update OP schedule involves updating either a cancellation/ rescheduling/ new appointment booking information in the schedule. It can be either managed by the doctor/ nurse managing the system or by the OP reception clerk. It can also occur, if the doctor is not available for few given slots and have to reschedule the

	bookings.
Steps	<p>If the patient requests for a new booking, cancellation, rescheduling</p> <ul style="list-style-type: none"> • OP reception clerk receives information from patient through a call or online portal to cancel/ reschedule/ book a new appointment • Opens the OP Schedule tab for the Doctor • Reconciles the information with the OP Schedule for the Doctor • Upon reconciliation, the OP reception clerk updates the information accordingly • Doctor/ Nurse receives a system alert for the update in OP Schedule <p>If the doctor needs to reschedule some slots</p> <ul style="list-style-type: none"> • Doctor/ Nurse opens the OP Schedule • Clicks on the selected slots they need to reschedule • Select on reschedule • System alert sent to OP reception clerk • SMS/ WhatsApp/ Email sent to patient for reschedule request • OP schedule will not show the selected slots
Outputs	<ul style="list-style-type: none"> • Update in OP Schedule • SMS/ WhatsApp/ Email
Messages & Alerts	<ul style="list-style-type: none"> • System alert to Doctor/ Nurse/ OP Reception Clerk for the update in OP Schedule • Message to patient/ family for rescheduling of appointment

Visio Update OP Schedule



Visio If the doctor needs to reschedule some slots

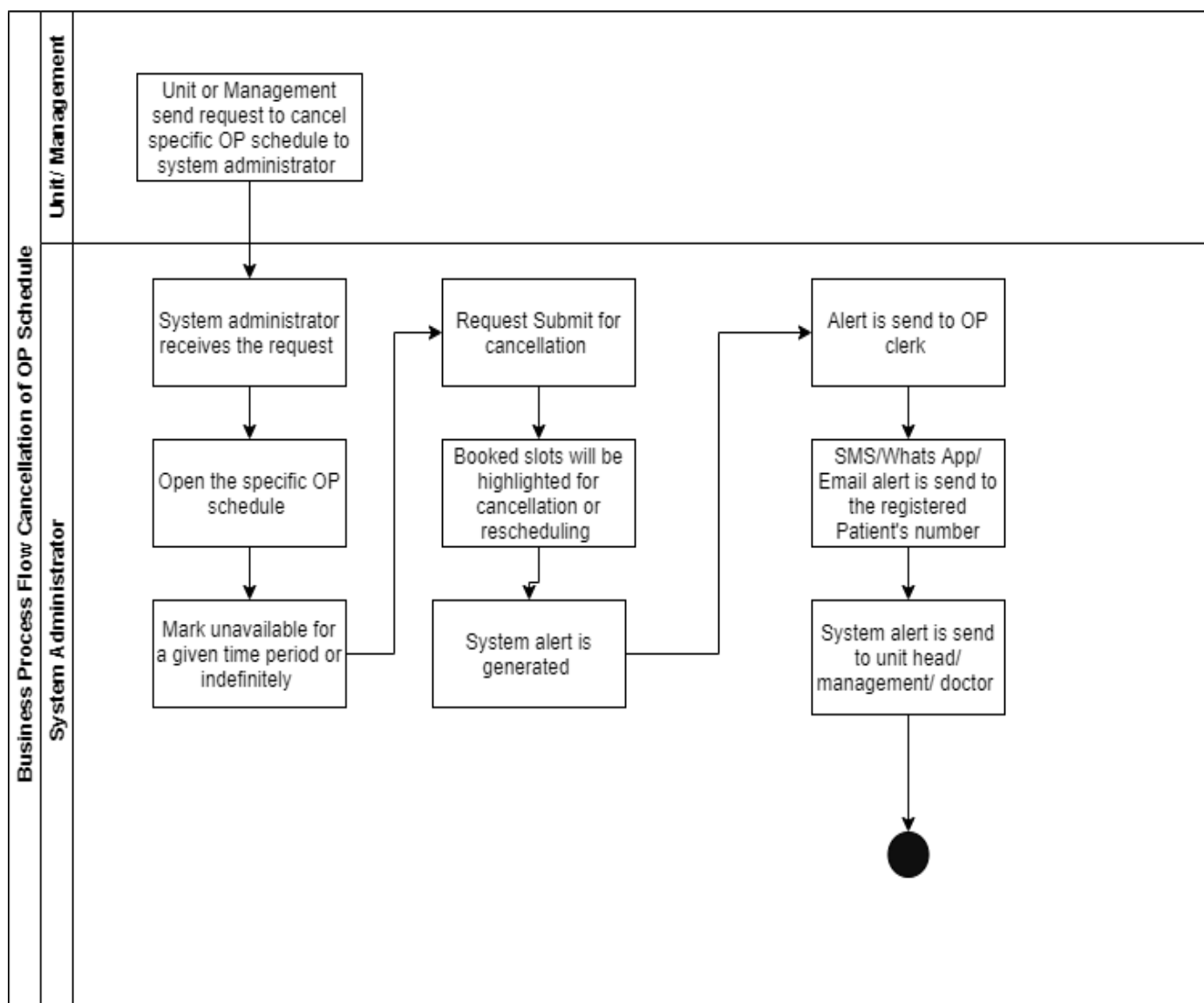


1.1.1. Business Process Flow for Cancel OP Schedule

Description	<p>Cancel OP Schedule is applicable in circumstances when either the entire unit is moving out or the doctor is moving out or the doctor is going to be unavailable for an extended period of time.</p> <p>As a result, the OP Schedule for the particular unit/ doctor would be made unavailable for any bookings.</p>
Users	System Administrator
Pre-requisites	Existing OP Schedule
Business Process Details	Cancel OP Schedule is the process to cancel the schedule when the doctor/ respective unit is not available for a considerable time and therefore, no slots can be booked against the doctor's time.
Steps	<ul style="list-style-type: none"> System administrator receives a request from either the unit or management to cancel a specific OP schedule Upon receiving the request, the administrator would select the specific OP schedule and mark them unavailable for the given period or indefinitely Upon cancellation, if there are booked slots, they will be highlighted for cancellation/

	rescheduling <ul style="list-style-type: none"> • System alert sent to OP reception clerk • SMS/ WhatsApp/ Email sent to patient for reschedule request • System alert sent to unit head/ management/ doctor for cancellation
Outputs	<ul style="list-style-type: none"> • Cancelled OP Schedule • SMS/ WhatsApp/ Email
Messages & Alerts	<ul style="list-style-type: none"> • System alert to Doctor/ Nurse/ OP Reception Clerk/ Unit manager for the cancellation of OP Schedule • Message to patient/ family for rescheduling of appointment

Visio Cancel OP Schedule



1.2. Required MDDS Data Elements

1.2.1. Entity: Generic

Data Elements	MDDS Codes	Data Format	Maximum Size	Code Directory
Time	05.001.0001	HH:MM: SS	8	
Date	G00.01	dd/mm/yyyy	10	
FIR No.	05.001.0002	Varchar	50	
Alternate Identifier Type	05.001.0003	Integer	2	
Alternate Identifier	05.001.0004	Varchar	254	
Alternate Identifier Format	05.001.0005	Bytes	20	
Comments	05.001.0007	Varchar	99	
Healthcare Application Number	05.001.0019	Integer	5	CD05.013
Code System Qualifier Type	05.001.0020	Char	1	
Code System Qualifier	05.001.0021	Varchar	15	CD05.032
System of Medicine	05.001.0022	Integer	2	CD05.030
Document ID	05.001.0023	Varchar	50	
Reference Document ID	05.001.0024	Varchar	50	
Non-Clinical Document Type	05.001.0025	Integer	2	CD05.034
Reference Document	05.001.0026	Varchar	254	
Non-Clinical Document	05.001.0027	Varchar	4096	

1.2.2. Entity: Person

Data Elements	MDDS Codes	Data Format	Maximum Size	Code Directory
Unique Health Identification Number	NDHB	Integer	12	Refer to G01.01
Alternate Unique Identification Number (UID) Type	05.002.0001	Integer	2	
Alternate Unique Identification Number (UID)	05.002.0002	Varchar	Max. Size =18 10 - PAN Card 08 - Passport No. 18 - Voter ID 18 - Any other Identifier	

1.2.3. Entity: Patient

Data Elements	MDDS Codes	Data Format	Maximum Size	Code Directory
Provider's Patient ID	05.003.0001	Varchar	18	
Patient Arrival Time	05.003.0014	HH:MM:SS	8	
Patient Arrival Date	05.003.0015	dd/mm/yyyy	10	Refer to G00.01
Reason for visit	05.003.0016	Varchar	99	
Patient Landline Number	05.003.0011	Varchar	8	Refer to G00.06- 02-05
Patient Mobile Number	05.003.0012	Char	10	Refer to G00.09
Patient Email Address/URL	05.005.0008	Varchar	254	Refer to G01.02

1.2.4. Entity: Employee

Data Elements	MDDS Codes	Data Format	Maximum Size	Code Directory
Employee ID	05.004.0053	Varchar	18	

1.2.5. Entity: Provider

Data Elements	MDDS Codes	Data Format	Maximum Size	Code Directory
Unique Individual Health Care Provider Number	05.005.0001	Varchar	18	
Unique Individual Health Care Provider Number Type	05.005.0002	Integer	2	Refer to CD05.008.
Care Provider Landline Telephone Number	05.005.0006	Varchar	8	Refer to G00.06- 02-05
Care Provider Mobile Number	05.005.0007	Char	10	Refer to G00.09

Care Provider Email Address/URL	05.005.0008	Varchar	254	Refer to G01.02
Care Provider Name	05.005.0009			Refer to G01.02
Health Service Provider Role code	05.005.0010	Integer	2	Refer to CD05.009
Health Service Provider Role Free Text	05.005.0011	Varchar	99	
Health Service Provider Type	05.005.0012	Integer	2	Refer to CD05.010

1.2.6. Entity: Facility

Data Elements	MDDS Codes	Data Format	Maximum Size	Code Directory
Unique Facility Identification Number	05.008.0001	Integer	10	Refer to CD05.001
Facility Type Code	05.008.0002	Integer	2	Refer to CD05.002
Facility Service Code	05.008.0009	Varchar	18	Refer to CD05.043
Facility Specialty Code	05.008.0010	Integer	3	Refer to CD05.011
Department Name	05.008.0015	Varchar	99	Refer to CD05.090
Referral Facility Identification Number	05.008.0019	Integer	10	Refer to CD05.001
Referral Facility Type Code	05.008.0020	Integer	2	Refer to CD05.002
Referral from Facility Identification Number	05.008.0021	Integer	10	Refer to CD05.001
Referral from Facility Type Code	05.008.0022	Integer	2	Refer to CD05.002
Facility Global Unique Identifier (GUID)	05.008.0025	Bits	26	

1.2.7. Other Elements

Data Elements	MDDS Codes			
Appointment Booking Status Code	New			
Appointment Provider Availability Status code	New			
Appointment Session Availability Status Code	New			
Resource Schedule Availability Status Code	New			
Appointment Session Start Date	G01.01	dd/mm/yyyy	10	Refer to G00.01
Appointment Session End Date	G01.01	dd/mm/yyyy	10	Refer to G00.01
ResourceScheduleStartDate	G01.01	dd/mm/yyyy	10	Refer to G00.01

ResourceScheduleEndDate	G01.01	dd/mm/yyyy	10	Refer to G00.01
ResourceScheduleStartTime	05.001.0001	HH:MM:SS	8	
ResourceScheduleEndTime	05.001.0001	HH:MM:SS	8	
ResourceType	New			
AppointmentRequestReferenceNumbernk	New			
AppointmentRequestedDate	G01.01	dd/mm/yyyy	10	Refer to G00.01
AppointmentRequestedTime	05.001.0001	HH:MM:SS	8	
AppointmentChannel (Portal,Mobile,InPerson etc.)	New			

AppointmentMicroservice – Technical Specification based on Microservice Event Sourcing Architecture

Value Objects or Data Transfer Objects Specification

ProviderScheduleVO

ResourceScheduleId
ResourceScheduleStartDate
ResourceScheduleEndDate
ResourceScheduleStartTime
ResourceScheduleEndTime
Array of NonWorkingDates //Schedule creation will exclude non working days and leaves
ResourceType(default='CareProvider')
UniqueIndividualHealthCareProviderNumber
UniqueFacilityIdentificationNumber
Set(Collection) of AppointmentSessionSlotsVO Objects

AppointmentSessionSlotsVO

AppointmentSessionSlotsId
AppointmentSessionStartDate
AppointmentSessionStartTime
AppointmentSessionStartTime
AppointmentSessionEndTime
AppointmentScheduleDate
AppointmentBookingStatusCode
AppointmentSessionAvailabilityStatusCode
AppointmentProviderAvailabilityStatusCode
ProviderScheduleVO for referential integrity

AppointmentVO

AppointmentId
AppointmentReferenceNumber
UniqueHealthIdentificationNumber
PatientName
AlternateIdentifier

AlternateIdentifierType
AppointmentBookingDate
AppointmentBookingTime
AppointmentBookingStatusCode
AppointmentSessionSlotsVO
ReasonForVisit
PatientMobileNumber
PatientLandLineNumber (either Patient LandLine or Mobile Number can be provided)
Patient Email Address/URL
AppointmentChannel
Patient

AppointmentRequestVO

AppointmentRequestId
AppointmentRequestReferenceNumber
UniqueHealthIdentificationNumber
PatientName
AlternateIdentifier
AlternateIdentifierType
AppointmentRequestedDate
AppointmentRequestedTime
AppointmentBookingStatusCode
ReasonForVisit
PatientMobileNumber
PatientLandLineNumber (either Patient LandLine or Mobile Number can be provided)
Patient Email Address/URL
AppointmentChannel

REST API (API Endpoints) Specification

GetAllProvidersSchedulesForAFacilityLocation

Method Type– POST

Request parameter – UniqueFacilityIdentificationNumber

response – List (collection) of ProviderScheduleVO Objects

GetProviderActiveSchedule

Method Type– POST

Request parameter –UniqueIndividualHealthCareProviderNumber

Response parameter– ResourceScheduleVO

GetProviderAppointmentSessionSlotsByDateRange (Slots from Active Schedule only Note – Any CareProvider will have only one active schedule at a time)

Method Type– POST

Request parameter – AppointmentSessionStartDate

AppointmentSessionEndDate

UniqueIndividualHealthCareProviderNumber

Response –List Collection of AppointmentSessionSlotsVO Objects

GetProviderAppointmentSessionSlotsBySessionAvailabilityStatusCode

Method Type– POST

Request parameter

UniqueCareProviderIdentificationNumber

AppointmentSessionAvailabilityStatusCode

Response –List of AppointmentSessionSlotsVO Objects

GetPatientAppointmentsByProviderID

Method Type– POST

Request parameter –

UniqueCareProviderIdentificationNumber

Response –List Collection of AppointmentVO Objects

GetAppointmentsByDate

Method Type– POST

Request parameter – Date

Response –List Collection of AppointmentVO Objects

GetAppointmentsByPatientUHID

Method Type– POST

Request parameter – UniqueHealthIdentificationNumber

Response –List Collection of AppointmentVO Objects

GetAppointmentByPatientMobileNumber

Method Type– POST

Request parameter – Patient Mobile Number

Response –List Collection of AppointmentVO Objects

GetAppointmentSlotsByAppointmentSessionAvailabilityStatusCode *//Slots based on slot availability status*

Method Type– POST

Request parameter

AppointmentSessionAvailabilityStatusCode

Response –List Collection of AppointmentSessionSlotVO Objects

GetAppointmentByVisitNumber

Method Type– POST

Request parameter

EncounterNumber

Response –List Collection of AppointmentVO Objects

BookAppointment

Method Type– POST

Request parameter

AppointmentRequestVO Object

Response

HTTP Status Code 201(Created)

Output – AppointmentVO Object

Failure – Error codes (400 if input request has error or 500 if server could not process request for any reason)

CreateProviderSchedule

Method Type– POST

Request parameter

UniqueCareProviderIdentificationNumber

Response –List Collection of AppointmentVO Objects

updateDoctorSlots

Method Type– PUT

Request parameter

List Collection of AppointmentSessionSlotsVO

Response –List Collection of AppointmentSessionSlotsVOObjects

getAllTimeSlots

Method Type– PUT

Request parameter

providerPatientID

patientName

patientAge

birthOrder

parity

gravida

identityUnknownIndicator

causeOfDeathKnownIndicator

patientAddress

patientAddressType

patientLandlineNumber

patientMobileNumber

patientClass
pregnancyIndicator
durationOfPregnancy
employerName

patientEmployerId
insuredCardID
insuredPolicyID
SecondaryHealthInsurancePolicyID
SecondaryHealthInsurancePolicyIndicator
payorAssignedBeneficiaryID

response

response – HTTP Status 200(ok)

GetTimeSlotBySlotId

Method Type– POST

Request parameter

ResourceScheduleID (ID of the resource schedule generated in database)

Response –List Collection of AppointmentSessionSlotsVO Objects

GetAppointmentByPatientUniqueHealthIdentificationNumber

Method Type– POST

Request parameter

UniquePatientHealthIdentificationNumber

Response –List Collection of AppointmentVO Objects

GetAppointmentsInTimeSlotByDateRange

Method Type– POST

Request parameter

AppointmentSessionStartDate

AppointmentSessionEndDate

Unique Care Provider Identification Number

Response

Response –List Collection of AppointmentVO Objects

GetAppointmentsInDateRangeByAppointmentBookingStatusCode

Method Type– POST

Request parameter

AppointmentSessionStartDate

AppointmentSessionEndDate

AppointmentBookingStatusCode

Response

Response –List Collection of AppointmentVO Objects

GetTimeSlotsByAppointmentProviderAvailabilityStatusCode

Method Type– POST

Request parameter

AppointmentSessionStartDate
AppointmentSessionEndDate
AppointmentProviderAvailabilityStatusCode
Unique Care Provider Identification Number

Response

Response –List Collection of AppointmentSessionSlotsVO Objects

UpdateAppointmentStatus

Method Type– POST

Request parameter
AppointmentVO Object

Response – HTTP Status 200(ok)
4xx in case of error in input parameter
500 in case of server error in processing request

CancelDoctorSchedule

Method Type– POST

Request parameter
AppointmentVO Object

Response – HTTP Status 200(ok)
4xx in case of error in input parameter

GetAppointmentsByStatus

Method Type– POST

Request parameter

Appointment Booking Status Code

Response e – [List collection of AppointmentVO entity](#)

CreateTimeSlotsForProviderSchedule

Method Type– POST

Request parameter

ResourceScheduleVO

StartDate

EndDate

StartTime

EndTime

SlotSize

Response

List collection of AppointmentSessionSlotsVOobjects

MergeAppointmentTimeSlots

Method Type– POST

Request parameter

List of AppointmentSessionSlotsVO (Source)

List of AppointmentSessionSlotsVO (Target)

Response – HTTP Status 200(ok)

4xx in case of error in input parameter
500 in case of server error in processing request

CancelAppointment

Method Type– POST

Request parameter

AppointmentVO object

Response – HTTP Status 200(ok)
4xx in case of error in input parameter
500 in case of server error in processing request

RescheduleAppointment

Method Type– POST

Request parameter

AppointmentVO
NewStartDate
New StartTime
New EndTime
Unique Care Provider Identification Number

Response

Response – HTTP Status 200(ok)
4xx in case of error in input parameter
500 in case of server error in processing request

CreateRecurringAppointments

Method Type– POST

Request parameter

AppointmentVO Object,
List of AppointmentSessionSlotsVO Object

Response – HTTP Status 200(ok)
4xx in case of error in input parameter
500 in case of server error in processing request
List of AppointmentVO objects

CreateBulkAppointments

Method Type– POST

Request parameter

Multipartfile CSV file , //CSV file contains bulk appointment details – The columns in CSV file should match with AppointmentVO object

Response – HTTP Status 200(ok)
4xx in case of error in input parameter
500 in case of server error in processing request
List of AppointmentVO objects

GetTimeSlotStatusByProviderID

Method Type– POST

Request parameter

UniqueIndividual Health Care Provider Number

Response

List collection of Patient entity

GetProviderAvailableSlots

Method Type– POST

Request parameter

UniqueIndividual Health Care Provider Number

Response

List collection ofAppointmentSessionSlotsVO

SetProviderNonAvailability

Method Type– POST

Request parameter

UniqueIndividual Health Care Provider Number

AppointmentSessionStartDate

AppointmentSessionEndDate

AppointmentSessionStartTime

AppointmentSessionEndTime

Response

List collection ofAppointmentSessionSlotsVO

PurgeAppointments

Method Type– POST

Request parameter

List of AppointmentVO Objects

Response

Status – HTTP status code 200 (success)

Response

BlockResource //Block SlotsAppointmentSessionAvailabilityStatusCode changes to 'Blocked' for the selected sessions.

Method Type– POST

Request parameter

AppointmentScheduleVO

List of AppointmentSessionSlotsVO Objects

Response – HTTP Status 200(ok)

4xx in case of error in input parameter

500 in case of server error in processing request

List ofAppointmentSessionSlotsVO objects

UnBlockResource //Block Slots AppointmentSessionAvailabilityStatusCode changes to 'Available' for the selected sessions.

Method Type– POST

Request parameter

AppointmentScheduleVO

List of AppointmentSessionSlotsVO Objects

Response – HTTP Status 200(ok)

4xx in case of error in input parameter

500 in case of server error in processing request

List ofAppointmentSessionSlotsVO objects

PurgeTimeSlots

Method Type– POST

Request parameter

List of AppointmentSessionSlotsVO Objects

Response

– HTTP Status 200(ok)

4xx in case of error in input parameter

500 in case of server error in processing request

GetAllAppointmentBlocksByCareProvider

Method Type– POST

Request parameter

String UniqueIndividual Health Care Provider Number

Response

Response – HTTP Status 200(ok)

4xx in case of error in input parameter

500 in case of server error in processing request

List ofAppointmentSessionSlotsVO objects

GetAppointmentBlocksByDateRangeForACareProvider

Method Type– POST

Request parameter

UniqueIndividual Health Care Provider Number

StartDate

EndDate

StartTime

EndTime

Response – HTTP Status 200(ok)
4xx in case of error in input parameter
500 in case of server error in processing request
List ofAppointmentSessionSlotsVO objects

GetAppointmentBlocksByAppointmentStatus

Unique Individual Health Care Provider Number
AppointmentBookedStatusCode

Response – HTTP Status 200(ok)
4xx in case of error in input parameter
500 in case of server error in processing request
List ofAppointmentVO objects

voidTimeSlot

Method Type– POST

Request parameter

UniqueIndividual Health Care Provider Number
StartDate
EndDate
StartTime
EndTime

Response

Response – HTTP Status 200(ok)
4xx in case of error in input parameter
500 in case of server error in processing request
List ofAppointmentSessionSlotsVO objects

unvoidTimeSlot

Method Type– POST

Request parameter

UniqueIndividual Health Care Provider Number

StartDate

EndDate

StartTime

EndTime

Response

Response – HTTP Status 200(ok)

4xx in case of error in input parameter

500 in case of server error in processing request

List ofAppointmentSessionSlotsVO objects

CheckInAppointment

Method Type– POST

Request parameter

AppointmentVO object (containing scheduled date and time and appointment reference number)

UniqueHealthIdentificationNumber //in case of walk in patient who is already registered

Unique Identifier

Alternate Identifier

Alternate Identifier Type

Response Parameter

AppointmentVO Object - Checkin process – person identifier will be updated and arrival date and time would populated and appointment status will be changed as

ÇheckedIn

AppointmentConfirmation

Method Type– POST

Request parameter

AppointmentVO object

Response Parameter

“Confirmed”, “Slot Not Available”

Commands

Appointment and Schedulingmicroservice will be capable of handling Nineteen different types of commands

1. CreateProviderScheduleCommand

parameters -

ResourceScheduleStartDate
ResourceScheduleEndDate
ResourceScheduleStartTime
ResourceScheduleEndTime
Array of NonWorkingDates //Schedule creation will exclude non working days and leaves
ResourceType(default='CareProvider')
UniqueIndividualHealthCareProviderNumber
UniqueFacilityIdentificationNumber
Set(Collection) of AppointmentSessionSlotsVO Objects

AppointmentSessionSlotsVO

AppointmentSessionStartDate
AppointmentSessionStartTime
AppointmentSessionStartTime
AppointmentSessionEndTime
AppointmentScheduleDate
AppointmentBookingStatusCode
AppointmentSessionAvailabilityStatusCode
AppointmentProviderAvailabilityStatusCode
ProviderScheduleVO for referential integrity

2. UpdateProviderScheduleByIdCommand

parameters -

ResourceScheduleId
ResourceScheduleStartDate
ResourceScheduleEndDate
ResourceScheduleStartTime
ResourceScheduleEndTime
Array of NonWorkingDates //Schedule creation will exclude non working days and leaves
ResourceType(default='CareProvider')
UniqueIndividualHealthCareProviderNumber
UniqueFacilityIdentificationNumber
Set(Collection) of AppointmentSessionSlotsVO Objects

AppointmentSessionSlotsVO

AppointmentSessionSlotsId
AppointmentSessionStartDate
AppointmentSessionStartTime
AppointmentSessionStartTime
AppointmentSessionEndTime
AppointmentScheduleDate
AppointmentBookingStatusCode
AppointmentSessionAvailabilityStatusCode
AppointmentProviderAvailabilityStatusCode
ProviderScheduleVO for referential integrity

3. CreateDoctorSlotsCommand

parameters

AppointmentSessionStartDate
AppointmentSessionStartTime
AppointmentSessionStartTime
AppointmentSessionEndTime
AppointmentScheduleDate
AppointmentBookingStatusCode
AppointmentSessionAvailabilityStatusCode
AppointmentProviderAvailabilityStatusCode

ProviderScheduleVO for referential integrity

4. UpdateDoctorSlotsByIdCommand

Parameters

AppointmentSessionSlotsId
AppointmentSessionStartDate
AppointmentSessionStartTime
AppointmentSessionStartTime
AppointmentSessionEndTime
AppointmentScheduleDate
AppointmentBookingStatusCode
AppointmentSessionAvailabilityStatusCode
AppointmentProviderAvailabilityStatusCode
ProviderScheduleVO for referential integrity

5. CreateAppointmentCommand

Parameters

AppointmentId
AppointmentReferenceNumber
UniqueHealthIdentificationNumber
PatientName
AlternateIdentifier
AlternateIdentifierType
AppointmentBookingDate
AppointmentBookingTime
AppointmentBookingStatusCode
AppointmentSessionSlotsVO
ReasonForVisit
PatientMobileNumber
PatientLandLineNumber (either Patient LandLine or Mobile Number can be provided)
Patient Email Address/URL
AppointmentChannel

6. **updateAppointmentCommand** (covers cancel appointment scenario)

Parameters

AppointmentId
AppointmentReferenceNumber
UniqueHealthIdentificationNumber
PatientName
AlternateIdentifier
AlternateIdentifierType
AppointmentBookingDate
AppointmentBookingTime
AppointmentBookingStatusCode
AppointmentSessionSlotsVO
ReasonForVisit
PatientMobileNumber
PatientLandLineNumber (either Patient LandLine or Mobile Number can be provided)
Patient Email Address/URL
AppointmentChannel

7. **RescheduleAppointmentCommand**

Combination of Cancel Existing Appointment and Creation of new Appointment

8. **CheckInAppointment**

Parameters

AppointmentVO object (containing scheduled date and time and appointment reference number)
AppointmentId
AppointmentReferenceNumber
UniqueHealthIdentificationNumber
PatientName
AlternateIdentifier
AlternateIdentifierType
AppointmentBookingDate
AppointmentBookingTime
AppointmentBookingStatusCode
AppointmentSessionSlotsVO
ReasonForVisit

PatientMobileNumber
PatientLandLineNumber (either Patient LandLine or Mobile Number can be provided)
Patient Email Address/URL
AppointmentChannel

Unique Identifier

9. MergeAppointmentCommand

Parameters

AppointmentReferenceNumbersourceAppointment
AppointmentReferenceNumbertargetAppointment

10. CreateBulkAppointmentCommand

Parameters

CSV file or XML file containing bulk appointment details

11. UpdateBulkAppointmentCommand

Parameters

CSV file or XML file containing bulk appointment details

Events

Patient Appointment & Scheduling Microservice will have seventeen events

1. PatientAppointmentBookedEvent

parameters -

AppointmentId
AppointmentReferenceNumber
UniqueHealthIdentificationNumber
PatientName
AlternateIdentifier
AlternateIdentifierType
AppointmentBookingDate
AppointmentBookingTime
AppointmentBookingStatusCode
AppointmentSessionSlotsVO
ReasonForVisit
PatientMobileNumber
PatientLandLineNumber (either Patient LandLine or Mobile Number can be provided)

Patient Email Address/URL

AppointmentChannel

2. PatientAppointmentUpdatedEvent

parameters -

AppointmentId

AppointmentReferenceNumber

UniqueHealthIdentificationNumber

\ PatientName

AlternateIdentifier

AlternateIdentifierType

AppointmentBookingDate

AppointmentBookingTime

AppointmentBookingStatusCode

AppointmentSessionSlotsVO

ReasonForVisit

PatientMobileNumber

PatientLandLineNumber (either Patient LandLine or Mobile Number can be provided)

Patient Email Address/URL

AppointmentChannel

3. PatientAppointmentCancelledEvent

parameters -

AppointmentId

AppointmentReferenceNumber

UniqueHealthIdentificationNumber

PatientName

AlternateIdentifier

AlternateIdentifierType

AppointmentBookingDate

AppointmentBookingTime

AppointmentBookingStatusCode

PatientMobileNumber

PatientLandLineNumber (either Patient LandLine or Mobile Number can be provided)

Patient Email Address/URL

AppointmentChannel

4. DoctorScheduleCreatedEvent

parameters -

ResourceScheduleId
ResourceScheduleStartDate
ResourceScheduleEndDate
ResourceScheduleStartTime
ResourceScheduleEndTime
Array of NonWorkingDates //Schedule creation will exclude non working days and leaves
ResourceType(default='CareProvider')
UniqueIndividualHealthCareProviderNumber
UniqueFacilityIdentificationNumber
Set(Collection) of AppointmentSessionSlotsVO Objects

AppointmentSessionSlotsVO

AppointmentSessionSlotsId
AppointmentSessionStartDate
AppointmentSessionStartTime
AppointmentSessionEndTime
AppointmentScheduleDate
AppointmentBookingStatusCode
AppointmentSessionAvailabilityStatusCode
AppointmentProviderAvailabilityStatusCode
ProviderScheduleVO for referential integrity

5. DoctorScheduledUpdatedEvent

parameters -

ResourceScheduleId
ResourceScheduleStartDate
ResourceScheduleEndDate
ResourceScheduleStartTime
ResourceScheduleEndTime
Array of NonWorkingDates //Schedule creation will exclude non working days and leaves
ResourceType(default='CareProvider')
UniqueIndividualHealthCareProviderNumber
UniqueFacilityIdentificationNumber
Set(Collection) of AppointmentSessionSlotsVO Objects

AppointmentSessionSlotsVO

AppointmentSessionSlotsId
AppointmentSessionStartDate
AppointmentSessionStartTime
AppointmentSessionStartTime
AppointmentSessionEndTime
AppointmentScheduleDate
AppointmentBookingStatusCode
AppointmentSessionAvailabilityStatusCode
AppointmentProviderAvailabilityStatusCode
ProviderScheduleVO for referential integrity

6. PatientAppointmentRescheduledEvent

parameters -

AppointmentReferenceNumber of Existing Appointment
AppointmentReferenceNumber of new rescheduled Appointment
AppointmentSessionStartDate
AppointmentSessionEndDate
AppointmentSessionStartTime
AppointmentSessionEndTime
UniqueHealthIdentificationNumber
Aadhar Number
Alternate Identifier

7. AppointmentCheckedIn

parameters -

AppointmentId
AppointmentReferenceNumber
UniqueHealthIdentificationNumber
Aadhar Number
Alternate Identifier

Queries

The Appointment & Scheduling service will be capable of handling seven different types of Queries:

getDoctorSchedule

Parameter –Unique CareProvider Identification Number

getAllAppointmentsForAProviderOnADate

Parameter - Date
Unique CareProvider Identification Number

getListOfPatientsArrivedOnADate

Parameter – Unique Health Identification Number
Date

getDoctorAvailableSlotsByDateRange

Parameter – StartDate, EndDate,UniqueCareProvider Identification Number

getDoctorNonAvailableSlotsByDateRange

Parameter – StartDate, EndDate,UniqueCareProvider Identification Number

Microservices Communication

Name of MicroserviceCalled From	Communication Mode	Parameters passed	Data Returned to
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Appointment&Scheduling Service			Appointment Service
Registration Microservice	Synchronous (HTTP call)	PatientId	Patient Demographic Value Object