

Process Design Document / Solution Design Document

Process Name: PCC Aged Orders PT/OT

Purpose of Document

This document serves as the technology policies and procedure for Intelligent Automation Hub at Geisinger

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1. Document Control

Applies to:	All IAH RPA Operating Model
Classification:	Highly Confidential
Owner:	Intelligent Automation Hub Team

DOCUMENT HISTORY

Version	Date	Author	Approver	Reasons for Change
1.0	09/05/2019			Initial Draft
1.1	09/03/2019			Screen Shot Updates
1.2	09/28/2020			Epic upgrade process changes
1.3	9/9/2022			Epic upgrade process changes
1.4	6/27/23			Epic upgrade process changes
1.5	10/6/2023			Epic upgrade process changes

REVIEW/APPROVAL

Role	Name	Date
SME		
Process Owner		
Business Architect		
Developer		

IAH Director		
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STAKEHOLDERS

Role	Name	Email
Process Owner		
SME		
Business Architect		
IAH Director		
Developer		

2. Document Details

2.1 PURPOSE OF THIS DOCUMENT

The Process Definition Document outlines the business process chosen for automation and the technology being utilized.

The document describes the sequence of actions performed as part of the business process, the conditions and rules of the process prior to automation and how they are envisioned to work after automating it, partly or entirely. This specifications document serves as a base for developers, providing them with the details required for applying automation to the selected business process.

3. Current State Process Description

3.1 PROCESS SUMMARY

Aged Order processing occurs monthly to remove all orders or appointments that have existed within a given work-queue more than a defined number of days. Once an order has exceeded this time frame, a report from EPIC containing these orders is generated and sent to the IT department via CSV file. When IT receives the CSV file, a manual batch is run to migrate orders

from the “active” tab to the “removed” tab in EPIC. Automation will eliminate the manual process of transferring orders within a specified timeframe from the “active” tab to the “removed” tab in EPIC and enable the process to be done on a daily, rather than monthly basis.

3.2 DATA FLOW & APPLICATIONS

3.2.1 INPUT

Input	Format	Location	Is it natively digital?	Is it structured?
Epic Work-Queue Export	Excel	Epic	Yes	Yes

3.2.2 OUTPUT

Output	Format	Location	Frequency	Comment
Spreadsheet	Excel	Network Shared Folder	Daily	

3.2.3 APPLICATIONS

Application	Version	Interface	Req Key / Operation / URL	Comment
Epic	Production	Citrix	N/A	

3.3 BUSINESS RULES

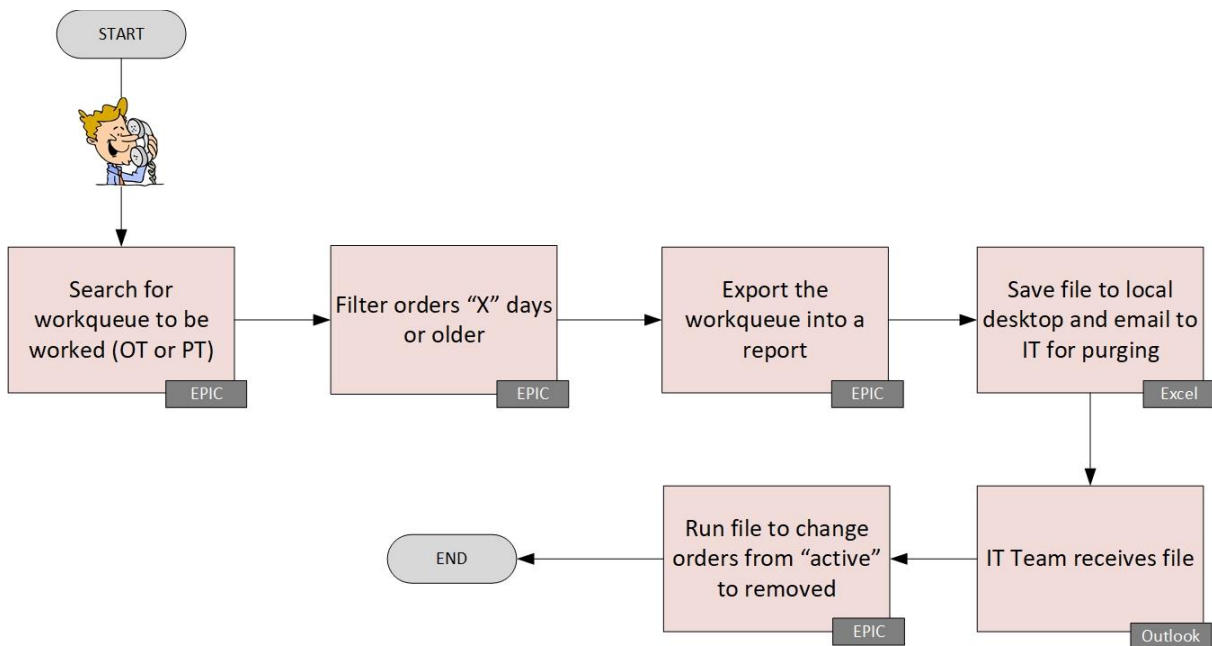
Rule	Detail
Automation frequency	Daily
Bot start time	7:00 AM
Excluding weekends and holidays	No
SLAs	Automation to run daily to ensure work-queue is up to date and not over crowded

3.4 CURRENT STATE METRICS

Avg. Daily Transactions	# Batches Daily	Avg. Volume / Batch	Weekly Avg. Volume	Frequency
3	1	3	21	Daily

3.5 CURRENT STATE PROCESS FLOW

High Level Process Flow Diagram (Current state):

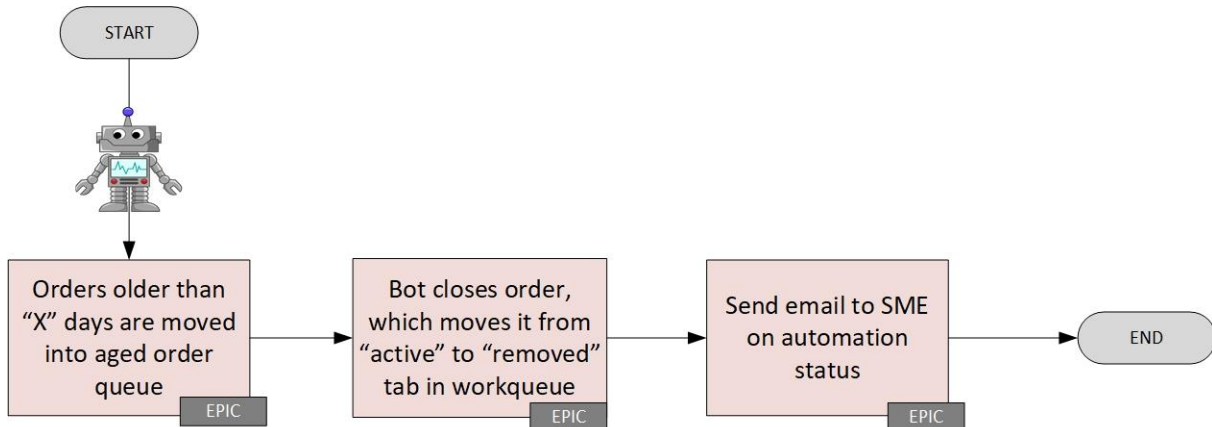


1. Log into EPIC and search for the work queue that will need to be worked
2. Click the "filter" button. Use the calendar to select the date that is 90 days prior to current date. This will filter the work queue to show orders within specified timeframe
3. Once the filtered work queue loads, click the "export" button to export the work queue into an Excel and save it to the desktop.
4. The file is attached to an email message and sent to IT department
5. IT team receives the file and runs a snow query. This will move the orders from the "active" tab to the "removed" tab of the work queue

4. Future State Process Description

4.1 FUTURE STATE PROCESS FLOW

Bot Automation Process & Workflow Diagram (Future State):



1. Based on rules built into work queue, orders within targeted work queues that are within a timeframe set by business will show on the Aged Order work queue
2. Bot closes each order with the removal reason 'Removed by Resulted Batch'
3. Order moves from "active" to "cancelled" tab of work queue due to cancel
4. Bot sends a report to SME on status of automation

4.2 IN SCOPE FOR RPA

100% of current state process is in scope for RPA.

4.3 OUT OF SCOPE FOR RPA

The actions out of scope for RPA should be listed in the table below together with the reasoning.

Activity/Action	Reason for out of scope	Future State solution	Measures to be taken for future automation
N/A	N/A	N/A	N/A

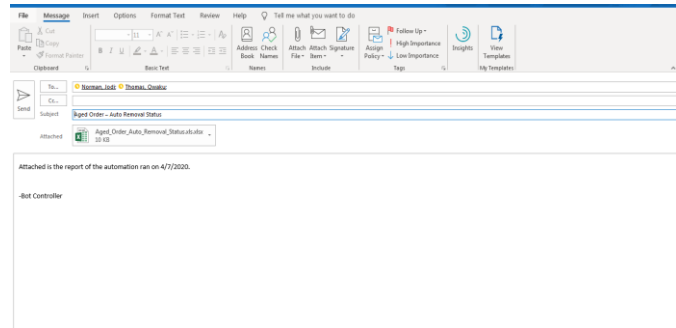
4.4 FUTURE STATE DETAILED STEPS

Step	Short description of key process steps	Screenshot for reference
1.	Bot Launches Epic Production	
2.	Bot Enters User ID	
3.	Bot Enters Password	
4.	Bot Clicks 'Log In'	
5.	Bot Enters Department of 'RESULTS REVIEW [200032]'	
6.	Bot clicks 'Workqueue List' in the menu bar	
7.	Bot clicks the 'Appt Requests' tab	
8.	Bot scrolls through list to identify Work-Queue ID '9703' Named 'Aged Orders' and clicks it to select it.	
9.	Bot clicks 'Open' in the work-queue menu bar	
10.	Bot clicks Export Folder	
11.	Bot clicks 'Export All' from drop down menu	

12.	Bot clicks 'Browse'	
13.	Bot defines appropriate network path in 'Save As' window for saving export file	
14.	Bot clicks 'Save'	
15.	Bot loads exported file to queue for processing	
16.	Bot clicks 'Filter' in work-queue menu bar	
17.	Bot clicks 'Advanced' tab in Filter Edit window	
18.	Bot clicks 'Clear All'	
19.	Bot clicks 'Add Additional Criteria'	
20.	Bot enters '6701' for Order ID in the Property field	
21.	Bot enters '=' in the Operator field	
22.	Bot enters Order ID# in Value field from entry in queue to be processed	
23.	Bot clicks the green plus (+) sign to the right of the value box to add the criteria	

24.	Bot clicks 'Accept'	
25.	Bot clicks 'Accept'	
26.	Bot confirms Order ID displayed in work-queue matches the order ID filtered for, the bot then clicks 'Cancel Request' from the work-queue menu bar Note: If a matching Order ID is not displayed in the work-queue, a business exception of 'Order ID Not Found' is produced	
27.	Bot enters '6' in the Reason field of the Information section for 'Removed by Resulted Batch'	
28.	Bot clicks 'Cancel Request'	
29.	Bot repeats steps 16-28 for all remaining entries in queue to be processed	
30.	Bot uploads process output file to network folder for process	
31.	Bot sends process output email notification	Subject: Aged Order – Auto Removal Status Body: Attached is the report of the automation ran on *insert date of run* Attachment: Aged_Order_Auto_Removal_Status.xls

Email Distribution: [i](#)



Output File: Excel with automation status

Order input bot should pull and include in Excel:

- Order ID #
- Patient MRN
- Procedure
- Ordering Date
- Priority
- Automation Status
- Remarks

4.5 EXCEPTIONS IN THE PROCESS FLOW

Exception	Actions	Comment
Patient/Record Not Found	Flag in output file and continue to next Masterfile entry to process	
Break-the-Glass	Flag in output file and continue to next Masterfile entry to process	
Deceased	Flag in output file and continue to next Masterfile entry to process	

4.6 SYSTEM ERRORS

Error	Action	Comment
Application crash	Recover and retry 3 times	
Epic Downtime	Pause bot if during run time	
Epic Upgrade	Review with business and determine what/if any action is necessary	

4.7 PROCESS CONTINUITY

Prevention: Establishing and defining what redundancies and protocols are in place to prevent failures in the process and maintain business continuity Detection: Defining what protocols are in place for monitoring the process to detect bugs and stop incorrect actions at all points post go-live and escalated monitoring during massive systems changes Recovery Assessing the level of risk, define strategic stakeholders to be alerted in need of a recovery and outlining the recovery plan to get back to operational state.			
Scenario	Prevention	Detection	Recovery
Expected number of input files not provided or missing.	Business reviews and confirms number of anticipated files are loaded/prepared by agreed upon date.	Bot scans/inspects for anticipated files/number of files.	- Bot sends notification email to those who are on the distribution list and IAH Prod support team. - Business to resolve the issue and notify IAH regarding next steps. - IAH team to reschedule bot run

			based on bot's availability.
Input file format change or input file is blank (no data).	Business to notify IAH regarding upcoming changes. IAH and Business work together to prepare and follow change management process.	Bot finds out the unexpected file format and fails to complete the process.	• Bot sends notification email to those who are on the distribution list and IAH Prod support team. • Business and IAH work together prepare and follows change management process.
Bot not completing as outlined in PDD.	N/A: What was not known was not preventable.	Hypercare Phase: Daily auditing is performed and process logs are monitored.	• IAH team adjusts bot design to improve business exceptions.
Higher than expected system exceptions.	N/A: What was not known was not preventable.	Insight Dashboards created during UAT for long term monitoring of volume and exception changes (increases or decreases).	• Alert/pulses identified and notifications sent to IAH Comm Support. • Business and IAH work together if additional phase is needed. • ServiceNOW incident reported and escalated as needed.
Output file errors (timing, format, info, reporting).	N/A: What was not known was not preventable.	Hypercare Phase: Daily auditing is performed and process logs are monitored. Insight Dashboards created during UAT for long term monitoring of volume and exception changes (increases or decreases).	• Business and IAH team adjusts bot design to identify output file errors. • Business and IAH work together if additional phase is needed.
Unknown reasons If the bot fails, how will it continue and resolve issue?	N/A: What was not known was not preventable.	Bot is unable to complete the automated process.	• Bot sends notification email to those who are on the distribution list and IAH Prod support team. • The Bot Controller will then be responsible to triage the bot disruption, fix the

			issue(s), and either schedule ad hoc processing or resume the bot processing. • Response time confirmed by business.
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5. Technical Details

Item	Description	Comment
Robot Type	Attended, Unattended, Mix	Unattended
Orchestrator used?	Yes/No	Cloud/On-Premise Version
UiPath version used	2020.10.4	

6. Reporting

Report Type	Update Frequency	Details	Distribution List
Process Report	Daily	Report status of processed transactions via email: Attach Output File • Subject: • Body:	
Error Logs	At Time of Error	Report of process errors	

		Subject:	
		Body: Bot failed due to system error. Bot will run the same population with next run.	

7. Environment Details

Application	Development Stage	Environment	Access Type	Access Key/Credential
Epic	Development	<Epic_Dev>	Username and password And Log in dept	Username: <USER ID> Password: <PASSWORD> Login Department: <DEPARTMENT>
	Test	<Epic_Test>	Username and password And Log in dept	Username: <USER ID> Password: <PASSWORD> Login Department: <DEPARTMENT>
	Prod	<Epic_Prod>	Username and password And Log in dept	Username: <USER ID> Password: <PASSWORD> Login Department: <DEPARTMENT>
Outlook	Development /Test/UAT/Prod	<Environment Name>	Email account and password	Email: TBD@geisinger.edu

				Password: <password1>
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8. Assumptions

Assumption	Impact
The entire process is automated end to end with no manual intervention.	
The distribution list, email addresses, and/or shared mailbox listed in the PDD for the purpose of process notification through email are to be maintained solely by the line of business.	

9. ADDITIONAL SOURCES OF PROCESS DOCUMENTATION

Type	Name	Link	Comments
Assessment		N/A	IAH Teams Folder
Step Recording (video)		https://geisinger.sharepoint.com/:f:/r/sites/RPA-ArchiveandAutomationAreachannels/Shared%20Documents/Archive%20and%20Automation%20Area%20channels/Patient%20Contact%20Center/Aged%20Order%20PT_OT/Recordings?csf=1&web=1&e=phaKM8	IAH Teams Folder
Task Capture		https://geisinger.sharepoint.com/:f:/r/sites/RPA-ArchiveandAutomationAreachannels/Shared%20Documents/Archive%20and%20Automation%20Area%20channels/Patient%20Contact%20Center/Aged%20Order%20PT_OT/Recordings?csf=1&web=1&e=phaKM8	IAH Teams Folder

UAT Recording (video)		https://geisinger.sharepoint.com/:f:/r/sites/RPA-ArchiveandAutomationAreachannels/Shared%20Documents/Archive%20and%20Automation%20Area%20channels/Patient%20Contact%20Center/Aged%20Order%20PT_OT/Recordings?csf=1&web=1&e=phakm8	IAH Teams Folder
Executive Summary		N/A	IAH Teams Folder

10. Appendix

10.1 GLOSSARY

Acronym/Term	Meaning
PDD	Process Design Document – document that contains information about the process in scope for automation and about the agreed technical solution
RPA	Robotic Process Automation
MRN	Medical Record Number
IAH	Intelligent Automation Hub
OT	Occupational Therapy
PT	Physical Therapy