

Process Design Document / Solution Design Document

Process Name: RM HB Claim Status via Availability

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	12/14/2023	Brian McDermott	Stakeholder	Initial Draft

REVIEW/APPROVAL

Role	Name	Date
SME		12/8/2023
Process Owner		12/8/2023
Business Architect		12/8/2023
Developer		12/8/2023
IAH Director		12/8/2023

STAKEHOLDERS

Role	Name	Email
Process Owner		
SME		

Business Architect		
IAH Director		
Developer		

2. Document Details

2.1 PURPOSE OF THIS DOCUMENT

The Process Design 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

This automation will complete the step-by-step process for Availity claim status checking, which will alleviate staff members from having to manually look up the claim status for every invoice in which a response was not received from the payer to determine if the claim is on file with the payer, has been paid or has denied.

3.2 DATA FLOW & APPLICATIONS

3.2.1 INPUT

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

3.2.2 OUTPUT

Output	Format	Location	Frequency	Comment
Epic Follow-Up Activity	Follow-up Activity	Epic	Each Transaction	Not on File, Paid, Denied, Insurance Paid to Patient (IPP)
Email	Summary	Outlook	Each Run	Summary of transaction processing
Excel	Detailed	Network Folder, Outlook/Email	Each Run	Detailed transaction details

3.2.3 APPLICATIONS

Application	Version	Interface	Req Key / Operation / URL	Comment
Epic	Resolute	Citrix	N/A	Resolute/Claims
Outlook	Enterprise	Local	N/A	
Excel	Enterprise	Local	N/A	

3.3 BUSINESS RULES

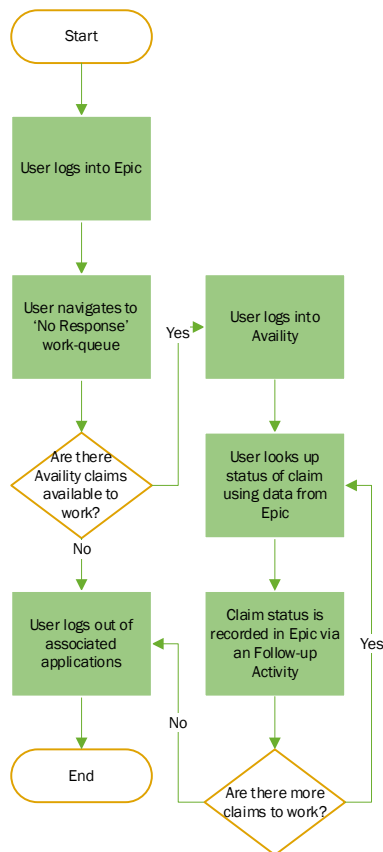
Rule	Detail
Automation frequency	Daily
Bot start time	TBD
Patient unique field	MRN
Excluding weekends and holidays	No
SLAs	TBD

3.4 CURRENT STATE METRICS

Avg. Daily Transactions	# Batches Daily	Avg. Volume / Batch	Weekly Avg. Volume	Frequency
72	1	72	504	Daily

3.5 CURRENT STATE PROCESS FLOW

High Level Process Flow Diagram (Current state):



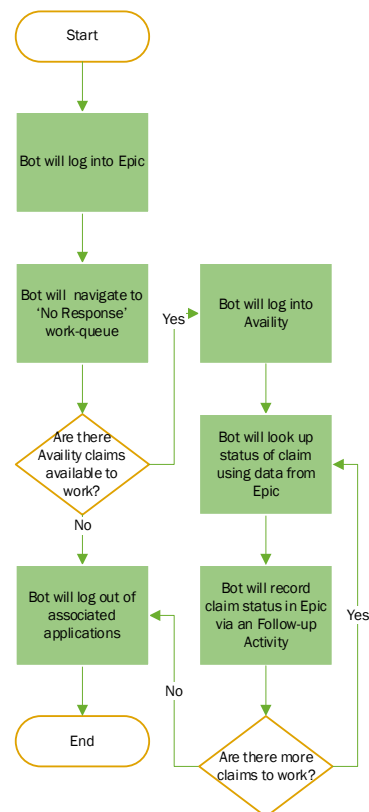
1. Log into Epic
2. Navigate to work-queue

3. Identify claims to work
4. Log into Availity
5. Lookup claim status using data from Epic
6. Record claim status in Epic via a Follow-up Activity
7. Exit applications

4. Future State Process Description

4.1 FUTURE STATE PROCESS FLOW

Bot Automation Process & Workflow Diagram (Future State):



1. Bot will log into Epic
2. Bot will navigate to work-queue

3. Bot will identify claims to work
4. Bot will log into Availity
5. Bot will lookup claim status using data from Epic
6. Bot will record claim status in Epic via a Follow-up Activity
7. Bot will exit applications

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.

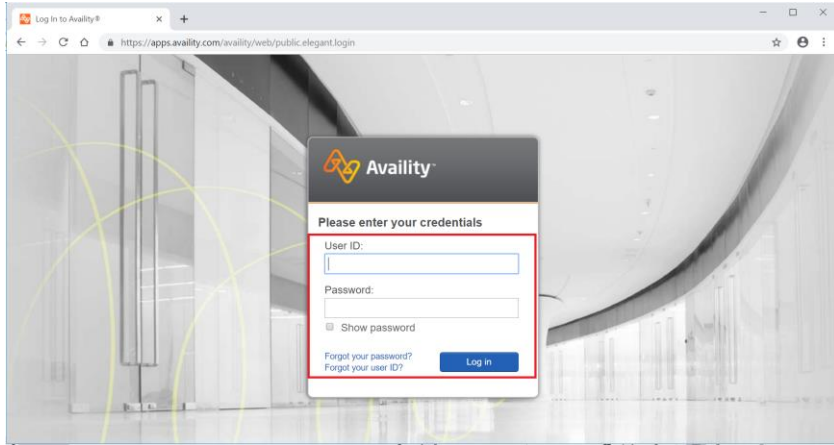
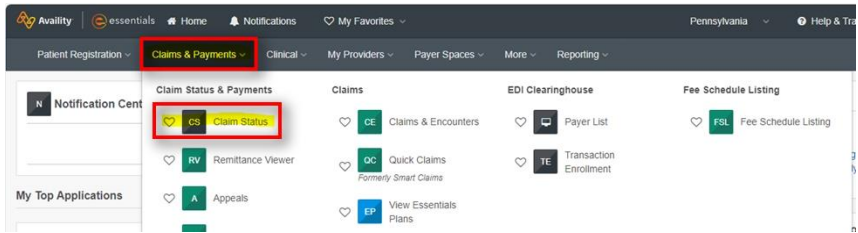
Activity/Action	Reason for out of scope	Future State solution	Measures to be taken for future automation
N/A	N/A	N/A	N/A

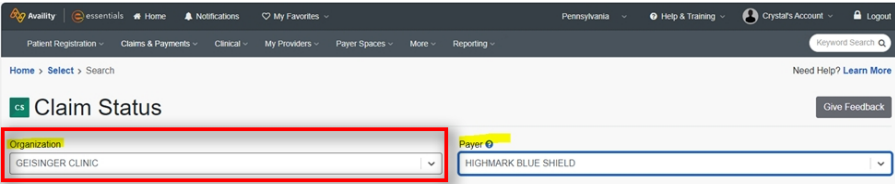
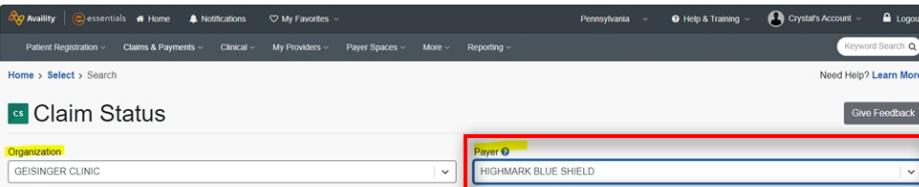
4.4 FUTURE STATE DETAILED STEPS

Step	Short description of key process steps bot will perform	Screenshot for reference
1.	Bot will launch Epic Production	
2.	Bot will enter User ID	

3.	Bot will enter Password	
4.	Bot will click 'Log In'	
5.	Bot will enter a Department of 'RESULTS REVIEW [200032]'	
6.	Bot will click Workqueue List	
7.	Bot will click Account tab	
8.	Bot will review the list of work-queues to identify work-queue 9709 GS PA HB – NO RESPONSE - BCBS and then double clicks it to open it; if the work-queue contains no entries to work, bot will end process.	

9.	Bot will double-click the first entry in the work-queue	
10.	Bot will click Invoice # hyperlink and record the Invoice # in the process output	
11.	Bot will click View Claim	
12.	Bot will click Paper Image	
13.	Bot will extract the From and To dates from cell 6 Statement Covers Period and record it in the process output	
14.	Bot will extract the NPI from cell 56 and record it in the process output	
15.	Bot will extract the Insured's	

	Unique ID from cell 60 Insured's Unique ID and record it in the process output	
16.	Bot will click X	
17.	Bot will open browser and enters Availity URL	https://apps.availity.com/availability/web/public.elegant.login
18.	Bot will enter User ID, Password and click Log-In	
19.	Bot will click the Claims & Payments drop-down menu and then clicks Claim Status to select it	

20.	Bot will click the Organization drop-down menu and clicks the corresponding entry to select it based on the Group NPI Crosswalk <u>BUSINESS EXCEPTION:</u> If Group NPI is not contained in crosswalk, bot will produce a Business Exception of Group NPI Not Cross-Walked and clicks Next to proceed to the next transaction	 Group NPI Crosswalk Needs to be Developed Next:
21.	Bot will click the Payer drop down menu and clicks Highmark Blue Shield to select it	
22.	Bot will key the Group NPI extracted from	

	the transaction into the Provider NPI field	
23.	Bot will key the Sub ID extracted from the transaction into the Member ID field	
24.	Bot will key the Date of Service extracted from the transaction into the From and To Service Dates fields	
25.	Bot will click Submit <u>BUSINESS EXCEPTION:</u> If result of Member Not Found is returned, bot will record a business exception of Member Not Found and clicks Next to proceed to the next transaction	Next:

26.	Bot will review each line of the returned results to identify the line with the Billed Amount matches the Billed Amount extracted from the transaction and then clicks the status icon of the corresponding line to select it and records the status of the transaction to the process output, if no results are on file, bot will record a transaction status of Not on File to the output for the transaction and proceeds to step 35	
27.	Bot will extract the Reason/Remark Codes and record them in	

	the process output	
28.	Bot will copy all code lines to paste into Epic	
29.	If extracted Reason/Remark Codes are PR and OA100, bot will click Account Activities; if extracted Reason/Remark Codes do not contain PR and OA100, bot will proceed to step 35	
30.	Bot will key 299 for Modify Billing Indicator in the Hospital Account Activity field followed by the enter key	
31.	Bot will paste data copied from Availity in the Add Note field	

32.	Bot will key 706 for IPP Letter Sent in the Update Billing Indicators field	
33.	Bot will click +Add	
34.	Bot will click Accept	
35.	Bot will click Account Activities	
36.	Bot will type 352 followed by the keyboard Enter key in the Hospital Account Activity field for Add Note	
37.	If recorded transaction status is Not on File, bot will key a note of 'Claim not of file with payer. MM/DD/YYYY', otherwise bot will paste copied code	

	lines in Add Note field	
38.	If recorded transaction status is Paid and extracted Reason/Remark Codes are not PR and OA100, bot will click Defer; otherwise, bot will proceed to step 41	
39.	Bot will key 1002 in the Reason field for Contacted Insurance – Payment Forthcoming	
40.	Bot will click 14d	
41.	Bot will click Accept	
42.	If current transaction status is Paid and extracted Reason/Remark Codes are not PR and OA100, bot is returned	Next:

	to next transaction in work-queue and proceeds to step 9 for the next transaction to work; otherwise, the bot will click Next and proceed to step 9 for the next transaction to work; if there are no remaining transactions or the bot has reached the end of its runtime, the bot proceeds to the next step	
43.	Bot will click Log Out	
44.	Bot will click X	
45.	Bot will send single output file for all entries processed to	Attach Output File: • Subject: IAH RM HB Claim Status via Availity Process Summary MM/DD/YYYY • Body:

	business's distribution list	
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4.5 EXCEPTIONS IN THE PROCESS FLOW

Exception	Actions	Comment
Member Not Found	Flag in output file and continue to next Masterfile entry to process	Member could not be located in Avality
Group NPI Not Cross-walked	Flag in output file and continue to next Masterfile entry to process	Organization selection in Avality could not be selected from NPI

4.6 SYSTEM ERRORS

Error	Action	Comment
Application crash	Recover and retry 3 times	
Epic Downtime	Pause bot if during run time	
Avality 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 input not provided or missing.	Business reviews and confirms input loaded/prepared by agreed upon date/time.	Bot scans/inspects for anticipated input.	• 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 format change or input 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 input 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.
Automated QA Bot.	Bot produces email/confirmation/notification of summary indicating input matches output file/data/action results.	Bot indicates in email either success or failure of input=output comparison.	• IAH Support and/or business reviews and determines next steps.
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 [iah_rpa_prod_support@geisinger.edu]. • 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 – the goal is to complete the work by xxth of the month, but ok if completed by xxth of the month.

5. Technical Details

Item	Description	Comment
Robot Type	Attended	
Orchestrator used?	Yes	
UiPath version used	Cloud	

6. Reporting

Report Type	Update Frequency	Details	Distribution List
Process Report	Daily	Report status of processed transactions via email: Attach Output File: - Subject: IAH RM HB Claim Status via Availity Process Summary MM/DD/YYYY - Body:	
Error Logs	At Time of Error	Report of process errors Subject: IAH RM HB Claim Status via Availity Process Error MM/DD/YYYY Bot will email the business to inform of the failure.	

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

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	RM HB Claim Status Via Availability	https://geisinger.sharepoint.com/:b:/r/sites/RPA-ArchiveandAutomationAreachannels/Shared%20Documents/Archive%20and%20Automation%20Area%20channels/Revenue%20Management/Claim%20Status%20via%20Availability/RM%20HB%20Claim%20Status%20via%20Availability.pdf?csf=1&web=1&e=y0AC7f	IAH Teams Folder
Step Recording (video)	N/A	N/A	IAH Teams Folder
Task Capture	N/A	N/A	IAH Teams Folder
UAT Recording (video)			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
IPP	Insurance Paid Patient