



Assessment for QA specialist - EHR Rev Transaction Ingestion

Task Overview

This assessment is designed to evaluate your proficiency in Excel and comprehension of run book processes, specifically as it relates to uploading and understanding revenue benchmarks for revenue cycle management. Please follow the instructions below to complete the tasks.

Please use the sheet attached for all tasks:

[assessment_external.xlsx](#)

Task 1: Data Analysis Using Excel/Google Sheets

You are required to analyze data provided in two sheets: **billing_data** and **scheduling_data**. Follow the steps outlined to complete the tasks:

Goal 1: Finding the associated provider for billing data using appointment data

Context

- You need to match data between the **scheduling_data** and **billing_data** sheets to identify the Staff Full Name for each billing record.
- You will need to find provider name by matching **patient_id** and **Appointment Start Date** in **scheduling_data** with **patient_id** and **Date of Service (DOS)** in

billing_data. You can concat the values and then find the matching criteria using an appropriate excel formula

- You can find the **provider_full_name** from the scheduling_data by concating **Staff First Name** and **Staff Last Name**

Expected Deliverable

- A new column (Column I) labeled **provider_full_name** added to the **billing_data** sheet.
- List of all the records in the data with a missing provider name. These should be all the rows where there is no matching **provider_full_name** for rows in the **billing_data**

Goal 2: Calculating Total Amount Collected Per Provider

Context

- After adding the **provider_full_name** to the **billing_data** sheet, you need to calculate revenue earned by each provider.
- Revenue should be calculated using payments that qualify based on the **Payment Method** column. Here is the definition of the payment methods:
 - Adjustment/Write-off - these are adjustments and do not add to the amount collected
 - Cash - this is a form of revenue used by patients to pay patient responsibility
 - Check - this is a form of revenue used by patients to pay patient responsibility or by insurance companies to pay a healthcare practice
 - EFT - this is a form of revenue used by insurance companies to pay a healthcare practice
 - Credit Card - this is a form of revenue used by patients to pay patient responsibility
 - Check Refund - this is a refund taken from the practice and returned to the payor or patient

- Visa - this is a form of revenue used by patients to pay patient responsibility
- Mastercard - this is a form of revenue used by patients to pay patient responsibility
- AMEX - this is a form of revenue used by patients to pay patient responsibility

Expected Deliverable

- A summary table with the **provider_full_name** and **Amount** Collected
- Clear documentation on how revenue was calculated and what payment methods were excluded.

Goal 3: Counting the distinct encounters in the billing data

Context

- An encounter is defined as a unique combination of **patient id**, **Date of Service (DOS)**, and **provider_full_name**. If a provider name is missing, the encounter should be identified by the unique combination of **patient_id** and **Date of Service (DOS)**.

Expected Deliverable

- A count of distinct encounters per the format below

Note: this should be a single number:

Total Unique Encounters in dataset	
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Task 2: RCM Data Analysis Assessment

Task Overview

This assessment will guide you through analyzing data in the **payment_data** sheet. Follow the instructions provided below to answer the questions accurately. Only use data in the sheet **payment_data** - screenshot attached below:

Claim Data							
Patient Name	Date of Service	Provider Name	Claim ID	CPT Codes	Primary Insurance	Secondary Insurance	
John Doe	4/12/24	Dr. Emily Stone	8a9b234f		97110 Harrison Health Co.	Global Assurance Ltd.	
John Doe	4/12/24	Dr. Emily Stone	8a9b234f		97112 Harrison Health Co.	Global Assurance Ltd.	
John Doe	4/12/24	Dr. Emily Stone	8a9b234f		97530 Harrison Health Co.	Global Assurance Ltd.	
John Doe	4/12/24	Dr. Emily Stone	8a9b234f		97110 Harrison Health Co.	Global Assurance Ltd.	
Alice Johnson	5/20/24	Dr. Mark Lee	b7d2f98c		97140 PrimeCare Solutions	Unified Life Services	
Alice Johnson	5/20/24	Dr. Mark Lee	b7d2f98c		97110 PrimeCare Solutions	Unified Life Services	
Alice Johnson	5/20/24	Dr. Mark Lee	b7d2f98c		97112 PrimeCare Solutions	Unified Life Services	
Alice Johnson	5/20/24	Dr. Mark Lee	b7d2f98c		97530 PrimeCare Solutions	Unified Life Services	
Michael White	6/15/24	Dr. Rachel Fox	c4f1a2b3		97112 MedPro Health	National Coverage Group	
Michael White	6/15/24	Dr. Rachel Fox	c4f1a2b3		97110 MedPro Health	National Coverage Group	
Michael White	6/15/24	Dr. Rachel Fox	c4f1a2b3		97530 MedPro Health	National Coverage Group	
Alice Johnson	5/21/24	Dr. Mark Lee	b7d2f98ce		97140 Harrison Health Co.		
Alice Johnson	5/22/24	Dr. Mark Lee	b7d2f98ce		97110 Harrison Health Co.		
Alice Johnson	5/23/24	Dr. Mark Lee	b7d2f98ce		97112 Harrison Health Co.		
Alice Johnson	5/24/24	Dr. Mark Lee	b7d2f98ce		97530 Harrison Health Co.		
Payment Data							
Claim ID	CPT Codes	Source of Payment	Amt				
8a9b234f		97530 Patient Responsibility	\$25				
b7d2f98c		97530 Insurance Refund (PrimeCare Sol	\$10				
c4f1a2b3		97530 Patient Responsibility	\$30				
b7d2f98ce		97530 Patient Refund	\$10				
b7d2f98c		97140 PrimeCare Solutions	\$60				
b7d2f98ce		97140 Harrison Health Co.	\$60				
8a9b234f		97112 Global Assurance Ltd.	\$40				
b7d2f98c		97112 Patient Responsibility	\$20				
c4f1a2b3		97112 MedPro Health	\$55				
b7d2f98ce		97112 Patient Responsibility	\$20				
8a9b234f		97110 Harrison Health Co.	\$50				
8a9b234f		97110 Insurance Refund (Global Assura	\$15				
b7d2f98c		97110 Unified Life Services	\$35				
c4f1a2b3		97110 National Coverage Group	\$45				
b7d2f98ce		97110 Harrison Health Co.	\$35				

Note: You will need to find a way to join the payment data with the claim data listed above in the sheet. You will need to do this manually and explain your logic of joining the data.

Additionally, if you find multiple matching criteria, explain which values you would use in the data.

Goal 1: Calculating total collections using claim level dataset provided in payment_data

Context

- There is billing data and payment data in the payment_data, use an appropriate way to join the payment data to billing data for analysis.
- Use the Source of Payment column to calculate the final amounts collected per encounter
- For this exercise, treat the Claim ID column as the encounter id
- You can manually join this data without using an excel formula
- You will need to account for insurance and patient refunds in your calculation

Expected Deliverable

- Calculation of the total amount collected across this dataset

Note: this should be a single number:

Total Amount Collected	
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- Breakdown of amounts collected by **Primary Insurance, Secondary Insurance**, and **Patient Responsibility** presented in a table format:

Payment Source	Amount Collected (Exact)
Primary Insurance	x
Secondary Insurance	y
Patient Responsibility	z
Total	$x + y + z$

- Calculation of the average amount collected per unique encounter. Use the claim_id as encounter_id for this exercise:

Note: this should be a single number:

Average Amount Collected Per Encounter	
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Goal 2: Primary and Secondary Insurance Analysis

Context

- This section aims to evaluate and compare the payout of primary and secondary insurances and their contributions to revenue.

Expected Deliverable

- Identification of the insurance type (primary or secondary) with the highest average payout per encounter and the corresponding average amount. The deliverable should list out the primary insurance and total amount collected per encounter as per the format below.

Note: this should be a single insurance and the average collected per encounter:

Insurance Name	Average Collected Per Encounter
x	y

- Calculation of the total amount collected for the following specific insurances listed below per the format:

Insurance Name	Total Amount
Harrison Health Co.	x
PrimeCare Solutions	y
National Coverage Group	z

Goal 3: Understanding the basics of revenue cycle management

Context

- Gaining a comprehensive understanding of Revenue Cycle Management (RCM) is essential for recognizing how healthcare organizations manage revenue streams effectively. This includes the interconnected processes that impact revenue collection and patient financial responsibility.

Expected Written Deliverable

Understanding Core RCM Processes

- Define and explain the following key RCM processes, detailing their roles and relationships:
 - **Claim Submissions:** Describe the steps involved in submitting claims to insurance providers, including data accuracy and compliance requirements.
 - **Claim Reconciliation:** Explain how payments are matched against claims and why this process is crucial for identifying discrepancies.
 - **Claim Denials:** Outline the common reasons for claim denials and the strategies used to manage and appeal these denials to ensure proper revenue capture.