

# MediPriceInsight

**BUAN 6390.001 - Analytics Practicum**

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What if healthcare pricing was as transparent as booking a flight?

“Today, it’s not.”

# MediPriceInsight:

From Raw Data to Real Decisions

*"Transforming chaos into clarity — at scale."*

# Let's See It In Action

*“From messy file... to usable insight  
— in minutes.”*

# Ingestion Step 1

The screenshot displays a web browser window with the address bar showing 'localhost:5002'. The page title is 'MediPriceInsight Data Ingestion Tool'. Below the title, a subtitle reads 'Upload your hospital data file to begin the ingestion process'. A progress bar at the top indicates three steps: 1. File Selection (active), 2. Review Address, and 3. Review Charges. The 'File Selection' step is further detailed as 'Select and upload CSV file'. Below the progress bar, there are four input fields: 'User Name \*' with the value 'Tarun Raghu', 'Ingestion Strategy \*' with the value 'Type 2 - CSV Pivot Ingestion', 'File Type \*' with the value 'CSV', and 'Upload File \*' with a file selection button and the filename '750972805\_texas-health-arlington-memorial-hospital\_standardcharges.csv'. A blue 'Upload and Process' button is located at the bottom of the form. A small circular progress indicator is visible below the button.

**MediPriceInsight Data Ingestion Tool**

Upload your hospital data file to begin the ingestion process

**1** **2** **3**

**File Selection**  
Select and upload CSV file

**Review Address**  
Verify hospital address data

**Review Charges**  
Verify hospital charges data

User Name \*  
Tarun Raghu

Ingestion Strategy \*  
Type 2 - CSV Pivot Ingestion

File Type \*  
CSV

Upload File \*  
Choose File 750972805\_texas-health-arlington-memorial-hospital\_standardcharges.csv

Upload and Process

# Ingestion Step 2

The screenshot shows a web browser window with the title 'Review Hospital Address' and the URL 'localhost:5002/review-address'. The page features a progress bar with three steps: 1. File Selection (Select and upload CSV file), 2. Review Address (Verify hospital address data), and 3. Review Charges (Verify hospital charges data). The 'Review Address' step is currently active. Below the progress bar, the 'Hospital Address Information' section displays the following details:

Hospital Name: Texas Health Arlington Memorial Hospital	Last Updated: 12/16/2024	Version: 2.0.0
Location: Texas Health Arlington Memorial Hospital	Address: 800 W Randol Mill Rd, Arlington, TX 76012	Region: Texas
City: Arlington		

At the bottom of the form, there are three buttons: 'Back to File Selection' (grey), 'Log Error' (red), and 'Confirm & Load Address' (purple).

# Ingestion Step 3

Review Hospital Charges

localhost:5002/review-charges

1

File Selection

Select and upload CSV file

2

Review Address

Verify hospital address data

3

Review Charges

Verify hospital charges data

### Hospital Charges Preview

Total Rows in File: 1089144

DESCRIPTION	CODE	CODE_TYPE	PAYER_NAME	PLAN_NAME	STANDARD_CHARGE_GROSS	STANDARD_CHARGE_
CARDIOVERSION	92960	CPT	Aetna Health of California	Aetna	1383	
CARDIOVERSION	92960	CPT	Aetna Health of California	Aetna Covered CA	1383	
CARDIOVERSION	92960	CPT	Aetna Health of California	Aetna Health Fund	1383	
CARDIOVERSION	92960	CPT	Aetna Health of California	Aetna Senior	1383	
CARDIOVERSION	92960	CPT	AHMC Health	AHMC Health Self-Insurance EPO	1383	

60%

Loading 472,248 unique records...

Elapsed time: 2m 20s

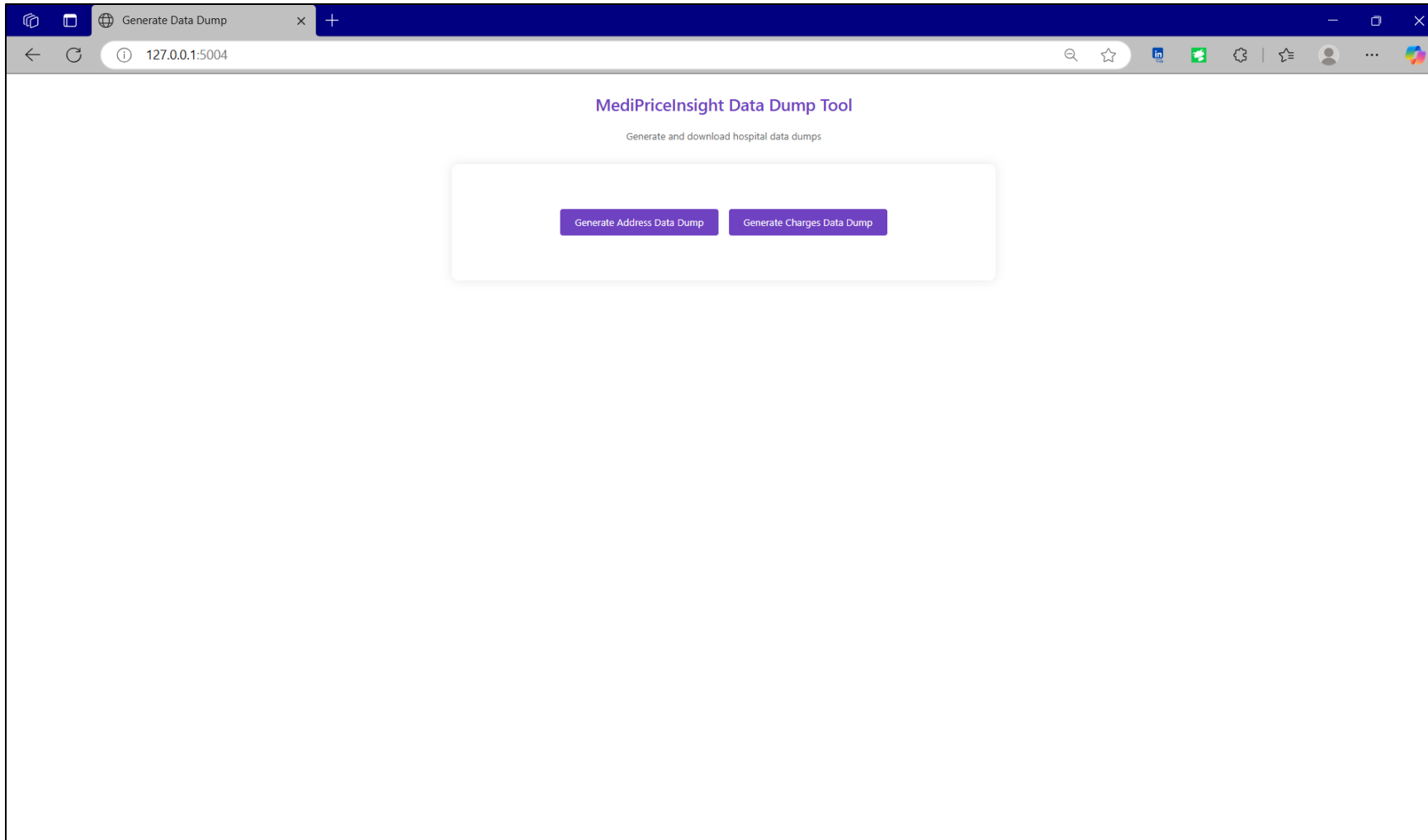
Back to Review Address

Back to Home Page

Log Error

Processing...

# Request Data Dump Page





# Tabular Report

MediPriceInsight - Price Transparency Tool

Reset All Filters

Region \*

California

City \*

Code \*

0001A - ADMIN FEE PFIZER COVID-19 VACCINE 1ST

Payer Name

Select Payer Name...

Plan Name

Select Plan Name...

Hospital Name

Select Hospital Name...

Export to CSV

Region	City	Code	Description	Hospital Name	Hospital Address	Payer Name	Plan Name	Standard Charge Min	Standard Charge Max	Standard Charge Gross	Standard Charge Negotiated
1 unique	1 unique	1 unique	1 unique	2 unique	2 unique	125 unique	179 unique	2 unique	2 unique	2 unique	11 unique
California	Los Angeles	0001A	ADMIN FEE PFIZER COVID-19 VACCINE 1ST	Whittier Hospital Medical Center	9080 Colima Road	Physician Healthways	Physician Healthways Medi-Cal Ancillary	\$8.30	\$83.00	\$83.00	\$8.30
California	Los Angeles	0001A	ADMIN FEE PFIZER COVID-19 VACCINE 1ST	Whittier Hospital Medical Center	9080 Colima Road	Wear and Wood	Wear and Wood WC	\$8.30	\$83.00	\$83.00	\$24.90
California	Los Angeles	0001A	ADMIN FEE PFIZER COVID-19 VACCINE 1ST	Whittier Hospital Medical Center	9080 Colima Road	Blue Cross of California	Blue Cross of CA Out of State	\$8.30	\$83.00	\$83.00	\$41.50
California	Los Angeles	0001A	ADMIN FEE PFIZER COVID-19 VACCINE 1ST	Whittier Hospital Medical Center	9080 Colima Road	Blue Shield of California	Blue Shield HMO Reciprocity	\$8.30	\$83.00	\$83.00	\$41.50
	Los Angeles		ADMIN FEE PFIZER COVID-19 VACCINE 1ST	Whittier Hospital Medical Center	9080 Colima Road	EMC Los Angeles	EMC Los Angeles				

# Ingestion Summary

- Type 1 Ingestion - 11
- Type 2 ingestion - 10
- Type 3 Ingestion - 8
- 29 in total (30 after this demo)
- Prominent Hospitals loaded - Medical City, Baylor Scott, Texas Health, Anaheim Region Medical Center, Keck Hospital of USC
- Regions covered – Los Angeles, Anaheim, Long Beach, Arlington, Dallas, Fort Worth
- Prominent Providers – Aetna, BCBS, United Health Care, Molina, Humana

# What's Next: Scaling, Integrating, Empowering

- *"From data transparency to decision intelligence."*

- 1) Leveraging ICD (International Classification of Diseases) or DRG (Diagnosis Related Group) Codes for Data Standardization
- 2) Packing the entire product as a Docker Image
- 3) Roll out the product to cover other states and metropolitan areas
- 4) Our ingestion tool handles 80% of the required data.

# Lessons in Building for the Real World

- *"From academic vision to industry-grade execution."*

- 1) Dealing with large files through PySpark
- 2) Dealing with complex formats such as Nested JSON , Pivoting
- 3) Product Mindset with no code approach
- 5) Responsive tabular report which works on 6+ million rows
- 6) Building an end-to-end pipeline and getting a glimpse of the how Healthcare in US works
- 6) Using AI tools such as Cursor AI for coding , learning to prompt better to get the desired result .

# From Confusion to Confidence

- *"Making healthcare data usable, understandable, and powerful."*