Specialty Drug Cost Analysis

Team Name: Data Navigators

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1. Summary of Activities – Week 9

During this Week, we completed the transition from total cost analysis to a more insightful perunit cost analysis for specialty drugs. We finalized our dataset by removing duplicates and verifying every drug as a specialty medication based on authoritative sources like CVS Specialty Pharmacy and the FDA.

2. Key Accomplishments

- Cleaned and validated our merged Medicare and Medicaid dataset.
- Resolved duplicate entries and inconsistencies in drug names using fuzzy matching.
- Verified that all remaining 45 drugs in the dataset are specialty drugs from valid sources.
- Removed ambiguous entries like Cosentyx Pen and Dupixent Pen when exact matches weren't validated.
- Performed a final duplicate check to ensure dataset integrity.
- Saved and locked the final cleaned dataset for analysis and reporting.

3. Deliverables This Week

- specialty_drugs_final_verified.csv Final dataset of 45 validated specialty drugs with Medicare and Medicaid costs.
- Specialty_Drug_Cost_Analysis_Presentation.pptx Final slides summarizing methodology, findings, and policy recommendations.
- Final project report outline prepared.

4. Tools and Technologies Used

- Python (pandas, matplotlib, seaborn, fuzzywuzzy)
- Microsoft Excel for cross-checks.

5. Next Steps

- Finalize policy insights and recommendations.
- Present per-unit cost analysis findings clearly in the oral presentation.