

Applying Data Analytics for Healthcare

3 Proven Cases with Results

Patient billing. Medical claims. Contract compliance. There are so many moving targets within a healthcare organization that are ripe for cost-savings – if you know where to look and you use the right tools.

Hospitals and physician groups must effectively manage contractual agreements with insurance companies to prevent inaccuracies or losses. While there are technologies available to calculate this data, they often come with an annual price tag of \$180,000 or more. There is a far more affordable solution, and even an opportunity to automate

the process that does not require programming.

CaseWare IDEA® is fast becoming the data analytics tool of choice among healthcare auditors for its ability to import data from disparate systems, analyze large data sets in minutes and automate repeatable tasks without any coding.

Chris Peters with GPS Consultants, LLC has extensive experience working with healthcare organizations to prevent loss, standardize business processes and improve efficiencies. Here are some real examples of how he has used IDEA, plus a few other tips on where to apply data analysis for healthcare audits.

CHALLENGE: Management of hospital contracts with insurance companies and validating payments from Medicare and Medicaid to prevent losses

Data Analysis Techniques:

1. Imported data into IDEA and joined the clinical database information with the claims database
2. Compared it with the provisions of the insurance contracts and actual payments
3. Used the Visual Script feature to capture the tasks he was repeatedly performing to write a customized IDEAScript designed to search for variances
4. Staff used the IDEAScript to search the database for overpayments, underpayments, timely payments, denied claims, and other discrepancies that required further research

Results:

- Switched from a manual review process of a small sample of reimbursement claims to an automated process of reviewing 100% of claims
- Ensured insurance payments were in accordance with the provisions in the contracts.
- Facilitated more accurate identification and resolution of discrepancies
- Identified multiple inpatient procedures that were not being paid at contracted case management rates
- Estimated \$200k+ saved annually

CHALLENGE: Comparison of clinical and accounting information for physician services for more accurate contract negotiations

Data Analysis Techniques:

1. Imported data into IDEA and joined the clinical and accounting information
2. Used pivot tables and other functions to view how procedures were grouped and paid
3. Compared reimbursement rates by payers depending on how the procedures were grouped

Results:

Physicians had access to more accurate data to negotiate with insurance companies and price their procedures accordingly. They also gained a better understanding of how their procedures should be grouped to ensure they are paid accordingly for the care provided.

“IDEA was built to handle these types of complex analysis. There is no other tool you can use to bring in data from so many different types of systems, and examine the data in different ways to clearly see opportunities to prevent potential losses.”

– Chris Peters

CHALLENGE: Reduce days in AR

Data Analysis Techniques:

1. Looked for averages and outliers to get to the root cause of delays in accounts receivables
2. Provided outliers to hospital staff for further investigation and follow up

Results:

- Helped the hospital establish guidelines for when to write off the debt, and when to pursue it for recovery
- Reduced majority of ARs to just below the targeted average
- Improved internal controls
- Implemented corrective measures to prevent losses

OTHER APPLICATIONS OF DATA ANALYSIS FOR HEALTHCARE:

- Calculate average days from:**
 - o Discharge to bill
 - o Bill to payment
 - o By payer
 - o By department
- Age receivables on data of service rather than invoice date to recalculate cash flow**
- Analyze rejected payment by: financial class, procedure code, cost center**
- Identify pricing discrepancies between subsystems and master**
- Analyze timeliness of claims payments by comparing:**
 - o Claim date
 - o Date claim received
 - o Date claim paid
- Look for duplicate billings and claim payments based on patient, provider, date of service and amount**
- Search for invalid, high dollar or duplicate charges on patient bills**
- Search for lost charges by matching supplies used to supplies billed**
- Check procedure codes and billed charges to identify inappropriate billed charges**
- Look for invoices without purchase order numbers, or with duplicate PO numbers**

IDEA is a powerful analytics tool designed to help accounting and financial professionals perform more efficient and effective audits, detect fraud and meet documentation standards. IDEA comes with unlimited Help Desk support and resources to get you started quickly. Plus, unique features including a Windows-like interface, flexible licensing options, PDF import tool, unlimited file size capabilities and the ability to open and view multiple files at the same time.

- Reduce audit time by 20-50%
- Recover 100x the cost of the software by uncovering duplicate payments
- Conduct more thorough audits by analyzing 100% of data vs. a sample population
- Through analytics improve your organization’s data quality
- Save time by automating repeatable tasks without programming

The best way to experience all CaseWare IDEA has to offer is to see it in action. We offer live, online demonstrations – tailored to your specific needs. For more information or to schedule a demo, contact sales@audimation.com or call 888.641.2800.