Solving Challenges with AI and Data Innovation for Federal Health Agencies including CMS

By **Heather Seftel-Kirk** - April 6, 2021
FedHealthIT.com

Responsibility to Improve Government

Certain Centers for Medicare and Medicaid Services (CMS) programs require Medicare independent review analysts to be responsible for making final determination efforts for claims where Medicare has funding allocated for coverage. To make an appropriate determination, a labor-intensive review process is conducted that can consist of hours spent sorting page by page through documents such as treatment summaries, submitter reports, decision rationales, carrier letters, primary care reports, and more.

"Information has to lead to innovation. Every Government contractor has a responsibility to leave Government programs better than they found them by cutting costs and increasing efficiency. One way to do this would be by introducing cutting edge technology that would allow employees to focus their time on their specific areas of expertise," said Tracy Mills, President and Founder of J29 Inc.

Labor Intensive Processes Give Rise to Mistakes

While the most skilled analysts will review these cases, labor-intensive processes do result in mistakes. In the case of Medicare Fee-For-Service (FFS), a recent report issued by CMS indicated $25B in improper payments – equating to just above 6% of an improper payment rate [1]. While there are a variety of factors that can lead to an improper payment such as eligibility, beneficiary, and non-compliance issues, there are contributing factors to mistakes that come with a labor-intensive claims review. Improper payment reports are based around the Comprehensive Error Rate Testing (CERT) program, which reviews a random sample of Medicare FFS claims to determine if they were appropriately paid based on coverage, coding, and payment rules. [2]

Improving the Process

Solutions should include research and development efforts focused on using innovative technologies to make assisted claims determinations. Specifically, the use of innovative technologies will allow claims teams to bring several benefits to delivery:

- **Exceeding high standards of quality assurance**
- **Ability to handle the highs and lows of volume fluctuations**
- **Re-allocation, and better use of medical analysts**
- **Faster turnarounds to accurately fund patient care**

One way to improve performance would be to focus on research and development efforts to create a predictive model that will be able to assist medical analysts by generating assisted determinations. Artificial-intelligence (A.I.) and unified data analytics would allow for the ingestion of specific claims data used in Medicare determinations to process, build, train, and validate machine learning.

"Across the Healthcare ecosystem, data and AI are enabling advancements in areas ranging from drug discovery to digital patient care to Healthcare administration. Databricks' unified analytics platform enables Healthcare organizations in both Government and commercial sectors around the world to automate processes like claims review, which reduces fraud, saves time, and lowers costs" said Michael Sanky, Databricks' Global Industry Lead for Health & Life Sciences.

The result is delivery creating recommended determinations, and real-time analytics dashboards for medical analysts, based on the AI lifecycle of reviewing claim documents such as:

- **Life Care Plans**
- **Submitter Letters**
- **Attorney / Policy Requirements**
- **Carrier Reports**
- **Treatment Summaries**
- **Decision Rationales**
- **Pricing Jurisdictions (the use of ICD / CPT codes)**

The use of innovative technologies in the unique claims space at CMS, will ensure that niche Medicare subject matter expertise is captured and leveraged to uphold high quality analysis and constant production.

About J29

J29 is a SBA-certified 8(a) and EDWOSB that has served as a proven partner to the Department of Health and Human Services. Specializing in claims analysis, data management, and program assurance, J29 prides itself on bringing innovative technology to the public sector.

About Databricks

Databricks is the data and AI company. Founded by the creators of Apache Spark™, Delta Lake and MLflow, organizations like Comcast, Condé Nast, Nationwide and H&M rely on Databricks' open and unified platform to enable data engineers, scientists and analysts to collaborate and innovate faster.

[1] https://www.cms.gov/newsroom/fact-sheets/2020-estimated-improper-payment-rates-centers-medicare-medicaid-services-cms-programs
[2] https://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/Improper-Payment-Measurement-Programs/CERT