Top Pediatric Hospital Uses Data Analytics to Reduce Denials

Challenge and Results

A leading U.S. pediatric hospital—which, according to U.S. News and World Report, treats more children with rare diseases and complex conditions than any other medical center—faced a denial rate higher than the industry average. The organization wanted to use its data, denials and related data in its Epic patient billing and payment system more effectively.

Identified potential of over
$1.5 million
in annual net revenue gain

Saved
3 – 6 months
of internal development time on data warehouse integration

Identified
6,000
first-pass denials of unreimbursed 86141 labs

Reduced first pass denials by
2.5%

Solution

Leadership knew that seeing trends and analyzing historical data would allow them to track and prioritize denial prevention efforts. By focusing on key improvement opportunities to reduce write-offs and denials, revenue would inevitably seen an upturn. The true challenge was finding and implementing the right infrastructure to interpret the data.

Tegria's Epic revenue cycle optimization and data analytics experts had a two-part project to tackle.

- Identify process and system changes to improve denial priorities and productivity of staff

- Develop enhanced data reporting and visualization tools to improve denials management and decision-making

We embraced the ambitious goal of reducing denial rates to be in line with industry standards—and even lower. We also aimed to identify operational efficiencies of up to 10%, which would translate into an annual net revenue gain of more than $1.5 million.

Write-offs and Denials Assessment

In-depth interviews with patient financial services managers helped us understand the hospital's present state, and from there we built requirements for data analytics. We used our proprietary data analytics model, which combines a deep understanding of Epic and of denials management, to extract and present key performance data on denials and write-offs.

Tegria

These findings identified challenges and enabled the team to set priorities for creating crucial data analytics capabilities and improving denials management processes and results. The outcome? Re-energized focus on previous improvement projects and other areas of billing that needed attention.

The organization was looking for an alternative to out-of-the-box Epic denials reporting that would give multi-level intelligence on historical denials, open denials, root cause, and ultimately net revenue loss tied to denials.

Advanced Analytics and Business Intelligence
To deliver useful denials information, Tegria's data analytics experts focused on two essentials:

- Ensuring the collection of accurate and pertinent data

- Presenting the data using a dashboard to make it easier to see, analyze, and act on patterns, trends, problem areas, and opportunities

Outcomes

This project helped digitally transform denials management at the hospital. Patient financial services staff now has access to top-tier data and analytics tools—which help them decrease denials and write-offs and increase visibility into opportunities for improvement. Insights from Tegria's revenue cycle management, denials management, and Epic expertise also drove expected operating efficiencies, including staff productivity.

Our strategic and data analytics implementation delivered key results including:

- Identifying potential operating improvements of up to 10%, or more than $1.5 million in annual net revenue gain, including:

  - $1.1 million in prior authorization-related write-offs

  - $160,000 in write-offs due to issues from manually transferring between departments

- Reducing first pass denials by 2.5% by correcting Medicare sequestration build

- Identifying 6,000 first-pass denials of un-reimbursed 86141 labs

- Implementing self-service tools, which saved 20 to 40 hours each week on writing reports

- Saving their team 3 to 6 months of internal development time on data warehouse integration

- Automating regularly distributed manual reports

With a sharp focus on return on investment, we used our expertise in Epic, denials management, and data analytics to enable the organization to begin realizing improvements within a few short months.

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