

Clinical and Financial Partnership Reduces Denials and Write-Offs by More than \$3 Million



HEALTHCARE ORGANIZATION

- Academic Medical Center
- Integrated Delivery System

PRODUCTS

- Health Catalyst® Analytics Platform, including the Late-Binding™ Data Warehouse and broad suite of analytics applications.

SERVICES

- Installation Services

EXECUTIVE SUMMARY

CMS denies nearly 26 percent of all claims, of which up to 40 percent are never resubmitted. The bane of many healthcare systems is the inability to identify and correct the root causes of these denials, which can end up costing a single system tens of millions of dollars. Yet almost two-thirds of denials are recoverable and 90 percent are preventable. Despite previous initiatives, The University of Kansas Health System's denial rate (25 percent) was higher than best practice (five percent), and leadership realized that, to provide its patients with world-class financial and clinical outcomes, it would need to engage differently with its clinical partners.

To effectively reduce revenue cycle and implement effective change, The University of Kansas Health System needed to proactively identify issues that occurred early in the revenue cycle process. To rethink its denials process, it simultaneously increased organizational commitment, refined its improvement task force structure, developed new data capabilities to inform the work, and built collaborative partnerships between clinicians and the finance team.

As a result of its renewed efforts, process re-design, stakeholder engagement, and improved analytics, The University of Kansas Health System achieved impressive savings in just eight months.

- \$3 million in recurring benefit, the direct result of denials reduction.
- \$4 million annualized recurring benefit.
- Successfully partnered with clinical leadership to transition ongoing denial reduction efforts to operational leaders.

THE COSTS OF DENIED CLAIMS AND HOW TO PREVENT THEM

Insurance claim denials are a significant financial liability for many health systems. CMS denies nearly 26 percent of all claims and 40 percent of those are never resubmitted, even though two-thirds are recoverable and 90 percent are preventable.¹ Health systems struggle with claims denial management, including the inability to identify and correct the root causes, which can cost tens of millions of dollars.



It is critical to partner your financial, clinical and operational teams, with your analytics teams to provide insights and actionable knowledge. This is the sweet spot where you will get synergy and be able to improve outcomes.

David M. Wild, MD
Vice President, Lean Promotion
The University of Kansas
Health System

Any large healthcare organization's revenue cycle is filled with variation and complexity. Policies and procedures differ from payer to payer, technology and communication systems vary from patient to patient, and the complexities of separate hospital and professional revenue cycles in the same system can lead to defects and waste.

This was true with The University of Kansas Health System, which faced a 25 percent denial rate compared to the national best practice of five percent. The University of Kansas Health System is a large academic medical system with more than 80 locations in two states, 999 licensed beds, over 700 employed physicians, and 10,000 employees.

THE PROBLEMS: LOW ENGAGEMENT AND LIMITED DATA-DRIVEN INSIGHTS

The University of Kansas Health System always had a vision of leading the nation in caring, healing, teaching, and discovering. But this vision was impaired by an unsustainable level of denied claims, leading to millions of dollars wasted annually. It understood that avoiding initial denials would reduce re-work and improve cash flow, but previous efforts proved too broad and required excessive effort from stakeholders. The University of Kansas Health System knew that in order to affect positive change in reducing denials that it would need to focus their effort, and do so in several areas:

- Inefficient processes and workflows
 - The workflow did not allow for a patient-centered process and there was wide variation in how staff performed functions.
 - Staff efficiencies were challenged by uneven workloads and burdensome manual data entry.
- Inadequate Analytics and Technology
 - The organization was not only underutilizing available technology, it was also challenged with multiple IT systems that didn't talk to each other—making it difficult to sift through data and resulting in re-work.
 - Available EHR reports were not specific enough, were difficult to run, and lacked the drill-down needed to precisely identify issues.
 - Denials data did not provide the insights needed nor was the data conveyed to clinical and operational leaders in a way that demonstrated how their work impacted the overall denial rate.



We were investing significant time to produce an incredible amount of data—but, when we shared it with our clinical and operational partners they were overwhelmed and the data was not meaningful to them. We needed to engage with our stakeholders differently.

Colette Lasack, MBA
Vice President, Revenue Cycle
The University of Kansas
Health System

- › Clinical and operational stakeholders disengaged in the problem. The financial team did not effectively communicate or collaborate with clinical and operational stakeholders to engage them in process interventions. They struggled to frame the problem in a way that connected with clinical and operational leadership, and to provide stakeholders with actionable, user-friendly information instead of mind-numbing pages of data.
- › The organization lacked a sense of urgency at the front end to obtain the complete and accurate insurance and demographic information needed to prevent denials.

Bottom line, The University of Kansas Health System needed to get upstream of its challenges with claims denial management, and needed a comprehensive improvement plan, informed by data, that engaged clinical, operational, and financial staff in improving the problem.

MULTI-PRONGED APPROACH REDUCES DENIALS

The University of Kansas Health System designed a comprehensive denials initiative, with a long-term goal to lower denial rates to the best practice industry standard of five percent. It simultaneously upped organizational commitment, improved its improvement task force structure, developed new data capabilities to inform the work, and built collaborative partnerships between clinicians and the finance team.

Building the right mindset

First, leadership set the stage for organizational commitment and success by endorsing and promoting the denials reduction initiative. The CEO, CFO, and COO provided visible executive support, and designated an executive champion, who conveyed the vision and the “why” for the work.

To engage clinical and operational leaders, executives articulated the vision and issues in a way that resonated with clinicians, illustrating how revenue cycle impacts patient experience. Clinicians understood that avoiding claims denials and getting billing right the first time would have a positive impact, and was the caring and right thing to do for their patients.

Renewing focus on quality improvement in the revenue cycle

The revenue cycle improvement plan was built with an eye on sustainability and flexibility, and framed progress as a series of initiatives to drive sustainable change. The University of Kansas

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To provide great financial care for our patients we strive for the highest quality and shortest lead time in the revenue cycle process, eliminating all possible waste.

David M. Wild, MD
Vice President, Lean Promotion
The University of Kansas
Health System

Health System recognized that focusing on specific problem areas identified in the data would lead to better outcomes than trying to “boil the ocean.”

Leadership stopped focusing on one-time tasks, and developed a culture of continuous improvement by conducting ongoing assessment, research, and continuous cycles of Plan, Do, Check, Act (PDCA), aligning lean improvement events to address specific areas of denials. This robust approach identified root causes and developed effective interventions to address inefficient processes, workflows, and manual entry.

A dedicated claims denial management team

The University of Kansas Health System realized that to maintain momentum and to sustainably reduce denials and write-offs, it needed a dedicated denials analysis team. It hired and trained a small, talented team to focus on denial trends and root cause analysis. The team was responsible for reporting, quantifying opportunities over time, identifying trends, and assessing improvement opportunities. In addition to its revenue cycle expertise, the team also had the skills to facilitate and develop partnerships with stakeholders.

The right tools made data visible and actionable

Set with a dedicated denials team, The University of Kansas Health System needed meaningful data to move forward. Initially, it developed Excel-based solutions to replace inadequate stock reports from its EHR, creating visualizations that gave new insights into the data.

Once denial information was visible, the team identified two root causes that led to problems early in the process. Seeing and understanding denials information allowed it to address these core issues right away:

- Challenges with getting insurance information right the first time. Many payors were complex, and to pick the right plan registration, staff had to refer to a 12-page document.
- Additionally, authorizations were sometimes missed while the patient was in the hospital. The original authorization may have been for three days, but if the patient stayed longer, the additional authorization was often missed.

The University of Kansas Health System leveraged the learnings gained from these Excel-based solutions to build a robust denials analytics application in its Healthcare Analytics Warehouse and

Knowledgebase (HAWK), using the Health Catalyst® Analytics Platform, including the Late-Binding™ Data Warehouse.

FIGURE 1. SAMPLE OF DENIALS ANALYTIC APPLICATION VISUALIZATIONS

- 1 Filters for selecting data of interest.
- 2 Denial trends over time.
- 3 Denial reasons.
- 4 Top ten denials reports.

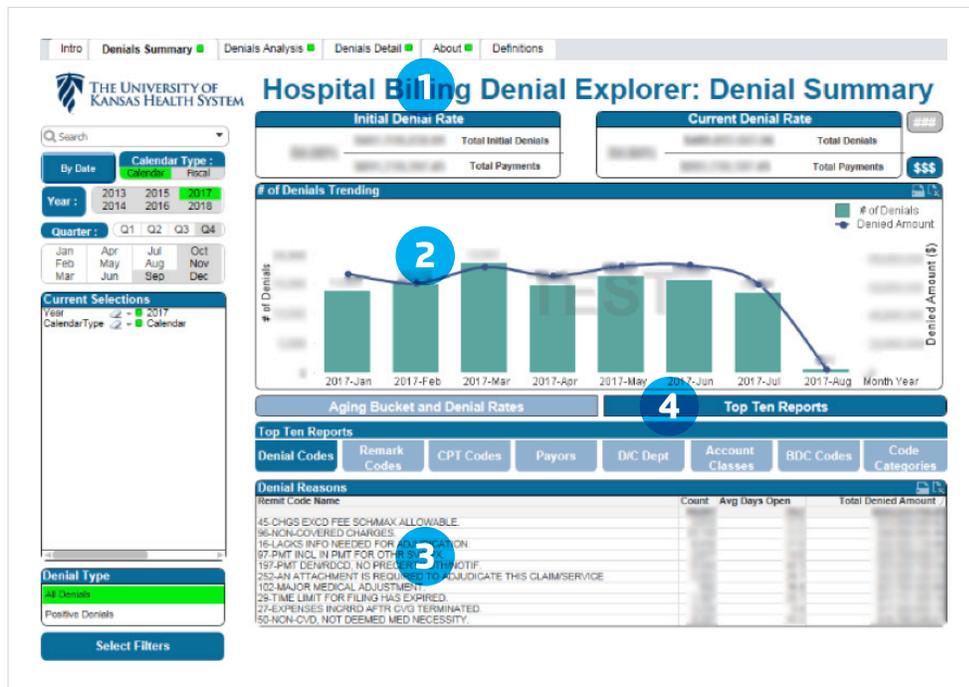


Figure 1. Sample of denials analytic application visualizations

Effective analytics drove improvement and engagement

The analytics application exposed denials data in powerful ways, allowing the team to drill into, and explore, specific issues with ease. Using the analytics application, The University of Kansas Health System could visualize performance and obtain detailed information for denial trends over time, age of denials, and type of denial by denial code, CPT code, payer, department, and account class. With this actionable data in hand, it could standardize a core set of metrics (initial denial versus subsequent denials) that defined success in ways that everyone agreed to, and could understand.

Measurable results, visible in reliable, trusted analytics applications, enabled consensus and engagement, and led to the successful adoption of improvement initiatives.

In one example, data exposed issues with denials of treatments in the cancer center, where the organization assumed it had been doing well. The team explored the data with the clinic leader, created shared understanding of clinic processes, and identified possible underlying causes of denials. Operational expertise, coupled with actionable, visible data and analytics, helped drive successful and sustainable improvement efforts in the clinic. This kind of collaborative partnership led to operational leaders owning and driving improvement efforts, and the associated results.

Our analytics tools provided us what we needed to get the data back to our operational partners in a way that is meaningful to them.

Colette Lasack, MBA
Vice President, Revenue Cycle
The University of Kansas
Health System

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First, know your problem,
understand your data and
performance, then you can
develop solutions.

David M. Wild, MD
Vice President, Lean Promotion
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RESULTS

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WHAT'S NEXT

The University of Kansas Health System continues to hone and refine analytic tools for denials reporting. Ongoing refinement of the continuous quality improvement model for insurance denials will support enduring changes in payer denials. The team continues to engage additional operational leaders and departments to help tackle denials. 🔥

REFERENCES

1. Haines, M. (2014). An ounce of prevention pays off: 90% of denials are preventable. *Advisory Board*. Retrieved from <https://www.advisory.com/research/financial-leadership-council/at-the-margins/2014/12/denialsmanagement>

ABOUT HEALTH CATALYST

Health Catalyst is a next-generation data, analytics, and decision support company committed to being a catalyst for massive, sustained improvements in healthcare outcomes. We are the leaders in a new era of advanced predictive analytics for [population health](#) and [value-based care](#). with a suite of machine learning-driven solutions, decades of outcomes-improvement expertise, and an unparalleled ability to integrate data from across the healthcare ecosystem. Our proven data warehousing and analytics platform helps improve quality, add efficiency and lower costs in support of more than 85 million patients and growing, ranging from the largest US health system to forward-thinking physician practices. Our technology and professional services can help you keep patients engaged and healthy in their homes and workplaces, and we can help you optimize care delivery to those patients when it becomes necessary. We are grateful to be recognized by Fortune, Gallup, Glassdoor, Modern Healthcare and a host of others as a Best Place to Work in technology and healthcare.

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