Tech-Enabled Managed Services: Smartsourcing Clinical Data Abstraction Reduces Costs and Improves Value

Banner Health.

💰 **$650K** in abstraction labor costs avoided and **$100K** in registry costs saved.

🔍 **38 percent reduction** in case review time—20K fewer annual abstraction hours.

⭐ **30 percent relative improvement** in team member engagement.

PRODUCTS

▸ Health Catalyst® Data Operating System (DOS™)

EXECUTIVE SUMMARY

Healthcare organizations are continually striving to decrease costs and improve profitability, and a growing number of organizations are outsourcing services to manage expenditures. Banner Health partnered with Health Catalyst to successfully smartsource clinical chart abstraction, utilizing Health Catalyst's Tech-Enabled Managed Services (TEMS). The partnership reduced costs, increased productivity, and enhanced employee proficiency and satisfaction while opening doors for team members to thrive and contribute in new roles.

SMARTSOURCING HELPS CONTROL HEALTHCARE COSTS

Healthcare organizations increasingly outsource services to control costs.[1] Banner Health smartsourced clinical chart abstraction to Health Catalyst. Health Catalyst accepted accountability for lowering costs by leveraging its Health Catalyst® Data Operating System (DOS™) platform and related tools to automate many manual tasks previously performed by registered nurse (RN) data abstractors. Banner Health retained responsibility for rationalizing its participation in elective registries, evaluating each on its ability to generate a positive return on investment.

INCREASING VALUE OF SERVICES BEING PROVIDED

Health Catalyst effectively lowered costs and improved clinical chart abstraction efficiency while simultaneously improving the team member experience. Banner Health successfully identified and discontinued several registries that were not providing value, either because they did not align with strategic objectives or a lack of internal readiness resulted in the incomplete application of the insights generated from the data. These savings allowed Banner Health to obtain greater value from the clinical chart abstraction services.

EXPANDING CLINICAL CHART ABSTRACTION SERVICES INCREASES EFFICIENCY

Banner Health optimized its participation in registries by retiring registries where the value derived from data collection and submission did not justify the investment needed to maintain ongoing participation. This allowed for the redirecting of resources toward continued and added registries where teams were actively engaged in using the data

for improvement. Health Catalyst automated components of the abstraction efforts, reducing the labor hours required for chart abstraction. With increased capacity, Health Catalyst invested its team members' time to support meaningful quality improvement efforts at Banner Health.

As Banner Health expanded its data collection for observed-to-expected (O/E) mortality across the entire organization, clinical chart abstraction team members used their knowledge of the Banner Health data and their clinical and analytics expertise to develop a mortality index review process to support quality improvement. This new process introduced a new strategy for improving key components of the mortality index (clinical care, documentation, and coding) for Banner Health.

Banner Health employed the combination of available RN data abstractors and DOS to bolster its performance in identifying and submitting electronic clinical quality measures (eCQMs). Banner Health previously performed manual chart reviews on small sample sizes to ensure the capture of the appropriate patient population. Health Catalyst leveraged the analytics platform to enable an automated review process for all cases identified by the EHR for submission, ensuring accurate and complete data submission. The more thorough assessment allows Banner Health to use the rich clinical information to help measure and track the quality of its healthcare services. The organization was able to assess the accuracy of its eCQM data and identify potential gaps in documentation and/or opportunities for improvement in the associated care delivery.

Banner Health elected to have available RN data abstractors augment its staff who had been pulled away to support accreditation survey readiness and the organization's COVID-19 response. The organization used the RN data abstractors to support infection-prevention surveillance efforts. The team members reviewed infection data for the entire system, identified patients with reportable illnesses/diseases, ensured appropriate initiation and discontinuation of isolation precautions, provided accurate reporting of infections, and conducted critical follow-up activities for potential exposure events.

ABOUT BANNER HEALTH

Banner Health is regarded and recognized as a top health system in the country for clinical quality care. The nonprofit organization is headquartered in Phoenix, Arizona, and operates 30 hospitals, including three academic medical centers, and other related health entities and services in six states.

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The nurse clinical data abstractor from Health Catalyst was amazing. She took time to understand our vision and goals in order to then help us design a review process meant to clean up the noise in our data and surface real clinical care opportunities. Development of this process led to an enterprise long term initiative beginning in 2022 focused on improving mortality index.

Chris Forman-Goerke, MSM, CPHQ
Senior Director, QI, Patient Safety & Peer Review, Banner Health

The clinical chart abstraction roles supporting Banner Health were also expanded to provide support to the organization's clinical consensus groups. Clinical consensus groups define expected clinical practices based on the best available evidence. Clinical chart abstractors support the clinical consensus group in obtaining and analyzing data to measure and monitor the success of clinical practice.

RESULTS

The Banner Health TEMS relationship with Health Catalyst enables the organization to improve utilization of registry data, control costs, adapt to changing organizational needs, and take on more advanced quality improvement activities. Results include:

- **$650K in abstraction labor costs avoided** and $100K in registry costs saved.
  - Data collection for hospitals acquired by Banner Health were added to the clinical data abstraction teams' work without requiring additional resources or fees.
- **38 percent reduction** in case review time—20K fewer annual abstraction hours.
- Investment of clinical chart abstraction resources to support quality improvement activities.
  - For the first time, Banner Health has a mortality index that allows the organization to benchmark performance against similar organizations and identify opportunities for improvement.
  - **46 percent improvement** in case submission accuracy for eCQM reporting and the identification of over 71,000 cases, out of 225,000, that would have been submitted in error.
    - The organization can now leverage eCQM data and analytics for improvement.
  - Effective infectious disease management, reporting, and precautions for more than 5,000 patients.
- **30 percent relative improvement** in team member engagement.

WHAT'S NEXT

Banner Health plans to continue its TEMS relationships with Health Catalyst. Health Catalyst will continue to evaluate opportunities to deliver value, continuously improving the effectiveness of its clinical chart abstraction services.

REFERENCES

1. LaPointe, J. (2019). Outsourcing on the mind as hospitals pursue value-based care. *RevCycleIntelligence.* Retrieved from https://revcycleintelligence.com/news/outsourcing-on-the-mind-as-hospitals-pursue-value-based-care

ABOUT HEALTH CATALYST

Health Catalyst is a leading provider of data and analytics technology and services to healthcare organizations, committed to being the catalyst for massive, measurable, data-informed healthcare improvement. Our customers leverage our cloud-based data platform—powered by data from more than 100 million patient records, and encompassing trillions of facts—as well as our analytics software and professional services expertise to make data-informed decisions and realize measurable clinical, financial, and operational improvements. We envision a future in which all healthcare decisions are data informed.

Learn more at **www.healthcatalyst.com**, and follow us on **Twitter**, **LinkedIn**, and **Facebook**.