

Mercy

Core Metric: Clinical Documentation

Executive Brief

About

Mercy, serving millions annually, includes 45 acute care and specialty (heart, children's, orthopedic and rehab) hospitals, more than 700 physician practices and outpatient facilities, 40,000 co-workers and more than 2,000 Mercy Clinic physicians in Arkansas, Kansas, Missouri and Oklahoma. Mercy also has outreach ministries in Louisiana, Mississippi and Texas.

Results

- Increased CMI by 6.27%
- Increased SOI from 2.1 to 2.3
- Increased ROM from 1.8 to 2.0
- Increased MCC by 6.7%
- Decreased physician response time to queries by 49%
- Enabled MDS to review 40% more patients per day

Overview

Mercy spent a decade optimizing its EHR system and processes, and navigating patient data for better cost and outcomes. Yet, they faced a wide gap between the clinical domain and the coding world. They implemented a clinical documentation improvement (CDI) initiative and industry-leading analytics to transform clinical documentation workflow, to improve the accuracy of physician documentation, and to shrink that gap. As a result, Mercy increased scoring indexes that reflected the acuity of care provided, including: case mix index (CMI), severity of illness (SOI) index, risk of mortality (ROM) index, and major complications and comorbidities (MCC) index.

Situation

Mercy's analytics and medical documentation teams partnered on the CDI initiative, focusing on secondary diagnosis identification and operational analytics. They addressed documentation accuracy, process efficiency and response timeliness. The team recognized that medical documentation wasn't accurately reflecting the sickness of patients or the quality of their care. They also identified that it took medical documentation specialists (MDS) 20-40 minutes to manually review charts for missed clinical information and coding deficiencies. In addition, the teams noted that non-standard processes used by MDS created a siloed environment where multiple teams sent the physician inconsistent messages, prolonging coding query response time.

To address these issues, Mercy leveraged existing EHR functionality, utilized analytics, re-engineered existing workflows and designed new workflows. A collaborative approach between physicians and MDS ensured successful implementation, adoption and sustainability of the new workflows. Mercy embedded a custom report in the EHR to automate the identification of patient charts with documentation deficiencies, allowing the coding specialist to turn insight into immediate action. This automation reduced a long chart review process to instantaneous detection and delivered greater precision of secondary diagnoses. The initiative resulted in accurate documentation of care provided and increased related quality measures of CMI, SOI, ROM, and MCC.

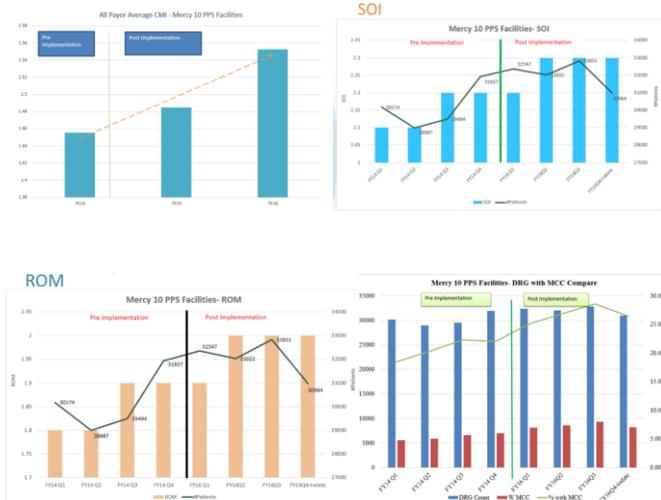
In addition, Mercy incorporated operational analytics to help MDS to prioritize their day by identifying top patients that need to be reviewed, monitor queries and overall trending, and track workflows.

Change management was also foundational to Mercy's success. They created alignment between MDS, physicians and coding teams to enable more consistent, efficient and standardized change. Mercy adopted a peer-driven change model, using a bi-directional change process to enable engagement, adoption and feedback from everyone including the end user.

Outcomes

Through the CDI initiative, Mercy provided accurate documentation in an efficient and timely manner, standardized workflows with best practices, provided actionable data, and enabled physicians to more precisely reflect the clinical case with appropriate terms.

Mercy increased CMI by 6.27 percent, SOI from 2.1 to 2.3, ROM from 1.8 to 2.0, and MCC by 6.7 percent for adult admissions across 10 hospitals.



Mercy also improved process efficiencies: decreased a 13-step process to three clicks for physicians; saved 10,000 clicks per MDS user per month, reduced post discharge queries by 20 percent, increased MDS daily patient review by 40 percent, and decreased physician response time to queries by 49 percent despite a 72 percent increase in queries.

Financial Considerations

The CDI initiative increased revenue, as reflected in the following cost-benefit analysis for 10 Mercy locations.

Cost-Benefits Analysis - Financial Consideration	
Costs	
Installation of new Hardware, Software and Licenses *Computers *Network *Application development *Database servers	\$350,000.00
Human Resources *Consultants *Co-worker Salaries	\$2,500,000.00
Implementation *Face to Face Training fees	\$100,000.00
On Going IT (support & maintenance) *IT support for initial server install *Monthly IT support *Support & Updates - Software	\$40,000.00
Total Costs	\$2,990,000.00
Benefits	
Vendor cost savings --- eliminated legacy reporting systems	\$4,400,000.00
Additional revenue realized from accurate documentation (All appropriate IP admissions)	\$65,737,317.00
Total Benefits	\$70,137,317.00

Lessons Learned

Mercy shared these lessons learned.

- ❖ Consider people and process component. We learned technology alone would not create sustainable improvement. Mercy encountered existing challenges, including a complex workflow, inconsistent and duplicative messages to providers, and the inability to report and track communication. The solution required a coordinated effort among different groups, maximizing process efficiency and bridging the gap between the clinical and coding worlds. The physicians' compensation formula encouraged participation in educational projects and overall goal alignment, which led to greater compliance. Another key driver was physician reputation. The more they understood how their reputation could be impacted by inaccurate words, alignment became more robust.
- ❖ Physician input and governance. The project was governed by physicians. Weekly meetings were held with them to enable input prior to implementation. They also worked with MDS to test post implementation. Collaboration, communication and education among MDS and physician champions helped create clinical guidelines for query processes to improve the quality of the EHR. Physician champions were the conduit for peer-driven change, engagement, adoption and feedback. Individual physicians from each facility were engaged in the governance process, creating buy-in from each location. And, because we made their jobs easier, the "easy button" concept gained a lot of attention from advisors and local medical staff. Buy-in grew over time, and we saw success and improvement at every Mercy facility.
- ❖ Identify key data. It's important to identify critical sources of data and ensure data migrates to the correct database. Once technology architecture was in place, Mercy's implementation occurred quickly.
- ❖ Assign champions. It's powerful to have an MDS super user and champion at each site to help create buy-in and increase adoption and utilization among MDS.
- ❖ Leverage an advanced analytics platform. Over the past three years, Mercy has systematically implemented a more agile data infrastructure. Our experience taught us the importance of having a powerful data platform in place to support the volume and complexity of advanced analytics initiatives.

Since 1994, the HIMSS Nicholas E. Davies Award of Excellence has recognized outstanding achievement of organizations who have utilized health information technology to substantially improve patient outcomes while achieving return on investment. The Davies Awards program promotes EHR-enabled improvement in patient outcomes through sharing case studies and lessons learned on implementation strategies, workflow design, best practice adherence, and patient engagement.

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