Unleashing the Data to Sustain Spine Service Line Improvements

DRIVING SUSTAINABLE IMPROVEMENTS IN SPINE CARE

Healthcare quality management remains a major challenge for healthcare organizations, specifically when it comes to sustaining quality improvement initiatives. Doing so requires adherence to standard work, ongoing measurement, and continued vigilance, well after improvement goals have been achieved.[1]

Following quality planning and improvement efforts, healthcare organizations must employ quality control and focus on monitoring the system for stability, continually examining processes via direct observation of performance, data and analytics, and statistical methods.[2]

The Allina Health Spine Clinical Service Line is dedicated to the comprehensive management of spinal diseases and disorders. This includes continual quality and performance improvement initiatives designed to create the best care at the right time.

HEALTHCARE QUALITY MANAGEMENT HINDERED BY DATA VISIBILITY

Several years ago, hospital leadership at Allina Health became aware of lower-than-expected grades in publicly reported data for spine surgery performance. Clinical champions began to drive quality improvement including regular review of key metrics. Soon after, Allina Health created a Spine Clinical Service Line (CSL), focused on integrating system wide efforts to improve the patient experience, including care quality and patient satisfaction, and improve the overall health of patient populations while containing the per-capita cost of care.

The Spine CSL successfully improved outcomes related to post-operative complications, while reducing length of stay and cost. To sustain these gains, Allina Health needed to secure widespread access to data and adopt the analytics required to maintain ongoing quality control and quality improvement.

DATA ACCESS ADVANCES IMPROVEMENT EFFORTS

To ensure ongoing quality control and sustainable quality improvements, Allina Health used the Health Catalyst® Analytics Platform, including the Late-Binding™ Data Warehouse and broad suite of analytics applications, to build an analytics application with spine-related data. The data was then made broadly available to stakeholders through the user-friendly analytics application—effectively unleashing the data through increased user access. The resulting transparency and accessibility of the spine-related data supported the Spine CSL in its ongoing performance monitoring and quality improvement efforts.

> "Expanding access to our analytics tools established the reliability of data and gave us ready access to a consistent reporting mechanism. It gave us a single source of truth and eliminated the unproductive 'the data is wrong' discussions, allowing us to sustain and further increase our improvement gains.

> Kate Radmer, MS, MBA
> Manager, Operations & Clinical Programs
> Allina Health

The analytics platform integrates disparate data, including financial, supply chain, and clinical data from across the organization into a single source of truth. Using the analytics platform and its multidisciplinary, patient-centric approach to improvement, the Spine CSL is able to:

- Use data to define the problem.
- Compare spine program outcomes to best practice supported by literature.
- Encourage consensus-driven improvement initiatives.
- Standardize measure definition and tools across the CSL.
- Compare performance data by site, physician practice, and individual physician.

The Allina Health Spine CSL Program Development Committee has administrative oversight and provides clinical guidance for the spine program, data, analytics, and improvement efforts. This ensures continued widespread access to, and adoption of, data and analytics to drive and sustain improvements.

The committee works to engage clinical leadership and set expectations for the use of self-service analytics, simplifying applications and accessibility of the applications, which enables improvement teams sustain quality control and identify new improvement opportunities. The committee also works with stakeholders to establish the reliability of the data and any reporting mechanism.

RESULTS

The Spine CSL at Allina Health has been able to sustain their initial accomplishments and further improve the reduction in complications, all while increasing cost savings. Specific results include:

- $1 million in pay-for-performance incentives received.

- More than $2 million in supply chain savings as a result of data-driven clinical standardization.
- 31 percent of expected complications avoided.
- 22 percent relative reduction in surgical site infections.
- 8.8 percent relative reduction in LOS.

WHAT'S NEXT

Based on their success with sustaining and building on their initial improvements with the spine program, Allina Health is taking a similar approach of unleashing data for other programs, recognizing that increasing access and encouraging self-service analytics paves the way for clinicians to see opportunities and change their practices to improve patient outcomes.

REFERENCES

1. Agency for Health Quality and Research. (2014). *Sustaining and spreading quality improvement*. Retrieved from https://innovations.ahrq.gov/perspectives/sustaining-and-spreading-quality-improvement

2. Scoville, R., Little, K., Rakover, J., Luther, K., & Mate, K. (2016). Sustaining improvement. *Institute for Healthcare Improvement*. Retrieved from http://www.ihi.org/resources/_layouts/download.aspx?SourceURL=%2fresources%2fKnowledge+Center+Assets%2fIHIWhitePapers+-+SustainingImprovement_09955be1-c7a3-4161-b799-2f010e406dfe%2fIHISustaining-ImprovementWhitePaper.pdf

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