



AVANT-GARDE
HEALTH

Let's Take a Closer Look™



CASE STUDY

Rothman Orthopedics & NueHealth: Reducing Knee and Hip Replacement Implant Costs Through Data-Driven Insights

Overview

Avant-garde Health, a leading provider of healthcare analytics software and services, partnered with Rothman Orthopedics, a world-renowned physician group specializing in orthopedic care, and NueHealth, a prominent operator of surgery centers and hospitals across the U.S.

Together, they tackled the escalating costs of knee and hip replacements in one of Rothman and NueHealth's regional markets. By leveraging Avant-garde's comprehensive analytics software, the collaboration identified a potential for **over \$1.7 million in annual savings** on implant costs.

Challenges

The rising cost of knee and hip replacement implants posed a significant financial challenge. Variability in implant pricing across facilities and discrepancies when compared to external benchmarks highlighted inefficiencies and opportunities for cost reduction.

Solution

Avant-garde Health's analytics software played a pivotal role by:

→ **Revealing substantial pricing discrepancies** across Rothman and NueHealth facilities and relative to industry benchmarks.

→ **Providing detailed insights into supply pricing**, segmented by vendor, procedure, and implant type (e.g., cemented vs. uncemented).

→ **Enabling the development of an informed reference pricing strategy** based on comprehensive internal and external data.

Avant-garde's services team collaborated closely with NueHealth's regional supply chain leader and a lead orthopedic surgeon from Rothman to design a strategic approach for securing competitive national pricing.

Implementation

- 1. Data Analysis:** The software facilitated an in-depth analysis of current pricing, highlighting cost discrepancies and opportunities.
- 2. Strategy Development:** Armed with data-driven insights, the team created reference pricing goals and crafted vendor agreements outlining expected pricing structures.
- 3. Vendor Negotiations:** The team engaged with vendors, addressing concerns over proprietary technologies and evaluating the justification for premium pricing.
- 4. Surgeon Engagement:** Input from a broader set of surgeons led to consensus on discontinuing the use of costlier implants that lacked significant added value.
- 5. Final Agreements:** After rigorous negotiations, new pricing agreements were established.

Results

- **Cost Savings:** Over \$1.7 million in annual savings on knee and hip replacement implant costs.
- **Ongoing Monitoring:** Avant-garde's software continues to track and report monthly savings across NueHealth facilities, ensuring sustained cost-efficiency.
- **Scalable Impact:** The initiative set a precedent for future cost-saving projects across additional procedures, surgery centers, and hospitals.

Key Takeaways

Data-Driven Decision Making: Leveraging granular data and external benchmarks is critical for identifying cost-saving opportunities. Data analytics enables healthcare organizations to uncover inefficiencies that may go unnoticed in traditional review processes. This approach ensures decisions are based on objective evidence, leading to more accurate and effective cost management strategies.

Collaborative Approach: Engaging both clinical and supply chain stakeholders ensures balanced, effective negotiation strategies. Collaboration fosters a culture of shared responsibility, where surgeons and administrators work together to evaluate the value of medical products, ensuring that clinical efficacy is not compromised while pursuing cost reductions.

Sustainable Results: Continuous monitoring and analytics support the longevity of cost reduction initiatives. Ongoing data analysis helps organizations adapt to market changes, track the effectiveness of cost-saving measures, and make real-time adjustments to maintain financial efficiency over the long term.

Benchmarking for Competitive Advantage: Comparing internal data with industry benchmarks provides a competitive edge. It allows healthcare organizations to identify areas where they may be overpaying compared to peers, setting realistic and competitive pricing goals that drive negotiations with suppliers.

Physician Engagement: Involving physicians in the decision-making process enhances the credibility and acceptance of cost-saving initiatives. Physicians' insights into clinical outcomes help balance cost considerations with patient care quality, making them key allies in implementing sustainable changes.

Replicability Across Systems: The success of this initiative demonstrates that similar data-driven, collaborative approaches can be replicated across different healthcare systems, procedures, and specialties. This scalability ensures that cost-saving benefits are not limited to isolated projects but can be expanded organization-wide.

