Regenexx® at Work

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KEY TAKEAWAYS

- **Duke University** and **Regenexx** partnered on a health economics and outcomes research (HEOR) study.
- This month explores the part of the study comparing **health outcomes** and **long-term cost savings** of Regenexx protocol* to those of **spinal fusion**† and **LFDF**‡§¶#, respectively.
- Duke spine research **reinforces** what **Regenexx data** have **historically demonstrated** when compared to surgery[1]:
  - **Significant cost savings** (long- and short-term)
  - **Low crossover to surgery**
  - **Decreased downstream healthcare utilization**
  - **Rare major adverse events**
- **Spinal fusion cost ~3–4× more** than the Regenexx approach across all time horizons (1-4 years).[1]

5-MINUTE READ

Duke University + Regenexx: Spine Snapshot

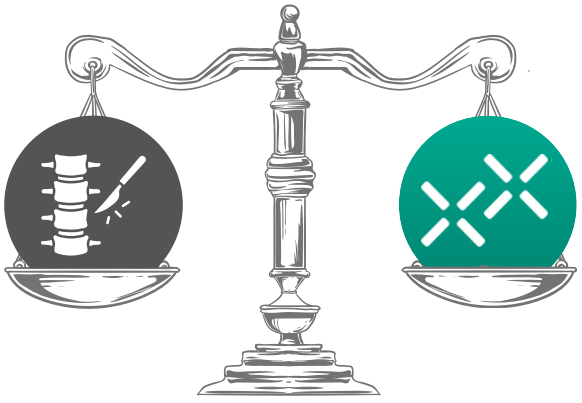
Our last two newsletters discussed the recent **HEOR study** from the **Regenexx partnership with Duke University**. This month, we'll share highlights from the **spine** portion of the study.

Duke researchers compared the **health outcomes** and **long-term cost savings** of the Regenexx protocol* to those of **spinal fusion** and **LFDF**, respectively. The study sourced **real-world data** from a large national commercial claims database and the **Regenexx Provider Patient Registry**.

The case for an alternative to spine surgery

The Regenexx protocol was designed to provide an option in care for musculoskeletal (MSK) issues such as back pain, offering an **alternative to spinal fusion and LFDF** where appropriate. This empowers employers to help **control for factors like spine surgery overuse**.‖ Such control is crucial, given that:

- Spinal surgery has been demonstrated to be **high cost, low value,** and **overused** by various studies[2,3]
- Spinal fusion is associated with higher rates of revision surgery**[4]
  - **Revision surgery** has often demonstrated **worse outcomes** than the first surgery[5]
    - This increases the likelihood of **additional surgery (reoperation)**



New Duke research agrees with ongoing Regenexx findings

The **Duke spine research reinforces what Regenexx data have historically demonstrated** when compared to surgery. Check out these highlights[1]:

COST SAVINGS

Significantly more short- and long-term cost savings across all time horizons (1-4 years).

- Trends in costs generally held consistent over 4 years, particularly for spinal fusion

CROSSOVER TO SURGERY

Lower rates of follow-up surgeries.

- All rates for matched analyses were **below minimum reporting threshold**. (This threshold helps to protect privacy when rates are too low to report individually.)
- Rates of reoperation after initial fusion surgery or LFDF were similar to reoperation rates published in other studies

Note: Expanded analyses demonstrated 3.8% of patients who received Regenexx protocol went on to receive LFDF at 2 years.

HEALTHCARE UTILIZATION

Significantly lower downstream healthcare utilization (including imaging, post-surgical care, and home health use).

- **Regenexx protocol vs. spinal fusion**
  - **X-ray:** 23% for Regenexx protocol vs. 93% for spinal fusion at 1 year
  - **Home health:** 14% for Regenexx protocol vs. 40% for spinal fusion at 1 year
- **Regenexx protocol vs. LFDF**
  - **Home health:** 12% for Regenexx protocol vs. 18% for LFDF at 1 year

ADVERSE EVENTS

Major adverse events were rare for Regenexx protocol.††

- **Regenexx protocol vs. spinal fusion | Regenexx protocol vs. LFDF**
  - **Adverse events were below reporting threshold** (<11) for Regenexx protocol

** Regenexx protocol utilized injections of the Regenexx provider patient's own cells (from bone marrow concentrate, which contains stem cells, and/or platelet-rich plasma).*

† Spinal fusion=procedure that fuses certain vertebrae together. It is often performed together with a laminectomy.[2]

‡ Laminectomy=surgery that removes part of the vertebra.[2]

§ Foraminotomy=surgery that treats nerve compression by widening the opening of the spine for the nerve roots.[6]

¶ Discectomy=surgery to remove all or part of the disc, or cartilage cushion that helps support part of the spine.[7]

 # Facetectomy=procedure that removes part of facet joint in the spine.[8]

‖ "Overuse" in this context refers to spine surgery patients with lower back pain who did not receive certain diagnoses for which the surgeries were indicated (such as trauma, a herniated disc, or scoliosis).

*** Revision surgery=future procedure to correct or improve the previous one.*

†† Adverse events were restricted in the Duke study by suppressing data where rates fell below the minimum reporting threshold where applicable.

Take a look at these Duke study cost savings and durability highlights for spinal fusion and LFDF over 4 years[1]:

Regenexx Approach Compared to Spinal Fusion

~77% cost savings at Year 1

Time Horizon	COST SAVINGS: Cost Savings (Commercial Payer Avg. Costs)		DURABILITY: Surgical Conversion Rate	DURABILITY: Spinal Fusion Reoperation Rate	
1 year	~$45,326 less	Spinal fusion cost **~3–4× more** than the Regenexx approach across all time horizons (1-4 years).	Below reporting threshold	~10.7%	**1 in 5** spinal fusion patients needed reoperation by Year 4
2 years	~$46,747 less			~14.1%	
3 years	~$49,122 less			~18.7%	
4 years	~$49,634 less			~21.4%	

Regenexx Approach Compared to LFDF

Time Horizon	COST SAVINGS: Cost Savings (Commercial Payer Avg. Costs)		DURABILITY: Surgical Conversion Rate	DURABILITY: LFDF Reoperation Rate	
1 year	~$17,944 less	LFDF cost **~2× more** than the Regenexx approach across all time horizons (1-4 years).	Below reporting threshold	~24.9%	**1 in 3** LFDF patients needed reoperation by Year 4
2 years	~$17,931 less			~29.0%	
3 years	~$19,727 less			~32.0%	
4 years	~$20,385 less			~34.1%	

Note: "Below reporting threshold" indicates fewer than 11 reoperation events were observed among Regenexx provider patients at every follow-up. "Surgical conversion rate" refers to Regenexx provider patients who went on to surgery. "Reoperation rate" refers to surgery patients who needed additional surgery.

Contact us to learn more about the Duke study and why it concluded that the **Regenexx approach provides a "high-value, cost-saving alternative"** to elective orthopedic surgeries.

Also, stay tuned for next month's *Regenexx at Work Newsletter*, where we'll zoom in on Duke knee study data.

Contact Us

What is the Regenexx® Corporate Program?

The Regenexx Corporate Program provides **MSK cost savings for self-funded employers**. According to a Validation Institute cost-savings analysis, **procedures using Regenexx injectates were ~50% less expensive than the surgery avoided**.[9]

The program continues to see traction among employers, brokers, and third-party administrators who have chosen to partner with us. The Regenexx benefit is no cost to add and simple to include in any self-funded healthcare plan.

Learn how adding the Regenexx benefit can **reduce costs by up to 70%** on individual surgeries while offering members a new option in care.[10] Contact your Regenexx Corporate Sales Representative to learn more.

Regenexx® Corporate Program

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Note: The Duke HEOR study data have not yet been finalized by authors. It may contain errors and report information that is not yet accepted or endorsed by the scientific or medical community.

Cost avoidance estimates for individual groups are not reflective of the potential cost avoidance estimates for another group. Any estimate of cost avoidance for a group is specific to their employee population. To understand how your company's surgical experience may relate to the Regenexx approach, you can request a Regenexx Corporate Program Impact Study.

Cost savings estimates: Physicians within the licensed Regenexx network indicate the surgical procedure for which Regenexx provider patients are a candidate. The Regenexx Corporate Program then measures the actual cost of the procedure using Regenexx lab processes against the cost of the surgical alternative. While the Regenexx Corporate Program does post service reviews and assess a percentage of Regenexx provider patients, not all these cases have been verified by a third party. Fair cost estimates based on Denver, CO ZIP code. In some cases, a generic "arthroscopy" cost estimate had to be used when a detailed condition-specific estimate was unavailable.

Like all medical interventions, procedures using Regenexx lab processes have a success and failure rate. Regenexx provider patient reviews and testimonials in this email should not be interpreted as a statement on the effectiveness of regenerative therapy for anyone else. Industry professional reviews and testimonials reflect the experience of that entity with the Regenexx Corporate Program. To discuss what a partnership with Regenexx could look like for your company or client, contact our team.

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Revised August 19, 2026.
Errata: The original version of this report (published May 8, 2026) has been updated to correct an error in the References section. The article name for reference 7 was corrected from "Foraminotomy" to "Diskectomy."

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