



# The Hidden Problem Costing Health Systems Millions: Rehab Referral Leakage

(Now Including 2022 Data)

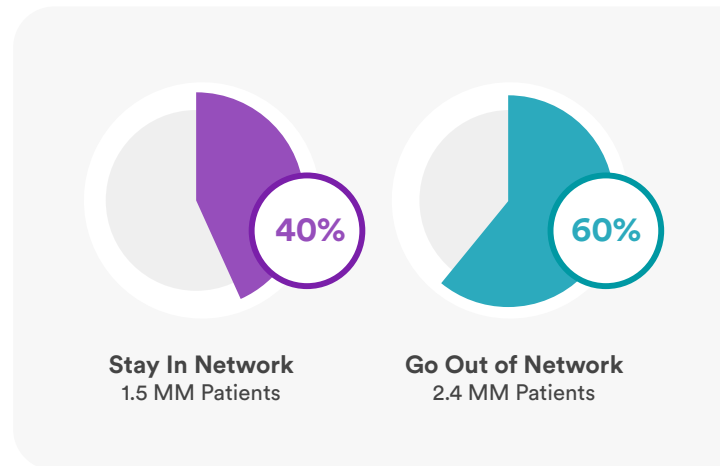
# Health Systems' Costly Issue: Rehab Referral Leakage

## Executive Summary

For patients, what happens after surgery is just as important as what happens in the operating room. In an effort to ensure high-quality care during recovery, health systems operate physical therapy clinics and refer patients to them after surgeries or other major medical events. This allows the team that performed the original surgery to know their patients are getting the right care and track a patient's recovery progress.

A concerning trend is that a significant portion of patients, approximately 60%, are choosing to go elsewhere for their healthcare needs instead of staying within their initial health system. This means that a substantial number of patients are bypassing the services by their primary provider, opting for alternatives. This is known as leakage.

Leakage means health systems lose the opportunity to standardize patient care and ensure that it aligns with the directives and practices of the physicians within their system. But why is leakage happening? Patient preference or convenience plays a significant role, as they may choose to seek care elsewhere based on preferences or ease of access. Additionally, the limited availability of certain services within the original health system may force patients to look for alternative providers that offer the specific care they require.



## In 2022, Health Systems Lost \$3.1+ Billion in Revenue Due to PT Referral Leakage

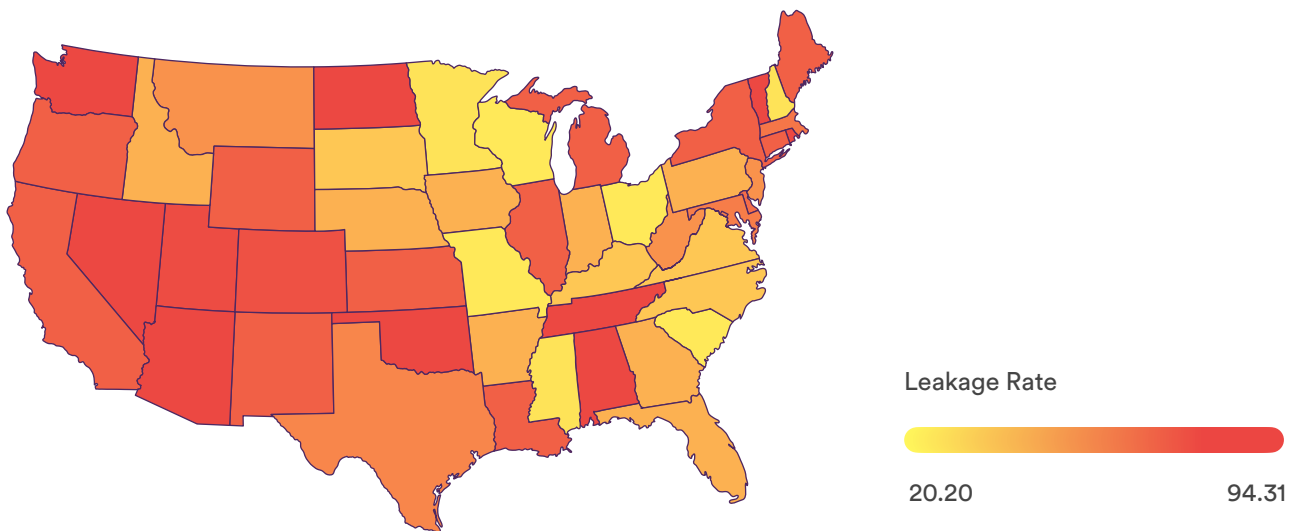
This research analyzed the care journeys of over 3.9 million patients in major metropolitan areas who are covered by commercial health insurance. **Nearly 2.4 million (60%) of these patients left their health system for physical therapy**, creating an estimated \$3.1 billion in lost revenue.

For each referred patient who leaves the system, health systems lose the chance to provide care – **\$2,000 - \$3,000 per leaked patient.**

# Referral Leakage Varies by Region

Leakage rates in healthcare differ by region, with the Northeast facing greater challenges in preventing patient attrition compared to other regions.

- The Northeast has the highest leakage rate of the four regions at 69%, costing an estimated \$1.02 billion in revenue.
- The leakage rate in the West is 62%, costing an estimated \$623 million.
- The leakage rate in the Midwest is 51%, costing an estimated \$562 million.
- The South has the lowest leakage rate at 45%, though leakage costs health systems in that region an estimated \$697 million in revenue.



Some possible explanations as to why the Northeast struggles with leakage more than other regions:

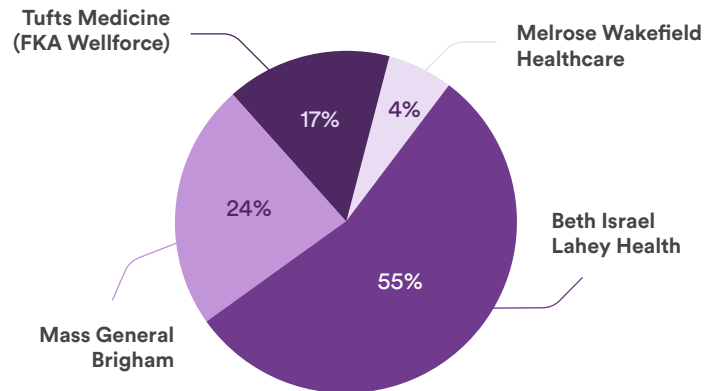
- With a higher population density, the Northeast has a larger pool of potential patients and a higher concentration of healthcare providers. This can create a more competitive healthcare landscape where providers strive to attract and retain patients. As a result, patients have more options to choose from, making it easier to seek out alternative providers for their healthcare needs, leading to referral leakage.
- This region is known for its numerous prestigious institutions and specialized providers who offer advanced and specialized treatments. Patients may have specific conditions or preferences that lead them to seek out these providers, even if they are outside their original referral network. The allure of accessing renowned experts or innovative treatments can override considerations of staying within their primary health system, contributing to referral leakage.
- The healthcare landscape may consist of multiple independent practices, hospitals, and healthcare organizations that may not be connected. This fragmentation makes it harder for health systems to ensure that all services and specialists are available within their network. As a result, patients may be referred externally for specialized services or procedures, increasing the likelihood of referral leakage.

# Leakage Persists Across Metro Areas

## Regional Deep Dive: Boston Metro Area

Leakage in the rehab industry exhibits not only regional disparities but also significant variations within a single metropolitan area. Below is a look at the referral volume of each system expressed as a percent of the total Boston area analyzed:

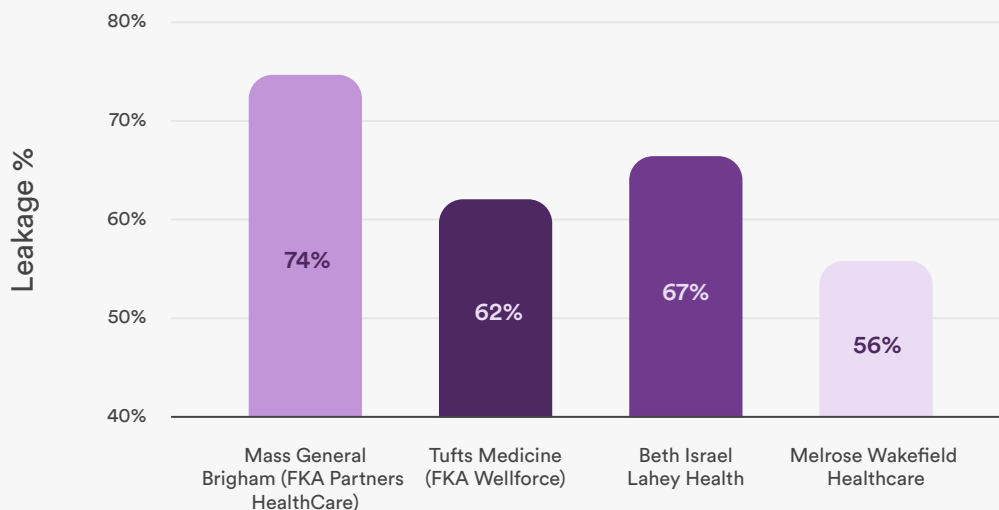
### Referral Volumes, Top Boston Health Systems



- Leakage rate: **67%**
- Total Referred: **150,000**
- Total Leaked: **~100,000**

While the volume of patient leakage may vary among health systems, it remains a significant concern with high leakage percentages across all major healthcare providers in the Boston area.

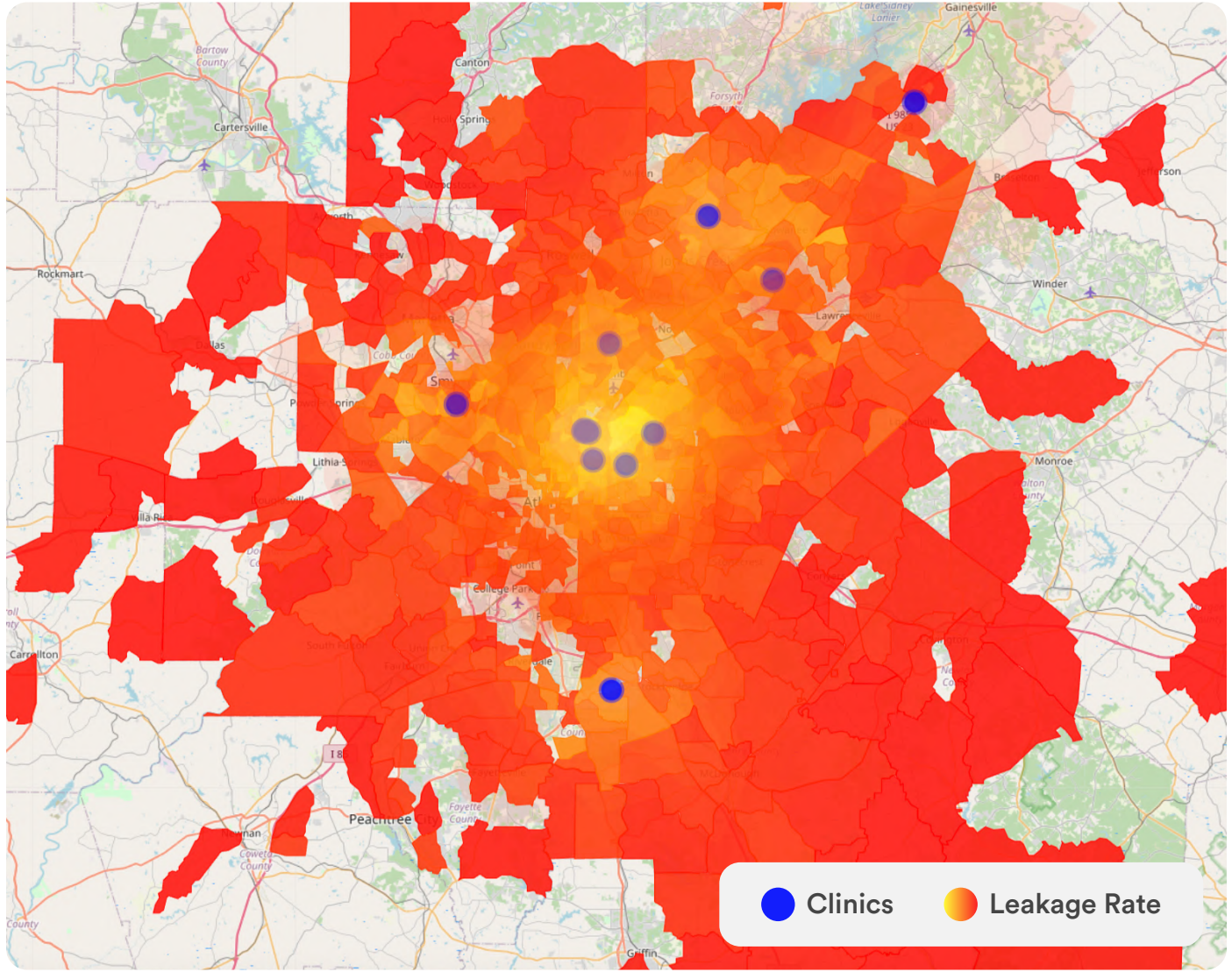
### Leakage Rates, Top Boston Health Systems



Factors such as patient preferences, limited service availability, drive times and convenience contribute to the fluctuations in leakage rates. Understanding and addressing these disparities is crucial for health systems to enhance patient retention and optimize the standardization of care within their respective markets.



# Proximity Analysis and Its Impact on Leakage



The heatmap shows a health system’s physical therapy clinics in a given metropolitan area, represented by the blue dots. Areas in yellow have less referral leakage (50-70% leakage) than areas in red (71-100% leakage).

## Patient Sensitivity to Driving

The heatmap clearly illustrates that patients are more likely to adhere to a referral and stay in the system if they live within a short drive of the clinic. Otherwise, they’re much more likely to go locally for care. In this health system’s case, the data demonstrated that patients within 5 miles of the clinic had a 50% chance of leaking, and patients greater than 5 miles of the clinic had a 80% chance of leaking.

This puts health systems in a difficult position. It’s not practical or efficient to continue building clinics until enough of the population has a facility within minutes of their home or office. Instead, health systems need to consider new ways of bringing care to the patient.

# IDNs with Highest & Lowest Leakage Rates

As demonstrated when looking deeper into Boston’s health systems, leakage rates across individual health systems can vary significantly, showcasing a wide spectrum of performance in preventing patient attrition. While some health systems may excel in mitigating leakage and demonstrate lower rates compared to others, even the best performers still face a persistent problem that requires addressing.

These five health systems had the lowest leakage rates of the systems analyzed.

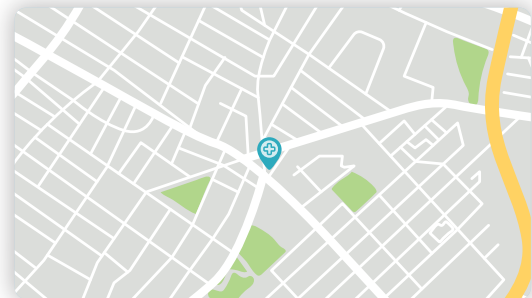
Health System	Location	Leakage Rate	Commercial Patients Leaked Per Annum <sup>3</sup>
SSM Health	MO	18%	~6,000
Wellstar Health System	GA	24%	~7,000
UofL Health	KY	27%	~4,000
Baptist Health	FL	28%	~5,500
Mercy	MO	29%	~16,000

On the other hand, these three health systems all handle similar patient volumes but struggle to keep even 25% of their patients:

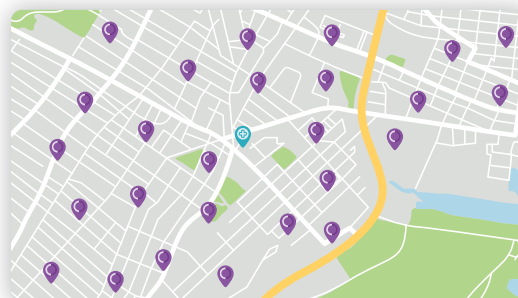
Health System	Location	Leakage Rate	Commercial Patients Leaked Per Annum <sup>3</sup>
Brookwood Baptist Health	AL	88%	~9,000
Providence Health and Service	WA	84%	~7,000
Good Samaritan Health System	CA	84%	~7,000
Abrazo Health	AZ	79%	~18,000
Phoenix Children’s Health System	AZ	74%	~4,000

# Addressing Leakage by Enabling Care at Home

Leakage poses a significant challenge for the healthcare industry, leading to substantial financial losses and hindering the standardization of patient care. Factors such as patient preference, convenience, and limited service availability contribute to the persistent nature of this issue. However, partnering with Luna offers a solution for health systems to address leakage effectively.



Without Luna



With Luna

By collaborating with Luna, health systems can tap into an extensive network of local therapists, enabling them to deliver on-demand services to patients throughout their service area without the need to construct new clinics. Additionally, Luna provides access to their acclaimed technology platform, empowering health systems to mobilize quality care in the field. With Luna's comprehensive support, resources, and branded care, health systems can extend their capabilities and enhance their rehabilitation service line.

Luna's advanced technology platform seamlessly connects patients with therapists from their local networks, taking into account specialty, geography, schedules, and other relevant factors. This personalized approach ensures patients receive consistent, high-quality care by working with the same therapist throughout their treatment journey. Moreover, patients can leverage the platform to schedule appointments, perform therapist-prescribed exercises, and track their progress, promoting convenience and engagement in their healthcare experience.

## Analysis Methodology

To understand the scope of the problem, we analyzed 2022 commercial claims data from 3.9 million patients across the U.S. compiled by Definitive Healthcare. With this data, we were able to calculate how many patients were prescribed physical therapy by a health system and how many sought care from a different provider within the same metro area as the prescribing health system.

This data included claims rendered under the Healthcare Common Procedure Coding System (HCPCS) codes applicable to physical therapy [97161, 97162, 97163, 97165, 97166, 97167, 9110, 97530, 97112, 97140].

Medicare claims data was not included in this part of the analysis because it does not include granularity at this level.

Leveraging data and insights from Luna's existing health system partners and Luna's own market analysis, we estimated costs by assuming each physical therapy visit costs \$130 and about 10 visits are completed per case. This is a conservative estimate, as some cases can include upwards of 12+ visits and many of the markets included reached \$150-\$200 per visit.

While the data presented is accurate and directionally captures the opportunity, we have strong reason to believe the analysis below underestimates the magnitude leakage opportunity because patients who received a physical therapy referral but did not seek care at all are not captured.