

Replacing Guesswork with Confidence in Patient Retention

Improved visibility into cardiology patient retention and leakage provided clearer economic context for planning decisions.

> Background

A large, integrated healthcare system relied on a combination of internal reporting and third-party claims data to understand patient movement and retention within a high-value cardiovascular service line.

However, without a consistent way to reconcile internal billing data with external claims, leadership lacked a durable baseline for assessing patient retention and understanding how patient movement was changing over time.

> The Challenge

In one competitive regional market, leadership sought clearer visibility into cardiology patient movement. Several challenges limited this understanding:

- Claims blind spots that obscured patient journeys
- Underreported internal volumes
- Inability to confidently measure keepage and leakage over time
- Fragmented data workflows that eroded trust in reporting

These limitations made it difficult to determine whether patients were being retained within the system or seeking care elsewhere, and to quantify the impact of retention-focused initiatives.

> Kythera's Approach: Wayfinder DataSync

Kythera deployed Wayfinder DataSync to securely harmonize internal cardiology billing data with multi-source healthcare claims data, creating a governed, analysis-ready dataset that materially improved patient visibility while maintaining HIPAA compliance.

This unified data foundation enabled consistent measurement of patient movement over time and established a defensible baseline for evaluating keepage and leakage.

> Scope of Analysis

This case study reflects a deliberately focused analysis, designed to establish a reliable baseline within a single, high-value service line before expanding to broader market questions.



Service line:
Cardiology



Market:
Competitive regional market



Encounter type:
Non-procedural evaluation and management encounters only

Procedural volumes were intentionally excluded to maintain consistency and ensure a reliable baseline for measuring patient retention and movement. While narrow by design, this scope illustrates how linking internal and external data can materially improve visibility and confidence in market-level measurement.

> Results

Results reflect longitudinal evaluation and management encounters and implied referral patterns based on patient movement over time, rather than formal referral orders or procedural transitions.

Establishing the Baseline: 2023

Using third-party claims data alone, the health system measured cardiology patient movement within a competitive regional market during 2023.

Total Encounters Identified

9,720

Keepage

64%

Leakage

36%

These figures understated true patient activity and limited confidence in leakage assessment.

After deploying Wayfinder DataSync and reconciling internal and external data sources:

Results 2024 (Full Year)

- Total encounters identified: **24,042**
- Keepage: **72%**
- Leakage: **28%**

2025 (Partial Year)

- Keepage improved from **61% to 72%**
- Leakage declined by **11 percentage points**

The observed gains reflected more complete and accurate visibility into actual patient movement, rather than volume growth alone.

> Business Impact

By harmonizing internal cardiology billing data with external claims, the health system gained the ability to translate improved visibility into patient retention into an estimated economic context.

Using conservative, internally informed estimates for non-procedural cardiology encounters, clearer differentiation between retained and leaked encounters enabled an approximation of the economic relevance of improved keepage.

Estimated annualized
value associated with
retained encounters
\$1.6M–\$3.8M*

- Additional retained cardiology encounters identified post–data harmonization: approximately 10,800
- Estimated average value per non-procedural cardiology encounter: \$150–\$300
- Estimated annualized value associated with retained encounters: \$1.6M–\$3.8M*

These estimates reflect improved visibility into retained non-procedural cardiology encounters following the reconciliation of internal and external data. They do not attribute incremental revenue and intentionally exclude downstream procedural revenue, ancillary services, and follow-on care.

> Why This Matters

Even within a deliberately narrow scope, harmonizing internal and external data materially improved confidence in keepage and leakage measurement. Establishing a reliable baseline allowed leadership to move beyond directional assumptions toward more grounded planning conversations.

This representative example illustrates how improved data completeness can support more confident decision-making across strategy and business development functions, particularly in competitive service lines where patient movement is difficult to observe using internal data alone.

** Estimated annualized value reflects conservative assumptions applied to retained non-procedural cardiology encounters identified after data harmonization. Estimates exclude downstream procedural revenue, ancillary services, follow-on care, and do not represent realized financial outcomes.*



Connect with Kythera. Kythera is a data technology company that brings unprecedented clarity and structure to complex real-world healthcare data. Kythera's Wayfinder Technology Platform, supported by pre-configured pipelines, processing libraries, analysis tools and remastered datasets, helps Healthcare and Life Sciences organizations work with greater speed, scale and confidence. Learn more at www.kytheralabs.com.