



September 2025

PROVIDER PERFORMANCE BENCHMARKING REPORT

# How providers stack up on conversions, denials, and efficiency

# Table of Contents

- I. Abstract
- II. Denials Due to Errors in Referral Processing
- III. Realizing Savings from Reduced First-Pass Denials
- IV. Improving Referral Conversion
- V. Making Teams and Processes More Efficient
- VI. Conclusion



# Abstract

## What is this report?

This report benchmarks how providers using the Tennr platform perform across three core metrics: **Referral Conversion, Denials, and Operational Efficiency**. It’s designed to be useful for any operator handling external referrals in assessing their key business drivers. Our aim here isn’t to sell you a miracle; it’s to show where technology and operations can properly drive outsized gains through optimizing the upstream pre-visit patient processing work (referral intake, eligibility & benefits verification, and clinical qualification review).

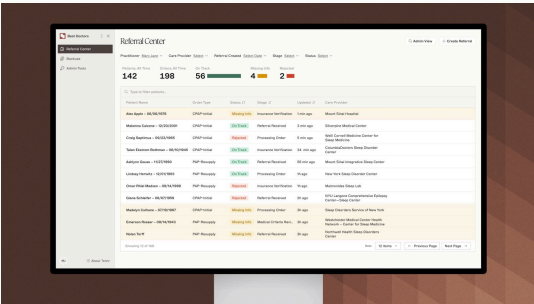
## What is Tennr?

Tennr is an end-to-end solution for handling the messy, error-prone upstream work that creates downstream billing and RCM headaches. We have the foundational belief that most providers suffer from ‘hidden loss’ fallacy, where they focus efforts on the backend that could be spent with greater ROI upfront. To do this, we ingest and organize incoming referral documents, extract and validate key data, manage benefits investigations and verifications, handle decisioning and auth reviews to qualify orders against payor requirements, all to drive sharp improvements to FTE efficiency, referral conversion rates, and reduced denial rates. We do this all while supplying patients and providers with maximum visibility into the process, closing the loop on provider-to-provider referrals.

*See: Referral Intake, Insurance Benefits Manager, and Qualification Review Engine in our appendix.*

## How to read this report

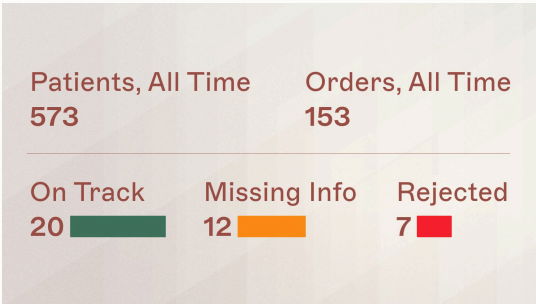
### Data sources



We used order and claim submissions data from Tennr customers, as well as referral documents processed via Tennr.

Code	Code Level	Service Level
298	Required	Required
180	Required	Required
N52	Required	Required
N289	Cleared	Cleared

Denial remits and reason codes are mapped to broader categories and to Tennr products they’re most likely to impact (Intake, E&B, Qualification).



Efficiency outcomes sourced from public Tennr customer stories.

## Key Metrics in this Report

**Denials:** % of submitted claims that are filtered down to payments, denials, and write-offs and then split into:

- **Intake-related** denials can be impacted by Tennr's Intake Operations Product (e.g., data completeness/accuracy issues)
- **Eligibility & Benefits-related** denials that can be impacted by Tennr's Insurance Benefits Manager (e.g., coverage/benefits errors)
- **Qualification-related** denials are impacted by Tennr's Qualification Review Engine (e.g., proof of medical necessity, required documentation, and clinical compliance with payor criteria)

**Referral Conversion:** % of total orders **not voided**.

When an order gets created, oftentimes, patients can't be reached in time before they decide to seek care somewhere else, they decide service is too expensive, their benefits aren't verified quickly enough, there is difficulty coordinating multiple documents to generate and update EHR records correctly, or a mistake is made that requires correction. The result is that orders are often deleted or voided. This is a great indicator of how many referrals actually become actionable orders, and this is your referral conversion rate.

**Efficiency:** reductions in human time spent on overall referral processing.

Staffing, payor mix, service types, desired processes, and geography also influence how providers fare against these key metrics. We control for timing (pre/post go-live with Tennr) and normalize across our customers where practical, but we encourage readers to keep their "healthy skeptic" hat on. This is an honest benchmark across a variety of providers who are each unique. Our team works directly with providers to assess and diagnose their referral operations to provide comparable outcomes.

# Denials due to errors in referral processing

## Many denials are conceived upstream in referral processes, but why?

Most “avoidable” denials stem from information gaps or mismatches introduced before the claim is even prepared for submission: incorrect demographic information, incorrect diagnosis, failure to properly coordinate benefits, incorrect payor IDs, missing, incomplete, or invalid ordering providers, insufficient same-and-similar checks, or incomplete evidence of medical necessity.

The referral process runs on fax/email for a large share of provider-to-provider communications, which makes consistency hard and data entry time-consuming and error-prone. But the reality is that this is the referral method most preferred by referral sources. Brightree, a popular billing platform for DME suppliers, notes ~80% of referrals still arrive via unstructured data for many orgs, with over 50% on average being faxed referrals.<sup>1</sup>

## How we categorize and group denials

Using remit reason codes, we mapped each denial to a broader denial category and then to the Tennr product most likely to prevent it upstream:

- **Intake-impactable:** demographic mismatches, missing NPI/signatures, data entry errors, bad HCPCS, incomplete order metadata. Processes that are readily automated with Tennr’s *Intake Operations* Product

*Ex. CO-58 Denial Code: Inappropriate/Invalid Place of Service or D18 Claim/Service has missing diagnosis information are common order entry errors that Tennr’s automated system prevents.*

- **Eligibility & Benefits (E&B)-impactable:** coordination of benefits, discrepancies between dependent/plan holder, PT ID/name do not match, same & similar conflicts, wrong payor routing/ID, and missing authorization requirements surfaced at the benefits stage. The type of activities that Tennr can handle through its *Insurance Benefits Manager*

*Ex. ‘Denial Code 119 – Benefit maximum reached*

- **Qualification-impactable:** Diagnosis not covered, missing or invalid, orders being deemed not medically necessary, or claims lack an indication that a plan of treatment is on file, or missing clinical notes required by payor policy. This is a complex system of rulesets that Tennr’s *Qualifications Review Engine* copilots with users to achieve qualifications decisions faster.

*Ex. Denial Code D14 - Claims lack indication that the plan of treatment is on file*

This lets us answer: *This lets us answer: of all denials, what % were preventable by fixing upstream intake, Eligibility & Benefits verification, or qualification review?*

This also lets us look at Tennr users today to see how denial rates are trending by using Tennr in key pre-visit referral workflows.

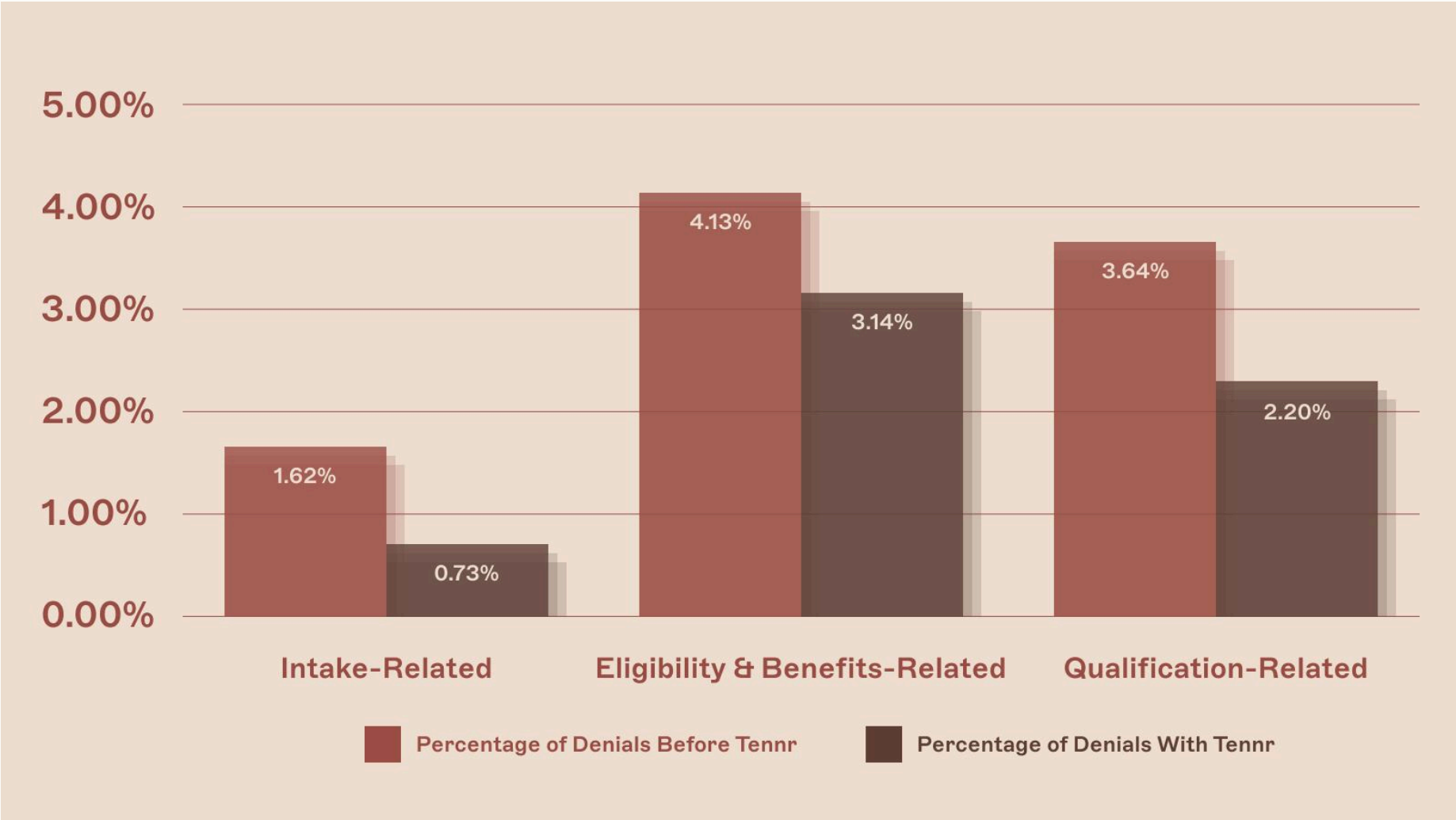
# How to read this denial data

Industry-wide, initial denials have ticked up (≈11.8% increase in 2024), driven in part by commercial and MA plans. The trend doesn’t appear to be changing anytime soon, and in 2025, nearly 1 in 5 claim submissions are denied on the first pass, so even small improvements against this headwind are especially meaningful in protecting provider revenue and have major impacts on margins.<sup>2</sup>

## What good looks like

Intake, Eligibility & Benefits, and Qualification-related denials are steadily shrinking within your “denied” stack.

The **annualized savings** item should be the headline your CFO cares about. It’s the revenue captured from reduced denials.



Among enterprise customers, nearly 10% of all allowables were related to preventable upstream complications (intake, eligibility & benefits, or qualification-related), of those, benefits management seemed to be the biggest driver. With Tennr, customers were able to see reductions across multiple types of contributing denial codes. Overall, these customers saw a 34% reduction in these types of denials. These are extremely impactful reductions, considering the providers' average order values and processing volumes. By doing so, we’re able to determine how much annual savings they capture by investing in their referral operations.



# Realizing Savings from Reduced First-Pass Denials

↓ 54 . 9%

Intake-Related Denials

↓ 23 . 9%

E&B-Related Denials

↓ 39 . 6%

Qual-Related Denials

\$2 . 18M

Average Total Annual Savings

Denials are structurally harder now than ever before (with the rise of prior authorizations, an increase in guidelines and requirement complexity, and the adoption of AI and automated claims processing). If your denial rate is holding flat or improving (even marginally) against that macro trend, you’re winning more than it might feel like day-to-day.

# Improving referral conversion

## What is a referral conversion?

**Referral Conversion = % of orders created that are not voided**, measured over time; it's a proxy for addressing the question: of all of the referrals we received, how many actually end up being orders placed that we can service. This is your true “captured” business from your overall potential.

## Where patients leak and conversion suffers

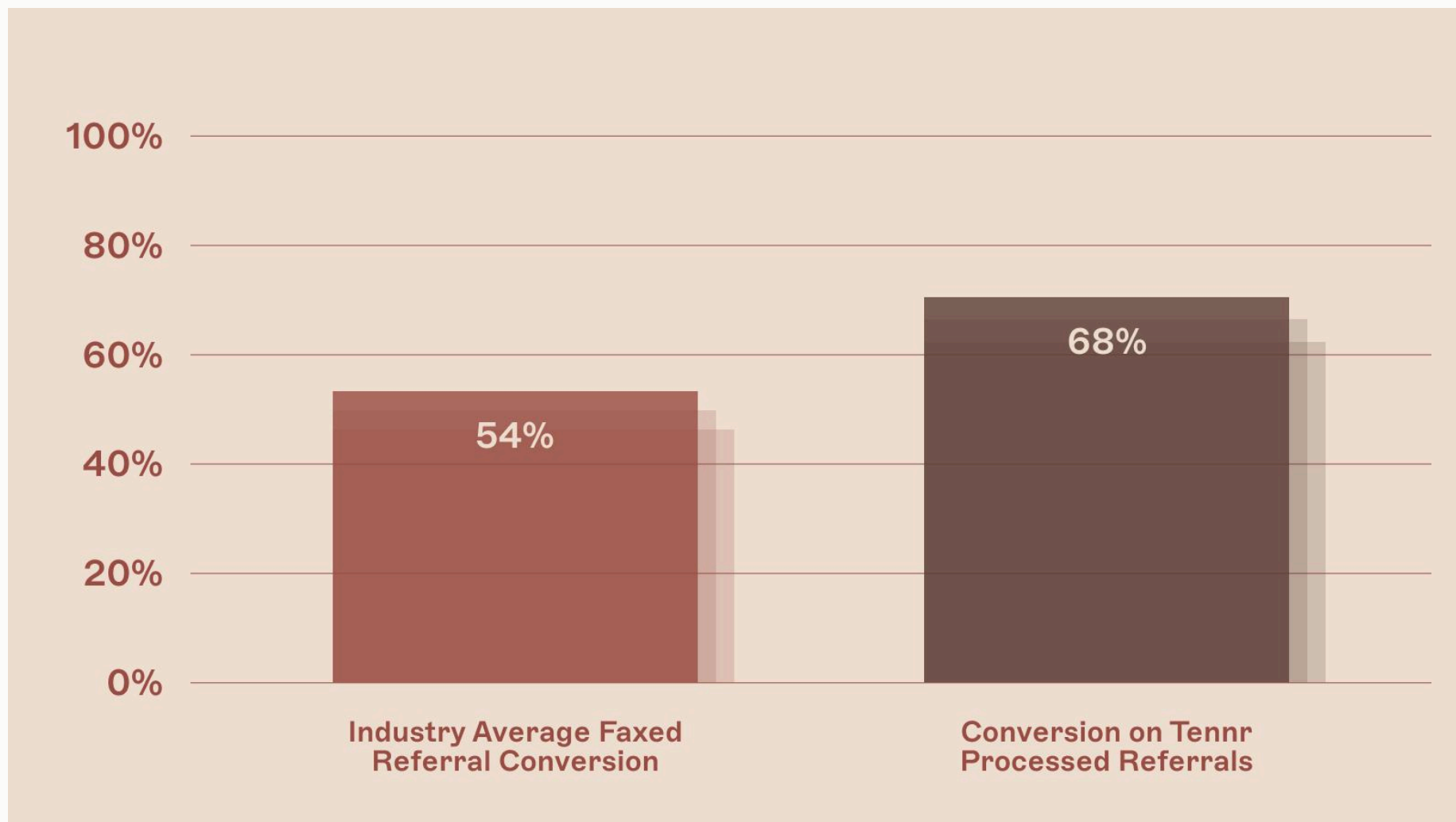
2

Referral conversions suffer for a handful of very predictable reasons that add up quickly. Some are directly in the control of operators, while others can simply be attributed to payor mix and logistics for patients. When an order comes in missing key details, it can take days or even weeks to chase down the required information. In the meantime, the patient is left waiting, often disengaging from the process and looking elsewhere for care. This “leakage” is the preventable and operational challenge that providers have to take look at. Even when the paperwork looks complete, if it turns out the patient has inactive coverage or benefits were checked against the wrong payer, everything stalls again. And as these delays accumulate, they create a backlog that slows down even the “clean” referrals. By the time the team finally gets to them, some patients have already moved on, and the opportunity to convert the referral is lost.

The idea of ‘leakage’ when trying to ‘close the loop’ on a referral is nothing unique to DME. For the aforementioned reasons, on average, 46% of faxed referrals across all of healthcare never result in an order placed or a patient scheduled for care. That means that the industry average is only a little better than 50% on converting faxed referrals.

Just as with denials, even marginal improvements in referral conversion can drive dramatic top-line growth. Notably, all while driving improved patient and referral partner satisfaction.





*Looking across Tennr customers, we see that after going live with Tennr for at least 6 months, their average conversion rate is about 68% on Tennr-generated orders.*

### Additional Revenue Potential from Improved Conversion

Every referral that slips through the cracks is lost revenue for the provider. By improving referral conversion they can turn more incoming referrals into shipped orders and active patients. Providers can unlock meaningful new revenue potential without adding new referral sources, simply by capturing more of what's already coming their way.

When we analyzed customers who were processing referrals with Tennr, we saw a 14% better conversion rate than the industry average benchmark. Even though customers process varying degrees of their entire referral volume if we assume a conservative 5% overall increase converted referrals with average denial rates and the average order volume and value for the providers included in this study we would see an annual lift of over **\$700,000 per year.**

# \$700k+

## Annually

The average revenue potential associated with just a 5% increase in overall conversions for the providers included in this study

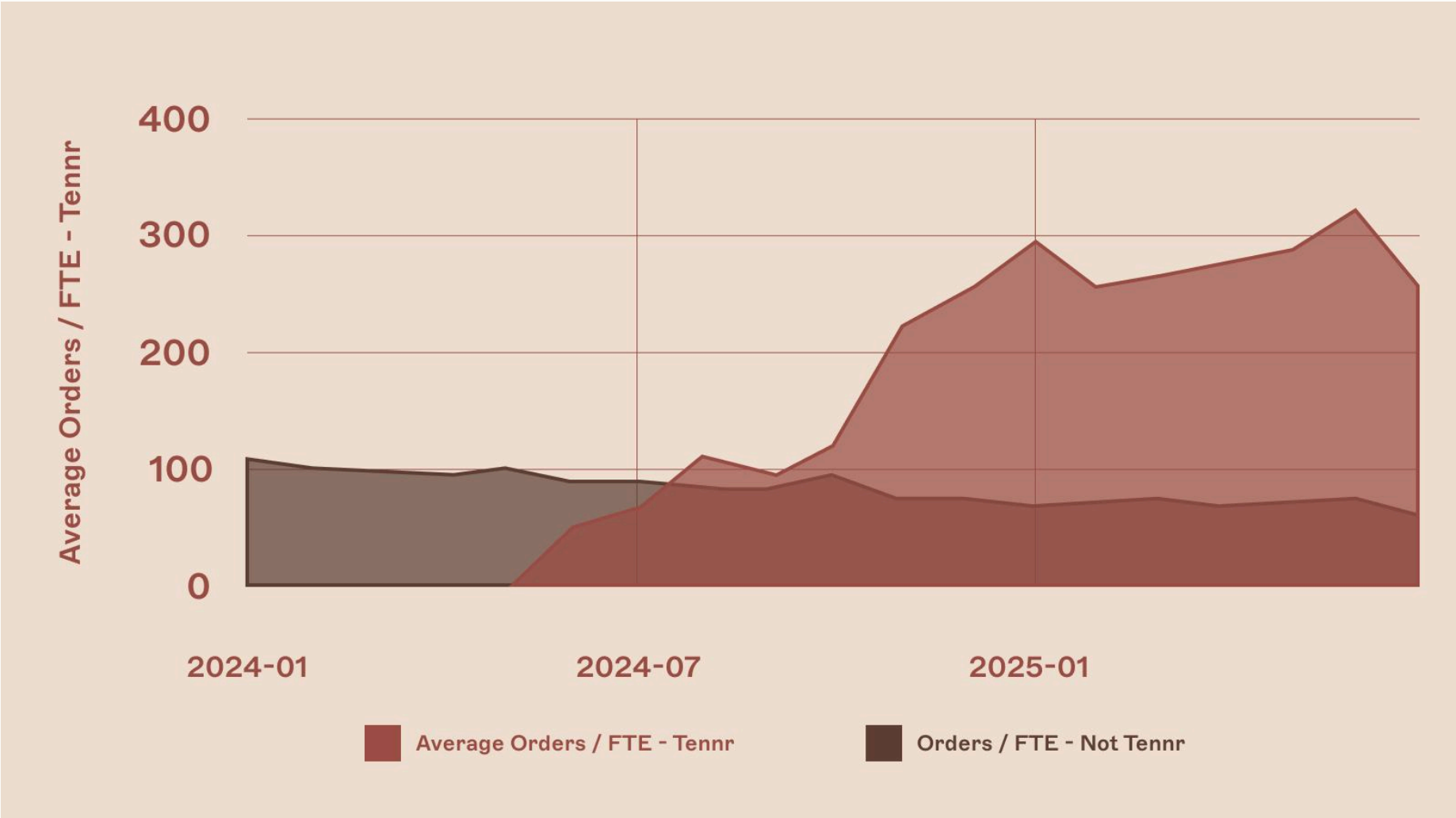
By quickly processing faxed referrals, providers are able to reach more patients, secure more referrals by building trust with referral sources, and stop spending time on faxed referrals they simply cannot service.

In a handful of cases, Tennr customers who crushed intake processing time saw step-changes in throughput. One provider **processed 157% more referrals** after eliminating their referral backlog, which created the headroom you need to dedicate resources to patient engagement and education and help convert more of what's coming in, which in turn creates more opportunity for higher volumes. And around and around it goes.

# Making teams and processes more efficient

However, improving conversions and improving overall referral volume does very little to help patients or providers if processing those referrals can't be done efficiently. Back office operations that require massive team sizes or days to get through. One of the key metrics we look into is the volume of work a singular full-time employee (FTE) can perform in the same amount of time.

We analyzed Tennr customers across different organization sizes and product types and found that in the past 18 months, there has been a massive increase in the average number of orders processed by FTE per week to nearly 300. While orders per FTE when not working through Tennr remain well below 100 on average.



# Conclusion

Across Tennr customers, we consistently see three things once upstream work is standardized and automated:

- 1. Fewer preventable denials.** Intake processes, Insurance Benefits Management, and Qualification denial categories shrink, while the share of paid claims grows.
- 2. Higher referral conversion:** more orders move forward because fewer get stuck or voided, and you see more order volume overall because referral partners can trust you to service their patients.
- 3. Real efficiency gains:** hours saved, work volume processed by team member, and average fax backlogs all improve.

None of this turns a difficult payor relationship into a good one overnight. But in a market where initial denials are trending up, operational control is the lever you do own, and it's moving the needle.

- Benchmarks are directional: your mix of payors, lines, and seasonality matters.
- Where your “N/A” denials dominate, we'll isolate payor/policy issues and set expectations accordingly.
- To go deeper, pair this view with **payor-level** trend lines and a **top-10 denial reasons** drill-down for targeted remediation.

*For more information on how you and your team stack up, reach out to us for a free diagnostic assessment of your referral management and operations.*



# Appendix – Tennr Product Catalog

## Referral Intake

*Setting your intake specialists for success by reading and pulling the right data from messy documents and entering it into your systems.*

Our **referral intake** product handles everything needed to get a new patient referral ready: **fast**. It automatically recognizes incoming documents, pulls out key data like patient information, insurance, and clinical information, and enters it directly into your systems. By the time your team touches it, everything is already in place.

### 1. Universal Inbox (Document Wrangling)

A single place to automatically split, group, tag, and route incoming documents from faxes, emails, and EHRs into the right workflows. No more digging across different inbound portals, fax lines, and emails.

### 2. Intake Operations (Intake)

Extracts and validates critical referral details, like patient demographics, insurance info, diagnosis codes, billing codes, and more, and enters them into your EHR or billing systems without manual work.

## Insurance Benefits Manager

*The Insurance Benefits Manager verifies whether a patient's insurance is active and covers the care you're providing. Tennr automates eligibility checks, benefits investigations, and even phone calls to insurers so your team isn't stuck on hold. You'll know what's covered, what's not, and what to do next.*

### 1. Digital Eligibility Checks

Integrated directly into your document processing workflows, the Insurance Benefits Manager takes patient insurance details directly from inbound documents and automatically runs digital checks for patient eligibility: active coverage, confirmed subscriber and beneficiaries, and re-verifications as needed.

### 2. Digital Benefits Verification

In addition to patient eligibility, the Insurance Benefits Manager will also run verification of the benefits coverage. Tennr provides comprehensive details for each configured health benefit, retrieved directly from our clearinghouse, such as, information includes benefit type, insurance type, and calendar year specifics.

Tennr includes a built-in Coordination of Benefits (COB) functionality, allowing teams to adjust multiple insurances on a given order before syncing it with the EHR.

### 3. Benefits Investigation Phone Calls

When digital benefits information from clearinghouses isn't enough or for high-value reimbursements, users can use Tennr to mediate calls with payors to conduct comprehensive benefits investigations guided by pre-configured call scripts to keep teams off hold and out of phone trees and focused on case management and patients.

# Qualification Review Engine

Verifying if a patient meets the clinical and documentation requirements to get a product or service approved by a payor.

The **Qualification Review Engine** ensures each patient meets both clinical and insurance requirements before you move forward with an order. It checks that all required documents are in place, highlights where information is missing, and creates audit-ready summaries so you can proceed with confidence—or fix gaps fast.

# Communication Coordinator

Keeping patients and providers in the loop when more info is needed—without slowing down your team.

**Communication coordination** in Tennr is a way to automatically communicate with patients and referring providers when you need missing documents or need to confirm receipt of a referral. Whether it's via email, text, or fax, Tennr keeps everyone informed—and your workflows moving.

## 1. Patient Updates

Send automated texts or emails to patients for referral confirmations and document requests.

## 2. Provider Updates

Automatically notify providers that you've received a referral or need more documentation to proceed.

1. [Interoperability: The big opportunity for HME/supply providers and home infusion pharmacies](#)
2. [Denial Rates Are Climbing: What Healthcare Revenue Cycle Leaders Should Be Watching in 2025](#)