

OUR TAKE

6 ways to reduce referral leakage from primary to specialty care

Most health systems are focused on maximizing return on investment from their employed medical groups in response to rising margin pressures. As a result, network integrity is a top priority for most organizations. But our analysis shows that only 55% of referral revenue attributed to employed primary care physicians (PCPs) stays in-network.

There are three distinct leakage points in the referral process. Leaders must take a comprehensive approach that targets leakage at each of these three points. Read on for six tactics health systems can deploy to improve network integrity.

Published – December 2024

Read time – 20 minutes

Audience

- Hospitals and health systems
- Physicians and medical groups

Our take

Health systems renew their focus on network integrity in response to rising cost pressures

As of January 2024, health systems employ 55.1% of all physicians and 28.4% of physician practices nationally.¹ Although health system revenues rebounded following the pandemic, operating costs increased at a faster rate, with growth in total expenses outpacing medical group revenue by three times per physician.² These financial realities have health systems heavily focused on maximizing return on investment from their employed medical groups.

As a result, network integrity is a top priority for most organizations. Many health systems employ physicians, in part, for the presumed benefits that come from an employed network: downstream revenue, streamlined care coordination, and improved patient experience.

Definitions

For the purposes of this publication, we'll use the following terms and definitions:

Network integrity

A health system's ability to deliver patient care within its provider network

Referral leakage (out-of-network referrals)

Referrals that leave the health system's employed network

Referral keepage (in-network referrals)

Referrals that stay in the health system's employed network

All health systems have significant opportunity to reduce referral leakage

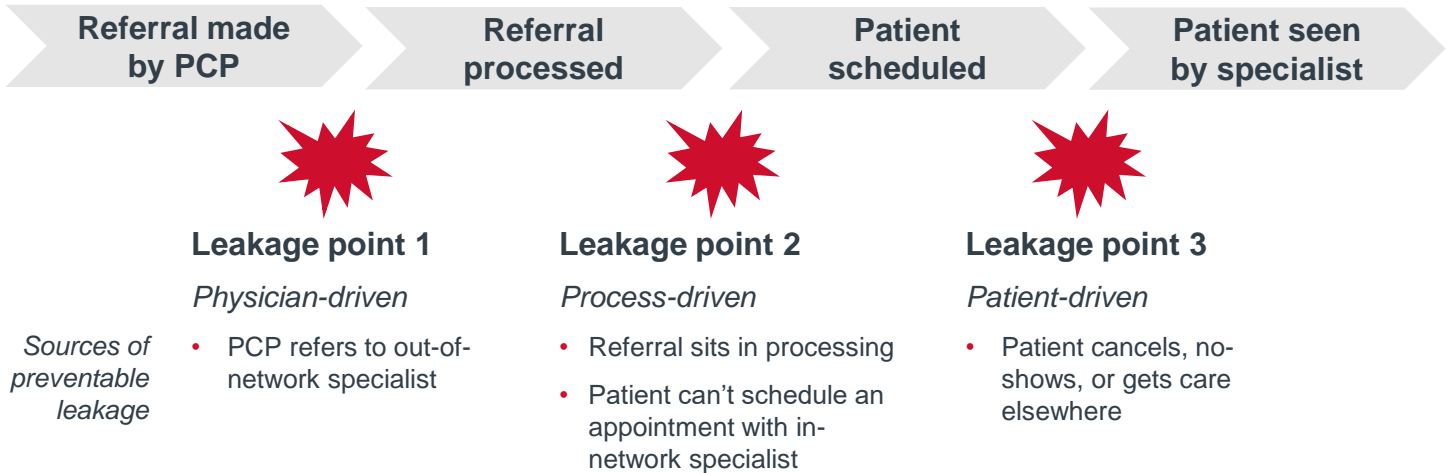
Primary care physician employment doesn't guarantee network integrity. According to our [data analysis](#), on average only 55% of referral revenue attributed to employed PCPs stays in-network. Said another way, PCPs send 45% of their referral revenue to competitors, costing \$388 million in annual revenue per system.

All health systems have an opportunity to improve referral keepage. This is especially true for those with keepage rates below 55%, but even those above that benchmark can see significant gains from improving by just 5% or 10%. Take for example a health system with 57% keepage. According to our analysis, improving every PCP's performance by 5% would generate an additional \$30 million in revenue. A 10% improvement would generate an additional \$61 million in revenue.

Comprehensive approach targets leakage at every point in the referral process

Our research reveals that reducing referral leakage requires a comprehensive approach that proactively combats all leakage sources. Many leaders believe that PCP referral patterns are the main cause of leakage because PCP behavior is often what's most visible and easily identifiable. However, there are two other points in the referral process where leakage occurs.

There are 3 key leakage points in the referral process



There are three leakage points in the primary to specialty care referral journey that health systems must address:

- **Leakage point 1:** Physician-driven leakage due to cumbersome referral workflows
- **Leakage point 2:** Process-driven leakage due to internal backlogs and delays
- **Leakage point 3:** Patient-driven leakage due to access barriers in specialty care

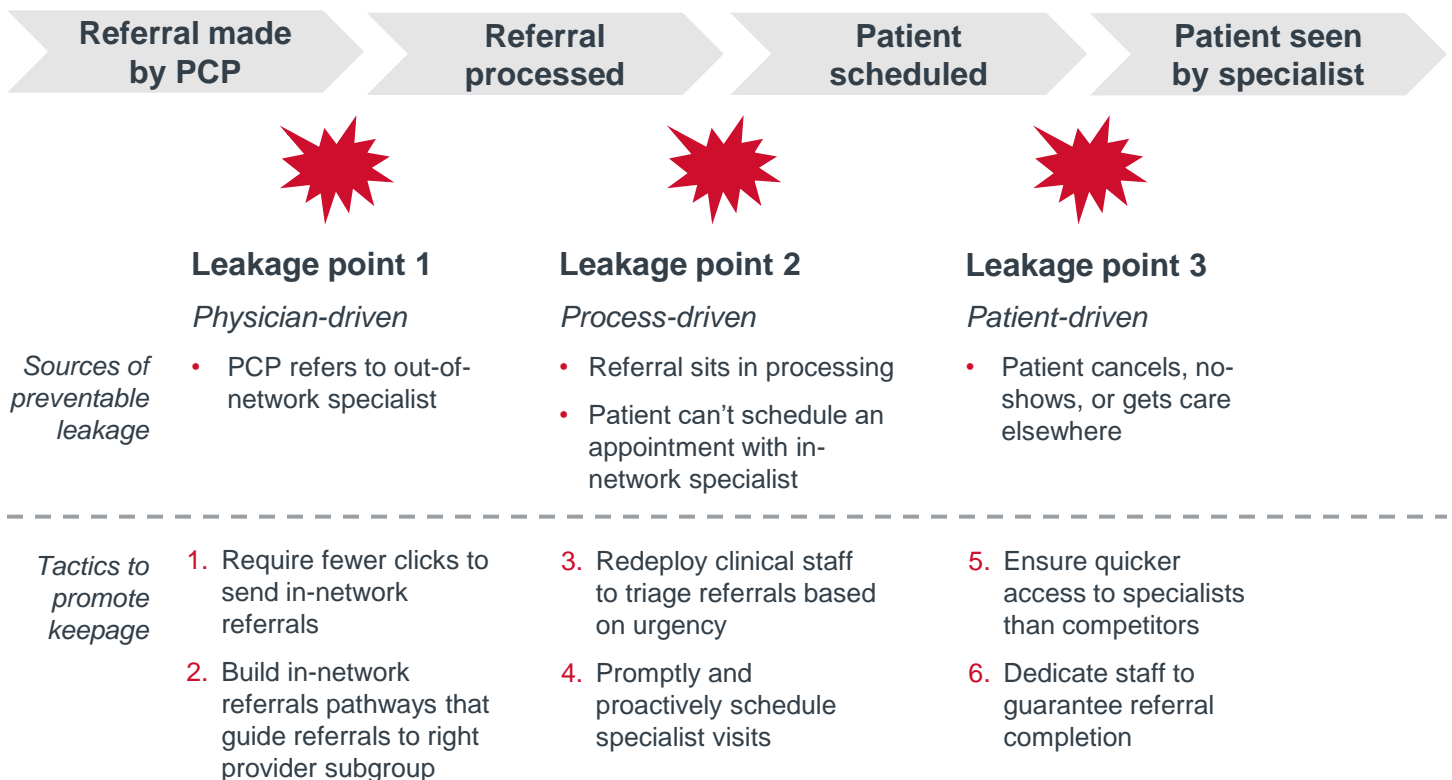
To successfully keep patients in-network from the point of referral to completion of the specialist appointment, a referral must make it across all three leakage points. This requires health systems to implement processes across the entire referral journey to make in-network referrals the path of least resistance.

A comprehensive referral strategy focuses on breadth over depth. It is more important to implement solutions for all three leakage points at baseline than to outperform on one. This is because a referral must make it across all three junctures to successfully remain in-network.

Prioritize based on leakage opportunity size

Individual leakage points contribute to each health system's overall problem with varying weights. We will offer metrics to identify and opportunity size each leakage point throughout this publication. Health systems should prioritize addressing the leakage points that their data shows are most problematic for their unique organization. Organizations that are just starting to address referrals or don't have access to the data to size their individual opportunity should prioritize chronologically, solving for leakage point one before moving on to two and three.

In the following pages, we dive into each leakage point in more detail and offer solutions with proven case study examples to decrease referral leakage at your organization.



Leakage point 1: Physician-driven leakage due to cumbersome referral workflows

Solution: Make in-network referrals the default workflow

Why leakage happens

Leakage at this point in the referral process stems from PCPs referring to out-of-network specialists. While many organizations attribute this leakage to physician preferences or existing relationships, it's more often an underlying workflow issue. We found that most health systems still have untapped opportunity to make physician workflows for in-network referrals easier.

When to prioritize this leakage point

Organizations just beginning to address referral leakage should start with this leakage point. If referrals don't make it past this stage, later leakage points won't matter. Below are indicators that suggest this leakage point is particularly problematic at your organization:

- Low "intent to refer" rates among PCPs
- Practices and/or specialties on separate EHRs
- Provider feedback that in-network referral process is burdensome

Many EHRs collect data on provider "intent to refer." This metric captures the percentage of all referrals that PCPs send in-network. Although it doesn't measure referral completion (that is, where the patient ultimately went), intent to refer helps organizations understand whether leakage stems from PCP referral patterns or another leakage point.

How to prevent leakage

Our research found that leakage most often occurs because in-network referral processes are cumbersome, and PCPs aren't equipped to make informed referral decisions. To solve these problems, health systems must make in-network referrals the path of least resistance by making it easier for PCPs to refer in-network (and harder for them to refer out-of-network). This is most effective when providers are on the same EHR.

► **Tactic 1: Require fewer clicks to send in-network referrals**

PCPs at most health systems make in-network referrals via the EHR. To make an out-of-network referral, the care team typically must call, email, or fax the specialist's office if they're on a separate EHR. This often makes in-network referrals easier from a workflow perspective. PCPs are most likely to follow the simplest process.

But organizations can make changes within the EHR to make in-network referrals easier. At most health systems, PCPs search from a long, sometimes alphabetized, provider list in the EHR when making a referral. At leading systems, PCPs see in-network specialists first by default in the EHR and can make referrals faster.

CASE EXAMPLE

Boulder Community Health

At Boulder Community Health (BCH), PCPs see employed specialists in the EHR first, followed by specialists in their clinically integrated network (CIN), and then ultimately out-of-network specialists with a few additional clicks. BCH made upgrades in their EHR that allows the system to tag in-network and CIN-affiliated specialists with a differential status, so they populate first when PCPs make a referral. PCPs are more likely refer to these in-network specialists because they're more visible in the EHR and, therefore, easier to refer to.³

▶ **Tactic 2: Build in-network referrals pathways that guide referrals to right provider subgroup**

At most health systems, PCPs decide themselves whether to refer to a specialty department or individual specialist. Referring to a specific specialist may unintentionally create access barriers if that specialist has long wait times. On the other hand, referring to a department is usually too broad, as most patients have specific clinical needs and/or geographic preferences.

Instead, PCPs should refer to a subset of providers to enable quicker access while still accounting for specific patient needs. Organizations can define provider groups based on clinical expertise, location, or both. We recommend that all referral pathways factor in subspecialist expertise to ensure that patients see the appropriate clinician for their concerns. Health systems in markets with neighboring competitors or long travel times should also incorporate location to make the referral more convenient, and therefore more likely, that the patient completes the referral.

All health systems: Use automation to match patients with the clinically appropriate provider groups.

CASE EXAMPLE

Robin Medical Center (a pseudonym)

When making a referral, PCPs at Robin Medical Center answer a series of clinical questions in the EHR related to the patient's medical history and clinical needs. On the backend, an AI decision tree uses the responses to map the referral to a provider subgroup based on the patient's condition. Robin defines subgroups by specialization, licensure, and skill set. For example, the decision tree will automatically refer a patient with a niche concern to a more specialized subgroup with the appropriate expertise, whereas it may refer a patient with a routine issue to a generalist or advanced practice provider subgroup. As a result, patients get clinically appropriate specialty care but aren't limited to scheduling with a single provider, thereby improving access.

Health systems in competitive and geographically spread markets: Factor in location.

CASE EXAMPLE

Mount Sinai Health System

At Mount Sinai, all ambulatory providers are prompted to identify a specific outpatient location and add a diagnosis code when making a referral. The referring provider selects a location the patient indicates they are willing to travel to. Patients are then presented with a list of providers at that location who have the expertise to treat their condition, and they can self-schedule based on availability. By making referrals to an outpatient location, rather than a specific specialist, Mount Sinai ensures that patients get the care they need while also prioritizing access and convenience. This makes it more likely that patients ultimately follow through on the referral. Mount Sinai lets PCPs refer to a specific provider if they prefer, but since this isn't a requirement, only around 30% of referrals are to a specific provider.

HOW TO GET STARTED

Nudge resistant PCPs to preferred referral patterns

It's best practice to refer to a set of providers, but some PCPs aren't ready for this change. To help with the transition, most health systems will let PCPs continue referring to specific specialists but build referral workflows that default to a group, thereby nudging resistant PCPs to adopt preferred referral patterns.

To get PCPs who continue to refer to individual specialists to change their habits, we recommend supplying data on specialists so PCPs make referrals based on objective criteria, rather than personal relationships or reputation. Health systems that take this approach often embed ranked specialist lists in the EHR based on agreed-upon criteria such as network status, cost, quality, and access. Not only does this lead to more data-driven referrals, but it also gets PCPs more comfortable with the health system playing a bigger role in referral management.

While organizations should ultimately convert all PCPs to refer to a set of providers, structuring default workflows and equipping PCPs with data makes referrals to individual specialists more effective in the interim.

Leakage point 2: Process-driven leakage due to internal backlogs and delays

Solution: Centralize systemwide referral management

Why leakage happens

Leakage at this stage in the referral process is often due to administrative barriers. After the PCP makes a referral, it is processed by a central team and then scheduled as a specialist visit. Delays in both processing and scheduling aren't uncommon, but they're often underestimated as contributors to referral leakage. While physician- and patient-driven leakage are more easily identified, getting these back-end processes right is critical for keeping patients in-network.

When to prioritize this leakage point

Health systems that recently integrated new hospitals or medical groups and/or receive a high volume of referrals will often need to prioritize this leakage point. Below are indicators that signal this leakage point warrants attention:

- Low referral-to-appointment conversion rate (in other words, only a small percentage of referrals end up being scheduled)
- Backlog of referrals awaiting processing
- Time between referral processed and appointment scheduled exceeds one week

How to prevent leakage

Centralized referral management is a must-have for all health systems. Since referrals from primary to specialty care inherently cut across service lines, health systems need to have a cross-department structure in place. Not only does this promote collaboration, but it also reduces variation in the referral process itself, which leads to quicker processing and appointment scheduling.

▶ **Tactic 3: Redeploy clinical staff to triage referrals based on urgency**

After creating a centralized referral process and team, health systems must resource and staff this team appropriately. Most health systems today employ administrative referral coordinators who process and schedule referrals. However, leading organizations supplement these administrative-focused coordinators with clinical support, often provided by medical assistants (MAs) or registered nurses (RNs).

This additional clinical staffing helps to improve efficiency because staff can use their clinical expertise to triage referrals and expedite processing when necessary. For example, clinical referral coordinators can recognize when high-risk patients must be seen before their condition escalates or when less urgent concerns can wait in the processing queue for an extra day or two.

While health systems may hire MAs and RNs specifically for this role, most redeploy and centralize clinical staff from practices to fulfill this function. In today's workforce environment, organizations often feel they don't have enough clinical staff to reallocate. But organizations that make this staffing investment report seeing ROI from referral volumes and new patient visits.

CASE EXAMPLE

Robin Medical Center

Robin Medical Center has a centralized team that processes and schedules referrals for nearly all service lines. In addition to this centralized team, RNs within each specialty practice scan their clinic's referral queue to assess each patient's clinical acuity. Referrals may be marked urgent (patient must be seen soon) or emergent (patient must be seen immediately) by the referring provider. RNs conduct a clinical review of these high-priority cases to confirm their status, or they can adjust the status to routine if it is not truly urgent or emergent. The nurses then communicate with the scheduling team who expedite scheduling for high-priority appointments. This ensures patients with pressing needs don't experience delays in care or leak to a competitor who can see them quicker.

Robin opted to keep these RNs within their specialty practices rather than reallocate them to the centralized team to preserve more robust clinic staffing. Health systems in a similar situation should ensure that each RN has dedicated clinical time for referral triage.

► Tactic 4: Promptly and proactively schedule specialist visits

After an initial referral, patients often call a central number or the clinic directly to schedule their own specialist appointment. However, best practice organizations proactively prompt patients to schedule once the referral is processed, rather than wait for them to schedule on their own.

Shifting from reactive to proactive scheduling makes it more likely that patients schedule with specialists as soon as possible. In addition to these efficiency gains, proactive scheduling is also an opportunity to improve patient experience and build loyalty.

Leading organizations offer multiple scheduling outlets, including online and over the phone, since patients have different preferences and comfort levels with technology. Giving patients multiple ways to book their visit makes it more likely that the referral gets scheduled.

CASE EXAMPLE

Mount Sinai Health System

Mount Sinai implemented an automated system in the EHR to improve the scheduling experience. After a referral is processed, the EHR automatically sends patients an SMS message with a hyperlink for online scheduling and a phone number for assistance. After opening the link, the patient answers a series of questions about their medical history and the reason for their visit to navigate to the right specialist. The patient is then able to directly schedule their appointment online.

Mount Sinai doesn't rely on these automated links alone. If the patient doesn't self-schedule within three days, a referral coordinator follows up with a phone call. If the patient doesn't answer the first call, the coordinator follows up one additional time.

So far, Mount Sinai has implemented this process in endocrinology, urology, dermatology, gastroenterology, ENT-otolaryngology, ob/gyn, orthopedics, podiatry, and allergy. Mount Sinai began with these specialties because they account for more than 50% of the system's referral volumes. Early results show that this process increased referral conversion by 10%. Now that the rollout across these specialties is complete, Mount Sinai plans to expand the online self-scheduling process systemwide.

Leakage point 3: Patient-driven leakage due to access barriers in specialty care

Solution: Bolster existing access efforts to support referral completion

Why leakage happens

Health systems that struggle with this leakage point have an access problem, not a referrals problem. Often, this challenge is compounded by insufficient care coordination that leaves patients to navigate a complex referrals process on their own. Patients who need to wait longer to get in with a specialist are more likely to cancel, no-show, or seek care elsewhere. While most leakage at this point in the referral process is patient-driven, many of the root causes—primarily long wait times—are solvable by health systems.

When to prioritize this leakage point

Health systems should prioritize this leakage point based on the severity and scope of their specialty access and care navigation problems. Most progressive organizations are focused on this leakage point since they already have dedicated strategies in place for the first two. Below are some indicators that your system needs to improve specialist access and care coordination:

- Claims data reveals patients referred in-network ultimately got care out-of-network
- High no-show rates
- High same-day cancellation rates
- Longer wait times for specialist appointments than competitors in your market
- Patient feedback that referral process is complex

Analyzing claims data is the most effective way to measure this leakage point because it shows where patients ultimately receive care. Leaders can compare claims data to EHR “intent to refer” data to:

- 1) Evaluate the relative size of leakage point one vs. leakage point three
- 2) Begin to assess the role that patient self-referrals play in referral leakage.

Claims data also helps to quantify volume and revenue losses from referral leakage.

How to prevent leakage

To avoid losing patients in the last mile, health systems need to improve access and care coordination. Organizations don't need a separate referrals-specific access strategy here. Rather, existing access and patient navigation efforts can support the additional goal of improving referral keepage. All specialties across the system should seek to incrementally improve access against their own benchmarks and relative to market competitors.

► Tactic 5: Ensure quicker access to specialists than competitors

Health systems recognize that the longer their wait times, the more likely patients are to shop around, cancel last minute, or no-show. While these specialty care access challenges are well known, the impact on referrals is often overlooked.

To increase near-term access, health systems should proactively reserve appointment slots for patients new to that specialty. At most organizations, referred patients are considered new patients in the specialty they're referred to, even when the referral originated within the system. Reserving dedicated time on provider schedules ensures that patients can get in with a specialist within a few days or weeks of their referral—making it more likely that they complete the referral.

CASE EXAMPLE

Mount Sinai Health System

To avoid losing referrals due to long wait times, Mount Sinai requires that all specialists convert at least 50% of their new patient time to late-releasing blocks. Late-releasing blocks release new patient appointments available within the next 14 days on a rolling basis. Leaders noticed that patients with appointments scheduled beyond 14 days were significantly more likely to cancel last minute or no-show.

Each specialist determines the number of new patient slots on their schedule and then are asked to convert 50% into late-releasing blocks. This means a set percentage of new patient appointments are released 7, 14, 21, and 28 days in advance. Although the goal is to get patients in within 14 days, Mount Sinai also opens slots 21 and 28 days out to provide additional near-term appointment options. If a slot isn't filled three days before the appointment, it's made available to existing patients and proactively offered to patients with longer wait times.

Mount Sinai reports that it's rare that an appointment slot goes unused. As of March 2024, just over 50% of providers use late-releasing blocks, and 47% of new patient appointments are scheduled within 14 days.

► **Tactic 6: Dedicate staff to guarantee referral completion**

Beyond improving specialist access, progressive health systems deploy dedicated navigators in primary care. Organizations often set up these programs to improve care coordination and patient experience, but there are also added benefits for referrals. Patients who work with a care navigator are more likely to follow through on their specialist visit and complete the referral. Although up-front staffing costs can seem high, the cost of losing patients to competitors is higher.

CASE EXAMPLE

Virtua Health

At Virtua Health, all patients with referral orders are introduced to a virtual care navigator at the end of their primary care visit. While working with the navigator is optional, most patients opt in. Navigators help patients schedule specialist appointments, use MyChart, and coordinate transportation. Coordinators can also verify patient insurance coverage during the first meeting and schedule a patient's next visit before they leave the office. Virtua has rolled out this program at five of their 21 primary care practices. Their goal is to expand it to all of primary care in 2025.

Prior to this program, Virtua PCPs sent 90% of referrals in-network, but claims data showed only 40% of those patients ultimately received care in-network. By contrast, early data reveals that 100% of patients who work with a care navigator schedule an in-network specialist visit, and these patients no-show at a rate of less than 2%.

While the program is newer in primary care, Virtua has had it in the emergency department (ED) for several years. The system reports that staffing patient navigators for three EDs costs \$800,000 per year but brought in \$7 million to \$8 million in in-network referrals—more than justifying the investment.

HOW TO GET STARTED

Target support to patients most likely to no-show

Not all health systems can offer navigation services to every patient. To start, offer tighter care coordination to patients who frequently no-show to make it more likely that they complete their referrals. Monitor the EHR to identify which patients don't attend their scheduled specialist appointments. Referral coordinators should then follow up with these patients to reschedule for a future date. Like we discussed earlier, proactive outreach is more effective than waiting for patients to call and reschedule. While health systems should ideally offer care navigation services to all patients, this is a more cost-effective and targeted approach to ensuring referral completion in the interim.

Key takeaways

- **Health systems must prevent leakage at every point in the referral process.** While most organizations focus on the PCP's workflow, there are two other points in the referral process where patients often leak out of the system. To successfully keep patients in-network from the point of referral through seeing a specialist, health systems must ensure the referral makes it across not just the first leakage point, but the other two as well.
- **Leakage point 1: Design physician workflows to work to your advantage.** Most organizations still have untapped opportunity to simplify physician workflows. Health systems should make in-network referrals the path of least resistance by making it easier for PCPs to refer in-network and harder for them to refer out-of-network.
- **Leakage point 2: Referral centralization is now a must-have.** Since PCPs refer across most service lines, a system-wide centralized process is vital. Not only does this improve collaboration, it's also more efficient. Centralization reduces variation in the referral process, saves time, and offers patients a more seamless, coordinated experience.
- **Leakage point 3: Leakage at the last stage is an access problem, not a referrals problem.** Long wait times are a big contributor to preventable leakage. Patients who wait longer for specialty care are more likely to cancel, no-show, or seek care elsewhere. To address this patient-driven leakage, organizations should offer more near-term availability and care coordination services to make patients more likely to complete their referral.

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Endnotes

1. Avalere Health. Updated Report: Hospital and Corporate Acquisition of Physician Practices and Physician Employment 2019-2023. Physicians Advocacy Institute. October 2024.
2. New Survey Finds Medical Group Operating Costs Continue to Outpace Revenue. AMGA. December 18, 2023.
3. All information in the case studies in this document was gathered through interviews with officials at the case study organizations.

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