artemis HEALTH

How Paychex Is Finding Benefits Cost Savings with Data

Many employers are facing rising benefits costs, but it's not easy to find ways to save that still offer great coverage for employees and their families. In this case study, we'll highlight the innovative way Paychex is addressing avoidable emergency room spending using their benefits data.

PAYCHEX®

Paychex is a leading provider of integrated human capital management solutions for human resources, payroll, benefits, and insurance services. Paychex serves approximately 670,000 payroll clients as of May 31, 2019 across more than 100 locations in the U.S. and Europe, and pays one out of every 12 American private sector employees.

The problem.

The Paychex benefits team noticed they had an opportunity to save costs on emergency room claims, an opportunity that has existed for a number of years. They partnered with Artemis Health to look more closely at their benefits data, and they saw that avoidable emergency room claims accounted for a staggering $1.5 million in their spending in the first half of 2019.

Avoidable ER Spend & Trend Overview

Measure	Prior	Current	Trend	
Sum Avoidable ER Overspending	$1,300,000	$1,500,000	15%	↑
PMPY Avoidable ER Overspending	$100	$125	15%	↑
Count District Members with Medical Claims	650	700	4%	↑
Sum Emergency Visits	725	775	6%	↑
Per 1k Emergency Visits	60.0	65.0	6%	↑

Additionally, that number was trending up. Members were visiting the ER more often, in larger numbers for each analysis period, and the cost was rising both for Paychex and for their members.

The analysis.

The benefits team wanted to understand which conditions were being treated in the ER that could have been addressed at a more appropriate point of care, like an urgent care clinic, a primary care doctor's office, or even a telemedicine visit. They found members were using the ER for conditions like these:

- **Urinary tract infections**
- **Headache**
- **Cough**
- **Low back pain**
- **Nausea**

While some conditions really do require emergency care, Artemis uses a unique data model to flag certain types of visits as "avoidable."

In order to get to a set of actionable tactics, Paychex wanted to understand more about their avoidable ER spending, so they also analyzed the utilization by office location. Here's what they found.

Artemis Health calculates avoidable emergency room spending using the NYU Wagner study around emergency room utilization. The Artemis Platform automatically calculates the total cost that could have been saved if all claims had been handled at the correct point of care.

Avoidable ER Overspending by Office

Office	Avoidable ER Overspending	Members with Avoidable ER Claims	Count Enrolled Members
Location 1	$98,000	45	1,100
Location 2	$90,000	25	500
Location 3	$75,000	15	600
Location 4	$71,000	55	2,200
Location 5	$56,000	15	400
Location 6	$48,000	15	350
Location 7	$43,000	20	275
Location 8	$37,000	20	400
Location 9	$36,000	10	125

While Paychex's Office Location 4 office boasts the highest number of enrolled members, it is not the primary hotspot for inappropriate ER utilization. In fact, you can see Office 1, Office 2, and Office 3 were also seeing high numbers of members visit the emergency room. This information gave the Paychex team the data they needed to take action.

The action.

Paychex is taking a data-driven approach to tackling their avoidable ER spending. They are targeting different groups of employees and different locations within the company based on what they learned using the Artemis Platform. Here are some actions they are considering:

- **More aggressively promoting their telemedicine program for everyone at Paychex to ensure members are aware of their options for immediate care**

- **Sending targeted member education materials on appropriate ER visits through the health plan and telemedicine vendor to office locations with higher avoidable ER costs, and tailoring the messages based on the demographics and reasons for avoidable ER visits where the problem is identified**

- **Conducting on-site benefits team educational visits to locations with higher ER utilization**

However, these actions have been impacted by the COVID-19 pandemic. While it has boosted awareness and utilization of their telemedicine program, it's also caused some members who needed immediate care to avoid the emergency room. The on-site educational visits are delayed, but Paychex's benefits team hopes to continue teaching members how and when to use the ER vs. other available care options.

These cost-saving strategies aren't just impactful for the business; Paychex is also empowering employees to make smart healthcare decisions, save the plan money, and save money on out of pocket costs as well. By tackling high ER utilization with targeted member education efforts, Paychex is incentivizing good healthcare decisions for employees and their families. It's all part of their effort to get employees to get the right care, at the right time, at the right place, for the right cost.