

ADVANCED ANALYTICS FOR HEALTH CARE PAYMENTS FIRM

SYNOPSIS

A leading processor of payments between health care payors and providers needed to understand the implications of its growth plans for potential attrition by existing providers from its network. Specifically, the company was concerned that, as the share of each providers' total payment volume processed by the company grew, fees would increase sharply and cause providers to leave the network. Horizon was retained to work with the CEO, CFO, and the ops team of the equity sponsor to study the drivers of attrition from the company's network and implications for growth.

SOLUTION

The Horizon team created a relational database model from the firm's OLTP transactional data and used it to analyze historical patterns in growth, revenue, and unit attrition over time and by product and provider characteristics. We then constructed two regression models – one at the individual provider-level and another at the aggregate (organization)-level. We used the provider-level model to quantify baseline attrition probabilities by key customer segments and identify drivers of increased attrition likelihood. We then used the intuition from the granular model to build an aggregate revenue model capable of capturing the effect of network growth on attrition. The model fit historical revenue patterns with high accuracy and, given its causal underpinnings, positioned the team to make forecasts that accounted for changes in their go-forward strategy.

VALUE

With a better understanding of attrition patterns and drivers, the firm was able to enhance its onboarding and retention efforts and reduce attrition among newer customers. They were also able to model induced attrition and aggregate revenue impacts of expanding their network, which could cause large jumps in monthly fees for some customers. This allowed the team to better set customers' expectations and/or modulate fee collection to soften the blow and reduce attrition among existing customers.