IntegerHealth

Quantifying Healthcare Outcomes

What do we want from our healthcare? A ***"good outcome,"*** when we get better–sooner, rather than later–and at the lowest overall cost.

How do we get a good outcome? By going to the best doctors and hospitals. The problem, however, has been that we didn't know how to quantify outcomes and identify those best providers.

Now at IntegerHealth, we do.

Our Result = Better Care at Lower Costs

Lake Wobegon

We all think that our doctor is the best, but we don't live in Lake Wobegon where all the children are above average. Exactly half of all children are above average, and exactly half are below.

It's the same with doctors–and the specialists and surgeons that they refer us to, and the hospitals that they put us in.

It seems counter-intuitive, but going to a good doctor costs less overall than going to a bad one. 30% of healthcare costs are due to poor or ineffective care and the best doctors wring out those excess costs.

Inputs vs. Outcomes

In the past, as we didn't know how to rank doctors based on the outcomes that they achieved, we changed the question from: "Did the patient get better?" to "What procedures did their doctor perform?" in the hope that following the right process would lead to a good outcome.

Other inputs that we used as proxies for a good outcome were patient satisfaction scores and price transparency tools, which told us what a doctor charged for a procedure or visit, without considering whether the doctor would get us better, and how much that would cost. Finally, there were the "narrow networks" that insurance companies touted. The best providers within their overall networks. Based on what? The inputs.

Quantifying Outcomes

There are two ways to quantify outcomes, one combining medical and pharmacy claims data with employee absence records–where the outcomes of the claims live–and the other using just the claims.

Employers that self-insure, as well as workers' comp insurance companies and TPAs, can use the first method. Health insurance companies, MA Plans, and multiemployer health plans can use the second.

Claims + Absence Costs

We use employee data and define a good outcome as an employee returning to work from their illness or injury. Having marked that point in time, we measure all the costs to get and keep the employee there, which are more than just the claims. The cost of paying an employee while out sick often exceeds the claims, with the length of time that the doctor took to get the employee better and back to work doubling as an indication of the effectiveness of the care. Employers can obtain the absence costs from their HR records, while workers' comp insurance companies and TPAs can use the loss runs and check registers.

IntegerHealth

Claims Only

When using employee data, we ask how much it cost and how long it took for the employee to return to work? When using only claims data for all patients, we flip the question and ask how much it cost per day in claims to keep a person well? And we define being well as not spending time in the healthcare system (e.g. hospital stay, etc.) or otherwise being non-functional.

Root Diagnosis

We group the calculations by root diagnosis because a doctor may be great treating diabetes, but lousy with asthma.

Risk Scores

If you ask any doctor why their costs are more than another doctor's, they'll always give the same answer. "Because my patients are sicker." And sometimes they're right.

Sicker patients cost more, and take longer to get better. If you have two patients with the same back injury, one of them young and otherwise healthy, while the other older, overweight and diabetic, the older patient is going to cost more. So we adjust for comorbidities by assigning each patient a risk score. That way our rankings are based solely on the provider performances, not the patients that they treated.

Allocate Costs

When allocating costs to a physician we assign them both their direct costs and the indirect costs from their downstream referrals. If a doctor sees a patient once and then refers them to a surgeon, that doctor's direct costs will be low compared to another doctor that works with the patient to avoid surgery. However, the overall costs–direct + indirect, will be much higher. So we include all costs for which a doctor is responsible.

Rankings

We sort providers into categories, because you can't compare a PCP to a surgeon, and rank them by root diagnosis from the best to the worst:

- Average risk-adjusted cost (claims + absence costs) when using claims and absence costs
- Average risk-adjusted claims per functional day when using only claims

Analytics & Action

We provide these analytics to our clients through a powerful internet portal consisting of interactive dashboards and reports. You can stop there, or move from analytics to action and *steer everyone* to the best providers (even when only using employee data to calculate the rankings). To do so, we provide streamlined portals to: (1) case managers handling high cost and chronically ill patients, (2) physicians referring patients to specialists and surgeons, and (3) patients.

Getting Started

We take 3-5 years of past data from a prospective client and model it to show how much we could save. If we move forward, we then have a head start and know who the best providers are on Day 1.

Contact Us

For more information, please contact:

Scott Roloff
President @ IntegerHealth
(817) 849-9402
sroloff@integerhealth.com

IntegerHealth

Better Care at Lower Costs