Strata Decision Technology

The Journey to Time-Driven Costing

Synchronizing Data Sources to Drive True, Accurate Cost Accounting

When it comes to cost accounting in healthcare, most organizations have managed with simple, manual workflows and estimations. Many calculate costs using ratios or averages rather than actual data, a practice that has come to represent but not fully depict the reality of the hospital's operations. With traditional labor costing, data from charges and labor have remained somewhat disjointed, passed through different systems that never entirely match up.

But in recent years, organizations have begun to look for ways to synchronize this data to achieve costing based upon true data rather than estimations. Partially influenced by legislature and regulations like the 2009 Health Information Technology for Economic and Clinical Health (HITECH) Act which supported the "meaningful use" of interoperable electronic health records, hospitals and healthcare organizations have invested in systems that now allow them to mine data from across their departments and teams. To drive cost accounting based in real, accurate data, healthcare providers are beginning to see the value in synchronizing these systems, to build a cost accounting approach that grounds decisions in real data instead of estimations.

In this whitepaper, we will outline the pitfalls that have accompanied traditional cost accounting and detail the path forward to a Time-Driven Cost Accounting approach that leverages preexisting data sources to automate and elevate cost accounting, for costing based on true data.

The Evolution of Labor Cost Accounting

In most industries, the price of goods and services is based upon the underlying cost to create or deliver them, plus an additional factor to help hit the targeted margin. As demand, competition, and the cost to produce these goods or provide these services change, their price will shift accordingly, or the realized margin will change.

Healthcare is not like most industries. As it stands, many hospitals and health systems would be hard-pressed to justify the prices attached to their services. Many work with outside consultants or contractors to help determine those prices, factoring in things like typical reimbursement and competitor prices. Even still, when it comes time to adjust prices or evaluate costing, they utilize a cost-to-charge ratio (RCC) to determine the ratio of the hospital's expenses to what the hospital charges for them, or relative value units (RVUs), which can stand for average times per procedure.

Cost-to-charge ratio: **the ratio of the hospital's expenses incurred in the process of providing a service against the amount the patient was actually charged for the service.**

Using these **cost-to-charge ratio (RCC)** or **relative value unit (RVU)** strategies tends to create a faulty foundation for cost accounting. Most importantly, the chargemaster isn't grounded in actual data. Typical costing compares cost across surgical procedures, rather than comparing by patient encounters.

Comparing Cost By Patient, Rather Than By Procedure

As we know, patient encounters can differ even for the same procedure. Two patients with the same demographic makeup—age, pre-existing conditions, background—can incur dramatically different costs during their procedures. Factors for variation include the number of hospital staff involved in the procedure and how long that staff stayed in the OR for the procedure.

Because the provider's chargemaster leverages static estimates rather than taking actual patient costs into account, this kind of cost accounting can't capture variability between patients nor establish an accurate depiction of the cost required to perform a service to those patients to determine a charge.

In the end, the data being used to determine that charge doesn't mean much. Charges end up being outsourced to consultants or based upon an arbitrary annual percentage increase, rather than being based upon the actual cost incurred by the patient.

Given the advances being made in electronic health records, hospitals and health systems should be able to account for labor expense when determining their charges, right?

Attempting to account for labor, many organizations have begun to adopt time and motion studies. These studies literally place stopwatches and clipboards into the hands of hospital staff, relying on clinical teams to input data of time spent in the hospital by staff. Manual, time-intensive, and often inaccurate, this method can seem like an improvement, but still doesn't account for patient-specific variation. Instead, it simply provides data based upon an average for all patients.

So, where is the future of cost accounting? How can organizations get on the path toward true cost accounting that includes labor cost, rather than relying on estimates or ratios?

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The Journey to Understanding True Labor Cost

Today, many hospitals and health systems are finding success utilizing a new kind of labor cost accounting, one that leverages preexisting hospital data to get a more accurate picture of the actual cost of a patient encounter.

Time-Driven Cost Accounting leverages an organization's investment in their EMR, utilizing clinical logs for recorded times and staffing data for every patient. The case-specific data feeds patient-specific costing, providing a true, accurate resource for cost accounting.

As previously mentioned, hospitals and healthcare systems need a way to account for variation in cost between patients that occurs often a result of labor involvement.

Time-Driven Cost Accounting allows an organization to overcome the challenges inherent to syncing charge and staffing data, utilizing patient data to do so.

How is True Time-Driven Cost Accounting Different?

While many organizations are seeking to execute costing driven by more accurate, empirical data from within their ORs and facilities, not all methods are created equal. The name may sound familiar, but this new method of Time-Driven Costing utilizing data and systems is not the same as other methods of cost accounting based on time and activities.

Some traditional activity-based costing strategies require departments to survey employees and develop estimates for time spent on certain activities. Time studies, as mentioned before, involve handing clinical teams stop watches and clipboards with the expectation that they will carve out time in their day to manually collect data and determine efficiencies for select procedures.

Despite these advancements, many healthcare leaders find themselves wondering…

- How accurate are these kinds of surveys?
- Are they worth the cost of paying a consultancy to set them up and train staff to execute?
- As for time and motion studies, is the process of manually collecting data worth the time staff spends away from more critical tasks and from providing patient care?

So how can you tell that your organization is truly utilizing Time-Driven Costing?

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Is My Organization Utilizing Time-Driven Costing?

Consider the following:

Is your organization's cost accounting…

…automated and data-driven?

…across all areas based on type of cost, i.e. All Surgeries

…driven by deeper, regular capacity analytics?

…used to identify variation across all cases?

…able to make granular calculations, i.e. Staff/Wage Rate/True Minutes?

…drilling down to physician level for comparison?

As your organization works toward implementing Time-Driven Cost Accounting, use these as benchmarks for measuring your success as well as aspirations for where you could go.

Now Where Do I Start?

Of course, to transform your organization's cost accounting mindset and drive more accurate strategies, you should begin by auditing your organization's current data sources for integration opportunities.

Many healthcare providers utilize EHRs that automatically record when staff clocks in and out, but this information can be difficult to synchronize with charge data. For one thing, charge data allocates department costs at a different granularity than staffing data. Different departments book things differently, causing the data in the system to be disjointed.

To best alleviate this problem, seek out opportunities to utilize preexisting data sources that you could synchronize in an advanced cost accounting system.

Start surveying your data sources to find out what information can be leveraged for true Time-Driven Costing. For organizations utilizing EHRs like Epic, the data is at your fingertips. You just need a way to interpret and leverage it for true labor costing.

But you might be asking yourself, where do I start? What will have the biggest impact at my organization?

Potential opportunities for labor optimization could come from specific departments, like surgery or extended recovery. For example, if you were to follow the surgical data model, you would begin by detailing your staffing and the resource profile involved during surgery, including information like surgical case, staff code, staff type, staff category, time, and the source system from which data is being pulled. Using data from real surgeries, you would be able to provide staff-specific time durations and begin to determine defaults and thresholds that can be leveraged in the future.

What's the Result?

Implementing Time-Driven Costing in your organization allows you to track cost variation using real data and drive a far more accurate cost model. But what are the outcomes?

With a more advanced, time-driven cost accounting approach, your organization can begin to tie real patient and labor data to your costs to determine more realistic charges. You can compare cost between patients and across procedures, instead of relying on traditional estimates.

But most importantly, implementing Time-Driven Cost Accounting within your organization opens up new opportunities to identify case-specific variation, leveraging your EMR investment to advance your cost accounting process and drive true, accurate costing necessary in today's healthcare environment.

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Want to Learn More?

To learn more about Time-Driven Costing and the path to more advanced cost accounting, visit our website and read about the HFMA-Strata L7 Cost Accounting Adoption Model.

Started over 20 years ago, the story of Strata is about a group of passionate people hyper-focused on and hyper-committed to making a difference in healthcare.

Our solution StrataJazz® is the leading cloud-based SaaS financial planning, analytics and performance platform in healthcare.

It is an enterprise-wide solution that addresses the financial planning, decision support and continuous cost improvement requirements of healthcare providers.

We provide seamless integration with existing EHR, ERP and EDW systems to leverage the organization's existing infrastructure and investments. The Company's advanced cost accounting platform has emerged as the solution of choice in the market.

To learn more about Strata Decision Technology and our cloud-based, modular platform, visit our website.