

Cost management and the renewed imperative for cost accounting

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Abstract The American healthcare delivery system is in the midst of tremendous change and is experiencing increasing financial pressure; yet adoption of cost accounting systems is still not widespread in the USA. The industry, consequently, has not fully tapped the potential of cost accounting to support management decision-making. Historically, there has been scant guidance to help providers match the power and sophistication needed from their costing systems with the imperatives of the reimbursement environment. Fortunately, national benchmarks, such as the Precision Risk Framework, the HFMA-Strata L7 Model and the Costing Maturity Model, are emerging. Adoption of these methodologies will allow healthcare entities to assess the efficacy of their current costing efforts and choose costing system elements that will give them the greatest return on investment (ROI). Each of these models is briefly presented and reviewed in this paper. Finally, 11 tactics are introduced that financial leaders can use to improve their costing efforts, regardless of their selected technologies, and without large capital expenditures.

KEYWORDS: Cost Accounting Adoption Model, evolving reimbursement, evaluating costing methodologies, assessing costing system efficacy, tactics to catalyse change

COST ACCOUNTING IS NOT WIDESPREAD

Healthcare leaders need to understand cost behaviour to make good decisions; yet adoption of cost accounting systems is still not widespread in the United States, notwithstanding assertions to the contrary. In a July 2018 *Health Affairs* article, Ederhof et al. state, 'Contrary to the notion that few providers have the ability to accurately measure costs at the individual procedure or patient level, highly-detailed cost data generated by internal cost accounting systems already exist in a large and growing number of health care organisations. Data collected by the Healthcare Information and Management Systems Society (HIMSS) reveal that more than 1,300 U.S. hospitals have adopted sophisticated internal cost accounting systems'.¹

While this figure may seem impressive and reassuring, according to the American Hospital Association, there are 6,210 hospitals in the United States²; thus, barely one in five U.S. hospitals (20.9 per cent) has adopted a cost accounting system. Furthermore, based on our more than six years of experience teaching cost accounting seminars for the Healthcare Financial Management Association (HFMA), many of these hospitals rely on Medicare cost report-driven systems that use ratio-of-cost-to-charges (RCC) methodology. Use of RCC can, however, lead providers to overestimate profitability in some high-visibility and high-revenue areas — like orthopaedics. Relying on faulty cost data to guide investments produces bad outcomes, through under- or over-investment.

Recently, HFMA reported that 90 per cent of healthcare providers lack accurate, comprehensive and actionable information on the cost of care. According to a *Harvard Business Review* article cited by HFMA, healthcare leaders are flying blind when it comes to understanding costs: 'Without understanding the true costs of care for patient conditions, much less how costs are related to outcomes, health care organizations are flying blind in deciding how to improve processes and redesign care'.³

In our opinion, the failure of U.S. hospitals to more widely adopt up-to-date cost accounting systems and methodologies has also contributed to their worsening financial performance, and possibly, to the recent bankruptcies. According to *Becker's Hospital Review*, 'From reimbursement-landscape challenges to dwindling patient volumes, many factors lead hospitals to file for bankruptcy'.⁴ Bankruptcies in the healthcare sector more than tripled in 2017, and at least 18 hospitals/hospital systems filed for bankruptcy protection. That trend did not subside in 2018. A recent health law blog cited *Becker's Hospital Review* as revealing eight more hospitals/hospital systems filed for bankruptcy protection, and nine hospitals closed, during the first three-quarters of 2018.⁵

AN UNCERTAIN ENVIRONMENT

Today, margin pressure can seem unrelenting because reimbursement methodologies are continuously evolving (often in forms with no historical antecedents), and Medicare, Medicaid and managed care payers all continue to shrink what they pay. This suggests that, to cope, healthcare leaders must have a solid grasp of their organisation's costs; yet different costing methods yield widely different results. How should someone decide which costing method to use? Merely applying the right methods and having the right numbers does not, however, automatically yield outstanding results. Understanding and managing costs is crucial to operating profitably.

The use of quality measures in computing value-based reimbursement, moreover, creates complex challenges for financial leaders. In addition, the growing use of full or partial capitation puts a premium on deciding which quality improvement initiatives are cost effective. No single department has the complete knowledge and tools to effectively manage the new array of payment methodologies. Often, the responsibility to optimise reimbursement may slip through the cracks between revenue cycle, accounting and clinical operations. While a multidisciplinary approach is therefore

Table 1: Healthcare executives' value-based care priorities

| Activity | Prevalance |
|--|------------------|
| Revise and improve data | 63% ¹ |
| Move outside your four walls | 70% ¹ |
| Develop infrastructure | 57% ¹ |
| Develop cost transformation/cost management skills | 96% ² |
| Develop a consumer strategy | 90% ² |

¹Source: HealthLeadersMedia/Intelligence, May-June 2018²Source: Kaufman Hall, "State of Transformation/ State of Consumerism," 2018

essential, financial executives need cost accounting tools they can use to leverage their skills and resources and help their institutions adapt to this evolving payment environment.

Accordingly, recent studies by HealthLeaders Media and Kaufmann Hall indicate healthcare executives are emphasising improving data and developing cost transformation and management skills. We question, however, how they intend to accomplish these objectives when almost 80 per cent of surveyed healthcare executives in the Kaufmann study lack effective cost accounting capability (Table 1).

The Kauffman Hall study goes on to point out the top ten initiatives its survey respondents planned in response to today's challenging environment. To have any chance of success, every listed initiative either requires detailed cost information or must be substantiated by widely-trusted cost data. In our opinion, the data are mandatory to support the difficult choices and trade-offs that will be needed for implementation. For such performance evaluations and trade-off decisions to work, all parties must perceive the cost allocation system to be fair (Figure 1).⁶

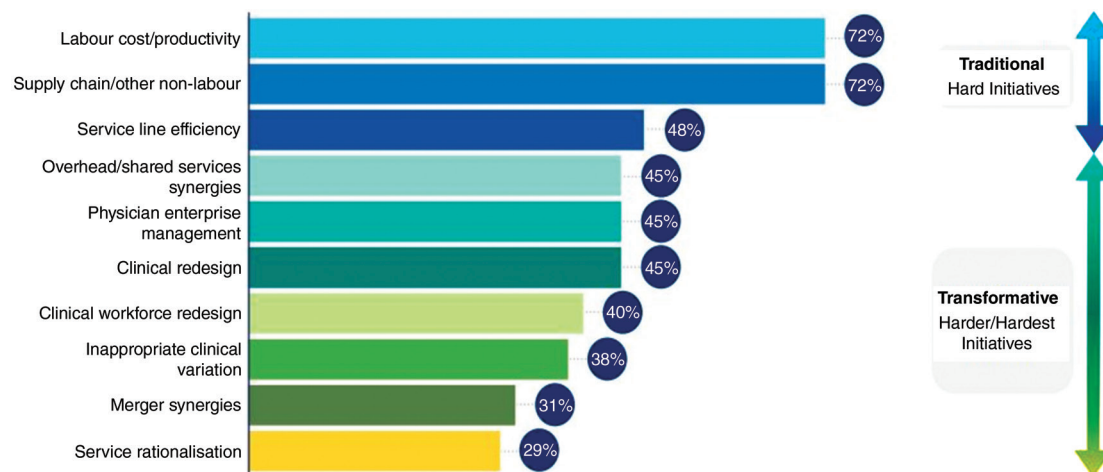


Figure 1: Focus of current transformation efforts
Source: "State of cost Transformation in US Hospitals," Kaufman Hall (2018).

COST ACCOUNTING CHALLENGES

A recurrent theme in discussing the state of healthcare cost accounting is that we, as an industry, have simply failed at it. In their widely cited 2011 *Harvard Business Review* article, Kaplan and Porter said, 'To put it bluntly, there is almost a complete lack of understanding of how much it costs to deliver patient care, much less how these costs compare with the outcomes achieved. Instead of focusing on the costs of treating individual patients with specific medical conditions over their full cycle of care, providers aggregate and analyze costs at the specialty or service-department level'.⁷

Only two years later, another author remarked in the same refrain: 'Healthcare reform was designed, in part, to alleviate this persistent cost problem, but much work remains to be done to fully-understand the true costs of health care. Once these costs are better-understood, the goal must then be to manage costs more effectively, efficiently, and sustainably. A critical starting point is for healthcare providers to have a more-accurate and realistic picture of what their current costs are, rather than what they think costs may be'.⁸

Some organisations, however, have accepted these challenges. One example is Utah's Intermountain Healthcare. Intermountain undertook a multi-year effort to convert its charge description master to a 'cost' description master. According to Dr. Brett James, Intermountain's Chief Quality Officer, 'If you know the true cost of providing care, you can ask yourself whether doing one thing is really more important than doing something else. Intermountain's mission statement is, "The best medical result at the lowest necessary cost". We think there is enough waste in health care that we can dramatically improve our costs. But to do that, we've got to be able to measure and manage those costs' (emphasis added).⁹

Even at Intermountain today, however, cost accounting challenges remain. According to Chris Bruerton, Assistant Vice President, Finance at Intermountain, traditional time-driven, activity-based costing 'is not easily scalable, is generally focused on a

certain procedure or case type, and is very time-consuming. You may not get value out of it when you try to expand that across multiple areas. If you have the capability within your electronic health record to capture time components of activities, and can then feed that data into an automated costing process, that is definitely the way to go. Reducing costs, without sacrificing the quality of care, is critical to being successful in a value-based, at-risk environment'.¹⁰

EVALUATING COST ACCOUNTING METHODOLOGIES

The absence of industry standards has led many to conclude that all cost accounting methods are equally valid. Using that logic, executives may choose the method with the lowest acquisition and operational costs. A careful comparison of the outputs of popular costing methodologies, however, demonstrates that different methods produce widely divergent results. The best costing method for an organisation is the one that provides the optimal outputs to support management's intended decisions. This approach balances the limitations inherent in all cost accounting systems and the different demands organisations make on their costing systems.

Kaplan and Porter urge caution: 'Using the wrong costing system may have disastrous consequences — personally or corporately. If and/or when providers misunderstand their costs, they can't link costs to process improvements or to outcomes. This prevents them from making systemic and sustainable cost reductions'.¹¹ Healthcare leaders today typically employ one or more of the following four widely used methodologies, each being more complex and expensive than its predecessor(s):

1. Ratio of cost-to-charge (RCC) costing
2. Relative value unit (RVU) costing —
Single RVU costing
3. Multiple RVU approach — Activity-based costing
4. Micro-costing

Table 2: Comparative accuracy of four costing methods

| Methodology | Accuracy |
|----------------------------------|----------|
| Ratio of cost to charges | 35-40% |
| Single relative value unit (RVU) | 65-80% |
| Multiple RVUs | 80-85% |
| Micro-costing | 85-90% |

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The average accuracy of each costing system can be determined by using previously established relationships between the costing method and the 'actual cost' for a cross section of hospital charges.¹² Weighting the values calculated under each method, as shown, yields an accuracy index for the system (Table 2).

Just as different costing systems produce different accuracy levels, they produce

different levels of detail. These levels of detail correlate with the complexity of the needed analysis. As reimbursement complexity increases, and 'breaks the walls' of the hospital to span the continuum of care, cost accounting's analytical power must also increase. Table 3 summarises typical limitations on detail, by costing method. Even the multiple RVU and micro-costing approaches leave something to be desired when confronted with today's reimbursement realities.

Taken together, accuracy and detail represent the system's 'precision'. For every decision, there is a minimum level of precision required to reasonably ensure management will reach a

Table 3: Typical limitations on detail by costing method

| Method | Limitations |
|----------------------------------|---|
| Ratio of cost to charges | <ul style="list-style-type: none"> > Cannot distinguish unique fixed or variable costs > Cannot distinguish unique category costs, such as labor and supplies, at the charge-code level > Cannot identify which cost elements are used in a particular charge code (radiation technician or nurse, for example) |
| Single relative value unit (RVU) | <ul style="list-style-type: none"> > Cannot distinguish unique fixed or variable costs > Cannot distinguish unique category costs, such as labor and supplies > Cannot identify which cost elements are used in a particular charge code > Cannot distinguish efficiency/productivity variances from changes in input costs |
| Multiple RVUs | Can distinguish fixed and variable costs as well as particular categories of costs, provided the expenses are mapped from general ledger to the buckets correctly, but still cannot distinguish efficiency/productivity variances from changes in input costs |
| Micro-costing | Cannot distinguish unique costs between specific patients or categories of patients. With a chest X-ray, for example, assuming only one charge code, all inpatients and outpatients receive the identical cost even though inpatients are not registered at time of service, may receive their X-ray in their room, and may require nurse support. None of these cost elements apply to outpatients, yet the cost computed includes these elements. |

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Table 4: External factors affecting precision-level needs

| Factor | Low Precision | High Precision |
|--------------------------|--|--|
| Market composition | Solo provider | > Multiple hospitals > Freestanding providers > Entrepreneurial physicians |
| Treatment focus | Treat and release or transfer patients | Regional referral or specialty |
| Managed care penetration | Up to 10% | 20% or more with anticipated growth |
| Payment models | Charges, discounted charges | Case rates, capitation carveouts, bundling |

Source: Selivanoff, P., "The Impact of Healthcare Reform on Hospital Costing Systems," *hfm*, May 2011.

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correct conclusion. Accordingly, 'precision risk' is defined as the risk that the cost accounting process will be insufficiently precise to accurately inform a decision. Precision risk is analogous to 'audit risk' — the risk the auditor's work may fail to discover a material financial misstatement when one has occurred.

One way to evaluate the effectiveness of an organisation's cost accounting system is through the 'precision risk framework'. Much like auditors, who plan audit procedures on the basis of an assessment of inherent risk, control risk and detection risk, cost accountants should plan and implement cost

accounting processes. Selecting the optimum precision level requires understanding an enterprise's organisational and reimbursement complexity, as well as assessing external conditions and management's decision-making intentions (Table 4).

Cost accounting is a specialised form of management accounting. It exists to inform and support decision-making. Cost accounting systems are, consequently, used to produce a variety of reports. As the complexity of needed decisions increases, the ability to use RCC- and single RVU-based analyses and reports declines. Table 5 shows

Table 5: Relating report types to methodology precision

| Type of Output | Ratio Cost to Charge (RCC) | Relative Value Unit (RVU) | Multi RVU | Micro-Standards | Actual Costing | Issues |
|--|----------------------------|---------------------------|-----------|-----------------|----------------|--|
| Product line summary > 6mo. | Yes | Yes | Yes | Yes | Yes | Aggregation of large number of accounts increases accuracy |
| Product line summary < 6mo. | | | Maybe | Yes | Yes | Short time periods accentuate variances |
| Payer summary > 6mo. | Yes | Yes | Yes | Yes | Yes | Aggregation of large number of accounts increases accuracy |
| Payer summary < 6mo. | | | Maybe | Yes | Yes | Short time periods accentuate variances |
| General strategic planning | Yes | Yes | Yes | Yes | Yes | Aggregation of large number of accounts increases accuracy |
| Existing service budget/forecast | | | | Yes | Yes | Absorption of waste in cost |
| New service budget/forecast | | | | Yes | Yes | Not enough detail |
| Bonus/incentive/revenue split agreements | | | | Yes | Yes | Not accurate enough |
| Manage productivity, efficiency, waste | | | | Yes | Yes | Not accurate enough, inadequate detail |
| Make or buy | | | Maybe | Yes | Yes | Not accurate enough |
| Evaluating care choices | | | Maybe | Yes | Yes | Not accurate enough |

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how to easily evaluate different classes of reports against the capability of each costing methodology. After applying this framework, cost accountants may find they are producing reports that do not contain a 'yes' in the column that correlates to their primary costing methodology. If so, they should seriously consider whether their organisation's chosen costing methodology is sufficient for their needs. This conclusion, and a recommendation for corrective action, should be communicated to senior management.

THE INDUSTRY RESPONDS

The aforementioned environmental challenges and cost accounting shortcomings have been discussed for years in the literature. As with many healthcare financial management issues, various thought leaders and stakeholders have addressed the problem and attempted to build consensus for an industry-wide approach; yet, until recently, none had emerged.

On 15 February 2019, however, HFMA introduced the HFMA-Strata L7 Cost Accounting Adoption Model, known as the L7 Model.¹³ Originally designed for 200 leading healthcare delivery systems, this model has now been open-sourced by HFMA to make it available to every healthcare provider. As its name suggests, the L7 Model has seven levels, ranging from 1 to 7:

- Level 1 — use of outdated or industry-defined RVUs for labor
- Level 7 — use of comprehensive and automated patient-specific time- and date-stamped expense detail

HFMA's conception is threefold. The L7 Model is designed to help healthcare providers with the following:

1. Assess their current cost accounting methodology
2. Understand the level of accuracy in their cost data
3. Benchmark their capabilities against their peers'

HFMA believes providers need to collectively adopt a uniform and systematic roadmap for the actions required to ensure their cost accounting approach meets their strategic needs. When they do, the ability to drill down into the costs associated with bundled services, specific patient groups or practice patterns will help decision makers better understand variation and the costs related to variation — and make changes that will improve value. Additionally, the ability to benchmark against peers should serve to catalyse more rapid implementation of higher-level cost accounting capabilities (Table 6).

HFMA's L7 Model correlates closely with the aforementioned precision risk model. Figure 2 presents a costing maturity model that organisations can use to assess their readiness to operate under ever more complicated reimbursement methodologies. As environments evolve towards greater complexity, and margins shrink, providers lose the luxury of 'waiting to find out'. Today's environment of change necessitates more frequent 'reality checks' and compels more rapid action, as shown in Table 7.

Users among the original 200 organisations that helped develop the L7 Model report significant benefits to the approach, particularly from the benchmarking database. According to Chris Donovan, Executive Director of Enterprise Analytics at Cleveland Clinic, as more and more providers begin to use the open source model, 'building a common model to have something to compare against and that we're all measured against equally will be a huge value. This is especially true not just when you are trying to communicate externally — there's a lot of discussion about how health care doesn't understand its costs — but being able to communicate internally to our own organisation about the need to invest in this capability and having an external benchmark that other peers and organisations are participating in, and that we can show our progress against, can really help move the needle internally as well.'¹⁴

Table 6: The HFMA-Strata L7 Cost Accounting Adoption Model

| L7 | ACCURATE: Components of Cost Model | Comprehensive: Scope of Costing |
|----|---|--|
| | | |
| 7 | Levels 1-6 + Comprehensive and Automated Use of Patient-Specific Time Stamp Detail in Highest Labor Expense Areas | All Services Provided to Patients and Members within and External to Your Organization |
| 6 | Levels 1-5 + Payor Discount Programs (e.g.: 340B) Reflected in Drug and Supply Cost + Comprehensive Use of Activity Codes Identifying Variation not Captured by the Charge Master for Clinical and Support Areas + Cost attributed to External Claims for Bundles/MSSP/ACO programs Based on Methodologies Described in Previous Levels | All Services Provided to Patients and Members within and External to Your Organization |
| 5 | Levels 1-4 + Professional Labor Cost Specific to Patient's Attributing Physician Compensation + Patient-Specific Acquisition Costing for Non-Chargeable Supplies at Item Level in All Major Surgical and Procedural Locations + Cost for Facility Owned Post-Acute Care Setting Based on Methodologies Described in Previous Levels | Hospitals + Physician Groups + Limited Post-Acute Care Costing |
| 4 | Levels 1-3 + Patient-Specific Acquisition Costing for Chargeable Supplies at Item Level in All Major Surgical and Procedural Locations + Patient-Specific Acquisition Costing for Drugs at NDC Level + Surgical Labor Cost Driven by Patient-Specific Time Stamp Detail + Limited Use of Activity Codes Identifying Variation Not Captured by the Charge Master for Clinical and Support Areas + Cost for Professional Services Based on Modifier Adjusted RVUs and Group Compensation Expenses. | Hospitals + Physician Groups |
| 3 | Levels 1-2 + Monthly RVU Development for New Charge Codes + Operational Ownership of RVU Maintenance w/ in Cost Accounting System + Patient-Specific Acquisition Costing for Chargeable Supplies at Item Level for One Major Surgical or Procedural Location + Cost for Professional Services Based on RCC or Outdated RVUs | Hospitals + Physician Groups |
| 2 | Level 1 + Annual RVU Update and Development Process + Limited use of Non-Patient-Specific Acquisition Cost or Markups for Supplies and Drugs + Detailed Cost Components for Supply and Labor + Variability Defined at the Account and Job Code Level | Limited to Hospitals |
| 1 | Outdated or Industry Defined RVUs for Labor + RVUs for Supplies + Simultaneous Overhead Allocation + Cost is Maintained on a Monthly Basis | Limited to Hospitals |
| 0 | Use a Basic RCC Methodology for Labor, Drug, and Supply Expenses | Limited to Hospitals |

ELEVEN 'DO IT NOW' TACTICS TO CATALYSE CHANGE

As providers take up the challenge of improving their cost accounting capabilities, it can be difficult to know where to start. That is why the aforementioned models (ie the Precision Risk Model, the HFMA's L7 Model and the Costing Maturity Model) can be so important for assessing an organisation's current capabilities.

Once an organisation has a grasp of its present state, however, it needs a toolkit of practical strategies to catalyse its change efforts. We believe the following 11 steps can yield practical, short- to medium-term successes. When measurable successes are achieved quickly, organisational stakeholders' commitment and enthusiasm usually increase commensurately.

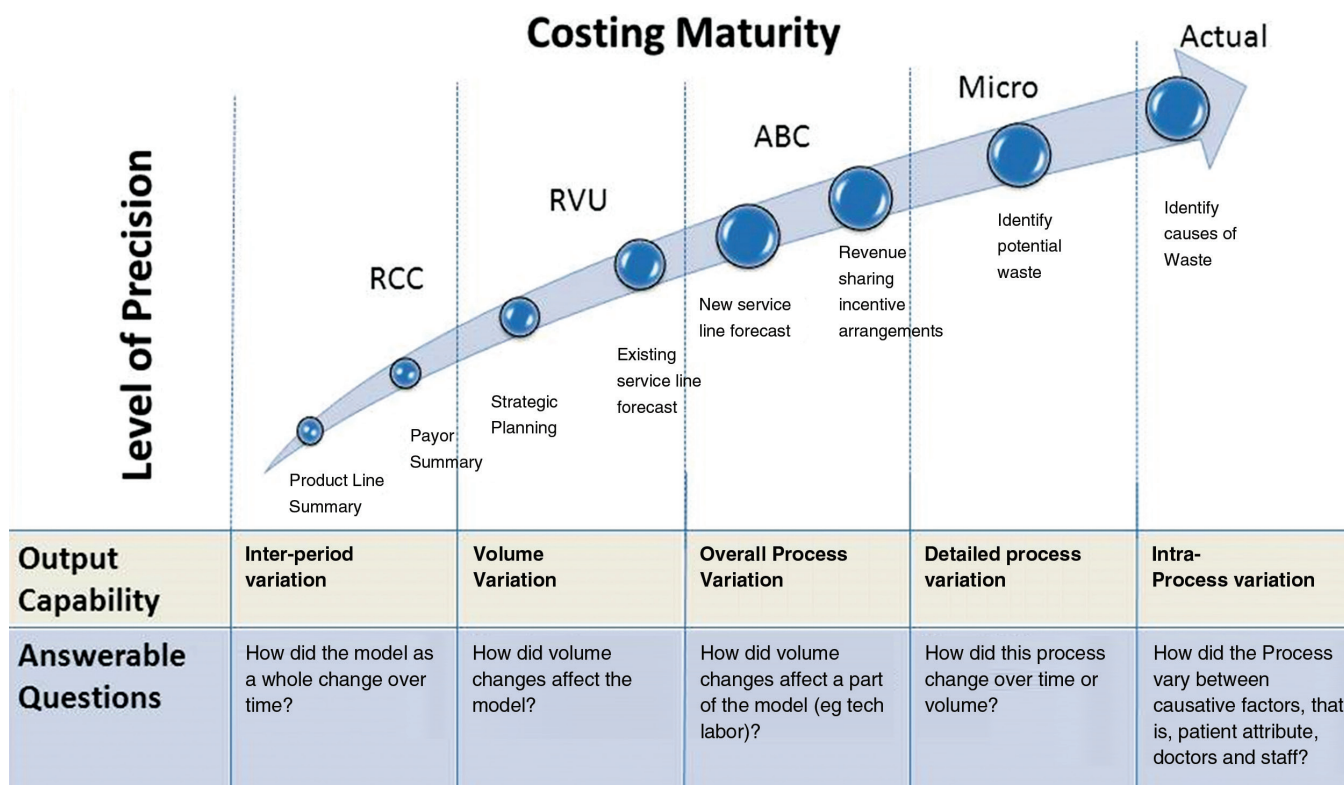


Figure 2: Costing maturity versus level of precision of costing methodologies

Table 7: Environmental impacts on cost accounting systems

| Healthcare environment | Impact on costing system |
|--|--|
| Shrinking margins eliminate luxury of waiting to find out. Environment of change necessitates more frequent "reality checks" | Real-time data increasingly required |
| Increased scrutiny of data at increasingly lower levels of detail, including legal challenges | Greater premium on accuracy / reliability |
| Reduced operating budgets for support staff | <ul style="list-style-type: none"> Cheaper to operate => Greater automation Grow to meet demands or get eaten alive by <ul style="list-style-type: none"> Decision Support Operations Analysis Performance Management Budgeting Strategy and Planning |
| Shift from revenue optimization and cost shifting to performance management | Increased level of detail and/or reliability required |
| Opportunities lie outside traditional finance realms | Incorporate non-financial elements (metrics, attributes, etc.) |
| Significant upgrades to clinical support systems | Where is the voice of cost accounting? |

1. Align incentives and effort

Cost reduction targets must be integrated with organisational plans and budgets. This step is one many organisations may already have accomplished. If not, productivity reporting, target metrics and budgeting must be brought into alignment. According to Kauffman Hall, specific cost accounting initiatives must be thoroughly integrated with the strategic financial plan, annual budget and operating plan. If these elements are not well aligned, cost efficiencies and reductions will be very difficult to achieve.¹⁵ Figure 3 illustrates this concept.

2. Use monthly reviews to clean up expenses

Cost analysts and management decision makers need to consider the challenges of model design bias. In other words, they must remember cost accounting is a type of management accounting. As such, it is essentially forward looking. Unlike its cousin, financial accounting, cost accounting does not need to be historically perfect. Indeed, pursuit of the ephemeral 'balancing to the financials' goal is a needless waste of resources.

Resolving uncertainty concerning fixed cost versus variable cost assignments

can also require a tremendous amount of essentially unproductive time. In many cases, a 'ready, fire, aim' strategy of continuous iteration will produce useful results. It may also be helpful to remember the old accounting adage 'All costs are fixed in the short term and variable in the long term' (Figure 4).

3. Break it down

Cost accountants need to remember to build a strategy for each cost element, instead of a department-by-department strategy. They should mix and match methodologies, to gain accuracy at lower cost. As shown in Table 5, the type of needed report ought to drive the precision risk methodology selected for the task. A point to remember is to always use the same 'item code' for purchasing and billing, to keep disparate systems in alignment (Figure 5).

4. Reduce time wasted on overhead allocation

There have been literally hundreds of articles in the literature on the topic of overhead allocation. One important point to remember is that often, 85–95 per cent of data requests are for contribution margin figures, not full costs. Decision makers therefore need to primarily focus on improving variable costs.

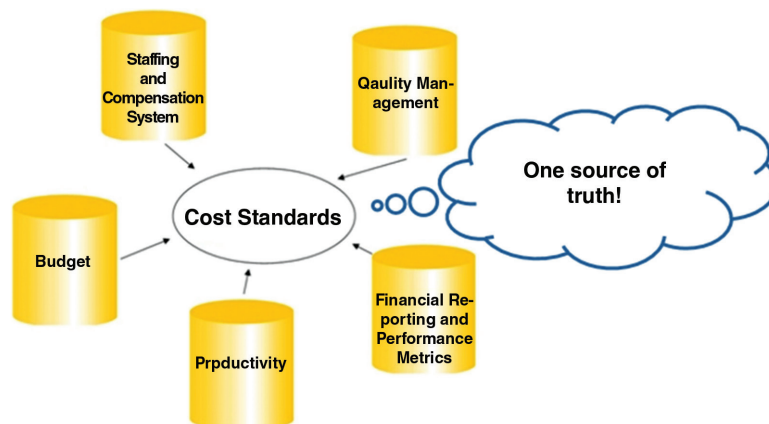


Figure 3: Enterprise database for costing standards

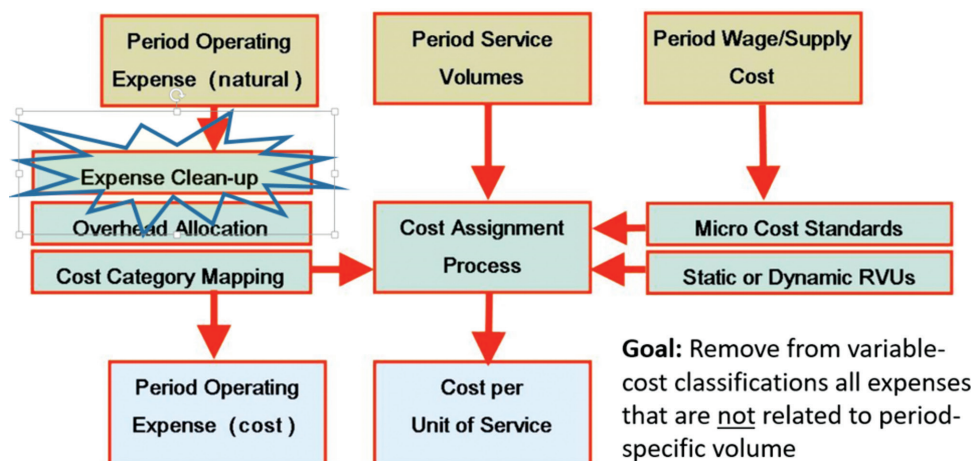


Figure 4: Idealised costing flowchart

In a population health/per member per month (PMPM)/capitation world, management's focus should be on labour costs first, then supply costs. Organisationally speaking, however, it is much more challenging to focus on labour. That is why the entire cost accounting enterprise needs to focus on transparency and building trust among important stakeholders (Figure 6).

5. Fix the charge description master (CDM)

Most CDMs contain only 'reimbursable' items. This reflects public policy, not sound costing theory. After years in which this was a hard and fast rule, the evolution from charge description master to cost description master has made it more acceptable to

use 'No-Charge/\$0 codes' to capture resource utilisation. Some organisations also reverse late charges after posting, or do not bother to post them at all. In an advanced cost accounting system, this practice should stop; otherwise, important information may be lost.

Many other important cost elements may not even be incorporated in providers' CDMs today. In some cases, for example, items may be included in bundled payment packages, but not individually priced. These include the following:

- Nuclear medicine scans—post-stent insertion
- C-arm or other x-ray supports in surgery

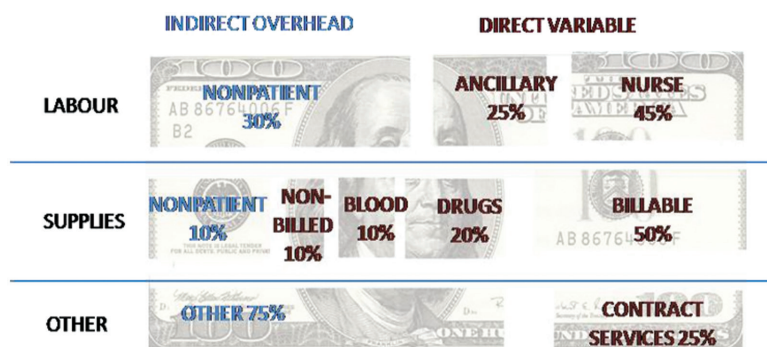


Figure 5: Ranked Functional Approach to Costing System Implementation

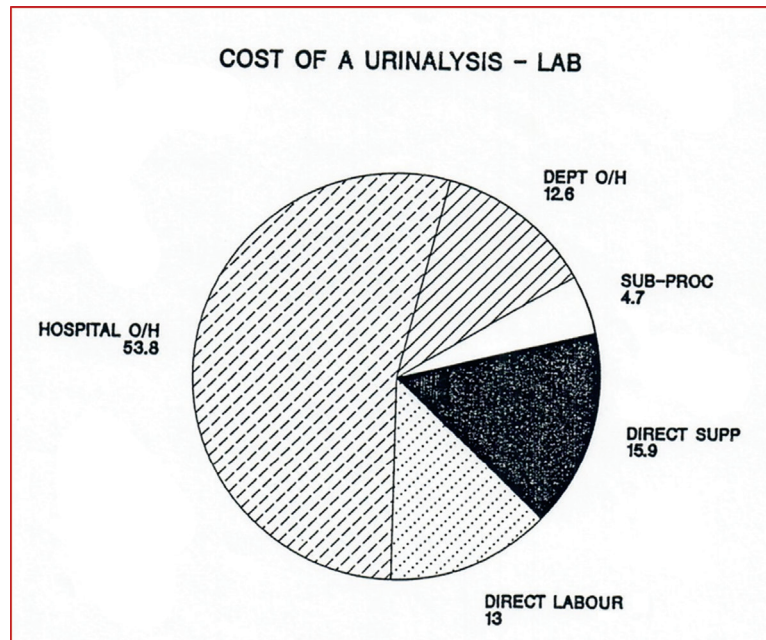


Figure 6: Distribution of total costs at the item level

- Outpatient surgery–pre-/post-surgical time
- Revenue cycle cost-to-collect, by financial class

This correlates with the need to communicate the difference between ‘billable’ and ‘payable’ services to clinical departments. Billable services are those covered by payers (usually Medicare) but that which do not have a separate outpatient payment. These should be included in the new CDM, so their discrete costs may be captured. Examples include the following:

- Non-routine supplies
- Conscious sedation
- Recovery-room time

Bundled items are another typical CDM entry that may need to evolve. These may include specialty beds hidden in room rates and/or actual nursing costs hidden in standard room charges. This concern leads directly to the sixth ‘Do It Now’ strategy.

6. Stop burying nursing in room charges

Nursing costs can vary dramatically, even within the same diagnosis-related group (DRG). In the Figure 7 example,

there are three separate clusters of nursing intensity. The ‘average’ is shown by the vertical red line. If that average alone were used to represent nursing acuity for DRG 195, important information about ‘the voice of the process’ would be lost. Additionally, when nursing acuity is measured and accounted for, nurses’ morale can increase significantly. This is because nurses feel that their contributions to overall patient care are more visible and therefore more widely acknowledged.

7. Improve pharmacy costing

Drug supply or distribution costs are often used as a basis for absorbing high cost clinical pharmacist labor when in reality there is little correlation.

‘For example, the drugs required by patients in ICU may generate relatively few labour units for distribution, while pharmacist clinical activity could be quite concentrated. Conversely, chemotherapy patients whose treatment plan has already been established receive high-labour-cost drugs, with little concurrent clinical-pharmacist activity’.

Average Cost/Day = \$864.31

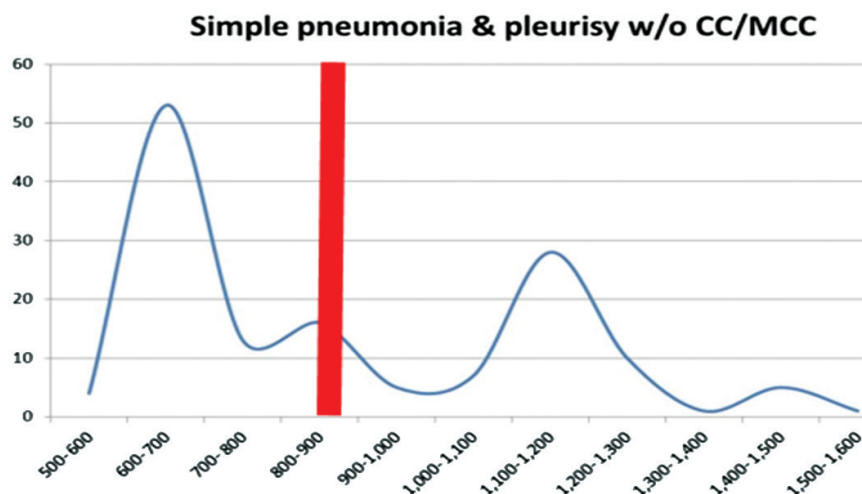


Figure 7: Three clusters of nursing intensity variability at the DRG level

8. Stop reconciling — validate!

In most cost accounting systems, stakeholders reconcile their final cost standards back to the general ledger (G/L). Why? Reconciliation does not prove costs are accurate. It only proves that no dollars were ‘lost’ during the costing process.

What if all the costs were inadvertently assigned to a single patient record? The reconciliation would balance, showing that all costs were accounted for, but any management report from the cost accounting system would clearly be ‘way off’. Additionally, reconciliation tells you nothing about how the individually costed items compare with true cost at the individual item level.

At present, there are no industry standards for measuring costing accuracy. We believe, however, that accuracy should be defined as ‘how well the cost number produced correlates with the true cost of the item’. How can an organisation know its cost standards are correct? The best way is to review the distribution of observation samples, not just the average(s), as shown in Figure 8.

At the item level, rather than the procedure or patient level, there are useful testing options for validating cost standards.

Under micro-costing, cost accountants should look for stable period-to-period variances at the G/L-bucket level. When using RVU costing, analysts should expect ≤ 10 per cent period-to-period dollar swings at the CDM level.

Other useful measures of cost system validity include the following:

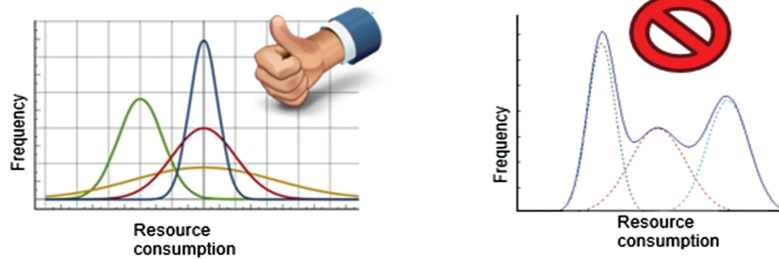
- Accuracy: how does the result of a particular method compare against a known standard?
- Reliability: does the costing model generate similar results across multiple fiscal periods?

9. Expense classifications — remember the users

There are certain important questions to keep in mind when implementing any of these 11 ‘Do It Now’ strategies, including the following:

- Will the user understand all the nuances? (Even cost accountants can get confused!)
- What is the practical limit of the product line reporting system?

Cost accounting systems should avoid use of ‘natural expense class’ terms, because they are often not ‘pure’. The general ledger is for ‘natural expenses’, whereas cost buckets are for modeling cost



Acceptable: Narrow distribution has best predictive value. Broad distribution has least predictive value

Problem: Solid line indicates there are three distinct cost drivers -- cannot be combined into a single charge code with any predictive value

Figure 8: Variability of observational sample distribution

behaviour. Cost accountants should also strive to determine and disclose system biases, especially related to fixed versus variable costs. Additionally, it is always a good idea to avoid 'hybrid' cost buckets. Perhaps the best rule is 'Keep it Simple!'.

10. Corporate costing programs — where to focus?

If individual organisations are members of a larger system, they may have to adopt 'corporate' cost accounting models as they move along the costing model continuum, from basic to advanced. In these cases, in which centralisation is a driving force, a focus on standardisation across entities produces the best results. When inputs and outputs are standardised, stakeholder engagement is typically strengthened (Table 8).

11. Engage management and important stakeholders

There are several important engagement strategies that have shown to engender the best results when applied to cost accounting initiatives. These apply regardless of the starting point, or the organisation's complexity, and are as follows:

- Define concepts and terms used in the model
- Disclose the entity-specific assumptions used to 'cost' data
- Provide 'evidence-based' disclosures about the cost data
- Inform management about appropriate and inappropriate uses of cost data
- Link organisational evolution to necessary adaptation of financial analysis tools

Table 8: Where to standardise costing efforts?

| Standardise inputs (Inputs) | Standardise outputs (Results) |
|--|--|
| <ul style="list-style-type: none"> • Standardise job-code-to-bucket mapping • Standardise G/L-expense-to-bucket mapping • Standardise charge master and apply standard RVUs | <ul style="list-style-type: none"> • Standardise definitions for cost buckets • Standardise rules for handling revenue offsets and expense re-classes • Standardise definitions for fixed/variable/direct costs and overhead • Standardise the approach for <u>developing</u> RVUs – do not "impose" standard RVUs |

THE WAY FORWARD

When so many hospitals, physician groups and health systems have not yet begun their cost accounting journeys, even taking a first step can seem daunting. The financial viability of today's healthcare organisations may, nevertheless, depend on their willingness and capability to confront these challenges. If providers adopt the best-practice tools and tactics now available, however, their chances of long-term financial success will be greatly enhanced.

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