



Why Margin Analysis Is the Key to Healthcare Providers Surviving and Thriving in a Future of Dynamic Challenges

Learn why margin analysis is the powerhouse behind the financial and strategic agility that hospitals and health systems need to respond to a broad spectrum of healthcare challenges.

KEY POINTS

- Margin analysis is a multi-purpose solution that addresses a range of existing and emerging healthcare challenges.
- Too many providers are sitting on untapped potential in their data, even in simple applications.
- Future proofing is possible for providers at every stage in their data journey.
- A few, specific challenges are holding providers back, including EHR limitations, stale data, and outdated finance and decision support software.



- Margin analysis is accessible to more providers through the application of free-flowing data, a single source of truth, right-sized cost accounting, and solid best practices.

Healthcare provider challenges might be complex, but a solution doesn't have to be.

Providers around the country are stepping into a future of unparalleled financial and organizational challenges—the kind that will require you to achieve levels of pinpoint efficiency that are only accessible through some level of margin analysis.

While these challenges might be diverse—navigating labor shortages, optimizing performance-based contracts, and the emergence of patients as a primary payer—the vast majority of providers will find that their most accessible, sustainable, and effective answers start in the same place: the use of valuable, existing data to power margin analysis.

What Is Margin Analysis?

The strategic examination of the additional financial benefits of any healthcare activity, in comparison to the additional costs that are incurred by that same activity.

Most providers are sitting on untapped potential for leveraging even the most rudimentary data stores to address their challenges, establish competitive advantage, and ensure financial stability. This means that whatever your starting point is, a data-forward strategy that uses actionable information to support future-proof levels of profitability isn't just possible—it's more accessible than most leaders realize. This white paper will walk you through the vision of your own future-proof status, how margin analysis supports that goal, and the fundamental steps you can take today.



Is the Future-Proof Hospital Possible?

The concept of future-proofing might seem daunting in the face of diverse healthcare challenges, but we believe it's more possible today than it ever has been. Here's why.

What Is the Future-Proof Hospital?

Future-proofing your organization isn't about identifying every possible challenge. It's about using data to create sustainable financial well-being as a foundation of organizational health.

The future-proof healthcare organization understands the value of even rudimentary data to its maturation in margin analysis—a journey away from unsustainable and self-defeating approaches (such as canceling premium pay, cutting vacation time, and laying off clinicians) and toward a deeper awareness of margins through right-sized margin analysis.

Why Oi Believes the Future-Proof Hospital Is Possible

While provider challenges have become more complex, so have solutions. Innovation in business intelligence and data analytics for healthcare finance has evolved tremendously in recent years, opening up accessibility to providers at any stage in their use of data and at almost any budget. These innovations allow for:

- Easier implementation
- Browser-based platforms with point-and-click functionality
- Easy dissemination of information across the enterprise, with department and service line managers
- Customizable levels of precision, complexity, and implementation intensity—across the organization or by department

The Future of Provider Challenges: A Dynamic Landscape

To understand why margin analysis sits at the convergence point of modern healthcare challenges, it's important to first look at how those challenges will be evolving in the near future.

Value-based care is maturing.

Performance-based contracts might have seemed like a distant future at one time, but that future is closer than many expect. A survey of 1,090 healthcare leaders across the provider, IT, staffing, and consulting verticals (among others) revealed expectations of the following shifts in the value-based care landscape:¹

- Phasing out of voluntary programs in exchange for mandatory participation with stricter limits on fee-for-service models (27.6%)
- Evolving ACOs and bundled payment arrangements, with payment arrangements becoming easier to understand (31.1%)
- Increasing market consolidation—more mergers and acquisitions and the growth of ACOs (18.9%)
- An uptick in providers benchmarking performance metrics against competitors (21.3%)

Workforce shortages will intensify.

Before the COVID-19 pandemic, studies predicted a national physician shortage of over 139,000 by 2030.² Similar shortages have been predicted among nurse practitioners, home health aides, and medical lab technicians by 2025.³ Stressful and dangerous work conditions will likely only exacerbate these trends. Surveys have found that 12% of physicians are considering leaving medicine⁴ and 100K nurses quit because of burnout in 2017.⁵

Regional challenges will persist.

Healthcare leaders will find that their pressures will largely be location specific. For example, rural providers will face mounting issues, including low patient volumes, increased reliance on government payers, aging populations with multiple chronic conditions, and increasing behavioral health needs.⁶ Urban hospitals, on the other hand, will navigate a larger portion of financial losses from the pandemic, layered on top of the risks they faced pre-pandemic.⁷



Innovative providers will struggle to find direction.

Even the most tech-forward providers can lose their way in a complex threat environment. Leaders will be pressured to allot limited resources across initiatives and assess the ROI on service line adjustments and process improvements. They will also find it critical to evaluate the impact of tech investment and patient-centered initiatives on hospital profitability.

The days of siloed problems have passed. Answering all these challenges with any measure of success will require a harmonization of clinical and financial data that feeds margin analysis and paves the way to financial and organizational health.

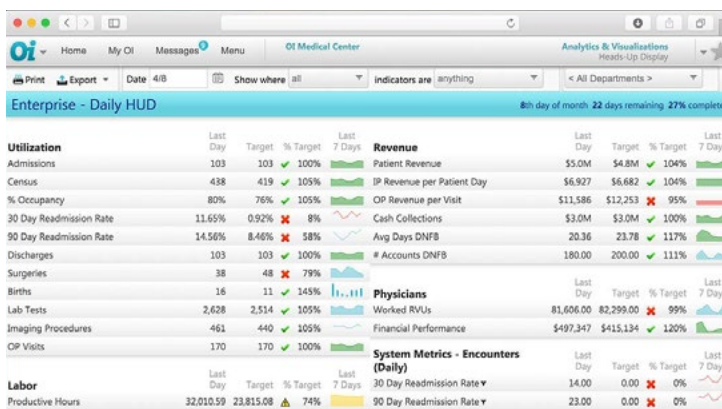
What's Holding Providers Back from Margin Analysis

Healthcare organizations have struggled with data analytics and governance—a 2017 survey found that 56% of hospitals didn't have a comprehensive information governance plan in place for the entire enterprise.⁸ But let's take a deeper look at what that looks like at the organizational level.

"The first thing holding hospitals back from a data-fueled margin analysis initiative is a failure to prioritize the problem."

The absence of an honest start

The first thing holding healthcare organizations back from a data-fueled margin analysis initiative is a failure to prioritize the problem. Since healthcare business analytics are so pervasive, there is a silent stigma attached to not having already gotten started leveraging data to power decision-making—but every provider is unique and has an enormous opportunity to start from where they are.



The lack of an installation beyond the EHR

Plenty of healthcare leaders think they have the system they'll need to future-proof their organizations, but what they're actually working with is base-level functionality tacked on to the EHR. These systems often:

- **Can't easily achieve true integrity** across disparate IT systems (killing your journey toward data governance)
- **Can't launch in a reasonable amount of time**
- **Don't produce results that empower managers** and don't provide a path to actionable data

The problem of stale data

If data isn't fresh and continually updating, your results aren't trustworthy. While decisions based on old data might have been OK in the past, the penalty for not prioritizing data freshness and real-time decisions is getting steadily higher.

The labor-intensive system problem

Some providers have stepped into modern use of data—but they're paying for it. They're working with systems that require vast amounts of labor and time to implement and maintain, leaving hospital managers drowning in data they can't turn into actionable information and missing out on future-proofing opportunities that are almost within their grasp.

The software facade issue

There are multiple solutions out there that can support margin analysis, and it's important to get a feel for what's under the hood. Some solutions simply weren't built for the modern healthcare environment and were instead cobbled together from systems from the 90s.

Why Margin Analysis Is Emerging as the Cornerstone of Every Provider's Future

The answer to the challenges above emerges at the point of margin analysis. Here's what we mean.

Value-Based Care: Performance-based initiatives will require insight into the margins of the services provided across the organization to achieve any measure of success. Management should be focused on all aspects of operations, including labor intensity, supply intensity, and other material costs.



Workforce Shortages: Margin analysis will support management in evaluating labor intensity and informing future projection and forecasting efforts.

Shifting Patient Volumes: Capacity planning is undergirded by margin analysis and is only effective if supported by continually refreshed data.

Shifting Payers: Margin analysis supports contract evaluation and negotiation as government contracts and self-pay become more common, and as commercial payers transition to performance-based agreements.

Tracking the Success of New Initiatives: Data will flood in from disparate sources, like clinical, financial, and quality assurance. Actionable information and a single source of truth (SSOT) will be critical to cross-functional teams as they evaluate opportunities, monitor, and adjust.

Case Studies in Margin Analysis Application

Adjusting the Contribution Margin for Elective Surgery

This study examines the effect of increasing or decreasing OR time on hospital margins. It found that altering time for each surgeon by as much as 25% could increase the hospital elective surgery contribution margin by 7.1% (\$2.5 million).⁹

Evaluating the Relationships Between Patient Age and Cardiac Cath Profitability

This study was driven by an aging German population and a lack of transparency about resource utilization for cardiac catheterization in aged patients, questioning whether DRG revenues compensated. It performed a contribution margin analysis of common procedures over a 5-year period.

The analysis found that catheterization of very old patients was related to lower per-day contribution margins despite higher expenditures of material and time. The study notes that, since efforts to reduce length of stay for this group of patients are limited, hospitals most affected by aging populations might be at a competitive disadvantage.¹⁰

Examining the Impact of EHR Implementation Choice on Hospital Operating Margins

This assessment of short-term acute and critical-access hospitals examines the pre-live to post-live impacts of implementation of Cerner, Epic, and MEDITECH to shed light on the effect of EHR selection on long-term profitability. It found “significant operating margin improvements” from MEDITECH implementations compared to others.¹¹

	Actual	FY	2FY	Variance	Var %
Income Statement					
REVENUE					
PATIENT SERVICE REVENUE	90,944,954	83,929,514	72,872,887	8,985,440	
8% INPATIENT REVENUE	18,188,988	17,174,938	15,174,575	3,014,450	
8% OUTPATIENT REVENUE	72,755,966	66,754,576	57,698,312	15,057,488	
8% Total PATIENT SERVICE REVENUE	90,944,954	83,929,514	72,872,887	8,985,440	
ALLOWANCES AND DEDUCTIONS					
27% CONTRACTS - CHARITY	(12,301,304)	(11,282,277)	(10,870,489)	431,075	
12% CONTRACTS - GOVERNMENTAL	(40,380,688)	(38,476,423)	(34,983,278)	14,787,710	
12% CONTRACTS - NON-GOVERNMENTAL	(44,734,138)	(34,999,391)	(34,750,190)	10,011,799	
8% Total ALLOWANCES AND DEDUCTIONS	(97,416,130)	(84,758,091)	(80,603,957)	16,708,082	
7% Total NET PATIENT SERVICE REVENUE	93,528,824	99,171,423	92,268,934	6,912,490	
30% OTHER OPERATING REVENUE	9,052,842	2,264,154	2,331,398	6,788,688	
20% NET ASSETS RELEASED	93,528,824	747,899	713,548	142,770	
8% TOTAL REVENUE	102,581,666	101,183,486	95,313,780	5,869,706	
EXPENSES					
70% SALARIES AND WAGES	71,247,341	70,881,758	70,904,488	3,362,883	
7% SUPPLIES	10,229,981	11,713,248	11,209,783	1,019,268	
8% PHYSICIAN FEE	7,934,739	4,488,100	4,729,033	3,205,639	
1% OTHER BUSINESS	10,233,289	10,300,939	9,739,842	1,493,447	
22% DEPRECIATION BENEFITS	6,094,714	4,902,039	4,382,794	1,711,920	
32% DEPRECIATION AND AMORTIZATION	2,874,879	2,772,049	2,882,478	1,102,830	
8% INTEREST	884,879	872,489	884,799	402	
9% PROVISION FOR UNCOLLECTIBLE	29,908	2,742,848	2,789,458	2,759,550	
0% TOTAL EXPENSE	99,470,930	97,891,247	96,299,194	18,171,683	
32% TOTAL NET OPERATING INCOME	3,110,736	3,292,239	2,514,586	6,077,653	
ADDITIONAL REVENUE					
8% NONOPERATING REVENUE	198,854	15,197,838	4,908,072	14,289,764	



What Powers Margin Analysis?

Successful margin analysis is a simple concept, but one that has multiple moving parts. The most important is organizational culture. Your journey toward margin analysis that protects the future of your organization requires a cultural shift—this is in finance and across the entire enterprise.

But culture is just the start. These are the elements that we've seen drive successful margin analysis for providers across the country.

Rethinking Band-Aid Approaches

Too many organizations use outdated approaches to improving hospital profitability—scaling back premium pay, cutting vacation time, and laying off clinicians. None of these are sustainable or even beneficial in the long term.

Harmonizing Clinical and Financial Data

Margin analysis requires that your entire organization be on the same page. If your clinical and financial systems don't speak the same language, your margin analysis interventions are dead in the water.

Supporting Free-Flowing Data

Data must also flow seamlessly from your systems to power reporting and analytics functions. Organizations often spend as much time cleaning and compiling data as they do analyzing it, which corrodes the effectiveness of margin analysis efforts.

Focusing on Patient-Centric Reporting Through Cost Accounting

Management will need to move from cost center sub-account variance analysis to reporting that more closely aligns with the patient experience.

Clinging to yesterday's approaches, which focused on driving volumes and being a local market share leader for utilization of individual services, will leave providers vulnerable. A shift to case-by-case profitability to identify margins by service lines and the cost benefits of quality initiatives will power deeper engagement with margins.

Best Practices for Future-Proofing Your Organization

Prioritize the right tools.

As you step into margin analysis, you'll need tools that can manage and clean huge amounts of data. Right now, your finance department is spending time compiling data that they should be using to analyze. These tools should require minimal manual intervention. The last thing you want is to invest in analytics tools that will drain valuable time reconciling data.

Establish your SSOT.

A single, validated source of truth is critical to deploying the analytics that will inform your best decisions in a changing healthcare environment. It will streamline governance and provide a solid foundation for all of your related analytics in the future.

Launch your cross-functional team.

Future-proofing your organization is an exercise in breaking down silos—creating synergies between clinical, financial, and IT functions. Deliberate efforts at the beginning of your journey into margin analysis will pay off significantly in the long-term as insights are shared and fresh creative approaches are developed.

Establish your benchmarks.

You'll want to construct benchmarks that work for your organization, but here are a few suggestions:

- Key modules implemented in 90 days or less
- Access to key cost accounting in under 6 months
- Launching a comprehensive decision support tool, providing daily information to all levels of management in less than a year



Your First Step Toward a Future-Proof Tomorrow

We've seen hospitals across the country make amazing progress toward ensuring their future stability, and we'd love to share that knowledge with you.

They've done this through the information discussed here, and the use of our browser-based decision support tools to enable the analytics and communication that facilitates cultural change and yields measurable results.

At Organizational Intelligence, we're proud to offer flexible, white-glove support that meets you where you are. We provide implementation resources to ensure a quality launch and walk you along your journey at a speed that works for your organization. To learn more about us and how to get started, visit [OiHealth.com](https://oihealth.com) today.

- ¹ Definitive Healthcare, <https://blog.definitivehc.com/value-based-care-2019-survey-results>
- ² Human Resources for Health, <https://link.springer.com/article/10.1186/s12960-020-0448-3>
- ³ Mercer, <https://www.mercer.us/our-thinking/career/demand-for-healthcare-workers-will-outpace-supply-by-2025.html#contactForm>
- ⁴ Medscape, <https://www.medscape.com/slideshow/2020-physician-covid-experience-6013151?faf=1#2>
- ⁵ HCP Live, <https://www.hcplive.com/view/survey-100-000-us-nurses-quit-burnout-2017>
- ⁶ The American Hospital Association, <https://www.aha.org/news/insights-and-analysis/2020-01-28-rural-health-care-big-challenges-require-big-solutions>
- ⁷ Definitive Healthcare, <https://blog.definitivehc.com/comparing-covids-effect-on-urban-vs-rural-hospitals>
- ⁸ Health IT Analytics, <https://healthitanalytics.com/news/56-of-hospitals-lack-big-data-governance-analytics-plans>
- ⁹ UCSI University, <https://www.coursehero.com/file/94979111/Margin-analysisdocx/>
- ¹⁰ BMC Health Services Research, <https://link.springer.com/article/10.1186/s12913-017-1999-4>
- ¹¹ Navin, Haffty, and Associates, <https://www.navinhaffty.com/wp-content/uploads/Navin-Haffty-Operating-Margin-Analysis.pdf>



For hospitals that want to make change a reality, Oi Health is the healthcare data analytics solution that marries financial and clinical departments. That's because we know your journey is bigger than software. Oi stays by your side to guarantee efficient financial management processes, clinical engagement, and honest data. To get started accelerating your journey to financial health, set up your demo today: 800.750.0201 or info@oihealth.com.