

The Budget Blind Spot: Why Health Tech Entrepreneurs Misread Their Customers' Financial Realities

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Abstract

This essay offers a deep investigation into the structural constraints in provider, payer, and employer budgets that health tech entrepreneurs often mis-estimate. It draws on macro health expenditure forecasts, labor and wage trends, and drug spending data to ground scenario modeling of discretionary budget pools through 2030. The essay provides:

- Mock budgets for representative provider, payer, and employer types
- Historical context from 2000 to 2020, with macro drivers
- Projections from 2025 to 2030 under best-case, base-case, and worst-case scenarios
- Discussion of which budget lines will expand, which contract
- Strategic implications for founders when sizing TAM and targeting buyers

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Introduction: The Mirage of Elastic Healthcare Budgets

Entrepreneurs in health technology often chase solutions they believe must be paid for, but they habitually overestimate the accessible budget. They imagine that a provider or payer has an innovation fund or discretionary pool that can be tapped once value is demonstrated. The pitch deck shows a total addressable market calculated by multiplying the number of hospitals by some plausible spend per hospital, the number of covered lives by a reasonable per-member-per-month fee. The market appears sound. The need seems urgent. The ROI models project payback in months. Yet deals stall, pilots never convert, and procurement cycles stretch into years by quietly dying. The problem is not that the solution lacks merit. The problem is that the entrepreneur has fundamentally misunderstood the architecture of the customer budget.

Budgets are not neutral. They are not pools of capital waiting to be allocated to the highest-value use case. They are rigid structures created by regulatory mandates, labor contracts, capital depreciation schedules, clinical priorities, and actuarial models. Every line item has a manager, a historical baseline, a political constituency, and a set of constraints that govern how it can be moved. The real challenge for founders is not to demonstrate value in the abstract but to engineer their solution so that it aligns with a specific budget line, one that is managed by a decision maker.

has authority, constrained by rules that permit the spend, and not already fully consumed by incumbent vendors or mandatory obligations. In order to do that credibly, one must understand not only the current baseline budgets but also how they have evolved over the past two decades and how they are likely to shift under plausible future scenarios.

This essay provides that understanding. It constructs mock budgets for hospitals, physician groups, community health centers, national and regional insurers, third party administrators, self-insured employers, and fully insured employers. It tracks the evolution of these budgets from 2000 through 2020, identifying the macro drivers that shaped spending patterns. It then projects forward to 2030 under three scenarios: best case, where economic conditions and policy tailwinds create modest expansions in discretionary pools; base case, where current trends continue and discretionary spending remains constrained; and worst case, where labor inflation, drug costs, and regulatory burdens collapse discretionary budgets to near zero. Finally, it offers strategic guidance for entrepreneurs on how to map their products to budget lines, discover their TAM estimates for structural access barriers, and build business models that survive the base case and thrive in the best case.

Provider Budget Dynamics: Historical and Contemporary

Hospitals and integrated delivery systems are among the most labor-intensive organizations in the economy. Labor has historically consumed between fifty and sixty percent of a hospital's operating budget, and that share has been rising. Over the past two decades, wage pressure, staff shortages, and fringe benefit inflation have progressively squeezed margins and reduced the pool of capital available for discretionary investment. In the early 2000s, information technology was a backline item, often consuming less than two percent of a hospital's operating cost. IT departments were small, systems were fragmented, and most clinical documentation was still paper-based. Capital budgets were dominated by facility expansions, major equipment purchases, and debt service.

The Health Information Technology for Economic and Clinical Health Act, enacted as part of the American Recovery and Reinvestment Act of 2009, changed this landscape dramatically. HITECH provided billions of dollars in incentive payments to hospitals and physicians who adopted certified electronic health record systems and demonstrated meaningful use of those systems. The result was a wave of capital investment in EHR infrastructure, data centers, networking equipment, and IT services. Many hospitals saw their IT budgets climb from two percent to five or even seven percent of operating expenses over the course of the 2010s. But this growth was discretionary in any meaningful sense. It was driven by federal mandates, the need to avoid future Medicare payment penalties, and the operational imperative to maintain and upgrade legacy systems. By the end of the decade, most hospital IT budgets were consumed by licensing fees for core EHR platforms, annual maintenance contracts, cybersecurity investments, and compliance with evolving federal regulations around interoperability and data sharing.

Simultaneously, clinical labor costs continued to rise faster than general inflation. The Bureau of Labor Statistics projects that employment in healthcare occupations will grow much faster than the average for all occupations over the 2024 to 2034 period, driven by an aging population, chronic disease prevalence, and expanded insurance coverage. Registered nurses, physicians, advanced practice providers, and allied health professionals all command wages that have increased at compound annual growth rates well above the consumer price index. Moreover, the supply of these workers has not kept pace with demand, creating upward pressure on wages and benefits. Training, nursing, agency staffing, and retention bonuses have become structural features of hospital labor markets, not temporary fixes. This wage inflation has increased the fixed cost base for provider organizations, making any non-labor line item a target for cost containment. As labor consumes an ever-larger share of the operating budget, the slack available for discretionary innovation shrinks correspondingly.

Supply costs have also become less stable. Medical devices, implantables, pharmaceuticals dispensed in hospital settings, and consumables like gloves and gowns all saw significant price volatility in the 2020s, exacerbated by supply chain disruptions and consolidation among manufacturers. While group purchasing

organizations and value analysis committees work to control these costs, they represent a substantial and growing burden. Capital depreciation schedules mean that hospitals must continuously replace imaging equipment, surgical robots, and other high-cost assets, further constraining the pool of funds available for new technology investments that do not directly replace or enhance clinical capability.

Physician practices have followed a similar trajectory, though on a compressed scale and with regional variation. In 2000, an independent primary care or specialty practice might spend less than one percent of its revenue on information technology, mostly for billing software and basic office systems. By 2020, that figure had risen to three percent or more for many practices, driven by EHR adoption, quality reporting requirements, prior authorization systems, and patient engagement tools. However, physician practices also faced declining reimbursement rates, particularly from commercial payers ratcheting down fee schedules to control their own costs, and Medicare payment updates that failed to keep pace with practice cost inflation. The result was margin compression that left little room for discretionary spending. Many practices responded by consolidating into larger groups or affiliating with health systems, transferring the budget decision to a corporate entity with its own constraints.

Federally qualified health centers and other safety-net providers operate under a different financial model, heavily reliant on grants, Medicaid reimbursement, and other federal programs like the 330 grant funding. These organizations often have earmarked funds for specific initiatives, such as expanding access, addressing social determinants of health, or implementing value-based care models, but very little discretionary capital. Innovation budgets are typically tied to grant cycles and must align with the priorities of funding agencies. A health tech solution that does not align with a specific grant opportunity or Medicaid reimbursement category will struggle to find a budget home in these organizations, regardless of its intrinsic value.

Payer and Insurance Budget Dynamics

Health insurance companies and managed care organizations control enormous amounts of capital, but they operate under tight regulatory constraints that limit how they can deploy that capital. The Affordable Care Act imposed medical loss ratio requirements mandating that insurers spend at least eighty percent of premium revenue on medical claims and quality improvement activities in the individual and small group markets and at least eighty-five percent in the large group market. This means that only ten to twenty percent of revenue can be allocated to administrative expenses, which must cover all non-clinical costs including marketing, sales, claims processing, call center operations, compliance, legal, finance, human resources, facilities, and technology. The discretionary pool within that administrative budget is a small fraction of the total.

Historically, payers grew their IT allocations in response to regulatory mandates and competitive pressures. The shift from paper claims to electronic data interchange in the 1990s and early 2000s required significant investment in transaction processing systems. The rise of consumer-directed health plans and high-deductible plans in the 2000s drove investment in member portals, cost transparency tools, and mobile applications. The transition toward value-based care models in the 2010s required new analytics platforms, provider network management tools, and care coordination systems. Today, large national insurers typically allocate between five and eight percent of their administrative budget to technology, but the vast majority of that spend is locked into maintaining legacy core systems, refreshing claims platforms, ensuring cybersecurity, and complying with state and federal reporting requirements. Innovation budgets within technology spending might represent only two to three percent of the total IT allocation, which translates to a tiny fraction of premium revenue.

Regional and mid-sized payers face even tighter constraints. They lack the scale to amortize technology investments across millions of members and often operate on older legacy systems that are expensive to maintain and difficult to replace. Their innovation budgets are correspondingly smaller, and their procurement processes are conservative. A regional Blue Cross Blue Shield plan with three million members might have an innovation budget in the tens of millions of dollars, but that budget must be spread across dozens of initiatives, each competing for attention and

resources. Moreover, payer innovation budgets are not just constrained by dollars but also by organizational capacity. Product managers, IT staff, compliance teams, and various other management functions are all stretched thin, which means that even when budgets are available, the organization may lack the bandwidth to implement new solutions.

Third-party administrators occupy a unique position in the payer ecosystem. TPAs manage claims and benefits on behalf of self-insured employers but do not take on the insurance risk. They operate on thin margins, typically charging employers a per-member-per-month administrative fee that ranges from a few dollars to twenty or thirty dollars depending on the complexity of the plan and the services provided. Of that fee, the TPA must cover all of its operating costs, including technology. For a TPA managing plans for fifty thousand lives at a fifteen dollar PMPM fee, annual revenue is nine million dollars. If technology consumes twenty percent of that, the TPA's budget is less than two million dollars, most of which goes to maintaining core IT systems and regulatory compliance. Discretionary spending on innovation might be one hundred thousand dollars or less, barely enough to pilot a single new solution. TPAs are extremely price-sensitive and will only invest in technology that directly improves client retention, reduces operating costs, or enhances their competitive position. A health tech solution that requires significant integration effort or does not deliver immediate, measurable value will struggle to find traction in this market.

Employer Budgets in Health Tech Context

Employers are the ultimate payers for a significant share of healthcare costs in the United States, but their ability to directly influence or allocate budgets varies enormously depending on whether they are fully insured or self-insured. Fully insured employers purchase group health insurance from a carrier and pay a fixed premium per employee. The carrier assumes all the risk and manages all the benefits. The employer has virtually no discretion over how healthcare dollars are spent beyond choosing which plan to offer and what cost-sharing structure to impose on employees. Any innovation budget is limited to small wellness programs, employee assistance programs, or voluntary benefits, typically funded out of human resources budgets measured in dollars per employee per year. For a company with one thousand

employees, a wellness budget of fifty dollars per employee per year amounts to five thousand dollars, hardly enough to support a sophisticated health tech intervention.

Self-insured employers, by contrast, assume the financial risk for their employees' healthcare costs and have much more visibility into and control over how those costs are spent. Large employers with ten thousand or more employees often self-insure because it allows them to avoid state insurance mandates, retain surplus from favorable claims experience, and customize plan designs. However, self-insured employers still face relentless healthcare cost growth that constrains their discretionary spending. According to the Centers for Medicare and Medicaid Services, private health insurance spending is projected to grow at an average annual rate of about four to five percent over the next decade, driven primarily by utilization increases, provider price inflation, and especially prescription drug costs. Specialty pharmaceuticals, which include biologics and high-cost drugs for conditions like cancer, rheumatoid arthritis, and multiple sclerosis, have grown from a small fraction of total drug spending in 2000 to more than half of all pharmacy costs today. CMS projects that prescription drug spending will grow by more than ten percent in 2019 alone, driven by new drug launches, price increases, and expanded utilization of specialty medications.

For a self-insured employer with five thousand employees and their dependents, covered lives might be twelve thousand. If annual healthcare spending averages one thousand dollars per member, total claims are one hundred forty-four million dollars. Pharmacy might consume thirty percent of that, or about forty-three million dollars, with specialty drugs accounting for more than half of pharmacy spend. Employee spending on healthcare is dominated by medical claims and pharmacy costs, leaving very little room for discretionary innovation. Benefits teams at self-insured employers typically allocate between one and three percent of total healthcare spend to non-claims activities like wellness programs, care navigation, disease management, and technology pilots. For an employer spending one hundred fifty million dollars on healthcare, that translates to one and a half to four and a half million dollars. However, much of that budget is already committed to incumbent vendors, broker/benefits consultants, and ongoing programs. The truly discretionary pool available

new health tech solutions might be only a few hundred thousand dollars per year even that is subject to intense internal competition and scrutiny.

Moreover, employer benefits decision-making is highly fragmented and risk-averse. Benefits leaders are evaluated on their ability to control costs and avoid employee dissatisfaction, not on their willingness to take risks on unproven technologies. Procurement cycles are long, often tied to annual renewal periods, and require buy-in from human resources, finance, legal, and sometimes the C-suite. Health tech entrepreneurs often underestimate the complexity of selling into this market and overestimate the size of the accessible budget.

Mock Budgets in Narrative Form

To make these dynamics concrete, consider a series of representative organizations and their budget structures. Start with a five-hundred-bed community hospital that is part of a regional health system. This hospital generates roughly one point two billion dollars in net patient revenue annually. Labor costs, including wages, benefits, and contract staff, consume approximately seven hundred twenty million dollars, or 60 percent of revenue. This includes registered nurses, physicians employed by the hospital, advanced practice providers, pharmacists, respiratory therapists, radiology technicians, laboratory staff, environmental services, food services, and administrative personnel. Clinical supplies, medical devices, implantable devices, and pharmaceuticals used in inpatient and outpatient settings account for another three hundred million dollars, or twenty-five percent of revenue. Facilities costs, including utilities, maintenance, and depreciation on buildings and equipment, consume one hundred million dollars, or five percent. Information technology, including EHR licensing, infrastructure, cybersecurity, telecommunications, and IT staff, accounts for seventy-two million dollars, or six percent. Other operating expenses, including legal, insurance, marketing, and administrative overhead, consume the remaining forty-eight million dollars, or four percent.

Within the seventy-two million dollar IT budget, the vast majority is committed to maintaining and upgrading core systems. The EHR platform alone might cost fifty

million dollars per year in licensing and support fees. Network infrastructure, data centers, and cloud hosting might consume another ten million. Cybersecurity, increasingly critical given the rise in ransomware attacks on healthcare organizations, might account for eight million. IT staff salaries and benefits might be twenty million. That leaves nineteen million dollars, but much of that is consumed by mandatory system upgrades, compliance projects, and replacing aging hardware. The discretionary innovation budget, the pool of capital that could be allocated to a new health tech solution that does not directly replace an existing system or fulfill a regulatory mandate, might be only ten to fifteen million dollars. And that budget is highly contested, with dozens of internal stakeholders proposing projects ranging from patient engagement platforms to revenue cycle optimization tools to clinical decision support systems. A health tech entrepreneur targeting this hospital needs to understand that they are competing not against an abstract budget constraint but against specific projects championed by influential department heads and clinical leaders.

Now consider a large physician group practice with sixty physicians across primary care and several specialties, generating sixty million dollars in annual revenue. Total costs, including physician compensation, mid-level providers, nurses, medical assistants, and administrative staff, consume about forty-two million dollars, or seventy percent of revenue. Rent, utilities, and equipment depreciation account for two million dollars, or ten percent. Medical supplies, vaccines, and lab services consume four point eight million dollars, or eight percent. Information technology, including EHR subscription, practice management software, telehealth platforms, and IT support, costs about one point eight million dollars, or three percent. Other operating expenses, including billing services, malpractice insurance, marketing, and regulatory compliance, account for the remaining five point four million dollars, or nine percent. Within the IT budget, the EHR and practice management system might consume one million dollars annually. Telehealth, patient portal, and e-prescribing tools might consume three hundred thousand dollars. That leaves five hundred thousand dollars, most of which goes to maintaining existing systems and paying for IT support. The discretionary budget available for new health tech tools might be one hundred thousand dollars or less. For a physician practice, every dollar counts, and any new

technology must demonstrably reduce costs, increase revenue, or improve physical workflow to justify adoption.

A federally qualified health center with eighty million dollars in annual revenue serving a low-income and uninsured population, operates under a different model. Revenue comes from a combination of Medicaid and Medicare reimbursement, patient fees on a sliding scale, and federal grant funding. Labor costs are similar dominant, consuming about fifty-two million dollars, or sixty-five percent of revenue. Facilities and equipment account for eight million dollars, or ten percent. Medical supplies and pharmaceuticals cost six million dollars, or seven and a half percent. Information technology, heavily subsidized by federal grants and programs like the Health Resources and Services Administration health center program, accounts for four million dollars, or five percent. Other operating expenses, including outreach, transportation assistance, and social services, consume ten million dollars, or twelve and a half percent. Within the IT budget, much of the spending is tied to specific grant requirements or federal programs. The discretionary innovation budget may be only one to two million dollars, and even that is typically restricted to projects that align with grant objectives, such as expanding access to care or addressing social determinants of health. A health tech solution targeting FQHCs must be framed in terms of grant alignment and mission impact, not just financial ROI.

On the payer side, consider a large national health insurance company with fifty billion dollars in annual premium revenue. Under medical loss ratio rules, at least forty billion dollars must go to medical claims and quality improvement. That leaves ten billion dollars for administrative expenses. Of that, sales and marketing might consume two billion dollars, claims processing and customer service another two billion, network management and provider relations one billion, compliance and regulatory affairs five hundred million, corporate overhead including finance, legal, and human resources another one and a half billion, and technology three billion. Within the three billion dollar technology budget, core claims processing systems, actuarial modeling platforms, and data warehouses consume about two billion. Cybersecurity, infrastructure, and telecommunications account for another five hundred million. That leaves five hundred million dollars for innovation, digital

health, member engagement, and new capabilities. However, that budget is spread across hundreds of initiatives, each requiring business case justification, IT development resources, and ongoing support. A health tech entrepreneur hoping to sell a solution to this insurer is competing for a slice of that five hundred million dollar pie, and they must demonstrate not just ROI but also strategic alignment with the insurer's quality initiatives, star ratings, or cost containment goals.

A mid-sized regional health plan with eight billion dollars in premium revenue faces tighter constraints. Administrative costs are capped at one point two to one point four billion dollars, with technology consuming perhaps four to six percent of that, or roughly sixty to ninety million dollars. Core system maintenance might consume ten to twenty million, leaving ten to forty million for innovation. But this plan lacks the scale and technical sophistication of a national insurer, and its innovation budget might be consumed by catch-up projects, replacing legacy systems, and meeting minimum regulatory requirements. The discretionary budget available for a new vendor might be five to ten million dollars, spread over multiple years and subject to pilot validation and ROI demonstration.

A third-party administrator with twelve million dollars in annual revenue, serving fifty thousand covered lives at a twenty dollar PMPM fee, operates on razor-thin margins. Technology costs might be two to three million dollars, with core claims systems consuming one point five to two million. Discretionary spending on innovation might be only one hundred thousand to five hundred thousand dollars. This TPA cannot afford to take risks on unproven technology and will only consider solutions that are plug-and-play, require minimal integration, and deliver immediate cost savings or revenue enhancement. The health tech entrepreneur selling to this TPA must offer a highly standardized, low-touch product with transparent pricing and clear value.

Finally, consider a self-insured employer with ten thousand employees, generating two billion dollars in annual payroll and spending two hundred million dollars per year on healthcare benefits. Medical and pharmacy claims consume one hundred ninety million dollars, leaving ten million dollars for stop-loss insurance, TPA fees, wellness programs, care navigation, disease management, and innovation. Of that

million, the TPA might charge three million, stop-loss another two million, leaving five million for discretionary programs. But that five million is already allocated to incumbent wellness vendors, EAP providers, and consultants. The budget available for a new health tech solution might be only a few hundred thousand dollars, and an employer will expect to see measurable results within twelve months. A fully insured employer with three thousand employees paying ten million dollars in annual premiums to a carrier has almost no discretionary budget at all. They might allocate one hundred thousand dollars to a voluntary wellness program or employee assistance but that is the ceiling. The carrier controls all other spending, and the employer has no direct influence.

Macro Trends and Forecasts (2024-2033)

Understanding current budget structures is necessary but not sufficient. Health entrepreneurs must also anticipate how these budgets will evolve over the next few years. The Centers for Medicare and Medicaid Services Office of the Actuary publishes detailed national health expenditure projections that provide a macro framework for this analysis. According to the most recent projections, national health spending is expected to grow at an average annual rate of five point eight percent from 2024 through 2033, reaching seven point seven trillion dollars and accounting for twenty point three percent of GDP by the end of the period. This growth is driven by several factors: an aging population that consumes more healthcare services, increasing prevalence of chronic diseases, expanded insurance coverage, and continued medical innovation that introduces new and expensive therapies.

Within this overall growth, different categories of spending are projected to grow at different rates. Hospital spending is expected to grow at an average annual rate of four point five percent, driven by inpatient and outpatient utilization, wage growth, and technology adoption. Physician and clinical services are projected to grow at five point one percent annually, reflecting volume growth and modest price increases.

Prescription drug spending, however, is projected to grow at a significantly faster rate with double-digit growth expected in the near term driven by new drug launches, particularly in specialty categories, and price increases that outpace general inflation.

By 2030, specialty drugs are projected to account for more than seventy percent total pharmacy spending, up from about fifty-five percent today. This shift has profound implications for employer and payer budgets, as pharmacy costs crowd discretionary spending on other categories.

Labor costs are expected to continue rising faster than general inflation. The Bureau of Labor Statistics projects that healthcare employment will grow from about twenty-two million jobs in 2024 to more than twenty-six million by 2034, an increase of roughly eighteen percent. Much of this growth will be in high-wage occupations including registered nurses, nurse practitioners, and physician assistants. Moreover, workforce shortages in nursing and allied health professions are expected to persist, putting upward pressure on wages. Hospitals and health systems are already responding by increasing base wages, offering retention bonuses, and relying more heavily on contract and travel staff, all of which increase labor costs. By 2030, labor costs are likely to account for sixty-five percent or more of hospital operating budgets, up from about sixty percent today. This increase comes at the expense of other budget categories including discretionary capital for technology and innovation.

Regulatory and compliance costs are also expected to rise. While specific mandates are difficult to forecast, the trend over the past two decades has been toward increasing complexity and reporting requirements. Interoperability regulations, prior authorization reforms, transparency rules, and cybersecurity standards all impose costs on providers and payers. Each new regulation requires system changes, staff training, and ongoing compliance monitoring, further consuming IT budgets that might otherwise be available for innovation.

Capital costs for providers are also rising. Interest rates, which were historically low for much of the 2010s, have increased significantly, making it more expensive for hospitals to finance capital projects through debt. Construction costs have risen due to labor shortages and supply chain constraints. Medical equipment, from imaging devices to surgical robots, continues to become more sophisticated and more expensive. Hospitals face a constant need to replace aging infrastructure and upgrade clinical technology to remain competitive and meet quality standards. These capital demands reduce the pool of funds available for discretionary IT spending.

For payers, the macro environment is similarly challenging. Medical loss ratio requirements remain in place, capping administrative spending. Competition, both from traditional insurers and from new entrants like managed Medicaid plans and Medicare Advantage plans, puts pressure on premium pricing and margins. Regulatory uncertainty, particularly around the future of the Affordable Care Act and Medicaid expansion, makes long-term planning difficult. Payers are responding by investing heavily in value-based care models, provider network management, and analytics to control costs and improve quality. But these investments are strategic necessities, not discretionary choices, and they consume the budget that might otherwise be available for unproven health tech solutions.

Employers face a similar squeeze. Healthcare cost growth continues to outpace wage growth and general inflation, forcing employers to shift more costs to employees through higher deductibles and out-of-pocket maximums or to reduce benefits. Political and regulatory pressures, including state and federal efforts to increase transparency and regulate pharmacy benefit managers, add complexity and uncertainty. The shift toward high-deductible health plans and consumer-direct models has increased employee dissatisfaction, putting pressure on benefits teams to find solutions that improve the employee experience without increasing costs. But the discretionary budget to fund those solutions remains constrained.

Scenario Modeling Through 2030

Given these macro trends, it is useful to construct three scenarios for how provider, payer, and employer budgets might evolve between now and 2030. These scenarios are not predictions but rather plausible futures that bound the range of possibilities and help entrepreneurs stress-test their business models.

In the best-case scenario, economic growth remains robust, healthcare policy stabilizes, and productivity gains from automation and artificial intelligence begin to offset labor cost inflation. Hospitals successfully implement staffing models that reduce reliance on high-cost contract labor, and wage growth moderates to roughly match general inflation. Drug spending growth slows as biosimilars gain market

and value-based pricing models take hold. Employers see healthcare cost growth moderate to three to four percent annually, and payers achieve margin improvement through better risk adjustment and care management. In this scenario, discretionary IT budgets expand modestly. For a five-hundred-bed hospital, discretionary IT spending might grow from fifteen million dollars in 2025 to twenty-five or thirty million by 2030, representing two to two and a half percent of revenue. For a physician group, discretionary spending might grow from half a million to one million. For an FQHC, federal appropriations for health center innovation and technology might increase, raising discretionary budgets to three or four million. For a large national insurer, innovation budgets might expand from five hundred million to one billion or more. For a regional payer, discretionary IT spending might reach one hundred to one hundred fifty million. For a TPA, strong growth in client base efficiency gains might allow discretionary spending to reach one to three million. For a self-insured employer, moderating healthcare cost growth might free up five to ten million for innovation. For a fully insured employer, wellness and voluntary benefit budgets might expand to two or three million.

In the base-case scenario, current trends continue without major disruption. Labor costs continue to grow faster than revenue, consuming sixty-five percent of hospital budgets by 2030. Drug spending growth remains elevated, driven by specialty pharmaceuticals. Employers and payers continue to face four to five percent annual healthcare cost inflation. Discretionary budgets remain flat or grow modestly in nominal terms but shrink as a percentage of total spend. For a five-hundred-bed hospital, discretionary IT spending remains around fifteen to twenty million, or one to one and a half percent of revenue. For a physician group, discretionary spending remains at half a million to one million. For an FQHC, discretionary budgets remain flat at two to three million, tied to federal grant cycles. For a large national insurer, innovation budgets remain in the five hundred million to seven hundred million range. For a regional payer, discretionary spending remains at one hundred to one hundred fifty million. For a TPA, tight margins keep discretionary spending under one million. For a self-insured employer, discretionary budgets remain at three to five million. For a fully insured employer, discretionary spending remains under one million. In this scenario, health tech entrepreneurs face intense competition for

limited dollars, and only solutions that clearly reduce costs, increase revenue, or regulatory requirements gain traction.

In the worst-case scenario, labor shortages worsen, wage inflation accelerates, and drug spending growth continues unchecked. Hospitals see labor costs rise to seven percent of operating budgets, leaving little room for anything else. Drug spending by employers and payers grows at double-digit rates, crowding out all other categories. Regulatory burdens increase, consuming more IT budget. Economic recession or policy changes reduce reimbursement rates for providers and squeeze payer margins. In this scenario, discretionary budgets collapse. For a five-hundred-bed hospital, discretionary IT spending might fall to five to ten million, less than one percent of revenue. For a physician group, discretionary spending might disappear entirely, with all IT spending locked into maintaining core systems. For an FQHC, federal budget cuts might reduce discretionary innovation funding to under one million. For a large national insurer, innovation budgets might shrink to two to three hundred million, focused only on regulatory compliance and cost reduction. For a regional payer, discretionary spending might fall to thirty to fifty million. For a TPA, discretionary spending might effectively reach zero. For a self-insured employer, discretionary budgets might shrink to one to two million, with all focus on cost containment. For a fully insured employer, discretionary spending might fall to under five hundred thousand dollars. In this scenario, only health tech solutions that are absolutely essential, that directly replace more expensive alternatives, or that are required by regulation will find buyers.

Growth and Contraction of Budget Line

Within these scenarios, certain budget lines will grow while others contract. On the growth side, cybersecurity spending will continue to increase, driven by the escalating threat of ransomware and data breaches and by regulatory requirements around data protection. Artificial intelligence and automation tools that demonstrably reduce administrative burden, improve clinical decision-making, or optimize revenue cycle management will see increased investment, particularly if they can be shown to reduce labor costs or improve productivity. Patient engagement and experience platforms that are t

reimbursement incentives, such as those that improve star ratings for Medicare Advantage plans or patient satisfaction scores for hospitals, will attract budget. management and population health tools that support value-based care contract continue to grow, as these contracts become more prevalent. Telehealth and remote monitoring, which saw explosive growth during the pandemic, will stabilize at baseline levels than pre-pandemic, though growth rates will moderate.

On the contraction side, wellness programs and employee engagement tools that not demonstrate measurable ROI will face budget cuts, particularly among employers. Generic, off-the-shelf solutions that do not integrate with core systems or that require significant manual effort to use will struggle. Analytics and reporting tools that produce insights without actionable workflows will lose favor. Pilots and proofs of concept that do not convert to enterprise contracts will find it harder to secure additional funding, as organizations become more disciplined about opportunity costs. Point solutions that address narrow problems without fitting into a broader strategic initiative will face consolidation pressure, as buyers seek to reduce vendor sprawl and administrative complexity.

Importantly, the line between growth and contraction is not always about the intrinsic value of the solution but about how it is positioned and priced. A solution that can be framed as reducing labor costs, improving compliance, or enhancing revenue will have access to larger and more stable budget pools than one that must compete for discretionary innovation dollars. A solution that integrates seamlessly with existing workflows and core systems will be more attractive than one that requires significant change management. A solution that can be piloted cheaply and scaled incrementally will be more viable than one that requires large upfront investment. Health tech entrepreneurs must design their products and go-to-market strategies with these realities in mind.

Strategic Lessons for Health Tech Entrepreneurs

The implications for health tech entrepreneurs are profound. First, TAM calculations must be discounted for structural access barriers. It is not enough to multiply the number of hospitals by a plausible spend per bed or the number of covered lives to get a reasonable PMPM. Entrepreneurs must estimate how many of those potential customers actually have budget authority, discretionary capital, and organizational capacity to buy and implement a new solution. In many cases, the accessible market is an order of magnitude smaller than the theoretical market. A more realistic approach is to segment potential customers by size, ownership structure, financial health, strategic priorities, and then estimate penetration rates and average contract value for each segment. This requires deep customer discovery and a willingness to accept that the addressable market may be smaller than initially hoped.

Second, business models must be designed to survive the base case and thrive in the best case, not to depend on the best case materializing. This means conservative revenue projections, lean cost structures, and contingency plans for slower adoption and lower pricing than the pitch deck assumes. It also means designing products that can be sold into non-discretionary budget lines. Solutions that reduce labor costs, improve regulatory compliance, enhance reimbursement, or replace more expensive incumbents have access to larger and more stable budgets than solutions that depend on innovation funds or strategic initiatives. Entrepreneurs should map their value proposition to specific budget lines and decision-makers within their target customers, rather than assuming that demonstrated ROI will automatically translate to purchase authority.

Third, entrepreneurs must develop fluency in the language and logic of their customers' budgets. This means understanding not just the total dollars but the constraints, the stakeholders, the approval processes, and the political dynamics. This means asking questions like: Which budget line would this come out of? Who controls that budget? What is already committed? What would need to be cut or deferred to make room? What are the approval thresholds? What is the buying cycle? What are the competing priorities? This level of budget literacy is rare among health tech founders, but it is essential for navigating complex sales processes and avoiding the trap of endless pilots.

Fourth, pricing strategies must be calibrated to the realities of constrained budgets and long approval cycles. Health tech entrepreneurs often price their solutions based on the value delivered rather than the customer's ability to pay, leading to proposals that exceed available budget pools regardless of ROI. A more effective approach is to understand the customer's budget constraints first and then design pricing models that fit within those constraints while still delivering meaningful value. This might mean offering modular solutions that can be implemented incrementally, subscription models that spread costs over multiple budget cycles, or risk-sharing arrangements that tie payments to measurable outcomes. For customers with severely constrained discretionary budgets, entrepreneurs might need to position their solutions as replacements for existing spend rather than additions to it.

Fifth, entrepreneurs must be realistic about implementation timelines and organizational capacity. Even when budget is available, healthcare organizations lack the internal resources to implement new technologies quickly or effectively. IT departments are stretched thin, clinical staff are resistant to workflow changes, and compliance teams are overwhelmed with regulatory requirements. A health tech solution that requires significant integration, training, or change management will face delays and resistance regardless of its intrinsic merit. Entrepreneurs should design their products to minimize implementation burden, provide extensive support during rollout, and demonstrate quick wins that build internal momentum for broader adoption.

Sixth, the timing of market entry matters enormously in healthcare, where budget cycles are rigid and decision-making is seasonal. Hospitals typically finalize their capital budgets in the fall for the following fiscal year, which often begins in July or October. Payers set their technology priorities during annual strategic planning that varies by organization but often occurs in the fourth quarter. Employers make benefits decisions during open enrollment periods that typically happen in the fall. A health tech startup that misses these windows may have to wait an entire year for the next opportunity, regardless of the urgency of the problem they solve. Entrepreneurs must map their sales cycles to their customers' budget cycles and plan their fundraising and product development accordingly.

Finally, entrepreneurs must build relationships and credibility over time rather than expecting immediate adoption. Healthcare is a relationship-driven industry where trust and reputation matter more than in many other sectors. A startup with no healthcare experience, no clinical advisors, and no reference customers will struggle to gain traction regardless of how innovative their technology. Building credibility requires investing in industry relationships, hiring experienced healthcare executives, engaging with clinical thought leaders, and demonstrating domain expertise through thought leadership and conference participation. This relationship-building takes time and resources, but it is essential for breaking into an industry where buyers are risk-averse and skeptical of unproven vendors.

Conclusion: Toward Budget-Fluent Innovation

Health tech innovation will succeed only when entrepreneurs speak the language of budgets. The total addressable market may be measured in hundreds of billions of dollars, but the accessible market is constrained by structural realities that most founders fail to appreciate. Labor inflation, drug cost escalation, regulatory compliance, and capital depreciation consume the vast majority of healthcare spending, leaving discretionary pools that are smaller, more volatile, and more contested than entrepreneurs typically assume. These constraints are not temporary obstacles to be overcome through better sales execution or more compelling value propositions. They are permanent features of the healthcare landscape that will persist regardless of technological innovation or policy reform.

The entrepreneurs who will succeed in this environment are those who design their products, business models, and go-to-market strategies around these constraints rather than despite them. They understand that healthcare budgets are not neutral pools of capital but complex political and regulatory constructs with their own logic and limitations. They map their solutions to specific budget lines managed by identifiable decision-makers with clear authority and available funds. They price their products to fit within existing budget constraints rather than requiring customers to find new money. They time their sales cycles to align with customer budget cycles.

plan their own fundraising and development accordingly. Most importantly, they build their businesses to survive the base case scenario while positioning to capture upside in the best case.

This budget fluency is not optional for health tech entrepreneurs. It is the foundational requirement for achieving scale and impact in an industry where the largest pools of capital are already committed and the smallest pools are fiercely contested. The entrepreneurs who master this discipline will find themselves with sustainable competitive advantages that are difficult for competitors to replicate. Those who continue to chase theoretical markets and mythical innovation budgets will find themselves trapped in pilot purgatory, burning cash while waiting for customers who will never materialize. In healthcare, as in few other industries, understanding the money is not just helpful for business success. It is the prerequisite for making any meaningful difference at all.



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Stuart Miller 🌟 Haverin about... Sep 29

I riffed on your article in this post I dropped today. I cited you and backlinked to your article. Thanks for the inspiration :-)

<https://haverin.substack.com/p/beyond-the-knights-who-say-no-the?r=2vmx1l>

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Stuart Miller 🌟 Haverin about... Sep 28

Trey, spot on. Your piece nails the core miss: founders sell to the theoretical budget, not the accessible one (TAM needs to be spelled out for many early-stage companies! the beast, even in well-resourced systems, discretionary pools of funding are tiny, political, and mostly already spoken for.

More so than this, they also underestimate the “Knights who like to say No!” (that Monty Python!).

https://open.substack.com/pub/haverin/p/the-knights-who-say-no?r=2vmx1l&utm_campaign=post&utm_medium=web&showWelcomeOnShare=false

Even with an enthusiastic clinician sponsor, an institutional sale still has to clear:

Procurement → IT architecture → InfoSec → Compliance → P&T → IRB

And those last two are often chaired by the most conservative clinical/research leaders. These checkpoints rarely appear in startup closing plans because many teams do not know they exist.

Your budget-fluency message matches that go-to-market reality. Evidence and pre-ROI aren't enough if you don't map to the right budget line item and address where work actually happens.

Hospitals will pick "good enough + integrated" over "best-in-class + standalone" day. As you so clearly state, labor and drug inflation simply crowd out everything

Bottom line: budget literacy + distribution + workflow integration > sizzle and abstract ROI potential.

Great debate!

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