

Healthcare Systems and Services Practice

Winning in private health insurance through technical excellence

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In private health insurance, a focus on technical excellence in product development, pricing, underwriting, and claims handling can improve insurers' bottom line—while easing their dependence on investment returns.

Historically, the ability of many private health insurers to achieve consistent profits from investment results has obscured the fact that their technical performance in core business operations (product development, pricing, underwriting, and claims handling) has left something to be desired. In many cases, these insurers have been able to offset their middling technical performance with returns on invested risk reserves, which often account for up to 50% of their profits.

But in the current environment of low interest rates, reliance on investment returns has put pressure on private health insurers to shore up profits, especially given continued medical cost growth. Many insurers (those not limited by regulatory constraints) are considering bolstering their bottom line by significantly increasing premiums—a potentially risky strategy because it could drive away business.

Some insurers have found a better answer: improving the performance of their core operations and achieving technical excellence across the value chain. These insurers have strengthened their ability to develop profitable and compelling product offerings, price and underwrite business to account for the often complex and long-term nature of health risk, and manage medical costs and process claims in a way that is both fair to policyholders and helps rein in medical costs.

Financial challenges are not the only factors leading health insurers to reconsider their approach to the core business. Changing customer expectations are also a factor—consumers

accustomed to the ease of digital shopping often find their patience tested by lengthy insurance underwriting questionnaires filled with obscure questions, a lack of transparency in the process, and weeks-long waits for claims to be paid.

For most health insurers, however, bettering their performance in core business functions is challenging. The improvement effort is often costly and requires a multi-year commitment; potential risks (e.g., increased churn) must be managed carefully; and finding the talent necessary to achieve excellence across all core functions can be difficult. But the reward is clear: core business excellence can result in combined ratios that are 5 to 10 percentage points higher than those achieved by competitors that have not improved their technical performance (Exhibit 1).

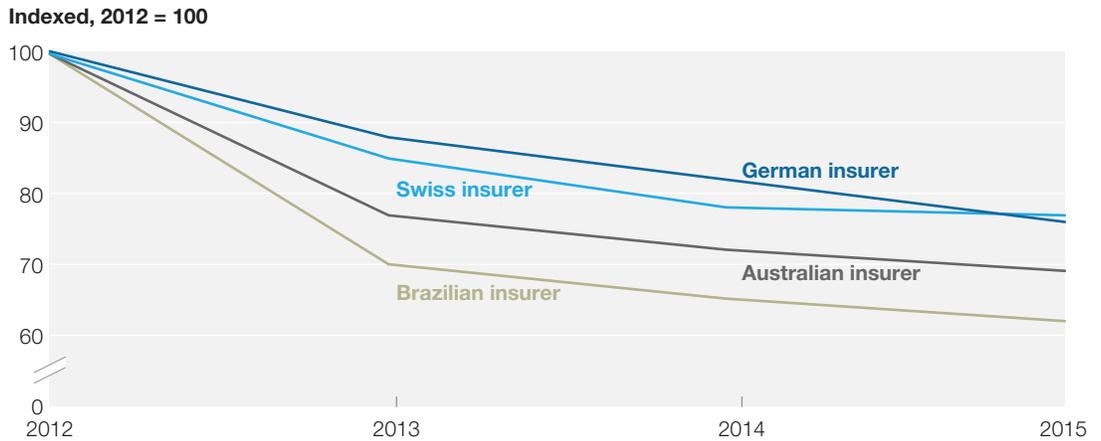
The key to achieving technical excellence is a holistic, end-to-end approach across all operations. When led from the very top of the organization, such an approach can create a virtuous circle—from product development through to underwriting, pricing, and claims—that generates improved results.

Technical excellence as a differentiator

Over the past year, McKinsey has invested significant resources in building a global view of what drives technical excellence at private health insurers. Our research included a detailed analysis of health insurers in more than 15 countries with varying regulatory requirements,

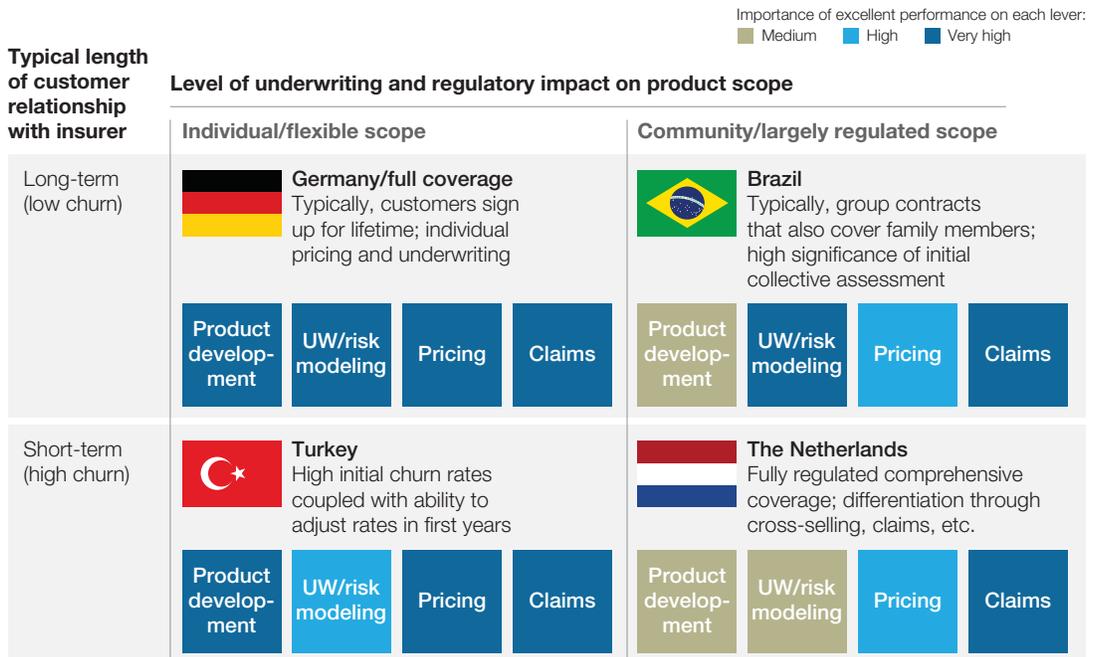
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EXHIBIT 1 Private health insurers' investment results have declined in recent years



Source: McKinsey Healthcare Systems and Services Practice

EXHIBIT 2 System context for PHI varies across countries



PHI, private health insurance; UW, underwriting.

Source: McKinsey Healthcare Systems and Services Practice

as well as more than 50 interviews with local actuaries, market experts, brokers, and other relevant individuals. The insights we derived have been codified in our private health insurance technical excellence database.

Despite the diversity of payment systems, underwriting frameworks, and other components (Exhibit 2), one finding was true for all private health insurers: technical excellence really matters. It is clear that in nearly all regulatory and market contexts, doubling down on technical excellence will increasingly separate successful private health insurers from their ailing counterparts.

A holistic perspective on technical excellence

By simultaneously employing technical excellence levers across the value chain, private health insurers can maximize the impact of their efforts. Because the levers are mutually reinforcing, pursuing one of them at a time can blunt the performance improvement. In combination, however, the levers can create a virtuous circle (Exhibit 3). For example, excellence in both individual and community underwriting ensures that the insurer can create products attractive to consumers and tailored to its strongest capabilities. Meanwhile, excellence in claims handling and related medical cost management activities provides the data needed to increase underwriting accuracy—and, in some cases, it can enable insurers to underwrite individuals, groups, or communities that would otherwise prove difficult to insure.

Each health insurer's approach to these four levers will depend on its market context, but certain elements are common to nearly all markets, as we discuss below.

Product development

The right way to approach modularization

Modular products are in vogue across the insurance industry for obvious reasons: they can provide consumers—who have grown increasingly accustomed to customization in their products and services—with exactly the coverage they need while also offering insurers attractive cross-selling opportunities.

Still, health insurers should not fall into the trap that arbitrarily flexible modules can bring with them. After all, a seemingly reasonable number of modules (say, 15 or 20) can result in more than one million different combinations, far more

Product development: What “great” looks like

Insurers that typify technical excellence in product development generally follow one of three courses to solve the modular challenge:

Prepackaged bundles. One option is to offer prepackaged bundles that reduce complexity for both customers and actuaries. Such bundles could be coupled with select elements that do not affect risk (e.g., telehealth services).

Customer-facing modularity. Another option is to deploy an intelligent, needs-based customer interface that leaves customers satisfied and gives them the perception of modular-like choice but actually delivers only a handful of preconfigured, monolithic products.

True modularity. In this third option, a significant share of the modules that affect risk selection are bundled into a common core. The additional elements offered to consumers are intelligent combinations of services, savings/consumption opportunities, and actual insurance.

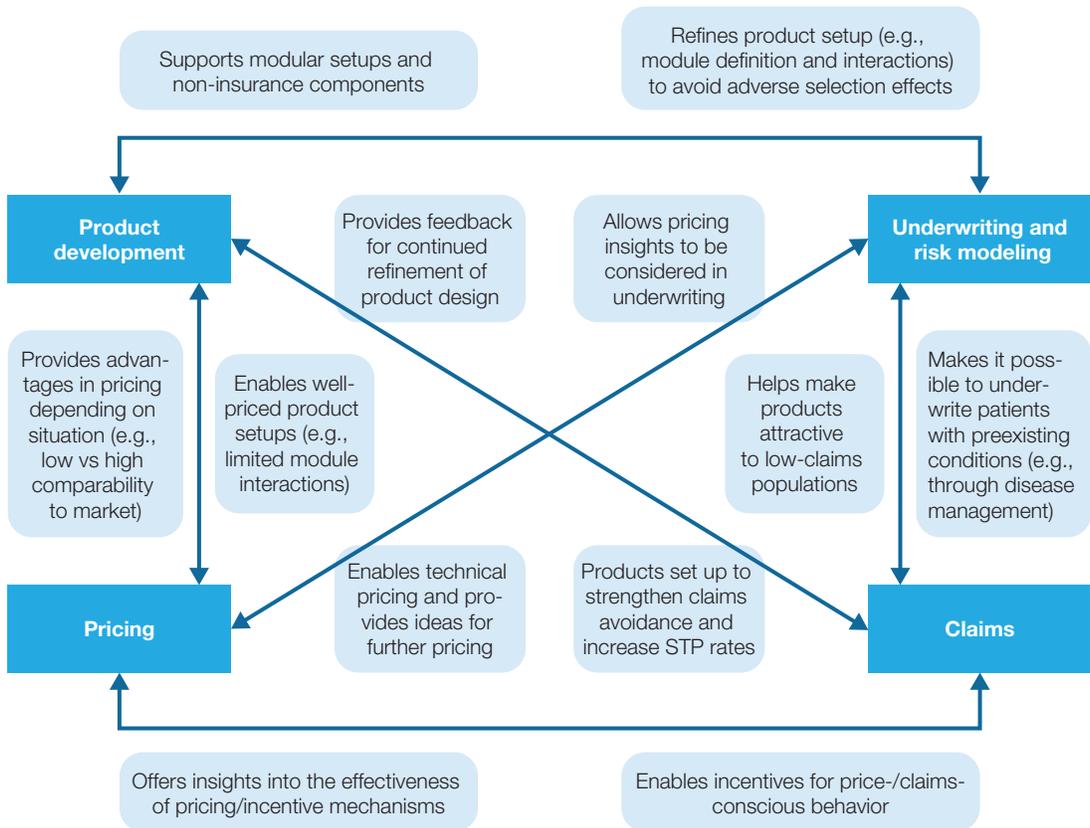
than can be handled by either distribution or operations. Since any given combination of modules might appeal to just a few customers, the collection of statistically significant data would be almost impossible. Therefore, although it may initially be viable (from an actuarial point of view) to price the individual modules, vast problems are nearly certain to arise within a few years.

To avoid the trap of having too many modules while still offering great modular products, health insurers can pursue several strategies:

Provide a set of fixed bundles. In the United States, for example, many insurers offer products with varying levels of coverage, which they designate bronze, silver, gold, and platinum plans. Products such as these can be designed to cover the needs of 95% of all customers.

Differentiate between perceived and actual modularity. In the eyes of most customers, certain features can make or break the perception of personalization. These features can be used to channel customers toward certain bundles.

EXHIBIT 3 Technical excellence in core operations can create a virtuous circle



STP, straight-through processing.

Source: McKinsey Healthcare Systems and Services Practice

Include elements other than insurance. Modular products can be created by offering consumers features that do not affect actuarial calculations. These features can include services (e.g., telehealth consultations) or savings/consumption opportunities (e.g., discounts on gym memberships).

Use a clever advice process. The purchase process can be set up to guide customers toward a discrete set of possible product combinations.

Underwriting

Precise and fair risk modeling

Private health insurers can make underwriting more effective by developing a deeper understanding of customer risk profiles. In some markets, for example, insurers that have long-standing relationships with members with chronic conditions can use each individual's exact (and often multi-decade) disease progression to develop a much more precise and profitable underwriting process. This type of approach may also make possible "fairer" pricing to the customer (e.g., by linking pricing to active participation in chronic disease management programs or differentiating based on the condition's severity).

Of course, the ability to implement such nuanced underwriting depends on a variety of factors—not just the average customer duration. In addition, the insurer must consider its ability to adjust its contractual relationship with the customer after the initial underwriting is done and any regulatory constraints that may be present (e.g., a requirement that only community-based underwriting be used). Furthermore, although this approach may at first glance appear to have only limited utility (because of

Underwriting: What "great" looks like

Health insurers that excel in underwriting usually combine very strong analytical skills with the ability to store and process decades of claims data, while also offering a great customer experience. For instance, several German private health insurers have created underwriting solutions based on predicting—decades into the future—an individual's likelihood of disease progression. They combined this insight with a simple, to-the-point dynamic risk assessment toolkit that can be used by brokers and even end-customers.

the need for annual renewal/price adjustments), its upside potential is huge: a more precise risk model allows for guided interventions (such as preventive measures), which can improve the customer's health status and reduce the insurer's costs. Such nuanced underwriting also facilitates data aggregation, offering the insurer a more complete picture of which communities or groups are viable to underwrite, as well as the ability to engage in long-term planning for the morbidity of the insurer's covered population.

The challenge to achieving technical excellence in underwriting is that customers increasingly expect quick service, believing that health insurance purchases, like online shopping, should be easy and hassle-free. Consequently, long and detailed medical questionnaires might put many customers off—especially those who think they are healthy and thus do not need to answer specific questions.

The key to achieving a deep understanding of a (prospective) customer's risk profile lies in combining four components:

- A digital-enabled, multilayer questionnaire

that shows only as much complexity to the customer as necessary

- Internal claims and underwriting data
- External data such as medical registries¹
- Advanced analytics for the progressive diseases that have the greatest significance for the mid- to long-term health costs of the individual/group being underwritten (and the diseases' interactions in cases of multi-morbidity).

Pricing

Excellence beyond the buzzwords

In the private health insurance industry, few technical topics are fraught with such a haze of buzzwords as pricing. Beyond the buzzwords, however, lie concrete improvement levers that can create significant value—on the order of several points of combined ratio, depending on the individual insurer's context and market environment.

Dynamic and behavioral pricing. The actual effect of activity tracking and similar fitness-oriented programs on an individual's underlying health risk is still unclear, but emerging evidence

suggests that such programs—if properly set up and executed within an insurance plan—can lead to a healthier membership. (Whether this outcome results from the programs themselves or from self-selection by healthier individuals is not yet known.) By taking the impact of these programs into account, insurers can undercut competitors on price while maintaining higher margins on the members with lower-than-usual risk profiles.

Prospective pricing. Even in markets with comparatively liberal pricing adjustment regulations (e.g., Spain), health insurers can fall into the trap of applying a disproportionately retrospective approach to pricing adjustments. (If a customer has a claims ratio above calculation in one year, the price for the next year is adjusted accordingly.) Such an approach can lead to high churn from customers who need an expensive one-time treatment, such as delivering a baby, but have a very low risk profile for the next 20 years. To avoid this outcome, insurers should employ long-term risk prediction models.

Competition-aware pricing. As transparency in health insurance pricing—particularly for supplemental products—increases, and the first aggregators (e.g., shopping portals) emerge, the potential to implement competition-aware pricing also rises. Competition-aware pricing requires that insurers add other pricing data points to their algorithms.

Technical excellence in pricing necessitates significant investments and capabilities. Thus, insurers must carefully consider the potential benefits by broadening their perspective to include other health insurance areas (e.g., by linking activity tracking with claims) and, where appropriate, other lines of business—especially property and casualty insurance—that may already have detailed pricing experience.

¹Both data access and privacy concerns can be major challenges to this type of approach. In countries where these factors limit what can be done, an option an insurer can consider is to look for countries with established medical registries (e.g., the Nordic countries) and then determine whether any of them have a similar health system and similar population. The insurer can then infer disease progression patterns from the external data and then apply the results to its own population.

Pricing: What “great” looks like

Health insurers that excel in pricing have a keen understanding of both the price sensitivity of their customers (or target groups) and the pricing mechanics of their competitors. This awareness enables the insurers to place themselves in an appropriate spot in their environment—for example, among the top three insurers in markets with active or well-functioning aggregators. Several examples of this strategy can be found in US insurers that have made significant investments in their pricing capabilities as part of their move to the public health insurance exchanges and B2C insurance sales.

Claims

Avoid, steer, and automate

Processing, adjudicating, and ultimately paying out claims is (at least in terms of volume) the heart of the business for most health insurers. These processes often employ thousands of claims handlers, many of whom consider their work a special sort of art.

Most claims are still handled only after a medical service has already been delivered. This approach is antiquated and replete with drawbacks:

Cost. Particularly in higher-cost locations, the marginal cost of employing a claims handler may sometimes outstrip the cost of simply paying the claims.

Variance. The customer experience is often significantly influenced by the person handling the claims.

Effectiveness. Adjudication rates rarely exceed single digits—preventing a claim altogether would be much more effective.

Customer satisfaction. Manual claims handling processes are often marked by long processing times, seemingly erratic decisions, and a lack of transparency.

Thus, many private health insurers could benefit from the “avoid, steer, and automate” paradigm, which shifts claims processing away from art and toward science. To start, insurers should work to prevent as many unnecessary treatments that result in claims as possible. This objective can be achieved in several ways, including various compensation mechanisms (e.g., capitation versus fee-for-service), disease

Claims: What “great” looks like

Insurers that excel in claims processing usually have a surprisingly small claims department—but they invest heavily in technology and analytics, as well as health and disease management. High performers in the last category often also have very strong network management capabilities, even up to the point of vertical insurer/provider integration in markets without an adequate number of potential provider partners.

management programs, and the customized management of high-cost patients.

Focusing on the prevention of unnecessary claims requires new skills and new partners, as well as careful consideration of what approach to take (for example, only a small minority of disease management programs have proved effective). However, prevention has the potential both to create healthier (and happier) customers and to significantly reduce medical costs.

For medically necessary treatments that result in claims, insurers can work to steer patients to preferred settings of care, such as in-network hospitals. “First time right”—an important Six Sigma principle—is applicable to healthcare: insurers can greatly reduce their costs by using the right steering mechanisms.

Last, for claims that should be paid, insurers should try to achieve a maximum degree of automation, using all levers from input management and improved data quality to advanced analytics for claims preprocessing. Every opportunity to implement straight-through processing (STP) helps to reduce total costs.

Enabling factors

Private health insurers can maximize the impact of their efforts to achieve technical excellence by deploying a thoughtful and thorough advanced analytics strategy, with the support of a strong, talented workforce and leadership from the top level of the organization.

Use your data assets

Health insurers are rich in data, from the information collected through health claims and underwriting to insights from disease management programs. This treasure trove is far beyond what most technology companies and other industry players have thus far been able to capture. Yet, most of this data currently goes unused outside of claims processing. If properly utilized, this information can be one of the greatest assets for achieving technical excellence across the value chain:

Product development could use insights about customer preferences and consumption, derived from historic claims data, to tailor insurance modules to customers' needs while maintaining healthy profit margins.

Underwriting could combine decades of claims and underwriting data with medical registry information to get a clearer understanding of disease progression and the costs that come with it.

Pricing (in renewal markets) could take into account the price sensitivity of current and prospective customers. (Churn rates, for example, provide some of this information.) The information could then be integrated with insights on competitors' pricing to ensure that conversion/retention and profitability are appropriately balanced.

Claims could be automated using artificial intelligence methods to achieve STP rates that go far beyond rules-based systems.

Capturing these benefits will require significant investment. For example, many insurers will need to digitize paper-based underwriting systems or build a data lake by integrating various data sources—a process that is often far from easy. However, the potential rewards of doing so (not only higher combined ratios but also greater efficiency) make the expense well worth it.

Bring in the data scientists

Achieving true technical excellence has major implications for an organization's skill footprint and talent. Health insurers will need to locate (and usually hire) individuals with a suite of skills that are not commonly found in most claims or underwriting departments. These individuals must include data scientists—ideally, with the rare combination of actuarial and advanced analytics knowledge—as well as customer-centric product designers, medical experts (to provide the analytical engines with an opportunity to actually learn or infer the correct deductions), and many others.

However, the claims and underwriting “factories” that most health insurers historically used are shrinking dramatically as STP/automation rates significantly increase. A few years ago, it may have seemed impossible to run a major health insurance core operation with fewer than 100 people, but today it is a distinct possibility.

Thus, achieving the skill footprint required for technical excellence has major implications for the insurer's workforce. Significant opportunities arise to reinvest in personal steering, customer experience, and other operational areas, but

Careful management of the expense ratio is required. Talent acquisition and retention are major challenges, because the data analysts needed are in high demand in almost every industry and every type of business, from start-ups to tech giants.

However, technical excellence can also have major implications for the insurer's analytics infrastructure, including its core IT platforms. At many insurers, these platforms are not yet equipped to easily accommodate modular product structures (or even their pricing), the use of external data in underwriting, or artificial intelligence-based claims handling.

Lead from the top

Technical excellence needs to be embedded throughout a health insurer's processes and work routines. In many cases, it must also extend to external entities (e.g., distribution partners may need to adhere to underwriting guidelines). If the tools and assets required are to achieve full impact, technical excellence must become part of the insurer's organizational DNA.

Thus, technical excellence must be a CEO priority that cascades down in target settings and performance dialogues throughout the organization. At every stage, it must enjoy equal footing with "fancier" topics, such as innovation and customer experience. These topics cannot be seen as a replacement for technical excellence but rather as a complement to it.

If the effort to achieve technical excellence is to succeed, mind-sets across the entire organization will need to shift. Every employee, from claims handlers to service agents, must understand and ultimately embrace the transformation. A lack of buy-in can hamper impact.

One health insurer, for example, achieved industry-leading STP rates in dental claims but was unable to improve its adjudication rates or processing speed. It turned out that its claims handlers had found a way to search for and reopen automatically processed claims and adjust them according to their experience values. Only after an extensive exercise did the claims handlers buy-in to technical excellence so that the transformation could live up to its full potential. Without leadership from the top, the necessary mind-set shifts are unlikely to occur.



Achieving technical excellence across core business operations is an enterprise-wide initiative, a reflection of the interlocking nature of these functions. Strategies that herald the impact of technology or process redesign alone are missing the larger picture. Only by adopting an end-to-end approach led by the C-suite will private health insurers reap the full benefits of better performance. The size of the prize makes this undertaking well worth the effort. ○

This is the first in a series of articles McKinsey will publish about technical excellence for private health insurers. Future articles will discuss insights from our technical excellence survey, how to build both modular and manageable products, big data-based underwriting, and other topics.

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