

Driving Healthcare Innovation

Health plans and providers face different challenges in unlocking the power of data



Payers and providers have been working to adapt to a post-pandemic healthcare environment in constant flux. In 2022, NTT DATA surveyed 1,000 business and IT executives across economic sectors. The study aimed to better understand their views on business strategy, digital investments, and the use of innovation to create value. This Innovation Index snapshot focuses specifically on the responses of health plans and healthcare providers.

Survey findings reveal several areas of overlap. Both plans and providers are largely unsatisfied with the usefulness and quality of healthcare data available to them. In addition, both seek more resilient systems and highly effective work models. Opinions diverge regarding global concerns, profitability, budgeting issues and cybersecurity. These areas of difference reflect the operational realities, business opportunities and day-to-day challenges unique to each group.

Healthcare organizations are taking steps to become data-driven

Throughout the healthcare industry, efforts are underway to leverage the vast amount of healthcare data available to the advantage of all stakeholders, including patients. More than half (56%) of providers and nearly half (46%) of plans have integrated new and modern technologies into their processes as part of efforts to become more data-driven.

Plans are further along in artificial intelligence (AI), with more than a third (34%) using chatbots and virtual-assistant technology in most or all functions – well above the survey average of 24%.

And more than a third (36%) say their chatbot investments have accelerated innovation.

Healthcare organizations have sought to implement solutions that weave together multiple sources of data to provide payers and providers with timely, actionable information. Roughly three in four healthcare organizations (75% of providers, 73% of plans) leverage customer relationship management (CRM) applications for activities such as navigating patient history.

Healthcare organizations have been more successful than survey respondents overall at modernizing technology infrastructure to address patient needs and wants by capturing value from multiple channels. More than 6 in 10 plans (62%) and providers (64%) have done so, compared to 58% of survey respondents overall.

“There is a lot of nervousness in the health sciences industry and the workplace. With a trifecta of regulation, economic slowdown and resource constraints – this new world we live in will require health plans, providers and tech partners to collaborate to drive innovation, technology investments, experience, and workforce decisions.”

Kumar Srinivas
CTO, Health Sciences, NTT DATA

But healthcare organizations have yet to reap the full benefits of digital technology. Both plans (46%) and providers (42%) have doubts about the usefulness and accuracy of the data they collect. Meanwhile, 42% of plans say they lack the internal skills necessary to get the most out of their data.

Many are also concerned about whether they are adequately addressing regulatory issues governing the collection and use of data. This is especially true of providers, among whom nearly 3 in 10 (28%) are completely confident they can keep up with data regulations (compared to 34% of plans). Security is a particular area of concern for payers. Many doubt their ability to prevent data security breaches. Only 28% of payers are completely confident they can do so. That figure lags behind both providers (46%) and the survey average (34%).

To translate data insights into action, organizations need to center patient needs and behavior into the decision-making process. Just 10% of insurers and 15% of providers say that this process is woven into daily operations, lagging behind the survey average (18%).

Technology partners play a critical role in building resilient systems

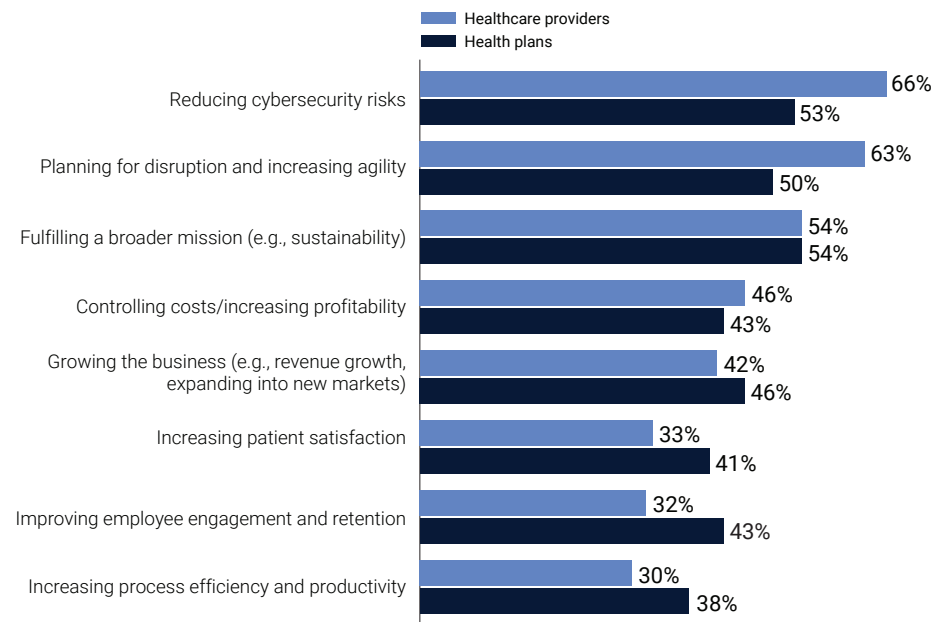
Healthcare organizations understand the importance of building resilient systems that respond to new challenges. They are looking to technology partners for help in accomplishing their goals (see Figure 1).

Avoiding issues that disrupt care is top of mind for providers. Almost two-thirds (63%) of providers expect technology partners to improve their ability to plan for disruptions, in part by increasing their agility. That's marginally higher than the survey average of 51%. Providers are also keen on technology partnerships that help minimize cybersecurity

risk, with 66% saying they expect partners to have a significant impact. That compares to 56% of all survey respondents and 53% of payers.

Both groups tend to see the right technology partnerships as key to their financial success. Plans (43%) and providers (46%) are more likely than the survey average (38%) to expect their technology partners to have a significant impact on controlling costs and increasing profitability.

Figure 1. Impact of technology/business partners on success of business decisions (significant impact)



Source: NTT DATA, Innovation Index, 2022

Organizations are looking to revamp the employee experience

Workforce effectiveness plays an important role in the success of healthcare organizations. In a tight environment for talent, they are focused on retaining and supporting employees. Plans are revisiting work models to reflect changes in employee preferences. Providers, meanwhile, have less flexibility in altering work models given the nature of their services. Plans (55%) are more likely than providers (21%) and the survey average (34%) to have revisited their organizations' work models and approach to work/life balance. Plans (61%) are also more likely than the survey average (45%) to view future-of-work initiatives as a major part of their process innovation.

The demands of seeing patients in person make it harder for providers to offer flexible and remote work arrangements. Nearly one-third (32%) find that this relative inflexibility creates an obstacle to offering high-quality employee experiences (compared to a 22% survey average).

Plans and providers face different obstacles to innovation

Providers and plans confront a variety of challenges to successful digital innovation. Most providers (57%) feel their innovation efforts are reactive rather than proactive (compared to a 45% survey average). Plans, meanwhile, are more likely than providers to say restrictive budgets hold them back significantly (27% insurers, 14% providers). However, these findings may reflect differences in the way innovation funding is managed. Three-quarters (75%) of plans say innovation is funded by a dedicated company budget, while nearly half (48%) of providers say innovation funding is managed by individual teams. Amid the challenges, there are areas of optimism. Providers are more likely than most industries to say a lack of employee skills is only a

minimal hindrance to their innovation efforts (55% providers, 43% survey average). Many providers (39%) feel they are highly effective at making updated tools and technologies available to workers. In addition, the vast majority (89%) feel they are effectively building a diverse workforce (81% survey average).

Meanwhile, plans are less likely to be restricted by partner and vendor processes. Only about one in five (22%) say it is a concern, compared to nearly one-third of survey respondents overall (32%).

“It is not surprising that providers are concerned about the reactive nature of their innovation efforts when considering the challenges with data quality, availability and relevance. Reactive innovation can be measured against real-world outcomes; proactive innovation is difficult to measure and can be impacted by poor data resulting in negative patient outcomes.”

Richard Swafford, PhD,
Director, Healthcare Consulting, NTT DATA

Moving ahead with actionable next steps

Healthcare organizations recognize the importance of leveraging data, but many are unsatisfied with the data they collect. They are not equipped with the technology to innovate as effectively as they might. Introducing technology that ensures data is accessible and well-presented could pay dividends. The following is what healthcare organizations can do to become data-driven.

Experimenting with new data opportunities

- Explore platform strategies that create and acquire data as a byproduct of process and workflow automation.
- Explore opportunities to acquire data from third parties to get more insight into members and patients, plan sponsors and employers, and healthcare delivery organizations and providers.
- Incorporate data acquisition requirements into RFPs and purchase agreements for software and software as a service, while including appropriate legal and security protections of privacy.
- Explore how to optimize data collection, making it part of every business relationship .
- Experiment with data curation, standardization and normalization on demand to optimize the use of data quality engineers, who are limited in number at a time of exponential growth in the data universe.
- Improve your data infrastructure's capability to support industry innovations using AI, machine learning and large language models such as ChatGPT.

- Mature your organization's capacity to address evolving privacy regulations and assure ethical decision-making relative to data and all forms of artificial intelligence.
- Partner with organizations that have capabilities such as data analytics as a service, which can help create a more agile analytics team that will be essential for superior results as competition for data analytics resources inevitably leads to greater staffing volatility.

Forging critical partnerships

Providers see tech partners as critical to increasing agility and planning for disruptions. Using that expertise will help healthcare organizations address challenges such as data privacy and cybersecurity – while reducing costs and empowering innovation.

Enabling employee experiences

Health plans are revisiting their organizations' work models, which they see as central to process innovation. They can build on this early success to make the employee experience even more flexible.

Innovating for success

Most providers judge their innovation efforts to be reactive rather than proactive. Such an approach may make them vulnerable to disruption. Adopting a proactive approach – integrating new technologies, redesigning care processes and improving patient education – can help them stay competitive while improving care.

[Download the Innovation Index](#) to learn how North American organizations across industries are prioritizing business strategies, digital investments and innovation to create value.

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Methodology

To create the Innovation Index, NTT DATA and Oxford Economics surveyed 1,000 business and IT executives across 16 industries about progress toward digital transformation. This includes organizational priorities, technology investments, data strategies, customer experience, and workforce decisions. The survey was conducted via a computer-assisted telephone interviewing (CATI) methodology during 2022.

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