# ISG Provider Lens™

# Healthcare Digital Services

A research report comparing provider strengths, challenges and competitive differentiators

Customized report courtesy of:

**NTT DATA**

**QUADRANT REPORT | DECEMBER 2022 | U.S.**

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## Executive Summary

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**Digital services improve health outcomes and business results**

The COVID-19 pandemic has caused 1.6 million deaths in the U.S. as of this writing. While death rates are falling, the physical and mental consequences for individual health outcomes will continue for decades. Long COVID-19 symptoms might last a lifetime, while much remains unknown about longer- term health effects. As was the rest of the society, the U.S. healthcare system was unprepared for the rapid change in demand for care, hospital beds, equipment and personal protective equipment (PPE). The industry is making changes to respond to the disease and to accommodate the increasing demand for healthcare services. Digital transformation and IT services are helping stakeholders in all parts of the healthcare ecosystem deal with the present and be future ready.

Among the service providers we communicated with, we repeatedly heard they are meeting clients where they are, rather than pushing specific agendas. Where they are, from a technology perspective, is reflected in recent ISG research that shows relatively low levels of adoption for many technologies (Figure 1).

Where the healthcare organizations are headed is reflected in the industry trends that emerge from this research:

- Increasing focus on health equity

- Industry convergence and interconnection

- Better stakeholder experiences

- IT modernization to reach desired outcomes

- Evolving economics of healthcare

# U.S. healthcare industry is slowly *evolving* to **face complex challenges.**

## Increasing focus on health equity

People and institutions in the U.S. are driving the healthcare industry to focus on equity and recognition of the social determinants of health (SDOH). Traditional company roles are no longer relevant. Payers are moving beyond benefits administration to sharing the responsibility of overall health with their members. Favorable health outcomes start with behavior change. Providers see how health is affected by everything that people do. They are also challenged to proactively identify people who are the most vulnerable. Thus, they seek ways to engage and interact at homes, workplaces and in the broader community, leading to an increased focus on using electronic medical records (EMRs) and SDOH through descriptive and predictive analytics, machine learning and NLP. Public health promotion programs

and self-care awareness are critical to improving individual and population health outcomes.

At the same time, there is a desire to treat individuals as unique. Awareness of behavioral and mental health is higher now, leading to a recognition of the need for proactive care. An increased focus on treating people as individuals drives uses of advanced data models and algorithms for early diagnosis and prevention. Integrated health uses a whole-patient approach while incorporating knowledge from SDOH.

Payers use a growing number of value-based care (VBC) agreements because Medicaid and Medicare programs provide incentives and rewards for positive health outcomes. Reluctant providers are slowly accepting both upside and downside risks. The transition from fee-for-service to VBC increases the focus on wellness, prevention, early detection and

## Figure 1: Technology Adoption Status
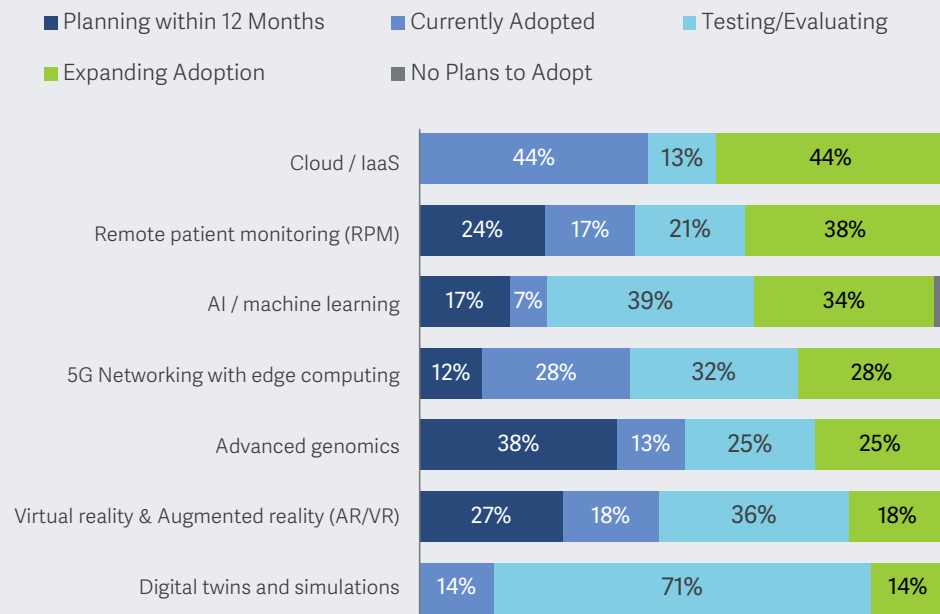


Source: ISG Research 2022 Healthcare and Life Sciences Survey

the management of chronic and acute diseases. VBC remains a small but growing portion of the healthcare business.

**Industry convergence and interconnection**

Payers and providers are crossing into each other's traditional businesses. The value proposition of health plans is eroding while providers consolidate to face threats from new entrants. Large healthcare players, such as Anthem, CVS and UnitedHealth Group, invest more in acquisitions and models such as "payviders." Some payers are diversifying by acquiring their hospitals, while providers are adopting insurance models. Consumers of healthcare services seek unified consumer experiences. Payers want to connect to patient EMRs, usually for use cases such as prior authorization and complex case management. Providers use APIs to exchange data with online

portals and mobile apps that help them have a complete view of their patient health data.

The need to better connect with the healthcare ecosystem is leading to a focus on improving data management and governance; integrating payer and provider systems is one of the most dynamic aspects of the healthcare market today. Integration and cooperation between payers and providers are essential to improve disease prevention and to have a better focus on therapies that deliver better health outcomes.

To enable this convergence, along with compliance with government mandates, a seamless flow of clinical and non-clinical information must occur across the healthcare ecosystem. When health information systems are better integrated, payers can develop an enhanced understanding of their utilization rates and better demand for services.

**Better stakeholder experiences**

Healthcare in the U.S. continues to receive low customer satisfaction ratings, according to research from the American Customer Satisfaction Index. Healthcare consumers and employees seek:

- Improved assess to doctors and hospitals

- Better call center services

- More insurance plans with price transparency

- Easier claims submission

- Timelier claims processing

People want to be active participants in their healthcare and coordination. They expect a multi-touch, digitally enabled healthcare experience that demands the payer segment to aggressively move toward a technologically advanced

service model. For example, people contacting member services expect their representatives to have access to all their information and historical data from past inquiries. They also expect online access or access via a mobile app.

To meet consumer expectations, there is an increase in the number of digital engagement initiatives enabling virtual care and personalization of care (Figure 2). A shifting population mix, along with unprecedented consumer acceptance and desire for digital engagement during the pandemic, boosted the demand for modern experiences in the healthcare sector. Changing care delivery is also driven by the entry of big technology and retail companies into the market. Legacy providers are changing their business models to compete better.

Another driver of experience change is the trend of care moving from hospital walls into ambulatory and home settings. Virtual

## Figure 2: Top 3 Transformation Motivations

■ Most Important   ■ Second Most Important   ■ Third Most Important
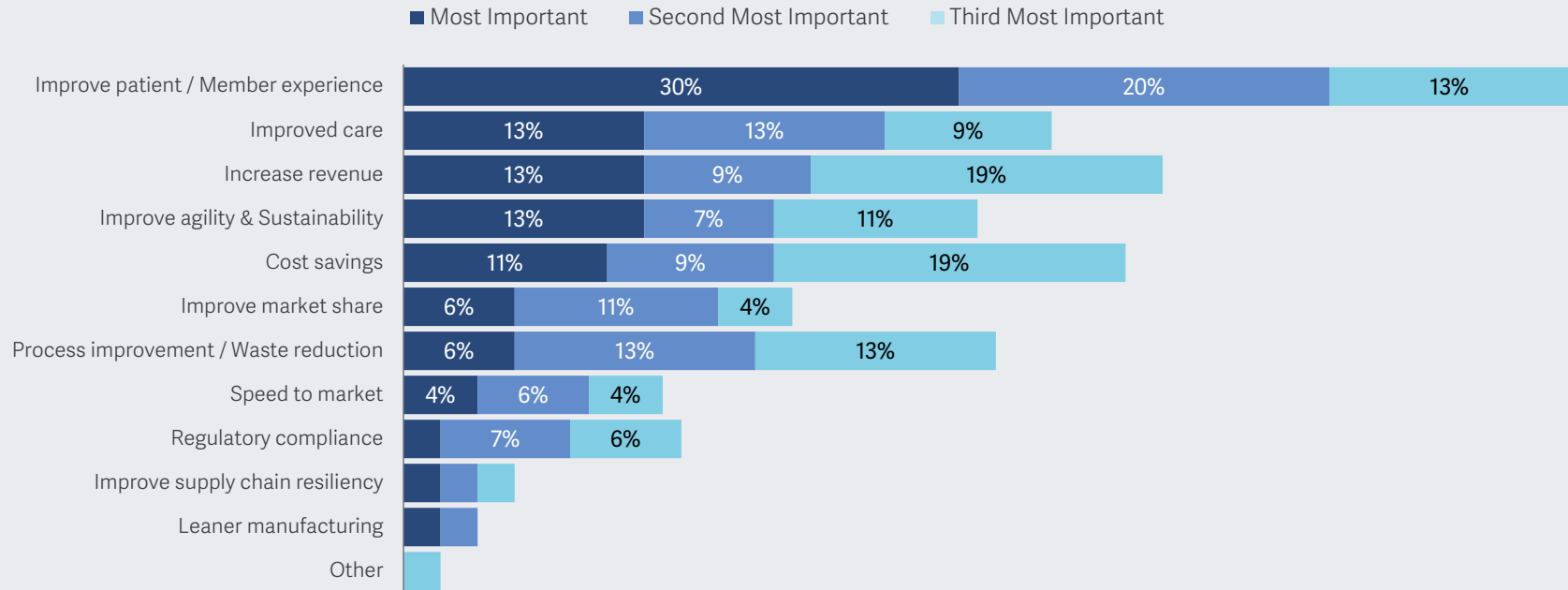


Source: ISG Research 2022 Healthcare and Life Sciences Survey

care gained significant traction during the pandemic, and the momentum continues with telemedicine, remote patient monitoring, digital therapeutics and home care services. Payers and providers are revamping their online portals to become self-service digital front doors, implementing chatbots and mobile apps for improved engagement. Physicians and patients continue to embrace virtual solutions and resulting benefits in terms of access, cost and health outcomes.

## IT modernization to reach desired outcomes

Digital transformation requirements are driving IT modernization spending in healthcare. Improving healthcare enterprises' legacy architecture or decreasing technical debt through modernization is helping enterprises address interoperability challenges, poor data quality and lower operational costs (Figure 3).

Meanwhile, part of modernizing involves using the cloud for data sharing and protection. In healthcare, there is a preference for hybrid or private clouds over the public cloud, especially because of the anticipated cost savings and ease of use associated with the hybrid or private cloud. As a result, there is increased demand for multicloud adoption and monitoring tools for management. There are differences within the industry in the adoption of and proficiency with cloud technology for managing healthcare data. Due to legacy investments, several firms in the healthcare sector have stayed digitally inactive. These old infrastructure systems may not have the scalability and flexibility needed to handle the data explosion occurring across client ecosystems, even though they appear to be tied to earlier investments.

AI and analytics speed up digital transformation, which results in better patient care and experiences. Automation

improvements using AI, machine learning and RPA affect core process optimization as well as automatic approvals and related initiatives for prior authorization and claims processing. The adoption of advanced analytics is also spurring innovations in:

- Population health

- Revenue cycle management (RCM)

- Payment integrity

- Member and patient engagement
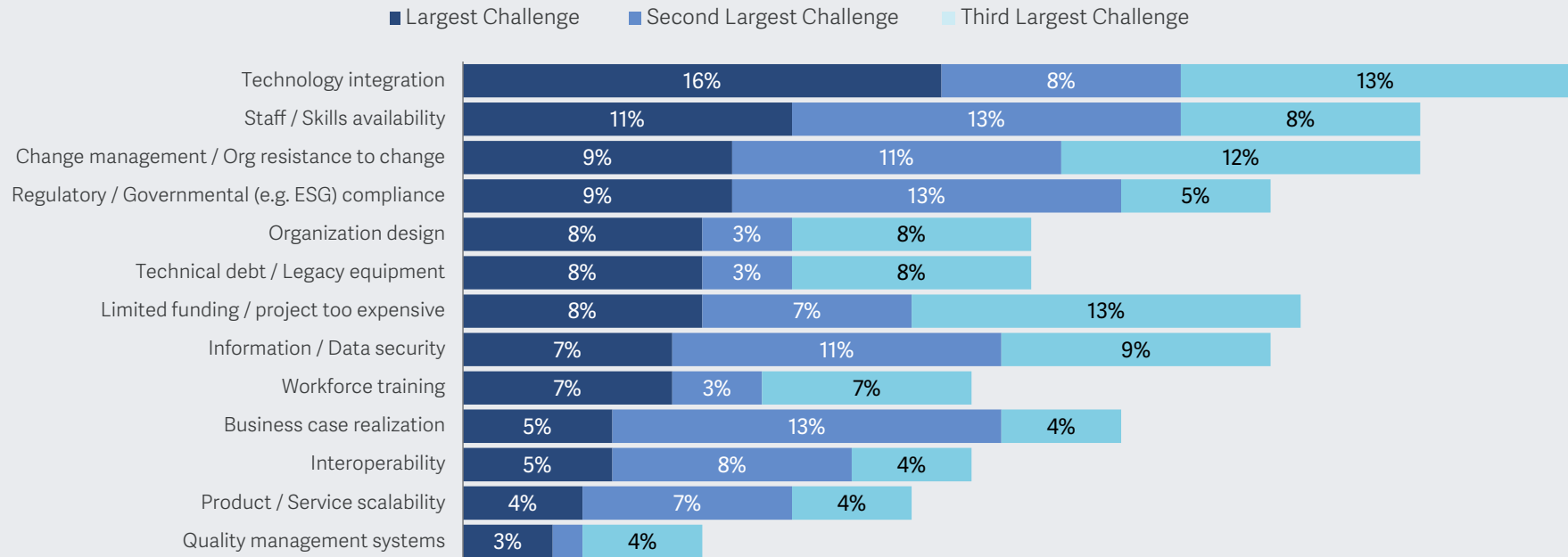
- Application of human genomic data

Furthermore, AI and analytics enable new mobile capabilities in healthcare, including consumer engagement via mobile devices such as wearables. However, these need proper data management foundations as well as clinical and operational business intelligence competencies to enable data-driven decision-making.

Another trend in the healthcare sector in the U.S. is the integration of AI and machine learning into legacy-rule-based workflows to ease administrative functions. Workflow automation helps ensure staff well-being, task quality and cost management efficiency and lessens challenges such as staffing shortages and an aging workforce. Precision medicine uses digitally enabled prescriptions supplemented with analytics and virtual platforms to improve diagnostics and prognostics.

Cybersecurity remains a top focus because of the nature and value of medical records and other personal data, including digital health data, interoperable data and customer engagement data. The WannaCry ransomware reportedly hit 40 percent of healthcare organizations. Furthermore, Internet of medical things (IoMT) wearable and implantable devices constantly feed sensitive patient data. The U.S. FDA recently directed stricter cybersecurity guidelines for device makers.

## Figure 3: Top 3 Transformation Challenges

■ Largest Challenge    ■ Second Largest Challenge    ■ Third Largest Challenge

| | Largest Challenge | Second Largest Challenge | Third Largest Challenge |
|---|---|---|---|
| Technology integration | 16% | 8% | 13% |
| Staff / Skills availability | 11% | 13% | 8% |
| Change management / Org resistance to change | 9% | 11% | 12% |
| Regulatory / Governmental (e.g. ESG) compliance | 9% | 13% | 5% |
| Organization design | 8% | 3% | 8% |
| Technical debt / Legacy equipment | 8% | 3% | 8% |
| Limited funding / project too expensive | 8% | 7% | 13% |
| Information / Data security | 7% | 11% | 9% |
| Workforce training | 7% | 3% | 7% |
| Business case realization | 5% | 13% | 4% |
| Interoperability | 5% | 8% | 4% |
| Product / Service scalability | 4% | 7% | 4% |
| Quality management systems | 3% | | 4% |

Source: ISG Research 2022 Healthcare and Life Sciences Survey

A HIMMS survey shows that 59 percent of healthcare organizations increased their cybersecurity budgets this year, compared to last year.

**Evolving economics of healthcare**

Demographic shifts and lifestyle changes, inflation and the pandemic continue to add cost pressure to healthcare ecosystems. Rising costs are leading to the need for cost optimization and workforce transformation. There is a growing focus on operational efficiencies, which encourages the adoption of cloud, process automation and application modernization initiatives, including mobility and remote workforce management.

The current adverse economic environment means modest to flat growth for commercial plans. Payers look to increase the member lifetime value, and government plans are expected to grow,

including both Medicare Advantage, due to an aging U.S. population, and Medicaid, with factors such as a rise in unemployment. Moreover, healthcare organizations are giving higher priority to environmental, social and governance (ESG) goals and measures. To deal with these economic changes, the healthcare delivery model is seeking operational improvements enabled by digital transformation.

Meanwhile, government mandates and regulations are driving digital projects. In the U.S., the Office of the National Coordinator for Health Information Technology (ONC) and the Centers for Medicare & Medicaid Services (CMS) have created structured data standards and other mandates that electronic health records (EHRs) must adhere to. CMS and ONC guidelines require that patients have access to their healthcare data and provider directories via APIs. The No Surprises Act is meant to prevent

## Figure 4: Healthcare Market Split: ITO vs. BPO
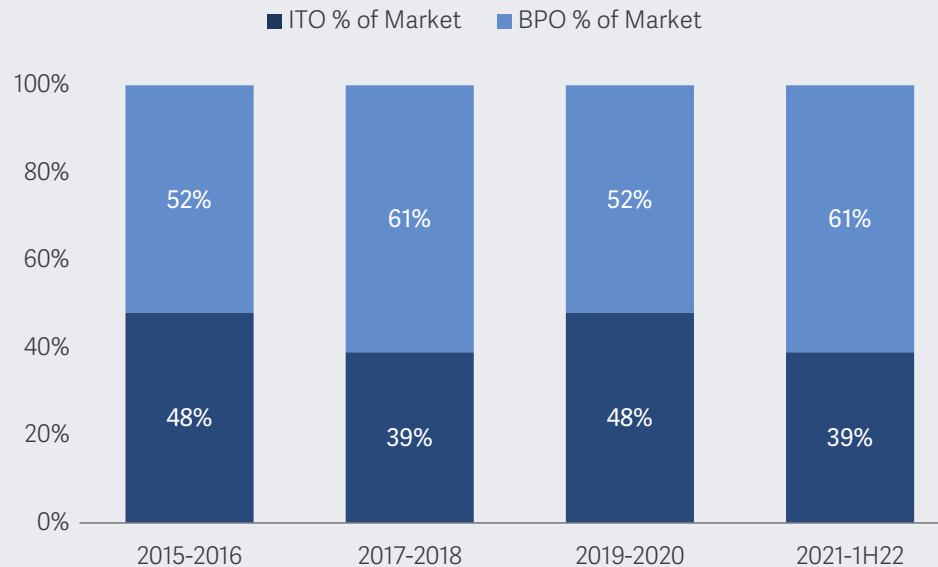


Source: ISG, 2022; Awards with > $5M Annual Contract Value

## Executive Summary

surprise medical bills. There are also new regulations on interoperability address security; payer-to-payer data exchange; and admission, discharge and transfer event notifications.

Foreseeing the potential for a recession, healthcare leaders are aggressively pursuing effective cost optimization strategies, which reflects:

- A continual drive for better patient experiences and engagements

- Judicious cost increases

- Restructuring cost for effective allocation

- Applying agile methodologies

- Some strategic cost takeout measures

- Leveraging industry cloud platforms

This study evaluates the service providers working with U.S. healthcare payers and providers. Over time, as ISG Index data illustrates below, there has been a shift to a higher percentage of business process outsourcing (BPO) deals than IT outsourcing (ITO).

Healthcare expertise and tools are essential to digital services.

## Provider Positioning

| | Payer Digital Transformation Services | Provider Digital Transformation Services | Healthcare Interoperability Services and Solutions | Value-based Care Services and Solutions |
|---|---|---|---|---|
| Accenture | Leader | Leader | Not In | Leader |
| Atos | Product Challenger | Leader | Product Challenger | Contender |
| Capgemini | Product Challenger | Market Challenger | Leader | Market Challenger |
| CitiusTech | Product Challenger | Product Challenger | Leader | Rising Star ★ |
| Coforge | Product Challenger | Not In | Product Challenger | Contender |
| Cognizant | Leader | Leader | Leader | Leader |
| Conduent | Product Challenger | Not In | Product Challenger | Not In |
| Deloitte | Rising Star ★ | Product Challenger | Leader | Leader |
| emids | Product Challenger | Product Challenger | Not In | Not In |
| EXL | Leader | Product Challenger | Product Challenger | Not In |

## Provider Positioning          **Page 2 of 4**

| | Payer Digital Transformation Services | Provider Digital Transformation Services | Healthcare Interoperability Services and Solutions | Value-based Care Services and Solutions |
|---|---|---|---|---|
| Firstsource | Leader | Not In | Not In | Not In |
| GAVS | Not In | Product Challenger | Contender | Not In |
| Genpact | Product Challenger | Product Challenger | Market Challenger | Market Challenger |
| HARMAN | Not In | Contender | Product Challenger | Contender |
| HCLTech | Leader | Leader | Leader | Market Challenger |
| Hexaware | Product Challenger | Rising Star ★ | Not In | Not In |
| Hitachi Vantara | Not In | Product Challenger | Not In | Not In |
| HTC Global | Contender | Contender | Contender | Market Challenger |
| IBM | Market Challenger | Leader | Not In | Not In |
| Infinite | Product Challenger | Product Challenger | Product Challenger | Product Challenger |

## Provider Positioning

**Page 3 of 4**

| | Payer Digital Transformation Services | Provider Digital Transformation Services | Healthcare Interoperability Services and Solutions | Value-based Care Services and Solutions |
|---|---|---|---|---|
| Infosys | Leader | Leader | Leader | Leader |
| LTIMindtree | Leader | Product Challenger | Rising Star ★ | Leader |
| Mphasis | Product Challenger | Product Challenger | Product Challenger | Product Challenger |
| NTT DATA | Leader | Leader | Leader | Leader |
| Optum | Leader | Leader | Not In | Leader |
| Persistent Systems | Product Challenger | Product Challenger | Product Challenger | Product Challenger |
| PWC | Market Challenger | Market Challenger | Market Challenger | Not In |
| Quantiphi | Not In | Not In | Not In | Contender |
| Rackspace | Not In | Product Challenger | Not In | Not In |
| Sutherland | Contender | Contender | Not In | Not In |

## Provider Positioning

| | Payer Digital Transformation Services | Provider Digital Transformation Services | Healthcare Interoperability Services and Solutions | Value-based Care Services and Solutions |
|---|---|---|---|---|
| TCS | Leader | Leader | Leader | Leader |
| Tech Mahindra | Product Challenger | Leader | Leader | Product Challenger |
| UST | Leader | Product Challenger | Product Challenger | Not In |
| Virtusa | Not In | Not In | Contender | Market Challenger |
| Wipro | Leader | Leader | Leader | Leader |
| WNS | Contender | Not In | Not In | Not In |

This study focuses on significant **Digital Services in Healthcare.**

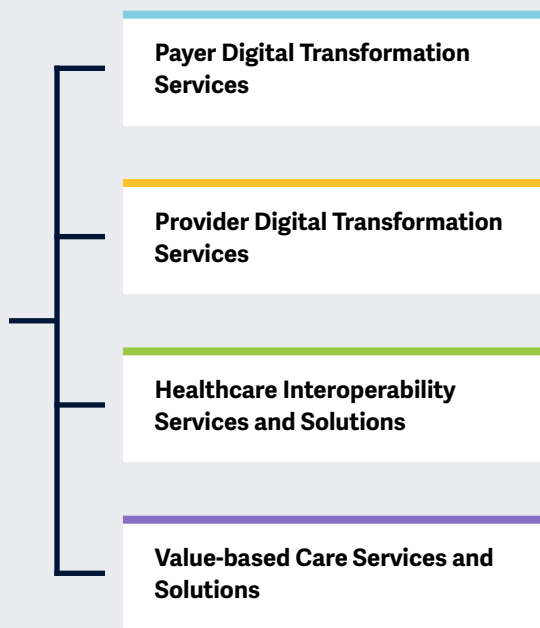Simplified Illustration Source: ISG 2022

**Payer Digital Transformation Services**

**Provider Digital Transformation Services**

**Healthcare Interoperability Services and Solutions**

**Value-based Care Services and Solutions**

**Definition**

The healthcare industry continues to be under pressure from customers, governments and other stakeholders to increase investments. The pandemic continues to affect industry practices. The public seeks better healthcare outcomes at lower costs, price transparency, appropriate data sharing and access to their own records. The U.S. healthcare industry must comply with new regulations and engage in mergers and acquisitions while adapting to the needs of an aging population. Furthermore, consumers expect advanced and convenient digital service delivery across the care continuum. Many companies and government agencies struggle to stay apace with the growing demand for their services, and in the private sector, they struggle to deal with the mounting competitive pressures.

**Scope of the Report**

In this ISG Provider Lens™ quadrant study, ISG includes the following four quadrants: Payer Digital Transformation Services, Provider Digital Transformation Services, Healthcare Interoperability Services and Solutions, and Value-based Care Services and Solutions.

This ISG Provider Lens™ study offers IT-decision makers:

- Transparency on the strengths and weaknesses of relevant providers
- A differentiated positioning of providers by segments
- Focus on regional market

Our study serves as the basis for important decision-making in terms of positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their existing vendor relationships and potential engagements.

**Provider Classifications**

The provider position reflects the suitability of providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the IT service requirements from enterprise customers differ and the spectrum of IT providers operating in the local market is sufficiently wide, a further differentiation of the IT providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions IT providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- **Midmarket:** Companies with 100 to 4,999 employees or revenues between $20 million and $999 million with central headquarters in the respective country, usually privately owned.

- **Large Accounts:** Multinational companies with more than 5,000 employees or revenue above $1 billion, with activities worldwide and globally distributed decision-making structures.

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product Challenger, Market Challenger and Contender), and the providers are positioned accordingly. Each ISG Provider Lens quadrant may include service providers that ISG believes have strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star.

**Number of providers in each quadrant:** ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).

## Provider Classifications: Quadrant Key

**Product Challengers** offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

**Leaders** have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

★ **Rising Stars** have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

**Not in** means the service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.

**Contenders** offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/services and a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

**Market Challengers** have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

# Payer Digital Transformation Services

## Payer Digital Transformation Services

### Who Should Read This

This quadrant report is relevant to healthcare payer enterprises across the U.S. for evaluating service providers offering digital transformation services to improve patient and member services.

In this quadrant, ISG highlights the current market positioning of service providers that offer digital transformation services to payers in the U.S. and shows how each provider addresses the rising demands and key challenges in the country.

Due to frequent regulatory changes, evolving customer expectations, varying claim volumes and a dynamic shift in the healthcare technology landscape, payers cannot control the fundamental factors that determine healthcare operations' quality and profitability. This challenge has left payers with no choice but to embrace digital transformation and innovation

to provide more effective outcomes for end-users. Leading service providers are focusing on the adoption of analytics to reduce administrative burden and costs and improve quality through automation and by increasing digital capabilities to meet payers' needs.

In the U.S., leading service providers are delivering digital transformation services to healthcare payers to address the ongoing challenges and prepare them to meet the upcoming shifts in the market. At the same time, payers seek providers, with digital expertise, that can offer a comprehensive, end-to-end solution that meets all market and regulatory challenges.

**Business professionals** should read this report to understand the relative positioning and capabilities of providers and thus effectively plan and select appropriate digital services and solutions. The report also shows how the technical and integration capabilities of a service provider are compared to the rest of the market.

**Digital professionals** should read this report to develop a better understanding of the current landscape of service providers' digital transformation offerings and understand how each of the providers have leveraged the latest technologies to meet healthcare payers' needs in the U.S market.

**Technology professionals** should read this report to understand how providers of healthcare digital transformation services fit in their digital transformation initiatives and how they are compared with one another.
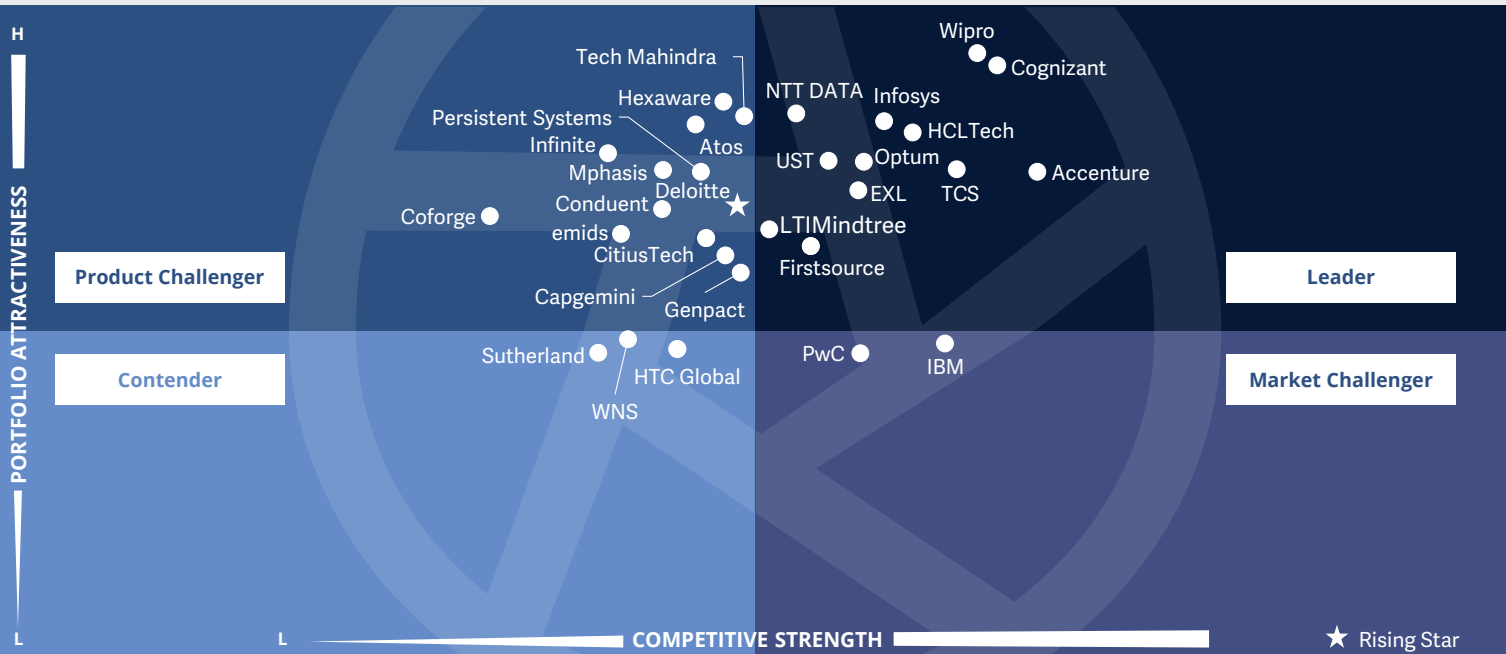
**Cybersecurity professionals** should read this report to understand how service providers address the significant challenges of compliance and security, without compromising patient privacy and experience.

**ISG** Provider Lens™

Healthcare Digital Services
Payer Digital Transformation Services

Source: ISG RESEARCH

U.S. 2022

**PORTFOLIO ATTRACTIVENESS**

H

L

Tech Mahindra

Hexaware

Persistent Systems

Infinite

Atos

Mphasis

Deloitte

Coforge

Conduent

emids

CitiusTech

Capgemini

Genpact

Sutherland

HTC Global

WNS

NTT DATA

Infosys

HCLTech

UST

Optum

Accenture

EXL

TCS

LTIMindtree

Firstsource

Wipro

Cognizant

PwC

IBM

**Product Challenger**

**Contender**

**Leader**

**Market Challenger**

**COMPETITIVE STRENGTH**

L

L

★ Rising Star

This quadrant evaluates service providers' ability to **deliver digital transformation** services to payers in the U.S. healthcare sector, including consulting, process and system **modernization and member experience improvement**.

*Ron Exler*

## Payer Digital Transformation Services

### Definition

Leading service providers in the healthcare industry have diverse digital offerings that can help payers and providers identify new ways of working together, while also assisting them in designing innovative products and service offerings to improve patient and member services. These service providers offer a combination of technology, process, and business expertise to aid payers and providers in their digital journeys. This quadrant assesses a service provider's ability to deliver digital transformation services to payers, also known as insurance plan companies in the U.S. Digital transformation services help payers progressively prioritize a digital-first pathway to improve patient care.

The services should help these insurance companies reach out to and serve members wherever they are located, via computers, remote monitoring devices, smartphones and other mobile devices. In addition, the services should address operational processes for payers, such as claims processing, member verification and enrollment, and their modernization capabilities should be clear.

### Eligibility Criteria

1. Technology **consulting for the use of appropriate traditional and emerging healthcare technologies**, with the ability to plan, develop and implement **consumer-grade interfaces** for employee systems and member information sources, including mobile apps

2. Established or emerging basic or standard relationships with **trusted partners,** including innovative startups

3. Ability to provide **services for the digitalization of processes** while navigating regulation complexities

4. Ability to **provide consultation services on the development of models** using AI, machine learning and analytics

5. Capabilities in the **modernization of payer systems**, including cloud migration, data center consolidation and application portfolio management experience in **large transition projects** that include consolidation of merged companies and the modernization of systems and applications

## Observations

Healthcare insurance companies, known as health plans or payers, face tremendous pressure, which is forcing them to drive digital transformation. Legacy systems and processes carry unnecessary costs and frustrate employees and providers, and government mandates for price transparency and data sharing are forcing system changes. Payer customers, also called members, consider their interactions with these companies frustrating.

Leaders in this quadrant exhibit significant involvement with payer customers in the U.S. Most offer a full range of services to help payers control costs, while improving member experience. Leaders repeatedly and consistently address the complex challenges of claims processing and modernization. However, all the companies in this study meet the eligibility criteria and could be right for a healthcare payer seeking service providers with specific strengths.

Most of the companies we talked with for this study mentioned that their digital services for healthcare payers grew by double-digit percentages in 2022. Services go beyond managed services, extending into strategic assessments and collaborative innovation.

Compared to the 2021 study, the 2022 study's Payer Digital Transformation Services quadrant has several new entrants, including CitiusTech, HTC Global, PwC and WNS. The study reflects minor position movements among those included in both years' studies. Since many, if not most, provider-client relationships within this quadrant are long term, the shift is mainly due to the expansion of incumbent relationships and partly due to providers taking clients from one another.

From the 37 companies assessed for this study, 30 have qualified for this quadrant, with 12 being Leaders and one Rising Star.

**accenture** >

**Accenture** offers U.S. payers services ranging from strategy and assessment to implementation. It helps payers move workers to remote offices and teams with innovative healthcare technologies, focusing on improved healthcare outcomes. Accenture Strategy now has expanded its healthcare coverage, due to the recent acquisition of The Beacon Group, a growth strategy consultant company.

**cognizant**

**Cognizant** builds on its widely used TriZetto solutions, which include extensive coverage for payer business needs, with interoperability capabilities to connect with other parts of the converging healthcare ecosystem. Cognizant brings digital technologies to healthcare, applying AI, automation, blockchain, cloud, IoT and other emerging technologies.

### Deloitte

**Deloitte** (Rising Star) builds and manages scalable and flexible digital experiences for payers, using human-centered design and innovative technologies. Its offerings help payers achieve net-zero carbon goals and contribute to the U.S. Department of Health and Human Services' pledge to reduce emissions. To deliver services, Deloitte combines its thought leadership and products with those from partners and acquisitions.

## Payer Digital Transformation Services

### EXL

**EXL** approaches payers with a focus on data. It combines its extensive expertise in data management, analytics and AI with healthcare domain knowledge to help payers improve member experiences and business outcomes. Digital operations and payment integrity are successful use cases.

**Firstsource** starts with business process improvement and operational efficiency services to help payers reach their goals. Its digital-first operating model helps payers reduce risks and lower costs as they improve member experiences. Technology enablers include process mining and simulation, as well as low-code automation and conversational AI.

### HCLTech

**HCLTech** is a Leader in this quadrant, with significant growth in the number of clients and revenue momentum. Its domain-led solutions, combined with dedicated practice and delivery teams, complement its strategic investments in cybersecurity, payer center of excellence and enhanced hyperscaler partnerships.

**Infosys** applies its Live Enterprise Suite to payers to deliver persona-first, digital-powered, future-ready solutions. It built an enrollment simplification solution to improve member experiences for traditionally difficult processes. Its AI-first strategy via the Healthcare Live Enterprise Framework (HELIX) helps payer-operations-handling professionals make faster and more informed decisions.

### LTIMindtree

To assist payers with claims administration, **LTIMindtree** uses automation. It is scalable to swiftly address peak loads. Both value-based healthcare and population health analytics make use of automated intelligence. The newly formed company should bring more digital power to large client engagements.

### NTT DATA

To help payers manage digital interactions with members, employers and brokers, **NTT DATA** has developed a digital health solution by combining its own and partner technologies in automation, document processing, RPA and business process management. NTT DATA also converts unstructured data, such as physician notes, into useful, structured data.

### Optum

**Optum** delivers digital transformation to payers, with a focus on product growth and enablement, cloud optimization and wisely used intelligent automation. Utilizing workflow integration, digital clinical data sharing, intervention identification and intervention optimization, it also collaborates with payers to close the historical and problematic gaps with providers.

**TCS** enables digital services in payer contact centers and claims processing. Its capabilities include real-time claim adjudication, quote-to-card transformation, billing, claims and intelligent benefits transformation. TCS Healthcare Analytics gives payers a model to identify gaps in care, thereby enabling payers to improve patient and staff experiences, leading to improved healthcare outcomes.

## Payer Digital Transformation Services

**U** ∎
**S T**

**UST** offers end-to-end digital transformation as well as transformation services and platforms for benefit coding, claims processing, enrollment and member portals. UST's MyDoc digital platform connects patients, payers and providers to deliver insights and coordinate care. UST is a HealthEdge implementation partner for administration and care coordination solutions.

**wipro**

**Wipro's** payer platform combines proprietary and partner technologies to provide intelligent platforms that leverage AI, cloud and blockchain. Service offerings are claims administration, member and provider management, healthcare management and administration. For Medicaid, it partners with Salesforce and HealthEdge. Its Medicare enrollment platform has new Appeals and Grievances modules.

# NTT DATA

**Leader**

*"NTT DATA has decades of payer experience, advanced technologies and expert professionals."*

*Ron Exler*

## Overview

NTT DATA is headquartered in Tokyo and operates in more than 55 countries. It has over 140,000 employees across 208 global offices. In FY22, NTT DATA was combined with NTT Ltd., under the name NTT DATA Inc., with total revenue exceeding $30 billion. NTT DATA aims to deliver end-to-end process automation by applying analytics, AI, and intelligent automation across the healthcare value chain.

## Strengths

**Midmarket fit:** NTT DATA's end-to-end services are most valuable to regional and Blue Cross Blue Shield companies, which account for more than 75% of clients, while 24% of its customers are large national health plan clients.

**Digital health technologies:** NTT DATA's digital health solution combines its own and partner technologies in automation, document processing, RPA and business process management to help payers manage their digital interactions with members, employers and brokers. Healthcare providers can also use the solution to manage their contracts, check claims and submit documentation to payers. In addition to this, NTT DATA offers services for the measurement of customer experience.

**Automating unstructured clinical information:** NTT DATA has the proprietary Clinical Language Pro (CLP) to help transform unstructured clinical information, codes, terms and concepts such as physician notes and lab reports, into usable, structured data. It uses NLP with AI to process standard coded insights for medical reviews, risk adjustment analysis, quality measure reporting and detection of fraud, waste and abuse.

## Caution

NTT DATA needs to pay closer attention to client retention, as the digital services market for healthcare payers is highly competitive.

# Provider Digital Transformation Services

## Who Should Read This

This quadrant report is relevant to healthcare providers across the U.S. for evaluating service providers offering digital transformation services to deliver better care, improve operations and enhance user experience.

In this quadrant, ISG highlights the current market positioning of service providers that offer digital transformation services to healthcare providers in the U.S. and shows how each of these service providers enables healthcare providers to improve patient experience and build a care delivery system that strengthens their client relationships.

Healthcare providers are accelerating technology adoption and providing high-quality care to patients. With more consumerization, automation and consolidation of health systems, they have realized that running a care system is not just about patient treatment but is also about enriching patient experience and driving improved health outcomes.

In the U.S., providers focus on healthcare digital transformation services that deliver personalized quality care, enhance clinician productivity, automate administrative tasks and improve patient management. They also incorporate technologies such as AI, analytics, machine learning, the cloud, data integration and security to provide convenience to users.

In the U.S., leading service providers support healthcare providers to address ongoing challenges and prepare them for the upcoming shifts in the market. At the same time, healthcare providers look for service providers, with digital capabilities, that can address market and regulatory challenges and offer an end-to-end, sustainable solution.

**Business professionals** should read this report to understand the relative positioning and capabilities of providers and thus effectively plan and select appropriate digital services and solutions. The report also shows how the technical and integration capabilities of a service provider are compared to the rest of the market.

**Digital professionals** should read this report to develop a better understanding of the current landscape of service providers' digital transformation offerings and understand how each of the providers have leveraged the latest technologies to meet healthcare providers' needs in the U.S market.

**Technology professionals** should read this report to understand how providers of healthcare digital transformation services fit in their digital transformation initiatives and how they are compared with one another.
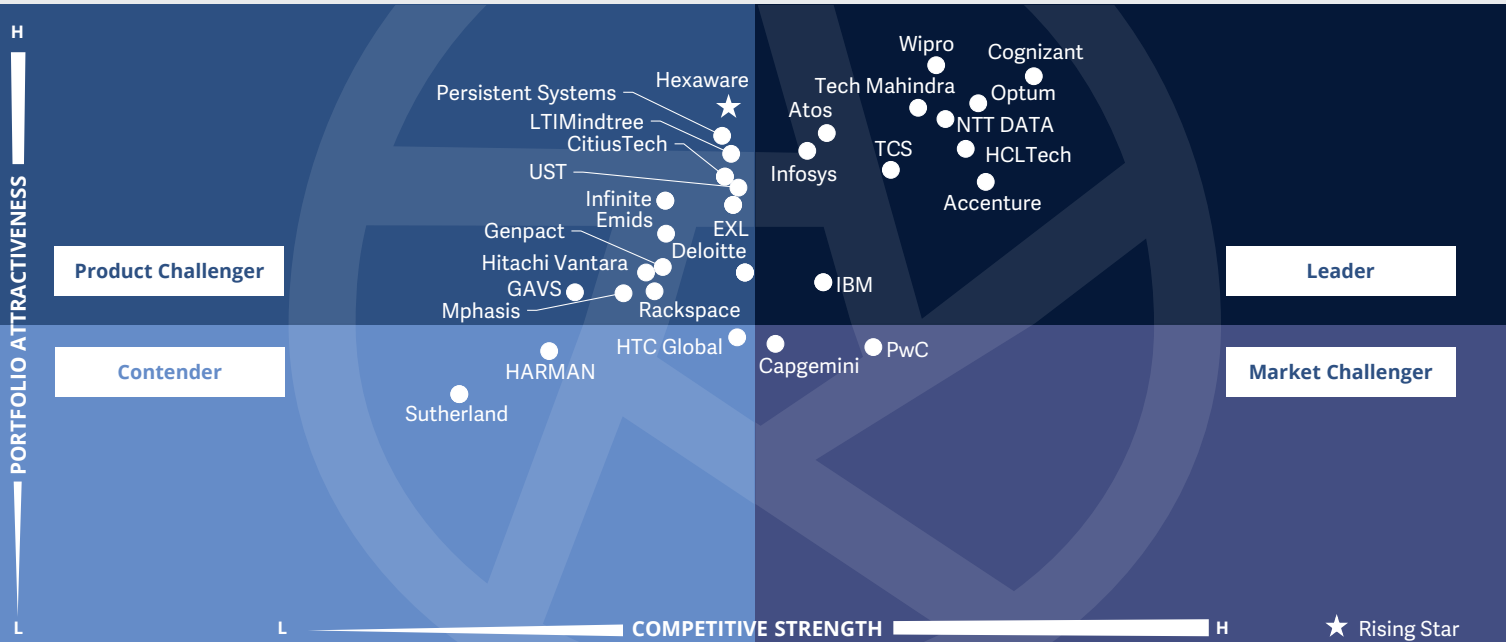
**Cybersecurity professionals** should read this report to understand how service providers address the significant challenges of compliance and security, without compromising on patient privacy and experience.

**ISG** Provider Lens™

Healthcare Digital Services
Provider Digital Transformation Services

U.S. 2022

**PORTFOLIO ATTRACTIVENESS**

H

L

**Product Challenger**

Persistent Systems
Hexaware ★
LTIMindtree
CitiusTech
UST

Wipro
Cognizant
Tech Mahindra
Optum
Atos
NTT DATA
TCS
HCLTech
Infosys
Accenture

Infinite
Emids
EXL
Genpact
Deloitte
Hitachi Vantara
GAVS
Mphasis
Rackspace

IBM

**Leader**

**Contender**

HTC Global

Capgemini
PwC

**Market Challenger**

HARMAN

Sutherland

L                                    **COMPETITIVE STRENGTH**                                    H          ★ Rising Star

**PORTFOLIO ATTRACTIVENESS**

This quadrant evaluates service providers that offer **digital transformation** services to providers of healthcare in the U.S., with a focus on **patient experience, care delivery, modernization and financial improvements**.

*Ron Exler*

## Provider Digital Transformation Services

**Definition**

Digital transformation helps to combat many of the ongoing and anticipated industry challenges. In the healthcare industry in the U.S., digital transformation of services helps provider segments evolve to better serve their constituents. Successful healthcare providers meet their challenges with the following:

- Driving targeted investments and continuous cost control

- Using advanced technologies and digital operating models

- Focusing on improved and innovative patient engagements

- Building, buying and improving data sharing processes and tools

- Shifting to digital platforms for rapid modernization and adjusting to the changing care environment

This quadrant assesses service providers that offer digital transformation services to healthcare providers such as hospital systems and independent healthcare providers. These providers should be responsible for processes and systems pertaining to patient relations and care, such as patient intake, physician referral management, ambulatory and chronic care and post-acute care. The services should also include employee systems such as information portals, scheduling and collaboration.

### Eligibility Criteria

1. Ability to plan, develop and implement **consumer-grade interfaces** of hospital and office systems and patient information and monitoring sources, including mobile apps for wellness, medical reference and fitness

2. Capability to offer guidance on **selecting and deploying telehealth solutions**, including measures for cybersecurity

3. Established or emerging basic or standard relationships with **trusted partners**, including emerging firms with new models of care delivery

4. Ability to advise on **workforce development**, including upskilling, to support digital and private data protection

5. Consulting on the **development of models**, using AI and analytics **for screening, diagnostics and treatment**

6. Capabilities in the **modernization of provider systems**, including cloud migration, data center consolidation and application portfolio management experience in **large transition projects** that include consolidation of merged companies and the modernization of systems and applications

## Observations

Healthcare providers include hospitals, doctors' offices, clinics, labs and testing facilities. In the U.S., providers face ongoing challenges of staffing, profitability, billing and treatment quality. The COVID-19 pandemic has pushed these care institutions to their limits, leading to significant changes. Such adjustments include seeking technologies that can help address significant challenges.

Leaders in this quadrant have notable success in many types of healthcare provider environments, covering care delivery, revenue cycle management, digital front doors, cloud migration and automation. However, all the companies in the study meet the eligibility criteria and could be right for a healthcare provider seeking service providers with specific strengths.

Compared to the 2021 study, the 2022 study's quadrant has several new entrants, including Capgemini, CitiusTech, Hitachi Vantara, HTC Global, PwC and Rackspace Technology. The study reflects minor position movements among those included in both years' studies. Because many, if not most, provider-client relationships within this quadrant are long term, the shifts are mainly due to the expansion of incumbent relationships and partly due to providers taking clients from one another.

From the 39 companies assessed for this study, 30 have qualified for this quadrant, with 11 being Leaders and one a Rising Star.

### accenture

**Accenture** helps add systems that allow healthcare providers to recommend digital services to patients and collect and interpret patient data from these services. It supports the consolidation of healthcare provider enterprise systems via cloud migration strategies, process streamlining and implementation.

### AtoS

**Atos'** OneCloud for healthcare supports the move of Epic and Cerner solutions to cloud, while implementing hybrid approaches as required. It offers a remote care platform for patient monitoring, scheduling and virtual meetings, while supporting decarbonization. Atos applies its notable security portfolio to protect vital services and healthcare information.

### cognizant

**Cognizant** helps providers better manage their financials with digital solutions that streamline and optimize revenue cycle management processes. Also critical is compliance with existing and new regulations, which Cognizant addresses with modernization, digital engineering and advanced analytics. Its consulting services include care model design, patient engagement and quality strategy.

### HCLTech

**HCLTech** actively recruits people with healthcare provider experience to sustain client credibility and boost its delivery capabilities. The company provides independent consulting around cloud transformation, and clients can choose from different hyperscalers and technology solutions. Its ecosystem partnerships include AWS, Google Cloud and Microsoft Azure, as well as IBM (for the hybrid cloud).

## Provider Digital Transformation Services

**HEXAWARE**

**Hexaware** (Rising Star) offers human-centered designs to help teams build patient-centric solutions. Such solutions reduce patient waiting times to schedule appointments, speeding up diagnoses and treatment. Hexaware developed a platform for CMS reporting that has a dashboard that captures and reports clinical quality measures. It enables faster identification of gaps in care.

**IBM**

Clinicians have access to any image, anywhere and anytime, via **IBM's** iConnect Enterprise Archive that gives a consolidated view of a patient's health record with integration to EHRs. This helps providers make more informed decisions for patients. IBM Cloud provides transformation services, with its healthcare expertise.

**Infosys**

**Infosys'** domain experts help assess and select EMR capabilities and applications. It supports cloud migration and enhancement of revenue cycle management (RCM) platforms and provides coaching on design thinking. The Infosys Digital Health Platform (IDHP) focuses on transforming patient experience and health outcomes. Infosys hosts a healthcare center of excellence and a design lab and has partnerships with academia.

**NTT DATA**

**NTT DATA** created a virtual hospital architecture that comprises systems of record, systems of insight, systems of engagement, devices, care delivery and logistics. Quality monitoring, ancillary services and program monitoring are embedded in workflows. Nucleus for Healthcare and Business Insights Engine supplement the company's domain expertise.

**Optum**

**Optum** starts at the business level, engaging executives with research and advisory services. Its analytics solution is embedded in its provider services, focusing on creating insights that improve health outcomes. It offers analytics capabilities on a platform, as a service, via managed services and through transformational services.

**tcs TATA CONSULTANCY SERVICES**

**TCS** works with healthcare providers to make clinical operations future ready with cloud services, data democracy and AIOps. It also helps transform legacy operations, such as revenue cycle management, claims and billing, into automated, proactive and predictive processes. TCS modernizes healthcare with patient-centric digital technologies, such as AI.

**Tech Mahindra**

**Tech Mahindra** uses technology-enabled strategies for process automation and enhancing value-based care. Other services for providers are cybersecurity, EHR modernization, healthcare enterprise analytics and interoperability. Its core offerings include automation, CRM services, managed application services, contact center, infrastructure services, onsite support and management consulting and strategic services.

**wipro**

**Wipro** employs thousands of registered nurses to support patients and providers. It also has hundreds of medical coders. Wipro's Remote Patient Monitoring and Care Management solution is an integrated home-installed system with wireless data transmission. Its Product Healthcare Cloud is used for medical applications such as telehealth, virtual care and wellness.

# NTT DATA

**Leader**

"NTT DATA leverages high-quality solutions and services to address challenges faced by U.S. hospitals."

*Ron Exler*

### Overview

NTT DATA is headquartered in Tokyo and operates in more than 55 countries. It has over 140,000 employees across 208 global offices. In FY22, NTT DATA was combined with NTT Ltd., under the name NTT DATA Inc.,with total revenue exceeding $30 billion. NTT DATA's expertise and healthcare-specific solutions bring scale to clients' needs, reducing their costs and increasing quality.

### Strengths

**Healthcare-specific solutions:** Digital accelerator (Nucleus for Healthcare) and the NTT DATA Business Insights Engine supplement the company's domain expertise. NTT DATA's cross-industry offerings, such as Dynamic Workplace, bring scale to provider needs, targeting costs and quality.

**Patient customer experience measurement and journey orchestration:** NTT DATA works with providers to identify actionable customer insights with measurable business outcomes. There are different metrics at each stage of the patient journey captured into customer experience KPIs, covering research, check-in, treatment, discharge, follow-up and loyalty.

**Virtual hospital at home:** As hospitals struggle to retain staff and face space constraints, moving people home for care becomes more important. With available and emerging technologies, NTT DATA created a virtual hospital architecture encompassing systems of record, systems of insight, systems of engagement, devices, care delivery and logistics. Quality monitoring, ancillary services and program monitoring are embedded in workflows.

### Caution

In October, NTT Corp. and NTT DATA Corp. finalized the creation of NTT DATA and formally launched their combined international business. This creates a larger company and carries certain uncertainties for employees, partners and clients. Furthermore, NTT DATA must integrate its recent acquisitions, including Apisero, Aspirent, Chainalytics, Hashmap, Nexient, Postlight, Umvel and Vectorform. This takes time, which can slow the delivery of newly acquired benefits to clients.

# Healthcare Interoperability Services and Solutions

## Healthcare Interoperability Services and Solutions

### Who Should Read This

This quadrant report is relevant to healthcare payer and provider enterprises in the U.S. for evaluating providers of healthcare interoperability services and solutions.

In this quadrant, ISG highlights the current market positioning of service providers that offer healthcare interoperability services and solutions to healthcare payers and providers in the U.S. and shows how each service provider addresses the key challenges faced in the country.

Interoperability in healthcare refers to secure access and exchange of data across the healthcare landscape so that it can be leveraged to optimize outcomes. It helps providers gather complete details about patients and enables payers to understand the needs of the market.

Secured access to data across the industry helps meet users' expectations, improve care and drive faster transitions.

The primary challenges healthcare organizations face while they make their systems interoperable include governmental mandates, lack of coordination between departments, reliance on legacy systems and diverse requirements. In response, leading service providers are enhancing their healthcare platform capabilities, strengthening their portfolios and creating holistic solutions to offer compatible interoperable solutions. At the same time, healthcare payers and providers seek trustworthy and committed partners that can address challenges and provide a roadmap for healthcare interoperability services and solutions.

**Business Professionals** should read this report to understand the relative positioning and capabilities of providers and thus effectively plan and select appropriate digital services and solutions. The report also shows how the technical and integration capabilities of a service provider are compared to the rest of the market.

**Digital professionals** should read this report to develop a better understanding of the current landscape of service providers' digital transformation offerings and understand how each of the providers have leveraged the latest technologies to meet healthcare providers' needs in the U.S market.

**Technology professionals** should read this report to understand how providers of healthcare digital transformation services fit in their digital transformation initiatives and how they are compared with one another.
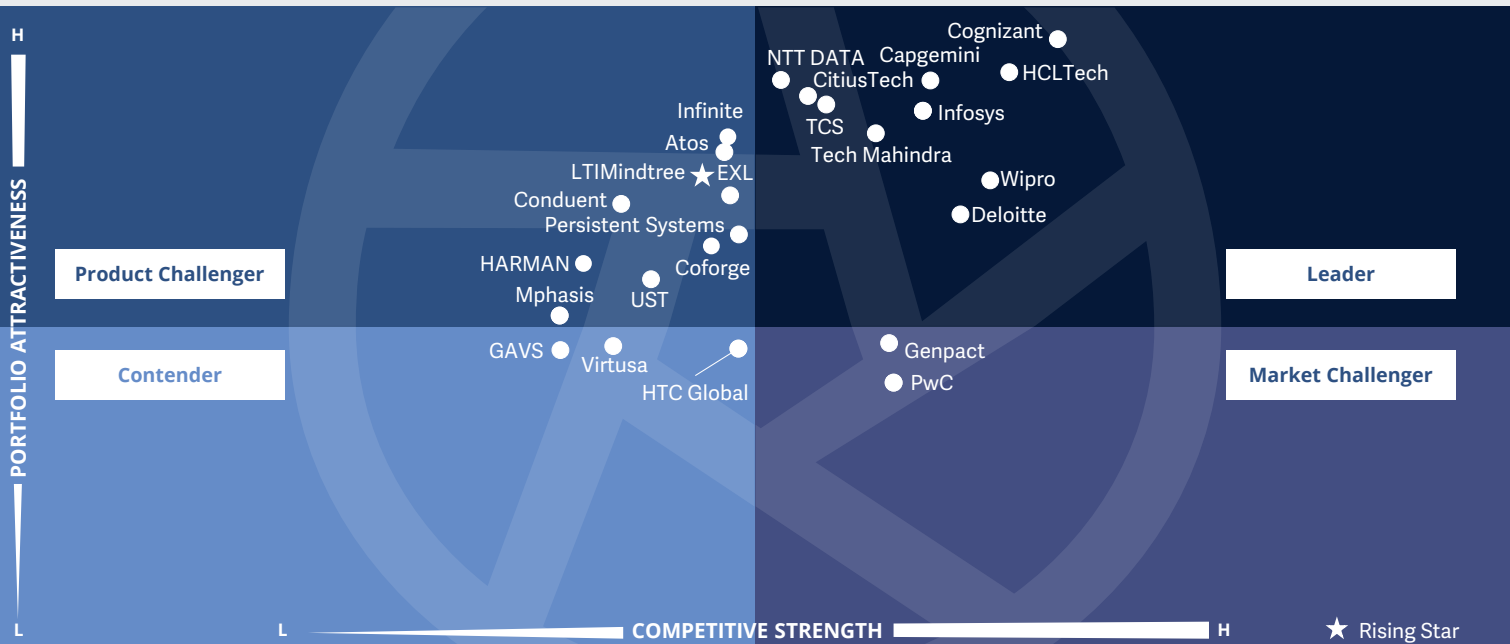
**Cybersecurity professionals** should read this report to understand how service providers address the significant challenges of compliance and security, without compromising on patient privacy and experience.

Source: ISG RESEARCH

Healthcare Digital Services
Healthcare Interoperability Services and Solutions

U.S. 2022

**PORTFOLIO ATTRACTIVENESS**

H

**Product Challenger**

Cognizant
NTT DATA   Capgemini
CitiusTech       HCLTech
Infinite
TCS          Infosys
Atos
Tech Mahindra
LTIMindtree ★ EXL
Conduent        Wipro
Persistent Systems   Deloitte
HARMAN
Mphasis   Coforge
UST

**Leader**

**Contender**

GAVS
Virtusa
HTC Global

Genpact
PwC

**Market Challenger**

L

L                    **COMPETITIVE STRENGTH**                    H       ★ Rising Star

This quadrant assesses providers of solutions and services that enable **improved data sharing** across the healthcare ecosystem. Adherence to Fast Healthcare Interoperability Resources (FHIR) standards and other services to help **meet government mandates** are critical.

*Ron Exler*

## Definition

The emphasis on interoperability and transparency in the sharing of health records among stakeholders has increased in the recent past. In the largest healthcare market in the world, the U.S. Office of the National Coordinator for Health Information Technology (ONC) and the Centers for Medicare and Medicaid Services (CMS) have created structured data standards and other mandates that electronic health records (EHRs) must adhere to. CMS and ONC guidelines require that patients have access to their healthcare data and provider directories via application programming interfaces (APIs). Other new regulations on interoperability address security; payer-to-payer data exchange; and admission, discharge and transfer event notifications. Access to the right information at the right time helps to deliver optimal care to patients or members. Recently, the focus

has been on meeting interoperability mandates of governments, while at the same time giving patients easier access to their medical records and allowing timely and efficient sharing of information across the healthcare ecosystem.

This quadrant assesses providers of solutions and services that enable improved data sharing across the healthcare continuum. For the U.S., service providers should know and advise clients on the CMS and ONC guidelines that mandate patients' access to their healthcare data and healthcare provider directories via APIs. Providers should also adhere to other new rules requiring interoperability capabilities to address security and payer-to-payer data exchange, as well as admission, discharge and transfer event notifications.

## Eligibility Criteria

1. Knowledge and experience with the **Fast Healthcare Interoperability Resources (FHIR)** standard developed for exchanging healthcare information

2. Knowledge and experience in tools to make it easier for healthcare systems and providers to **connect and share data across different sources**, such as Google Cloud Platform's Cloud Healthcare API

3. Ability to support consultation services for the **development of custom capabilities for interoperability** solutions

4. Ability to build, maintain and scale **seamless and secure personal experiences** across APIs

5. Capability in **designing user experiences** to ease the implementation and use of healthcare interoperability solutions

## Observations

Interoperability ties together the healthcare ecosystem in important and visible ways. In addition to government mandates to share data, the added potential value of appropriate and timely data management and analysis leads payers and providers toward enhanced services.

Leaders in this quadrant offer a range of interoperability services, starting with those needed to comply with Centers for Medicare & Medicaid Services (CMS) mandates. They offer solid teams of people with training and certifications in Fast Healthcare Interoperability Resources (FHIR), HL7 and other relevant standards. Interoperability centers of excellence also reflect commitment to training, partnerships and innovation. However, all the companies in this study meet the

eligibility criteria and could be right for a healthcare company seeking service providers with specific strengths.

Compared to the 2021 study, the 2022 study's quadrant has several new entrants, including Deloitte, Genpact, HTC Global and PwC. The study reflects minor position movements among those included in both years' studies. Since many, if not most, provider-client relationships within this quadrant are long term, the shift is mainly due to the expansion of incumbent relationships and partly due to providers taking clients from one another.

From the 36 companies assessed for this study, 24 have qualified for this quadrant, with 10 being Leaders and one Rising Star.

### Capgemini

**Capgemini's** longer-term interoperability strategy calls for the creation of a FHIR-enabled system of intelligence, seamless care coordination, and prior authorization via increased EHR integration and next-generation interoperable care management systems. The structure also includes the exchange of clinical data and the development of specialty services.

### CitiusTech

**CitiusTech** offers a full gamut of integration services that healthcare organizations need, including FHIR consulting, interface development, app integration, device data integration and other professional services. Accelerators include a SMART-on-FIHR app framework and a library for improved consumer engagement.

### cognizant

**Cognizant** offers solutions for each step of the interoperability journey. It adds value to interoperability, going beyond compliance to solutions that help a business. Some of the examples include member risk stratification, quality measures acceleration, data rich enrollment and personalized shopping experiences.

### Deloitte

**Deloitte** uses advanced integrations with AI and cognitive platforms and smart APIs aligned to real-time, workflow-enabled solutions to help advance clinical care. It offers design and implementation delivery frameworks, along with independent and containerized platform accelerators, to standardize and automate interoperability. Deloitte goes beyond the technical interoperability needs to address strategic objectives.

## Healthcare Interoperability Services and Solutions

### HCLTech

**HCLTech's** services range from strategy development to implementation and support. It helps clients adhere to CMS interoperability rules at scale. A partnership with Innovaccer gives HCLTech enhanced interoperability capabilities. Its center of excellence has certified HL7 consultants, FHIR experts, healthcare integration consultants and EDI experts.

### Infosys

**Infosys'** services include strategy consulting, API development, testing and implementation, HL7/FHIR data repository implementation, analytics and app development, and interface managed services. The company uses several accelerators, such as predefined data maps, solution frameworks, reference architectures and clinical data analytical models.

### NTT DATA

**NTT DATA** offers end-to-end healthcare interoperability consulting, architecture, design, implementation and support. It has experience implementing and supporting clinical integrations and interoperability solutions for all EMR systems. NTT DATA uses its technologies for a wide range of integration, interoperability and data services to payer and provider healthcare clients.

### TCS — TATA CONSULTANCY SERVICES

**TCS** takes an all-inclusive approach to healthcare interoperability, connecting various stakeholders with unified and frictionless experiences. It offers advisory and compliance services, data integration, quality engineering, and analytics, as well as service partnering and delivery. Its partnership with 1UP Health adds FHIR platform expertise.

### Tech Mahindra

**Tech Mahindra**, with its U.S.-based subsidiary, HCI Group, offers experience in EHR implementations with all interfaces, along with custom adaptation and compliance with interoperability standards and mandates. This includes EHR integrations with Allscripts, Cerner and Epic. FHIR support includes a partnership with Firely, Innovaccer, mphrX, Onyx and WSO2.

### wipro

**Wipro** has specialized healthcare interoperability knowledge and capabilities, including technology, market access, FHIR expertise and credibility. It also builds FHIR hubs for connecting medical devices to EMRs. FHIR APIs are available for the enrollment process, adjudicated claims, encounters, provider directory and pharmacy connections.

### LTIMindtree

**LTIMindtree** (Rising Star) helps clients comply with CMS and the Office of the National Coordinator for Health Information Technology (ONC) mandates. The integration of EMR with current and emerging systems for patient engagement, telehealth and wellness is addressed through FHIR-based interoperability services. It also hosts an integration center of excellence with hundreds of certified consultants, dozens of frameworks and industry partner involvement.

# NTT DATA

**Leader**

"NTT DATA has broad experience working with healthcare firms to meet interoperability mandates."

*Ron Exler*

## Overview

NTT DATA is headquartered in Tokyo and operates in more than 55 countries. It has over 140,000 employees across 208 global offices. In FY22, NTT DATA was combined with NTT Ltd., under the name NTT DATA Inc., with total revenue exceeding $30 billion. NTT DATA's interoperability improves processes and data sharing across the healthcare continuum, advancing the Quintuple Aim (health, experience, cost, staff well-being and equity).

## Strengths

**Interoperability experience:** NTT DATA has decades of experience across various healthcare data formats, communication protocols and technology stacks. It has experience implementing and supporting clinical integrations and interoperability solutions for all systems (for example, EMR, billing, consumer, SDoH). The company offers end-to-end healthcare interoperability consulting, architecture, design, implementation and support. Thousands of specialists and consultants carry necessary certifications to deliver integrations.

**Focus on healthcare data:** NTT DATA offers Digital Accelerator (Nucleus for Healthcare) with the Digital Health Platform (DHP), Business Insight Engine (BIE) and MCM/Care Pro (payment integrity) to provide a wide range of integration, interoperability and data services to payer and provider healthcare clients.

**Interoperability layer extends beyond traditional integration:** An interoperability layer allows disparate applications to access a common set of patient data shared by multiple disparate applications. The layer extends to the visualization layer, providing a common set of tools for members, patients, clinicians and administrators.

## Caution

U.S. healthcare clients and prospects should request and speak with current NTT DATA client references to best understand what fits their specific and future requirements, as well as the effects of the recent consolidation.

# Value-based Care Services and Solutions

## Who Should Read This

This quadrant report is relevant to healthcare payer and provider enterprises in the U.S. for evaluating providers of healthcare value-based care services and solutions.

In this quadrant, ISG highlights the current market positioning of providers that offer value-based services and solutions to healthcare payers and providers in the U.S. and shows how each service provider addresses the key challenges faced in the country.

The objective of value-based care is to focus on better outcomes and reduced costs, while amplifying the overall experience of a patient. Payers can align values with reimbursement, and providers can deliver high-quality care to patients. The objective is to ensure high-quality treatment is delivered and fees are paid for the value of treatment rather than volume.

Healthcare organizations face numerous challenges when they adopt value-based care systems, including changes in policies and regulations, coordinating care across departments, reliance on legacy systems, a lack of resources, low data interoperability and financial risks. Service providers need to address these challenges and offer a continuum of care, enhance patient experience, align cost and value, analyze outcomes and reduce readmissions. At the same time, healthcare payers and providers seek trustworthy and committed partners that can address challenges and provide a roadmap for value-based care services and solutions.

**Business professionals** should read this report to understand the relative positioning and capabilities of providers and thus effectively plan and select appropriate digital services and solutions. The report also shows how the technical and integration capabilities of a service provider are compared to the rest of the market.

**Digital professionals** should read this report to develop a better understanding of the current landscape of service providers' digital transformation offerings and understand how each of the providers have leveraged the latest technologies to meet healthcare providers' needs in the U.S market.
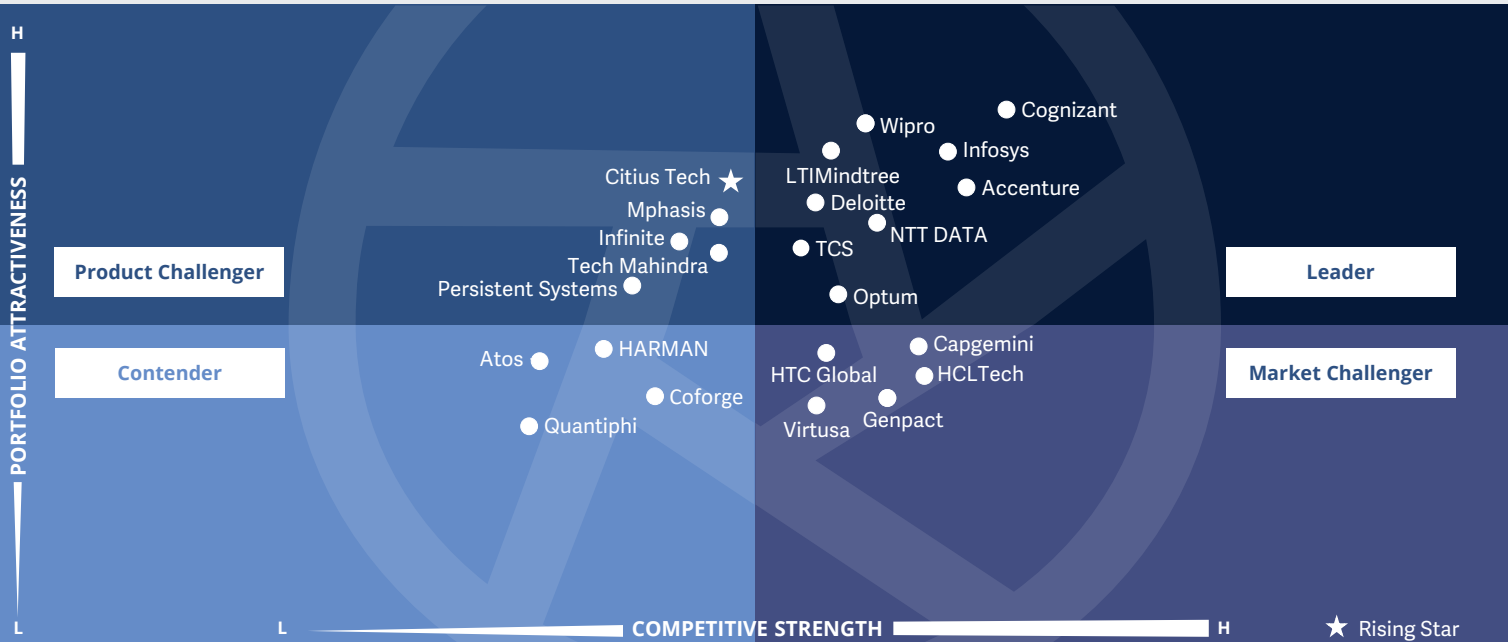
**Technology professionals** should read this report to understand how providers of healthcare digital transformation services fit in their digital transformation initiatives and how they are compared with one another.

**Cybersecurity professionals** should read this report to understand how service providers address the significant challenges of compliance and security, without compromising on patient privacy and experience.

**ISG** Provider Lens™

Healthcare Digital Services
Value-based Care Services and Solutions

U.S. 2022

**H**

PORTFOLIO ATTRACTIVENESS

**Product Challenger**

**Contender**

**L**

Citius Tech ★

Mphasis

Infinite

Tech Mahindra

Persistent Systems

Atos ● HARMAN

Coforge

Quantiphi

Wipro

LTIMindtree

Deloitte

TCS

NTT DATA

Optum

Cognizant

Infosys

Accenture

Capgemini

HTC Global

HCLTech

Virtusa

Genpact

**Leader**

**Market Challenger**

**L**                    **COMPETITIVE STRENGTH**                    **H**

★ Rising Star

This quadrant assesses **service providers that offer value-based care (VBC)** services and solutions to payers and providers in the U.S. market. Value-based healthcare **improves quality and outcomes** of the healthcare system, for both payers and providers.

*Ron Exler*

## Definition

The rapid changes in healthcare, propelled by the pandemic, highlight the need for healthcare providers to focus more on value-based care. During the pandemic, many payers transformed their associations with providers into more economically balanced, value-based care contracts. For patients, exposure to telemedicine prompted a shift in the way they chose to interact with their healthcare providers and the way they evaluated the value of in-person visits. Consequently, patients are adapting the way they relate with their healthcare providers. Telehealth and in-person care are not the same, but the latter is increasingly being swapped with the former, compared to the time before the pandemic.

This category includes service providers that offer a range of services to support payers or providers seeking to build or extend value-based care (VBC) services. VBC is a healthcare model focused on patient outcomes, in contrast to the more common fee-for-service models. In the U.S., Medicare and other plans are starting to use VBC. Because this model is different, processes and systems must be changed to accommodate the new model. Service providers that participate in this quadrant help healthcare companies measure patient outcomes, share appropriate data between payers/providers and patients, and create new contract models. They also need to advise clients on how to reduce the downsides of VBC and potential unintended consequences so that all involved can experience the benefits.

### Eligibility Criteria

1. Ability to **guide clients in contract modifications** that address financial incentives and payment reconciliation

2. Knowledge of **outcome measurements and systems** to manage and communicate them

3. Ability to **define and manage the necessary data** needed to achieve VBC objectives

4. Experience in setting up **performance management benchmarks** and continuous improvements

5. Ability to understand how to apply **population health analytics and social determinants of health** to inform care plans

6. Ability to advise on and support needed **modifications of utilization and case management** processes and systems

7. Experience in **setting up and managing digital infrastructure** and processes

## Value-based Care Services and Solutions

**Observations**

With the growing demand for quality-based services, backed by regulatory pressure and an evolving technological landscape, there will be a shift in the healthcare service landscape. The objective of VBC services is to reduce the spending on healthcare and improve the quality of outcomes by reforming the care model and reshaping payment systems.

VBC providers include a variety of features in their solutions to ensure quality care around a variety of medical conditions. They also measure outcomes for every patient, aligning reimbursements with value; integrating systems; and infusing them with intelligence, allowing payer and provider convergence and using IT systems designed to support the entire ecosystem. Providers are investing heavily in VBC solutions, through partnerships, mergers and acquisitions. Furthermore,

they heavily focus on integrated platforms, data-driven intelligence, talent upskilling and retention, and personalized solutions and services.

As the U.S. healthcare system increasingly focuses on VBC and the demand for personalized engagement rises, service providers will invest more heavily in VBC solutions.

From the 28 companies assessed for this study, 23 have qualified for this quadrant, with 9 being Leaders and one Rising Star.

### accenture

**Accenture** continues to focus on VBC services and solutions. The company focuses on how intelligent insights can improve the outcomes of payers, providers and clinicians in healthcare. Accenture is also investing in partnerships to expand its expertise in digital health.

### cognizant

**Cognizant's** VBC solution offers payers and providers key insights into the patient journey to drive overall quality improvements and reduce costs. The solution enables faster care gap closure, increased operational efficiencies, better patient outcomes and improved quality of care.

### Deloitte

**Deloitte** has extensive experience in delivering holistic VBC solutions for providers, payers and the government sector. Deloitte serves all the largest U.S. healthcare systems, over 500 of the country's health systems, and 75 percent of the largest managed care organizations. Deloitte offers a broad set of capabilities required to be successful in VBC transformation, supported by several tools and accelerators.

### Infosys

**Infosys** focuses on integrated care, leveraging its data integration platform. The platform tracks patients' journeys and ensures proper care is delivered. A special payer service ensures that payment systems are reformed and reimbursement is aligned with value.

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## Value-based Care Services and Solutions

**LTIMindtree**

**LTIMindtree** will establish a comprehensive portfolio of VBC services. The company offers a complete ecosystem of talent, infrastructure and services to enhance payer, provider and clinician experiences.

**NTT DATA**

**NTT DATA** incorporates core technologies into its value-added services such as AI, analytics, data integration and automation. Adapting these technologies reduces the complexity of decision-making and care delivery.

**Optum**

**Optum** focuses on data-driven decision-making. Optum provides a scalable and sustainable VBC solution that addresses challenges.

**TCS**

**TCS** invests in innovative solutions to keep up with evolving market demands and clients' expectations. TCS focuses on midsize and large companies and delivers services that elevate user experiences.

**wipro**

**Wipro** focuses on providing a personalized experience for customers. The company is investing in partnerships to reduce technical and operational challenges to deliver outcome-based services.

**CitiusTech**

**CitiusTech** (Rising Star) deeply understands the evolving demands and trends in the VBC spectrum. The company continues to invest in technologies and partnerships to enhance VBC delivery.

# NTT DATA

"NTT DATA's data analytics and skilled workforce create value and drive actionable insights."

*Ron Exler*

## Overview

NTT DATA is headquartered in Tokyo and operates in more than 55 countries. It has over 140,000 employees across 208 global offices. In FY22, NTT DATA was combined with NTT Ltd., under the name NTT DATA Inc.,with total revenue exceeding $30 billion. NTT DATA reduces non-value activities of payers and providers and integrates value-based care transformation levers for better outcomes across the healthcare ecosystem.

## Strengths

**Data-driven intelligence:** NTT DATA helps businesses grow beyond traditional business models by leveraging data and intelligent insights. Its advanced intelligence and analytics solutions enable clients to build a comprehensive strategy to manage the evolving healthcare business needs. The company also helps reduce the complexities of the decision-making process and deliver quality outcomes to users. It continues to develop and enhance its proprietary solutions, Medical Cost Management/Payment Integrity and Care Pro.

**Upskilling:** NTT DATA focuses on bridging the gap between growing employee skillsets and post-pandemic technology disruption in the healthcare industry. It automates the learning process, accelerates the scope of learning and builds rewarding and productive workforces.

**Conversational AI:** An enterprise-level conversational AI solution eliminates manual tasks and improves quality. It can reduce operational costs, gather analytical information and offer best-in-class user experiences. The objective is to support healthcare organizations in improving performance and managing outcomes.

## Caution

It is imperative for NTT DATA to pay more attention to client retention and competitive strengths in the VBC market, which is growing exponentially, as the demand for quality healthcare increases.

# Appendix

## Methodology & Team

The ISG Provider Lens™ 2022 – Healthcare Digital Services analyzes the relevant software vendors/service providers in the U.S. market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

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The research and analysis presented in this report includes research from the ISG Provider Lens program, ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of November 2022, for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars ($US) unless noted.

The study was divided into the following steps:

1. Definition of Healthcare Digital Services market

2. Use of questionnaire-based surveys of service providers/ vendor across all trend topics

3. Interactive discussions with service providers/vendors on capabilities & use cases

4. Leverage ISG's internal databases & advisor knowledge & experience (wherever applicable)

5. Use of Star of Excellence CX-Data

6. Detailed analysis & evaluation of services & service documentation based on the facts & figures received from providers & other sources.

7. Use of the following key evaluation criteria:
   * Strategy & vision
   * Tech Innovation
   * Brand awareness and presence in the market
   * Sales and partner landscape
   * Breadth and depth of portfolio of services offered
   * CX and Recommendation

*Lead Author*

### Ron Exler
**Director and Principal Analyst**

Ron Exler is a principal analyst with the ISG Provider Lens (IPL) service, a part of ISG Research, leading IPL studies including Internet of Things (IoT) and Healthcare Digital Services. Ron has led product management at enterprise software companies, run enterprise research advisory services, and advised, built and deployed innovative technology inside large enterprises.

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*Research Analyst and Author, VBC*

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Sneha Jayanth is a senior research analyst at ISG. She supports and co-authors Provider Lens™ studies on contact center, healthcare digital services, healthcare platform studies and procurement services and platforms.

She also provides enterprise perspectives and contributes to global summary reports. For ISG clients, Sneha offers expertise in technology, business and market research. She previously worked with a research firm specializing in IoT, cloud,

AI and analytics, delivering market intelligence and authoring reports. In various consulting projects, Sneha conducted market research, analyzed data, and collaborated with internal stakeholders to provide deep market insights to the clients.

IPL Product Owner

## Jan Erik Aase
**Partner and Global Head – ISG Provider Lens™**

Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry. Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor.

Now as a research director, principal analyst and global head of ISG Provider Lens™, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.

## ISG Provider Lens™

The ISG Provider Lens™ Quadrant research series is the only service provider evaluation of its kind to combine empirical, data-driven research and market analysis with the real-world experience and observations of ISG's global advisory team. Enterprises will find a wealth of detailed data and market analysis to help guide their selection of appropriate sourcing partners, while ISG advisors use the reports to validate their own market knowledge and make recommendations to ISG's enterprise clients. The research currently covers providers offering their services across multiple geographies globally.

For more information about ISG Provider Lens research, please visit this webpage.

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Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,300 digital-ready professionals operating in more than 20 countries— a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data. For more information, visit www.isg-one.com.

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