ISG Provider Lens™

Healthcare Digital Services

U.S. 2020

Quadrant Report

A research report comparing provider strengths, challenges and competitive differentiators

Customized report courtesy of:

NTT DaTa

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About this Report

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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 December 2020 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 lead author for this report is Ron Exler. The editors are Ipshita Sengupta, Ambrosia Sabrina and Sajina B. The research analysts are Ammar Mohammed and Sidhanth Prasad and the data analyst is Bhanwar Chauhan. The quality and consistency advisors are Bob Krohn, James Burke and Tony Mataya.
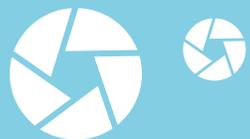
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EXECUTIVE SUMMARY

The global pandemic of COVID-19 unquestionably accelerated the move to digital services in the healthcare industry. However, ISG considers this the acceleration of pre-pandemic activity by healthcare providers and payers to enhance operations, reduce costs and improve engagement with their stakeholders using digital services.

For years, new players have been entering the healthcare markets from the technology solutions business, including hyperscale cloud behemoths such as Amazon, Google and Microsoft. In October 2020, Microsoft released Microsoft Cloud for Healthcare, which includes data models, cross-cloud connectors, workflows, application programming interfaces (APIs) and built-in healthcare-specific components, along with its horizontal cloud apps and services. Salesforce Health Cloud is a popular healthcare customer relationship management (CRM) solution supported by most service providers in this study. At present, health technology stalwarts such as Allscripts, Cerner and Optum are expanding their service offerings, posing a competitive threat to traditional IT service providers.

The service providers in this industry are ready for a change not only because of new entrants and the shift to digital and cloud but also because of contract expiration. According to ISG Research, between 2021 and 2023, a total of 384 IT outsourcing (ITO) deals are expected to expire in the healthcare industry in North America. Application development and management (ADM) and infrastructure, as well as pure ADM services, account for about 74 percent of the total expiring deals by total contract value. As healthcare companies in the U.S. seek to control costs and change with the market, digital transformation is growing, along with business process as a service (BPaaS).

Interoperability remains a challenge for the industry, resulting in inadequate data sharing, especially between payers and providers. The Fast Healthcare Interoperability Resources (FHIR) standard was developed to exchange health information. In December, the U.S. Centers for Medicare and Medicaid Services (CMS) issued a proposed rule to require Medicaid, Children's Health Insurance Program (CHIP) and Qualified Health Plan (QHP) programs to build HL7 FHIR-based APIs to support data exchange and prior authorization. The rule also includes a proposed API standard for healthcare operations nationwide. The 21st Century Cures Act: Information Blocking, Interoperability, and the Office of the National Coordinator for Health Information Technology (ONC) Health IT Certification Program Final Rule (ONC Cures Act Final Rule) requires health IT developers to comply with a set of certifications, APIs and other data access improvements. In April, also to address interoperability Google Cloud rolled out the general availability of Cloud Healthcare API, a tool to make it easier for health systems and providers to connect data across different sources and share that data with patients. In December, Amazon Web Services (AWS) launched HealthLake for storage and analysis of data, automatically structured into the FHIR standard. All the service providers in this study embrace the FHIR standard in their digital transformation programs.

Automation is key to digital services as healthcare enterprises gradually adopt robotic process automation (RPA) and artificial intelligence (AI) technologies to improve specific processes, including claims processing, medical diagnosis and patient care management. With the ongoing COVID-19 pandemic, there is an increased adoption of telemedicine systems as doctors must overcome lockdowns and reduce in-person exposure risks to

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treat their patients. Healthcare providers are deploying connected healthcare monitoring devices at an explosive rate: According to the Consumer Technology Association, the U.S. shipment revenue rose by 73 percent in 2020 and is forecast to reach US$1.2 billion by 2024. Security is an essential component of a digital services ecosystem for employee productivity and patient record protection. In addition, ride-hailing platform companies are joining with their own services. Lyft Healthcare already provides non-emergency medical transportation (NEMT) services in the U.S., and it recently partnered with Anthem, JPMorgan Chase, United Way and others to get people in underserved communities to COVID-19 vaccination sites.

The COVID-19 pandemic will continue to influence the behavior of U.S. policymakers, citizens and companies in the healthcare ecosystem in 2021 as they take a fresh look at the business of healthcare management in the war against this disease that is dragging onward. In early January 2021, the U.S. Department of Health and Human Services (HHS) renewed the declaration of the public health emergency from the COVID-19 pandemic, extending key waivers for regulations on services such as telehealth until April. Recent executive actions from the new presidential administration to help quell the pandemic include commitments to government assistance in prevention, care and treatments for COVID-19 and to the supply chain and worker health. In the next few years, the healthcare industry services for all aspects of care will look radically different. Governmental and intergovernmental agencies are building new frameworks for disease response and data sharing. Public and private alliances and collaborations are emerging and will be mandated soon. Regulations, spending priorities and the current resiliency posture of healthcare

ecosystems will determine the "new future" for healthcare payers and providers. It is against this backdrop that digital services will be central to positive outcomes in health and the health business.

Payer Digital Transformation Services

According to the U.S. Census Bureau, the percentage of people with health insurance coverage for all or part of 2019 (the most recent year studied) was 92 percent, and private health insurance continued to be more prevalent than public, covering 68 percent and 34 percent of the population, respectively. However, the insured are dissatisfied with their health insurance companies. The American Customer Satisfaction Index (ACSI) shows that Americans were less satisfied with their health insurance in 2020, and the discontent is permeating nearly the entire industry. Member satisfaction weakened by 2.7 percent to an ACSI score of 72, bringing the industry to its lowest point since 2016. Claims are becoming harder to submit and processing is taking longer. However, the U.S. payers seek to remedy these issues, and digital transformation helps them meet member service requirements, changing regulations and competitive pressures. Payers measure the success of technology investments based on business outcomes, so finance and other business leaders − not IT − often drive digital transformation.

Payers are using RPA to automate mundane back-end business processes such as price estimates using predefined rules, documentation of insurance contracts, claims notification and verification processes across their value chain. Many payers apply AI in the back office by combining multiple data sources to interpret clinical data to improve services. Healthcare

payers require a frictionless flow of information between sales and service channels. By leveraging automation, payers can significantly lower costs, enable faster decision-making and focus on product and service innovations. More advanced technologies such as blockchain are rarely used, despite use cases such as sharing patient data records.

Accenture, Cognizant, HCL, IBM, Infosys, NTT DATA, Optum, TCS, UST and Wipro are identified as leaders, while EXL and Genpact are the Rising Stars.

Provider Digital Transformation Services

Healthcare providers are in crisis. In the U.S., the COVID-19 pandemic has overloaded hospitals, stalled elective procedures and reduced productivity, with many professionals are unable to do their jobs, all of which has erased profits. The ACSI measures patient satisfaction with hospitals (including inpatient, outpatient and emergency room services) as well as ambulatory care (office visits to doctors, dentists, optometrists and mental health professionals). Following a sharp drop last year of more than 5 percent, patient satisfaction with hospitals fell to the lowest level in nearly two decades. For ambulatory care, patient satisfaction retreated for the first time in five years, dropping to an all-time low.

In response, healthcare providers are changing from a fee-for-service to a value-based care (VBC) delivery model, as patients are increasingly expecting personalized and cost-effective care. Digital services are facilitating greater value at reduced cost with minimal touch interactions. In addition, VBC is shifting the healthcare paradigm from "disease care" to "health outcomes." The service providers in this study embrace VBC and help their

clients move toward it through digital transformation. Investments in cloud solutions to help enable digital services are driven in part by the need for greater agility in the time of a pandemic, coupled with the growing expectation for transparency through easily accessible portals and mobile solutions.

Healthcare providers are increasingly introducing wearables and other sensors to monitor patient health and influence the course and choices of patient care. Digital channels that are centered around the patient can dramatically influence wellness, facilitate the capture of data to improve efficacy of treatments and feed other applications to monitor and better manage diseases.

Accenture, Cognizant, Genpact, IBM, NTT DATA, UST and Wipro are identified as leaders, while Conduent is a Rising Star.

Payer Business Process As A Service

Automating business processes is critical to payers seeking to reduce costs and streamline services. Business process as a service (BPaaS) reduces TCO by breaking silos and optimizing costs. It also helps payers modernize their operations and accelerate their transition to a VBC model. Operational flexibility is another benefit that is considered important in pandemic and post-pandemic times. Cloud infrastructure supports modernization of payer infrastructure as well as movement to enterprise agility, which will help the service providers in this study that excel in BPaaS to offer strong cloud migration services.

Accenture, Cognizant, HCL, IBM, Infosys, NTT DATA, Optum, TCS, UST and Wipro are identified as leaders, while EXL and Genpact are identified as Rising Stars.

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Introduction

Simplified Illustration

Healthcare Digital Services 2020		
Payer Digital Transformation Services	Provider Digital Transformation Services	Payer Business Process As A Service

Source: ISG 2020

Definition

The healthcare and life sciences industries are, more than ever, under pressure to change. The COVID-19 pandemic and public demand for more effective outcomes are mandating the acceleration of actions needed to better meet care lifecycle requirements and build patient-centric business models. All segments of the industry are being compelled to comply with new regulations, integrate waves of competitive mergers and acquisitions and adapt to the needs of the aging population. However, blockbuster mergers have precipitated costly integration efforts. Also, consumers expect advanced and convenient digital service delivery. At the same time, many companies are struggling to keep pace with growing demands for their services and increasing competitive pressures.

Definition (cont.)

Scope of the Report

Digital transformation helps address many of the current and anticipated industry challenges. In the U.S. healthcare industry, digital transformation services help payer and provider segments evolve to better serve their constituents. As payers shift the focus of their purchase decisions to business outcomes, finance and other business leaders are driving digital transformation. While some enterprises do it themselves, others use BPaaS solutions. This report covers Healthcare Digital Services in the U.S. across three quadrants, shown below. A second report covers Healthcare Digital Services in Germany and a third covers Life Sciences Digital Services globally.

Provider Classifications

The provider position reflects the suitability of IT 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 US$20 million and US$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 US$1 billion, with activities worldwide and globally distributed decision-making structures.

Provider Classifications

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product & Market Challenger and Contender), and the providers are positioned accordingly.

Leader

The Leaders among the vendors/ providers have a highly attractive product and service offering and a very strong market and competitive position; they fulfill all requirements for successful market cultivation. They can be regarded as opinion leaders, providing strategic impulses to the market. They also ensure innovative strength and stability.

Product Challenger

The Product Challengers offer a product and service portfolio that provides an above-average cover¬age of corporate requirements, but are not able to provide the same resources and strengths as the Leaders regarding the individual market cultivation categories. Often, this is due to the respective vendor's size or weak footprint within the respective target segment.

Market Challenger

Market Challengers are also very competitive, but there is still significant portfolio potential and they clearly fall behind the Leaders. Often, the Market Challengers are established vendors that are somewhat slow to address new trends due to their size and company structure, and therefore have some potential to optimize their portfolio and increase their attractiveness.

Contender

Contenders still lack mature products and services or sufficient depth and breadth in their offering, but also show some strengths and improvement potential in their market cultivation efforts. These vendors are often generalists or niche players.

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Provider Classifications (cont.)

Each ISG Provider Lens™ quadrant may include a service provider(s) which ISG believes has 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).

Rising Star

Companies that receive the Rising Star award have a promising portfolio 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. This award is only given to vendors or service providers that have made significant progress toward their goals in the last 12 months and are expected to reach the Leader quadrant within the next 12-24 months due to their above-average impact and strength for innovation.

Not In

The service provider or vendor was not included in this quadrant. There might be one or several reasons why this designation is applied: 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 qualify due to market share, revenue, delivery capacity, number of customers or other metrics of scale to be directly compared with other providers in the quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer this service or solution, or confer any other meaning.

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8

Healthcare Digital Services - Quadrant Provider Listing 1 of 2

	Payer Digital Transformation Services	Provider Digital Transformation Services	Payer Business Process as a Service
Accenture	● Leader	● Leader	● Leader
Allscripts	● Not in	● Product Challenger	● Not in
Atos	● Product Challenger	● Leader	● Not in
Birlasoft	● Not in	● Contender	● Not in
Cerner	● Not in	● Leader	● Not in
CGI	● Contender	● Not in	● Not in
Cognizant	● Leader	● Leader	● Leader
Conduent	● Contender	● Not in	● Rising Star
Deloitte	● Contender	● Market Challenger	● Not in
DXC	● Product Challenger	● Product Challenger	● Not in
emids	● Product Challenger	● Product Challenger	● Not in
EPAM	● Product Challenger	● Product Challenger	● Not in
EXL	● Rising Star	● Product Challenger	● Not in
Firstsource Healthcare	● Not in	● Not in	● Product Challenger
Genpact	● Rising Star	● Contender	● Leader
HCL	● Leader	● Leader	● Not in

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Healthcare Digital Services - Quadrant Provider Listing 2 of 2

	Payer Digital Transformation Services	Provider Digital Transformation Services	Payer Business Process as a Service
Hexaware	● Product Challenger	● Product Challenger	● Not in
IBM	● Leader	● Leader	● Not in
Infosys	● Leader	● Not in	● Contender
Leidos	● Not in	● Contender	● Not in
LTI	● Product Challenger	● Not in	● Not in
Mphasis	● Product Challenger	● Contender	● Product Challenger
NTT DATA	● Leader	● Leader	● Leader
Optum	● Leader	● Leader	● Product Challenger
Persistent	● Product Challenger	● Rising Star	● Not in
Sutherland	● Contender	● Contender	● Not in
TCS	● Leader	● Market Challenger	● Market Challenger
Tech Mahindra	● Product Challenger	● Product Challenger	● Contender
UST	● Leader	● Rising Star	● Leader
Virtusa	● Contender	● Not in	● Not in
Wipro	● Leader	● Leader	● Leader

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10

Healthcare Digital Services Quadrants

ENTERPRISE CONTEXT

Payers Digital Transformation Services

This report is relevant to healthcare payer enterprises across the U.S. for evaluating providers offering digital transformation services such as back-office automation services and clinical data management services to healthcare payer enterprises.

In this quadrant report, ISG highlights the current market positioning of service providers that offer digital transformation services to healthcare payer enterprises in the U.S. and how each provider addresses the key challenges faced in the region.

It is widely known that healthcare lags other industries in the adoption of digital technology, mainly due to legacy practices, regulatory obstacles and privacy requirements. However, the pandemic brought on by the COVID-19 outbreak has forced healthcare payers and regulators to develop interim solutions that facilitate a swifter adoption of digital technologies.

Compared with other industries, healthcare payers often have less control over factors that are fundamental to their operations and profitability. Frequent regulatory changes, peaks and valleys in claims volume and healthcare innovations all have a significant influence on the industry. In the face of these challenges, health insurers are constantly on the lookout for areas where they can optimize. Digital technologies such as robotic process automation (RPA) and artificial intelligence (AI) have opened a wide range of opportunities for payers to achieve unprecedented gains in efficiency while improving customer engagement. Applying

intelligent automation to claims processing is one of the strongest levers that payers can pull to achieve unprecedented levels of operational efficiencies and drive down costs.

In the U.S., some providers offering digital transformation services to healthcare payers also offer provider digital transformation services and payer business process as a service (BPaaS). Enterprises are looking for trustworthy and committed partners that can address the challenges and provide a roadmap for setting up an optimal IT infrastructure.

Healthcare payers and IT and technology leaders should read this report to understand the relative positioning and capabilities of providers and thus effectively plan and select the appropriate digital services and solutions. The report also shows how the technical and integration capabilities of a service provider compare with the rest in the market.

Digital transformation professionals should read this report to understand how providers of healthcare digital transformation services fit their digital transformation initiatives and how they compare with one another.

Government, procurement and vendor management professionals should read this report to develop a better understanding of the current landscape of service providers offering digital transformation for healthcare payers in the U.S.

Security leaders should read this report to see how service providers address the significant challenges of compliance and security without compromising patient privacy and experience.

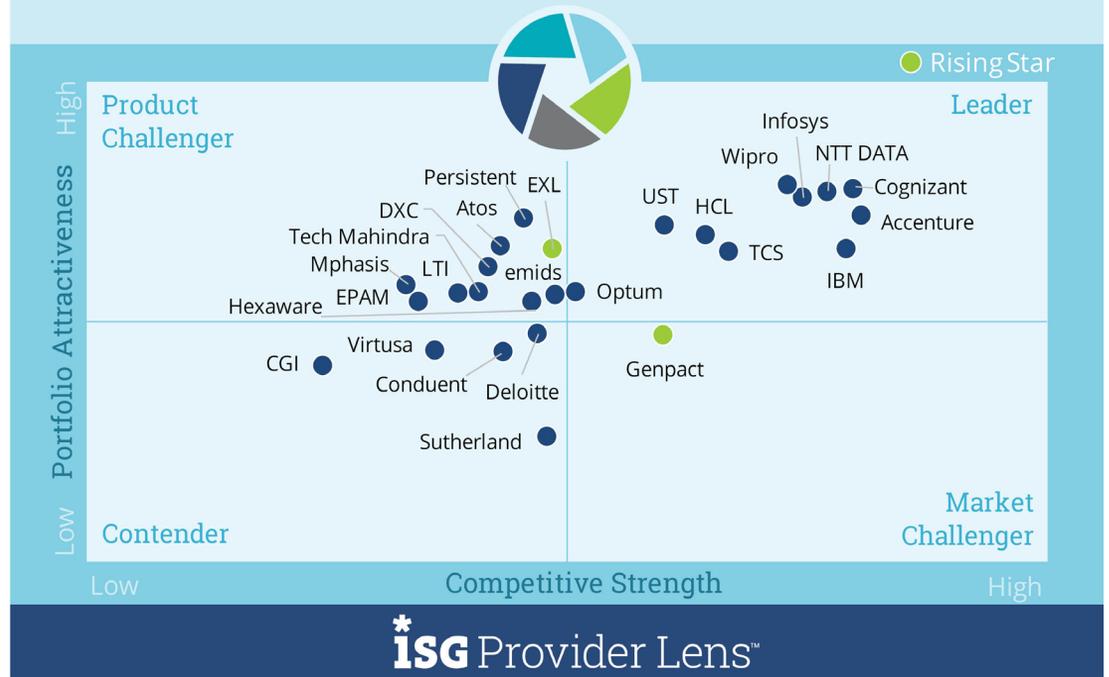**ISG** Provider Lens™

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12

PAYER DIGITAL TRANSFORMATION SERVICES

Definition

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. and statuary health insurance companies in Germany. Digital transformation services help payers progressively prioritize a digital-first pathway to improve patient care. The services should help these insurance companies reach and serve their members wherever they are, via computers, remote monitors, smartphones and other mobile devices. The services should also address payers' operational processes, such as claims processing, member verification and enrollment. Service modernization capabilities should also be clear.

Healthcare Digital Services
Payer Digital Transformation Services

2020
U.S.

Product Challenger — Leader — Contender — Market Challenger

Rising Star

Providers plotted: Persistent, EXL, DXC, Atos, Tech Mahindra, Mphasis, LTI, emids, Hexaware, EPAM, Virtusa, CGI, Conduent, Deloitte, Sutherland, Optum, Genpact, UST, HCL, TCS, IBM, Infosys, Wipro, NTT DATA, Cognizant, Accenture

Portfolio Attractiveness (High / Low) vs. Competitive Strength (Low / High)

Source: ISG Research 2020

PAYER DIGITAL TRANSFORMATION SERVICES

Eligibility Criteria

- Platform consulting for the use of the right emerging healthcare technologies, with the ability to plan, develop and implement consumer-grade interfaces of employee systems and member information sources, including mobile apps

- Established or emerging basic/standard relationships with trusted partners, including startup innovators

- Ability to provide services for digitization of processes while navigating regulation complexities

- Ability to provide consultation services on the development of models using AI, machine learning (ML) and analytics

- Experience in large transition projects that include consolidation of merged companies and modernization of systems and applications

Observations

- **Accenture** is one of the largest service providers to U.S. healthcare payers. Accenture has acquired 20 companies with digital heritage, now offered via its Accenture Interactive, Accenture Analytics and Accenture Mobility units and innovation centers in the U.S.

- **Cognizant's** TriZetto suite is a healthcare-specific solution for payers. The firm spent US$1.4 billion in 2020 on acquisitions, including those supporting payer digital transformation, such as purchases of companies with expertise in cloud, configure-price-quote (CPQ) and billing, digital consulting, digital marketing and ServiceNow.

- **HCL** strengthened its digital health offerings with acquisitions, including Actian for data integration and analysis; seven IBM software products for security and digital experience; and Strong-Bridge Envision for digital transformation consulting. It has as clients U.S. regional plans such as the single-state or regional plans in the Blue Cross Blue Shield Association (Blues).

- **IBM** leverages its unmatched market presence, cloud capabilities, R&D and Watson Health to offer service to the U.S. payers.

PAYER DIGITAL TRANSFORMATION SERVICES

Observations (cont.)

- **Infosys** Healthcare Platform (IHP) offers the U.S. payers an AI-first business strategy to support decisions that improve member experience and achieve higher efficiencies.

- **NTT DATA** has honed its U.S. healthcare payer services strategy over several decades. The company includes the former Dell Services and more recent acquisitions in the U.S., which include Cognosante Consulting, a provider of health IT solutions, business process outsourcing services and consulting, as well as Nete, a provider of digital services to the U.S. Department of Health and Human Services.

- **Optum** is a large subsidiary of UnitedHealth Group, the largest healthcare company in the world. The OptumInsight unit will combine with recently acquired Change Healthcare to form a health technology-centric products and services giant.

- **TCS** offers U.S. payers cloud and digital transformation with data analytics as well as operating model transformation services.

- **UST** serves healthcare as a core industry, growing at double-digit rates.

- **Wipro** services the top ten commercial U.S. health plans, three-quarters of the Blues and many individual, Medicare and Medicaid plans. Its portfolio of services goes across the payer value chain, including claims administration, member management, provider management, care management and administration.

- **EXL** (Rising Star) launched the EXL Health brand in 2020 with many healthcare domain experts. EXL claims six of the top ten U.S. healthcare payers as clients.

- **Genpact** (Rising Star) has an alliance with Deloitte that, if it can extend beyond Finance and Accounting, gives payers a reliable combination of expertise in process, domain and digital. Genpact also partners with Plexis for payer administration and claims processing, as well as with AWS, IBM and Microsoft for cloud.

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NTT DATA

Overview

NTT DATA Corp. provides IT services worldwide via 133,000 employees and generated US$21 billion in annual revenues. It is part of the NTT Group, one of the world's largest telecommunications and IT companies and the world's 55th-largest company overall. The U.S. is served via NTT DATA Services, headquartered in Plano, Texas. Healthcare is one of the six focus industries, and NTT DATA has serviced healthcare and life sciences clients for more than 45 years.

Strengths

Patient-centered, technology-enabled services for payers: NTT DATA has six designated focus areas for digital enablement, which include IT optimization, data and intelligence, customer experience, Internet of Things (IoT), intelligent automation and cybersecurity. For claims adjudication, there is an automation toolkit for use across a variety of health plans, platforms and connectivity methods. An intelligent decision toolset reduces configuration efforts for new customer implementations. An enterprise conversational AI platform providers 24x7 omnichannel virtual agent capabilities. Other toolsets help screen, score and coordinate benefits to improve payment integrity and revenue recoveries.

Invests in payer-specific AI innovations: The AI-based Chronic Disease Prediction and Intervention solution helps in the early identification of patients at risk for certain chronic diseases, which may be critical in enabling early and effective prevention. It uses large data sets from multiple payers, providers and pharmaceutical companies. Digital healthcare is a focus of the company's medium-term management plan.

Robust partnership ecosystem: To complete its payer offerings, NTT DATA works with service partners such as Oracle, Cedargate and Dynamic Healthcare, as well as with health tech firms including HealthEdge, Plexis and Simplify Healthcare. NTT DATA integrates its consumerism and digital health platform with the Smile CDR CMS interoperability solution. Larger partners are Salesforce and Oracle for health offerings and Dell Technologies, Microsoft, AWS and GCP for cloud.

Caution

NTT DATA continues to work on improving the branding of its digital transformation services for healthcare payers so that the market understands its differentiators.

2021 ISG Provider Lens™ Leader

NTT DATA offers decades of experience and ongoing presence serving U.S. health plans, with extensive domain expertise and a strong foundation of digital services.

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16

ENTERPRISE CONTEXT

Provider Digital Transformation Services

This report is relevant to healthcare provider enterprises in the U.S. for evaluating suppliers of digital transformation services.

In this quadrant report, ISG highlights the current market positioning of providers that offer digital transformation services to healthcare providers in the U.S. and how each provider addresses the key challenges faced in the region.

Due to the COVID-19 pandemic, there has been a rapid evolution of government regulations, technology innovation and patient expectations. Starting right before the pandemic and expanding into it, healthcare providers have realized that running a medical practice is not just about patient treatment anymore. It is also about enriching the patient experience and driving improved health outcomes.

In the U.S., Population Health Management (PHM) is concerned with people's healthcare needs and offers services accordingly. Enterprises are focusing on technology-based services that leverage data-driven automation, analytics and artificial intelligence (AI) to build virtual assistants and co-create telehealth solutions. With a sense of urgency resulting from the pandemic, they are also looking for digital transformation services related to smart healthcare diagnosis, back-end operations, augmented reality (AR) and virtual reality (VR) to make timely and informed decisions.

Healthcare providers seek trustworthy and committed partners that can address the challenges and provide a roadmap for digital services.

Healthcare professionals and IT and technology leaders should read this report to understand the relative positioning and capabilities of service providers and thus effectively plan and select the appropriate services and solutions. The report also shows how the technical and integration capabilities of a service provider and its market presence compare with the rest in the market.

Digital transformation professionals should read this report to understand how suppliers of digital transformation services for healthcare providers fit their initiatives and how they compare with one another.

Government, procurement and vendor management professionals should read this report to develop a better understanding of the current landscape of providers offering digital transformation services to healthcare providers in the U.S.

Security leaders should read this report to see how service providers address the significant challenges of compliance and security without compromising the patient experience.

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17

PROVIDER DIGITAL TRANSFORMATION SERVICES

Definition

This quadrant assesses service providers that offer digital transformation services to healthcare providers such as hospital systems and independent healthcare providers. They should be responsible for processes and systems for patient relations and care, such as 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.

Healthcare Digital Services
Provider Digital Transformation Services

2020
U.S.

Source: ISG Research 2020

PROVIDER DIGITAL TRANSFORMATION SERVICES

Eligibility Criteria

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

- Capability to offer guidance on selecting and deploying telehealth solutions, including measures for cybersecurity

- Established or emerging basic/standard relationships with trusted partners, including emerging disruptors with new models of care delivery

- Ability to advise on workforce development, including upskilling to support digital and data privacy protection

- Consulting on the development of models using AI and analytics for screening, diagnostics and treatment

- Platform consulting for the use of the right emerging healthcare technologies, such as telehealth services, remote patient monitoring (through IoT and wearables), blockchain for data sharing, robotics and electronic prescription services

- Experience in large transition projects that include consolidation of merged companies and modernization of systems and applications

PROVIDER DIGITAL TRANSFORMATION SERVICES

Observations

- **Accenture** incorporates human-centered design into its healthcare provider services while focusing on privacy and security of patient data.

- **Atos** leads with a digital hospital model based on innovation and science, while enabling decarbonization. In 2020, Atos acquired several small companies in the U.S. that offer technologies and consulting services in various areas, including Salesforce, AI and data science.

- **Cerner** is a healthcare information technology company serving hospitals and health systems. It has been growing its services businesses and is competing now with the traditional service providers.

- **Cognizant** is not only based in the U.S., but its Healthcare and Life Sciences business also has a large presence in the country and contributes 29 percent of company revenues. It spent US$1.1 billion on nine acquisitions in 2020 in data and AI, cloud, digital engineering and the IoT.

- **HCL** acquired Strong-Bridge Envision, a Delaware company that provides digital transformation strategy consulting, digital/Agile program management and organizational change management, as well as Actian for healthcare data integration and analytics. Acquired IBM products enhance HCL's patient experience and digital transformation support.

- **IBM** remains one of the largest and most trusted providers of technologies and services. In response to the pandemic, IBM has set up telemedicine stations for doctors to handle remote diagnosis.

- **NTT DATA**, with partners, established Nucleus for Healthcare, a framework that incorporates best-in-class solutions to help accelerate clients' digital transformation journeys. NTT DATA recently acquired Hashmap, a data engineering firm; Flux7, a cloud consulting firm; and Acorio, a ServiceNow workflow company.

- **Optum** Analytics Managed Services applies experts and the OptumIQ tools and data to helping healthcare providers make informed, data-driven decisions that promote sustainable operations and success. Optum's services to providers will expand with the acquisition of Change Healthcare.

PROVIDER DIGITAL TRANSFORMATION SERVICES

Observations (cont.)

- **Wipro** gives providers a community hub strategy, along with its AssureCare Platform data integration for several devices/protocols, and necessary data security, encryption, compliance and reporting capabilities. It invested in Iora Health, a Boston-based primary care provider network.

- **Persistent** (Rising Star) offers digital front door and other capabilities to U.S. healthcare providers, especially via the Salesforce Health Cloud, to support digital transformations. Persistent is acquiring CAPIOT, which is based in Palo Alto, California, and specializes in enterprise integration with expertise in MuleSoft, Red Hat and TIBCO.

- **UST** (Rising Star) acquired Contineo Health, a New Jersey-based healthcare strategy and technology consulting firm that specializes in electronic medical record (EMR) implementation, optimization, health data reporting, analytics and interoperability. MyDoc is its digital healthcare platform that connects patients, payers and providers to deliver insights from healthcare data and help coordinate care.

NTT DATA

Overview

NTT DATA Corp. provides IT services worldwide, with 133,000 employees. It generates annual revenue of US$21 billion, making it a member of "The Big 15" in the ISG Index. It is part of Japan's NTT Group, the world's 55th-largest company. NTT DATA Services coordinates its U.S. services from Plano, Texas. Healthcare is one of the six focus industries, with 10,000 people dedicated to serving healthcare providers.

Strengths

Digital front door for healthcare: In July, NTT DATA announced a new alliance with Teladoc Health, Enli, VisitPay and R1 RCM to build Nucleus for Healthcare, a framework that incorporates best-in-class solutions to help accelerate clients' digital transformation journeys. Alliance partners enable virtual care, virtual real-time patient scheduling and intake, population health management and patient financial engagement. NTT DATA's cloud-based enterprise AI platform uses predictive analytics, automation and integration capabilities to provide a seamless digital fabric and user experience for the various personas within a health system.

AI in medicine: Image analysis is an area of medicine where AI is making early inroads in significantly improving diagnoses and patient outcomes. NTT DATA's Nucleus for Unified Clinical Architecture offers imaging and analytics collaboration to providers. One of the major partners of NTT Data is MD.ai, an emerging company in imaging research and AI delivery for the clinical imaging space. NTT DATA also collaborates with Google Cloud to develop and deliver solutions with AI, ML and IoT.

COVID-19 response: In addition to helping its clients rapidly move to remote work with healthcare service desk teams, NTT DATA works with Enli's population health management software to deliver COVID-19 patient care coordination. It also developed a mobile, end-to-end solution on the Salesforce platform to test and trace City of Austin residents, first responders and testing site workers.

Caution

Many recent acquisitions and partnerships to expand its business could make NTT DATA look a bit disjointed to healthcare providers.

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NTT DATA is leading and growing in the U.S. with its Nucleus for Healthcare framework, which enables digital transformation for healthcare providers.

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22

ENTERPRISE CONTEXT

Payer Business Process as a Service

This report is relevant to healthcare payers in the U.S. for evaluating service providers of payer business process as a service (BPaaS).

In this quadrant report, ISG highlights the current market positioning of service providers offering payer BPaaS to enterprises in the U.S. and how each service provider addresses the key challenges faced in the region.

As the healthcare market moves toward managing by outcomes, the BPaaS alternative is emerging as an elegant strategic option for payers. The pandemic has exacerbated a situation in which plan members and healthcare providers are accessible to payers and increasingly competent to change. Thus, adopting a BPaaS strategy can lead to stronger results as payers can create efficiencies across the operations landscape. It can support connections and orchestrate data flows, allowing payers to operate their businesses more efficiently and intelligently.

As the BPaaS model continues to evolve, service providers are developing their offerings to meet the growing requirements of healthcare payers and demonstrate agility in transforming the way healthcare is experienced by its constituents — members, providers, brokers/agents and regulators.

Some payer BPaaS providers in the U.S. also offer digital transformation services to payers and other providers. Enterprises are looking for trustworthy and committed partners that can address challenges and provide a roadmap for setting up an optimal IT infrastructure.

Digital transformation, IT and technology professionals should read this report to understand how providers of payer BPaaS fit their digital transformation initiatives, IT architectures and cloud strategies.

Business strategy leaders, through this report, will gain knowledge of providers' product portfolio capabilities, which, in turn, can support the selection of services to enable a streamlined workflow and enhance functionality.

Procurement and vendor management professionals should read this report to develop a better understanding of the current landscape of healthcare service providers in the U.S. for digital transformation. The report also shows how the technical and integration capabilities of a service provider compare with the rest in the market.
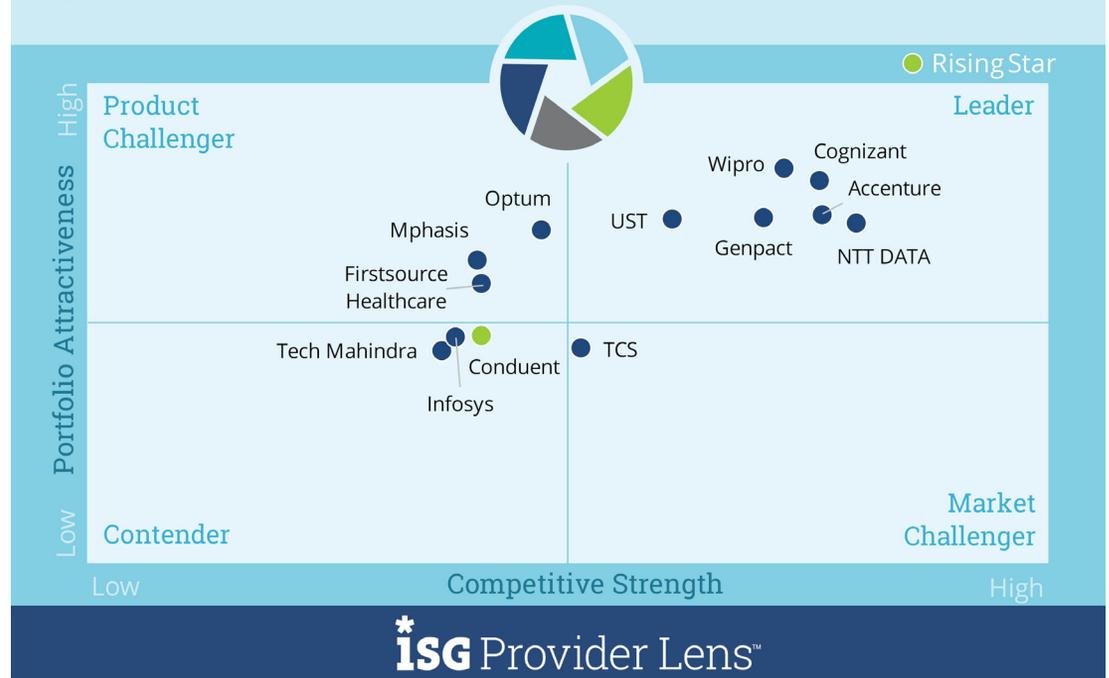
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PAYER BUSINESS PROCESS AS A SERVICE

Definition

This quadrant assesses healthcare payer BPaaS for end-to-end outsourcing of business processes across the technology stack to improve business outcomes. The service provider integrates services, processes, applications and infrastructure into a comprehensive service with a clear objective of cost control. Apart from cost savings, BPaaS also promotes improved member and provider experience, operational insights, improved quality of care and regulatory compliance.

Healthcare Digital Services
Payer Business Process as a Service

2020
U.S.

Source: ISG Research 2020

PAYER BUSINESS PROCESS AS A SERVICE

Eligibility Criteria

- Ability to advise, with focus on outcomes, via member engagement and financial value metrics

- Ability to support any application or platform, including legacy systems

- Established protocols and technologies for integrated security

- Ability to implement appropriate intelligent automation for specific business processes

- Experience implementing and expanding health plan analytics

- Ability to support back-office, middle-office and front-office business processes

- Competencies in integrated governance and performance service management

- Established or emerging partnerships with application providers, platform companies and infrastructure firms

Observations

- **Accenture** offers payer BPaaS via its Intelligent Health BPS for common processes and its Advanced Health Analytics platform. The company also employs thousands of BPS professionals dedicated to healthcare clients.

- **Cognizant** is one of the leading service providers for U.S. healthcare payers with its industry expertise and tools, cloud and digital portfolio. In 2020, it invested US$120 million in R&D of platforms that support its BPaaS solutions.

- **Genpact** serves payers with a strong BPaaS offering that evolved from Genpact's BPO heritage, a growing focus on digital transformation capabilities and deep domain expertise in the health-care ecosystem. To bolster its U.S. operations, in January 2021 it acquired Enquero, a small California-based firm that offers data engineering and data-led digital transformation services.

- **NTT DATA** has a mature and proven offering called Digital BPaaS for Health Plans that instanti-ates contract simplicity, utility consumption, intuitive scope, personalized bundles and flexible consumption units in outcome-based pricing models.

PAYER BUSINESS PROCESS AS A SERVICE

Observations (cont.)

- **UST** Healthcare-in-a-Box combines its capabilities for payer Core Administration Platform Services (CAPS) with partner solutions for member experience, contact center, document interchange, imaging, payment integrity, financial integrity and population health services.

- **Wipro** BPaaS offers management of the entire payer value chain, including enrollment processing, member billing, fulfillment, care management and claims processing. Wipro recently entered a global strategic partnership with Plexis Healthcare Systems for claims and care management technology.

- **Conduent** (Rising Star) has begun to leverage its contact center and customer experience management in the healthcare payer business. It acquired the U.S.-based Health Solutions Plus (HSP) in 2019 to further enhance its core administration processing capabilities in the healthcare industry.

NTT DATA

Overview

NTT DATA Corp. provides IT services worldwide. It has 133,000 employees and generates annual revenue of US$21 billion. It is part of the NTT Group, one of the world's largest telecommunications and IT companies and the world's 55th-largest company. NTT DATA Services is headquartered in Plano, Texas. Healthcare is one of its six focus industries, and NTT DATA has serviced healthcare payer clients for 50 years.

Caution

NTT DATA does not have the name recognition of some competitors in the payer BPaaS market.

Strengths

Market presence: NTT DATA has more than 50 clients for its Digital BPaaS for Health Plans, including national, multistate, state and local plans. Its sweet spot is those with 50,000 – 300,000 members in the Medicare, Medicaid and Medicare Advantage segments and payers with 300,000 or more members in a commercial line of business.

Business outcomes: With a consumer focus, the BPaaS offerings use a high-performance service factory model with a component architecture, and with integration across business process, applications and infrastructure. Its offerings include automation and analytics, hosted through a secure private, public or hybrid cloud or on premises. NTT DATA offers a range of nearshore and offshore options. The company claims contract simplicity, utility consumption, intuitive scope, personalized bundles and flexible consumption units in outcome-based pricing models.

Digital engagement: Member and provider needs are changing with the pandemic, requiring payers to handle more interactions at any time of the day or night. NTT DATA BPaaS offerings include the digital solutions needed to improve engagement with members and providers. NTT DATA is also venturing its BPaaS into areas where the healthcare provider market integrates with the payer market, actively pursuing touchpoints between the healthcare provider and payer to deliver services to one another in a faster, streamlined, cost-effective manner.

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NTT DATA's Digital BPaaS for Health Plans offers a comprehensive yet flexible solution with advanced analytics, intelligent automation services and integrated workflow support.

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Methodology

METHODOLOGY

The research study "ISG Provider Lens™ 2020 – Healthcare Digital Services" analyzes the relevant software vendors/service providers in the global market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology

The study was divided into the following steps

1. Definition of Healthcare Digital Services

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

6. Use of the following key evaluation criteria:
   - Strategy & vision
   - Innovation
   - Brand awareness and presence in the market
   - Sales and partner landscape
   - Breadth and depth of portfolio of services offered
   - Technology advancements

Authors and Editors

Ron Exler, Author
Senior Advisor

Ron Exler is a Director and 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. Ron holds a Master of Science degree in Cartography from the University of Wisconsin as well as a Bachelor of Science degree from Oregon State University. Ron also holds the ISG Digital Xpert certification.

Ammar Mohammed, Enterprise Context and Global Overview Analyst
Senior Analyst

Ammar is a lead analyst with ISG Provider Services. At ISG he works on provider workshops, thought papers and IPL studies focused on the Media, Healthcare and Life Sciences industries. He also tracks and assesses digital transformation trends and the impact of emerging technologies across the Healthcare and Life Sciences verticals. During his tenure, he has developed content for ISG Momentum™ and ISG Provider Lens™ in the areas of Healthcare, Life Sciences and Manufacturing industries. He is responsible for supporting research authors and authoring blogs, enterprise content and the Global Summary report with market trends and insights.

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Authors and Editors

Sidanth Prasad, Enterprise Context and Global Overview Analyst
Research Analyst

Sidhanth Prasad is a research analyst at ISG and is responsible for supporting Provider Lens™ studies on Healthcare and Lifesciences. During his tenure, he has developed content for ISG Provider Lens™ in the areas of Healthcare and Life Sciences. He is responsible for supporting research authors and authoring blogs, enterprise content and the Global Summary report with market trends and insights.

Jan Erik Aase, Editor
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, Partner and Global Head - 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.

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