UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2020

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number: 001-36730

SYNEOS HEALTH, INC.

(Exact name of registrant as specified in its charter)

Delaware	**27-3403111**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1030 Sync Street **Morrisville, North Carolina** (Address of principal executive offices)	**27560-5468** (Zip Code)

Registrant's telephone number, including area code: **(919) 876-9300**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Class A Common Stock, par value $0.01 per share	SYNH	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant, based on the closing sale price of $58.25 on June 30, 2020, was approximately $3,634,037,915.

As of February 11, 2021, there were approximately 104,305,489 shares of the registrant's Class A common stock outstanding.

Portions of the registrant's Proxy Statement for its 2021 Annual Meeting of Stockholders are incorporated by reference into Part III hereof.

SYNEOS HEALTH, INC.
FORM 10-K
For the Fiscal Year Ended December 31, 2020

TABLE OF CONTENTS

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Such forward-looking statements reflect, among other things, our business plans and strategy, market trends, beliefs regarding our competitive strengths, current expectations, future capital expenditures, and anticipated results of operations, all of which are subject to known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements, market trends, or industry results to differ materially from those expressed or implied by such forward-looking statements. Therefore, any statements contained herein that are not statements of historical fact may be forward-looking statements and should be evaluated as such, including our business strategy, the future impact of the COVID-19 pandemic on our business, financial results, and financial condition, and planned capital expenditures. Without limiting the foregoing, the words “anticipates,” “believes,” “can,” “continue,” “could,” “estimates,” “expects,” “intends,” “may,” “might,” “plans,” “projects,” “should,” “would,” “targets,” “will” and the negative thereof and similar words and expressions are intended to identify forward-looking statements. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in Part I, Item 1A, “Risk Factors” in this Annual Report on Form 10-K. Unless legally required, we assume no obligation to update any such forward-looking information to reflect actual results or changes in the factors affecting such forward-looking information.

As used in this report, the terms “Syneos Health, Inc.,” “Company,” “we,” “us,” and “our” mean Syneos Health, Inc. and its subsidiaries unless the context indicates otherwise.

Summary of Principal Risk Factors

We operate in a rapidly changing environment that involves a number of risks, some of which are beyond our control. In evaluating our company, you should consider carefully the summary risks and uncertainties described below together with the other information included in this Annual Report on Form 10-K, including our consolidated financial statements and related notes included in Part II, Item 8, "Financial Statements and Supplementary Data" in this Annual Report on Form 10-K. The occurrence of any of the following risks may materially and adversely affect our business, financial condition, results of operations and future prospects.

- The COVID-19 pandemic has adversely impacted our business and results of operations, and is expected to continue to do so.
- If we do not generate a large number of new business awards, or if new business awards are delayed, terminated, reduced in scope, or fail to go to contract, our business, financial condition, results of operations, or cash flows may be materially adversely affected.
- Our backlog might not be indicative of our future revenues, and we might not realize all of the anticipated future revenue reflected in our backlog.
- If we underprice our contracts, overrun our cost estimates, or fail to receive approval for or experience delays in documentation of change orders, our business, financial condition, results of operations, or cash flows may be materially adversely affected.
- Our business depends on the continued effectiveness and availability of our information systems, including the information systems we use to provide services to our customers and to store employee data, and failures of these systems, including cyber-attacks, may materially limit our operations or have an adverse effect on our reputation.
- We are subject to governmental regulation and legal obligations in the areas of privacy, data, and security. Our actual or perceived failure to comply with such obligations could harm our business.
- Our customer or therapeutic area concentration may have a material adverse effect on our business, financial condition, results of operations or cash flows.
- Our business is subject to international economic, political and other risks, including the United Kingdom’s withdrawal from the European Union, that could have a material adverse effect on our business, financial condition, results of operations, cash flows or reputation.
- Governmental authorities may question our intercompany transfer pricing policies or change their laws in a manner that could increase our effective tax rate or otherwise harm our business.
- If we are unable to successfully increase our market share, our ability to grow our business and execute our growth strategies could be materially adversely affected.
- The operation of our early phase (Phase I and IIA) clinical facilities and the services we provide there as well as our clinical trial management, including direct interaction with clinical trial patients or volunteers, and our in-home clinical trial services, could create potential liability that may adversely affect our business, financial condition, results of operations, cash flows, and reputation.
- If we are unable to attract suitable principal investigators and recruit and enroll patients for clinical trials, our clinical development business might suffer.
- Our business could result in liability to us if a drug causes harm to a patient. While we are generally indemnified and insured against such risks, we may still suffer financial losses.
- Investments in our customers’ businesses or drugs and our related commercial rights strategies could have a negative impact on our financial performance.

- Our acquisition strategy may present additional risks, including the risk that we may be unable to fully realize the competitive and operating synergies projected to be achieved through any specific acquisition.
- Our relationships with existing or potential customers who are in competition with each other may adversely impact the degree to which other customers or potential customers use our services, which may adversely affect our business, financial condition, results of operations, or cash flows.
- We face risks arising from the restructuring of our operations, which could adversely affect our financial condition, results of operations, cash flows, or business reputation.
- We operate in many different jurisdictions and we could be adversely affected by violations of the Foreign Corrupt Practices Act, U.K. Bribery Act of 2010, and/or similar worldwide anti-corruption and anti-bribery laws.
- The failure of third parties to provide us critical support services could adversely affect our business, financial condition, results of operations, cash flows, or reputation.
- The biopharmaceutical services industry is highly competitive and our business could be materially impacted if we do not compete effectively. Outsourcing trends in the biopharmaceutical industry and changes in aggregate spending and research and development budgets could adversely affect our operating results and growth rate.
- Actions by government regulators or customers to limit a prescription's scope or withdraw an approved product from the market could adversely affect our business, results of operations, and financial condition.
- If we fail to comply with federal, state, and foreign healthcare laws, including fraud and abuse laws, we could face substantial penalties and our business, financial condition, results of operations, cash flows, and prospects could be adversely affected.
- We may be affected by healthcare reform and potential additional reforms which may adversely impact the biopharmaceutical industry and reduce the need for our services or negatively impact our profitability.
- Current and proposed laws and regulations regarding the protection of personal data could result in increased risks of liability or increased cost to us or could limit our service offerings.
- Our customers face intense competition from lower cost generic products and other competing products, which may lower the amount that they spend on our services and could have a material adverse effect on our business, results of operations, cash flows, and financial condition.
- Our substantial debt could adversely affect our financial condition and cash flows from operations. Despite our level of indebtedness, we are able to incur more debt and undertake additional obligations. Incurring such debt or undertaking such additional obligations could further exacerbate the risks to our financial condition.
- Interest rate fluctuations or foreign currency exchange rate fluctuations may have a material adverse effect on our business, financial condition, results of operations, or cash flows.
- Our private equity investors have significant influence over our company, and their interests may be different from or conflict with those of our other shareholders.
- Our internal control over financial reporting is required to meet all the standards of Section 404 of Sarbanes-Oxley, and failure to achieve and maintain effective internal controls over financial reporting could have a material adverse effect on our stock price, reputation, business, financial condition, results of operations and cash flows.

PART I

Item 1. Business.

Overview

We are a leading global biopharmaceutical solutions organization providing a full suite of clinical and commercial services to customers in the pharmaceutical, biotechnology, and healthcare industries. We offer both stand-alone and integrated biopharmaceutical product development solutions ranging from Early Phase (Phase I) clinical trials to the full commercialization of biopharmaceutical products, with the goal of increasing the likelihood of regulatory approval and commercial success.

Our operations are divided into two reportable segments, Clinical Solutions and Commercial Solutions. Our Clinical Solutions segment offers a variety of services spanning Phases I to IV of clinical development, including full service global studies, as well as individual service offerings such as clinical monitoring, investigator recruitment, patient recruitment, data management, and study startup to assist customers with their drug development process. Our Commercial Solutions segment provides commercialization services, including deployment solutions, communication solutions (public relations, advertising, and medical communications), and consulting services. We integrate our clinical and commercial capabilities into customized solutions by sharing knowledge, data, and insights through our biopharmaceutical acceleration model (“BAM”). This collaboration across the development and commercialization continuum facilitates unique insights into patient populations, therapeutic environments, product timelines, and the competitive landscape.

Founded more than three decades ago as an academic organization dedicated to central nervous system ("CNS") research, we have translated that expertise into a global organization with deep therapeutic specialties, as well as full data services and regulatory advisory and implementation support capabilities. Over the past decade, we have built our scale and capabilities to become a leading global provider of Phase I to Phase IV clinical development services, as well as a full range of commercialization and other complementary services. We were established as INC Research in 1998, and our corporate headquarters are located in Morrisville, North Carolina. INC Research Holdings, Inc. was incorporated in Delaware in August 2010. We changed our name to Syneos Health, Inc. after our 2017 merger (the “Merger”) with Double Eagle Parent, Inc. (“inVentiv”), the parent company of inVentiv Health, Inc.

COVID-19 Pandemic

On March 11, 2020, the World Health Organization designated the outbreak of the novel strain of coronavirus that causes the disease known as COVID-19 as a global pandemic. Governments and businesses around the world have taken unprecedented actions to mitigate the spread of COVID-19, including, but not limited to, shelter-in-place orders, quarantines, significant restrictions on travel, social distancing practices as well as restrictions that prohibit many employees from going to work.

The COVID-19 pandemic and its adverse effects have impacted the locations where we, our customers, suppliers, and partners conduct significant portions of our business, such as Europe and North America, and, as a result, we experienced pronounced disruptions in our operations during the year ended December 31, 2020, the largest of which occurred during the second and third quarters of 2020.

As a result of these conditions, we took decisive actions to mitigate the revenue, profitability, and cash flow impacts from COVID-19. These actions included cost management strategies consisting of certain temporary compensation adjustments, hiring restrictions, staffing reductions, voluntary and involuntary employee furloughs, reductions in third-party costs, and other initiatives. The majority of the temporary cost savings measures ended in the third quarter of 2020. In addition to these temporary actions, we continued to implement our *ForwardBound* margin enhancement initiative, which is our enterprise-wide effort designed to increase productivity and manage costs.

We are guided by our global and regional crisis team, which monitors the evolving situation and recommends risk mitigation actions related to business continuity and employee health and safety. Throughout the pandemic, we have assessed and implemented continuity plans to provide customers with continued services. We also continue to implement contingency planning to protect the health and well-being of our employees. This includes having employees work remotely where possible, implementing travel restrictions and visitor protocols, and following social distancing practices.

While the potential for further disruption to our business from the pandemic is difficult to predict and depends on factors not in our control, such as the degree of success of vaccinations and other treatments for COVID-19, we began to see a recovery in the latter half of 2020 in both our Clinical Solutions and Commercial Solutions segments and expect this recovery to continue in 2021. As of December 31, 2020, a substantial number of our clinical trial sites have returned to allowing physical monitoring visits, and in 2021, we expect a continued increase in patient enrollment rates and a moderate increase in the use of remote monitoring from pre-COVID-19 levels, although below levels necessitated in 2020. Further, in our Commercial Solutions segment, we expect to continue to see an increase in site access as well as the use of remote field team visits.

While certain governments eased restrictions during the balance of 2020, the pandemic remains disruptive to our business operations. As we look ahead, we continue to expect impacts in our Clinical Solutions segment to be temporary and primarily relate to limitations on our ability to physically access investigative sites, delays in patient enrollment and trial start-up activities, as well as delayed decision making related to new business awards. Our full service studies and, to a lesser extent, our functional service provider offering have been impacted, and we expect them to continue to be impacted, by a switch from site-based monitoring visits to remote monitoring visits, and reduced capacity of businesses that utilize our services or facilities we use to conduct our business during the pandemic. In our Commercial Solutions segment, we continue to expect impacts to be temporary and primarily relate to delayed decision making related to new business awards, delays or cancellations of existing projects, declines in field team visits to healthcare providers (“HCPs”), and travel disruptions.

The extent to which COVID-19 impacts our future results will depend on future developments. National, state, and local governments may impose, and have imposed in certain areas, additional restrictions or may extend the restrictions already in place if the pandemic continues or if new waves of infection occur. The continuing spread of COVID-19 and the related safety and business operating restrictions could result in a number of adverse impacts to our business, including, but not limited to, additional disruption to the economy and our customers, additional work restrictions, and supply chains being interrupted or slowed. Also, governments may impose other laws, policies, regulations, or taxes that could adversely impact our business, financial condition, or results of operations. Depending on the extent to which our customers continue to be affected, they could further delay or reduce purchases of services we provide. The effects of COVID-19 also could impact us in a number of other ways including, but not limited to, additional reductions to our profitability, fluctuations in foreign currency markets, the availability of future borrowings, the cost of borrowings, credit risks of our customers and counterparties, and potential impairment of the carrying amount of goodwill or other long-lived assets.

Despite these impacts, we remain confident in our liquidity position, which includes cash on hand of $272.2 million as of December 31, 2020, and access to our revolving credit facility. We have also implemented cash conservation initiatives, including reducing operating costs, deferring certain payroll taxes and other tax payments during the year ended December 31, 2020, as permitted by various government stimulus packages in multiple jurisdictions, and entering into interest rate swaps to fix certain variable rate debt at lower interest rates.

See Part I, Item 1A, “Risk Factors” in this Annual Report on Form 10-K for further discussion of the potential impact of the pandemic on our business.

Our Market

The market for our solutions is primarily the biopharmaceutical industry that utilizes outsourced clinical drug and medical device development and commercialization services. We believe we are well-positioned to benefit from the following market trends:

Trends in clinical drug and medical device development. Biopharmaceutical companies continue to prioritize the outsourcing of Phase I to Phase IV clinical trials, particularly in complex, high-growth therapeutic areas such as oncology. Additionally, small and mid-sized biopharmaceutical companies typically have limited infrastructure and resources, making them more likely to outsource their clinical development to contract research organizations ("CROs"). With increased funding, emerging biotechnology companies, which typically lack resources and infrastructure to conduct clinical trials, are a high growth segment for the CRO market. Within the overall Phase I to Phase IV clinical trial market, the Phase IV/post-approval/Real World Evidence sub-market represents an increasing area of spending. These pharmaceutical industry trends are increasing demand for outsourced research and development services from CROs. According to industry estimates, funding to the biotechnology sector has shown no signs of slowing down, remaining near all-time record highs.

We estimate that, based on industry sources and management estimates, the market for CRO services for Phase I to Phase IV clinical development activities will grow at a compound average annual rate of 7% to 8% through 2023, driven by a combination of increased development spending and further outsourcing. We estimate the total addressable clinical development market to be approximately $94 billion, of which $46 billion was outsourced to CROs in 2020, including spending related to pass-through costs.

Trends in commercialization outsourcing. We believe that, based on industry sources and management estimates, the market for contract commercial organization ("CCO") services will increase at a compound average growth rate of approximately 4% to 5% per annum through 2023. We believe this potential growth is supported by: (i) significant biopharmaceutical sales and marketing budgets; (ii) a continuing shift toward specialty and more complex therapies requiring more complex and integrated sales and marketing execution; (iii) a robust funding environment, which provides capital to fuel development and commercialization spending, particularly for small to mid-sized companies; (iv) continued political scrutiny of pharmaceutical pricing, which is intensifying pressure for our customers to further reduce fixed costs by outsourcing; and (v) an evolving industry landscape illustrated by a shift to more strategic relationships, particularly where economies of scale can reduce costs.

Increasingly challenging clinical development and commercialization environment. The biopharmaceutical industry is currently facing a number of challenges, including: (i) margin deterioration; (ii) reimbursement and provider access hurdles; (iii) fewer blockbuster and high profitability drugs; (iv) continued pressure from generic brand exposure; and (v) the consolidation of payers, healthcare systems, providers, and pharmacies. These challenges also make it more complicated to engage physicians and patients, making new product launches more difficult. At the same time, the industry is experiencing growing demand for specialty drugs, pressure to improve research and development ("R&D") productivity, the transition of the healthcare industry worldwide from a volume-based to a value-based reimbursement structure, and growing political and pricing pressures. Existing approaches to address these challenges include reducing overhead costs, optimizing the deployment of marketing and field assets, and refocusing product portfolios around therapeutic areas with depth of presence and expanded market access capabilities.

Optimization of biopharmaceutical R&D efficiency. Market forces and healthcare reform, including the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, the 21st Century Cures Act, and other governmental initiatives, place significant pressure on biopharmaceutical companies to improve cost efficiencies. At the same time, the complexity, size, duration, and globalization of clinical trials has increased drug development costs. In an effort to reduce these rising costs, biopharmaceutical companies need to demonstrate a new therapy's relative improvement in quality, safety, and effectiveness compared to the current standard of care as early as possible in the development process. Outsourcing to CROs allows biopharmaceutical companies to deploy capital more efficiently, quickly benefiting from CROs' existing infrastructure and therapeutic expertise without having to continuously scale in-house development resources.

Globalization of clinical trials. Clinical trials have become increasingly global as biopharmaceutical companies seek to accelerate patient recruitment, particularly within protocol-eligible, treatment-naïve patient populations without co-morbidities that could skew clinical outcomes. Biopharmaceutical companies are also increasingly seeking to expand the commercial potential of their products by applying for regulatory approvals in multiple countries, including fast-growing economies that are spending more on healthcare. As part of the biopharmaceutical approval process in newer markets, especially in certain Asian and emerging markets, regulators now often require clinical trials to include specific percentages or numbers of people from local populations, resulting in a combination of multinational and domestic clinical trials.

Management of increasingly complex clinical trials. The biopharmaceutical industry operates in an increasingly sophisticated and highly-regulated environment and has responded to the demands of novel therapeutics by adapting efficient drug development processes. Complex clinical trial design expertise has emerged as a significant competitive advantage for select CROs that have a track record of successfully navigating country-specific regulatory, clinical trial protocol, and patient enrollment barriers, including sometimes subjective, evolving clinical endpoints. In addition, the therapeutic areas where we have significant experience and expertise, including CNS, oncology, and other complex diseases, often require more complicated protocols than other disease indications. Many of these studies have longer durations due to these factors, resulting in demand for greater clinical trial proficiency and expertise in these therapeutic areas, particularly in light of new methods such as the use of biomarkers and gene therapy.

Evolving commercialization outsourcing needs for large versus small to mid-sized biopharmaceutical companies. The needs of large versus small to mid-sized customers are evolving differently based upon their distinct infrastructure and corporate commercialization goals. Large biopharmaceutical companies tend to have robust internal resources and generally are seeking to augment these resources with individual outsourced services on a brand-by-brand basis. Frequently, they are also looking to establish enterprise vendor relationships with volume considerations to support broader cost savings initiatives. Conversely, small to mid-sized biopharmaceutical companies typically have limited product portfolios with fewer internal resources and less commercialization experience. As a result, these companies generally require the full spectrum of commercialization capabilities, what we call full service commercial solutions. Historically, their only viable commercialization option was to enter into licensing agreements or a divestiture, which often meant surrendering a significant portion of an asset's long-term economic value. However, with today's funding environment driving sufficient capital for product launch, we believe these companies are becoming more receptive to commercialization alternatives that allow them to maintain their independence.

Rapid adoption of remote and digital solutions. Accelerated by the COVID-19 pandemic, we have observed a spike in the adoption of remote and digital solutions to facilitate continued healthcare delivery to patients and support to HCPs for our customers' products. Site- and patient-centric solutions that have been on the rise, include risk-based and remote monitoring, home health, and virtual personal and non-personal outreach to medical facilities and clinics. In light of these trends, we have continued to invest in our Decentralized Solutions and Kinetic capabilities, supported by Dynamic Assembly. Decentralized Solutions is designed to speed clinical trial data collection, ease site and patient burden, expand available patient populations, and improve patient diversity. Kinetic is designed to digitally enhance our Commercial Solutions by synchronizing customer engagement across multiple personal and digital channels to provide real-time performance data and intelligence. As adoption of remote and digital solutions increases over the longer term, we believe these capabilities provide an opportunity for improved efficiencies that could help to offset the potential revenue impact from reduced travel and other reimbursable expenses.

Our Competitive Strengths

Our key competitive strengths are:

Differentiated positioning through our full suite of clinical and commercial services. We believe our customers are facing an increasingly complex and evolving market where regulatory approval no longer guarantees a successful product launch. To address this modern market reality, we believe that clinical development and commercial disciplines must work together to accelerate the delivery of differentiated therapies to the market that meet the needs of patients, healthcare professionals, and payers. As the only company with in-house capabilities to provide a full suite of integrated clinical development and commercial solutions, we believe we are well-positioned to successfully navigate this increasingly complex and evolving market for our customers.

Global leadership and experience in biopharmaceutical outsourcing. We believe our scale, global reach, and breadth of services, coupled with our deep industry expertise and experience, are critical to our customers who are seeking to consolidate their outsourcing to a smaller set of large global providers. We offer our services through a highly skilled staff of more than 25,000 employees and contingent workers located in approximately 60 countries as of December 31, 2020, and have conducted work in more than 110 countries. In addition, over the last five years, more than 92% of all new molecular entities approved by the U.S. Food and Drug Administration ("FDA") and 94% of the products granted marketing authorization by the European Medicines Agency ("EMA") have been developed or commercialized with our support.

Syneos One® represents a unique offering in the market. Our Syneos One® offering coordinates integrated solutions across the full clinical development and commercialization continuum. This offering provides our small to mid-sized customers with an economic alternative to divesting, out-licensing, or co-promoting assets, and provides our large biopharmaceutical customers with further opportunity to reduce their fixed-cost infrastructure, and an alternative approach to developing and promoting their non-core assets. We believe this offering represents a unique capability in the market that can reduce program risk and optimize clinical development timelines, while maximizing return on investment.

Proprietary Methodology - the Trusted Process®. Since 2006, we have used the Trusted Process® to standardize our delivery methodology in the conduct of clinical trials, which increases our service delivery predictability, accelerates median clinical study start-up time on new projects, and reduces operational risk. Our dedicated Operations Management function defines, maintains, improves, and ensures consistent application of the Trusted Process® across our global footprint. In addition, it contributes to the absolute reduction of cycle times in critical path milestones, providing greater operating efficiency, more predictable project schedules, and a reduction in overall project timelines. Our metrics-driven Trusted Process® methodology is divided into four phases:

- PlanActivation® — the *design* phase, where the objectives are analyzed utilizing our therapeutic and technical subject matter experience to develop a quality-driven strategy for success;

- QuickStart® — the *engineering* phase, which serves to align the team to the project strategy, create shared expectations, and develop a joint plan for project conduct;

- ProgramAccelerate® — the *execution* and *control* phase, where we proactively manage project conduct. Data is used to ensure project timelines, risks, issues and quality are actively managed while maintaining positive relationships with all stakeholders; and

- QualityFinish® — the *closing* phase, where we develop a plan for project close that accounts for the remaining deliverables and provision of actionable data and/or the final product.

While initially developed to better manage clinical trial complexity, the Trusted Process® is being actively deployed in our Real World and Late Phase ("RWLP"), Functional Service Provider ("FSP" or "FSP360") and Syneos One® offerings and is being adapted and deployed as warranted across our commercial service portfolio to further drive efficiency, consistency, and quality in our integrated operations.

Functional Service Provider Model. Our FSP model provides flexible resourcing solutions in the areas of biostatistics and programming, data management, drug safety and pharmacovigilance, study startup, medical writing, clinical monitoring, trial master file support, and site and investigator payments. Our model includes a comprehensive plan designed to ensure both speed and quality for operations, relationship management, communication, quality and risk mitigation, and internal processes and tools. We collaborate extensively across functional teams to ensure customer needs are appropriately identified and supported.

Adding value across the biopharmaceutical product life cycle. We believe our ability to utilize our broad experience, data assets, and information technology assets across our full suite of services uniquely positions us to provide solutions that help biopharmaceutical customers optimize execution and reduce costs throughout the product development life cycle using the following capabilities:

- *Superior clinical trial design*: We believe our expanding clinical and commercial knowledge and our access to electronic medical records and claims data allows us to expedite the completion of clinical trials without sacrificing quality, improving the probability of regulatory approval and subsequent commercial success.

- *Enhanced site selection and patient recruitment:* We utilize our data assets, behavioral insights, social media and communications capabilities to enhance the speed and success of site selection and patient recruitment.

- *Proactive pre-launch reimbursement and formulary management:* We bridge the gap between clinical development and commercialization by using insights derived from our diverse capabilities and ability to communicate clinical benefits to payers and Pharmacy Benefit Managers ("PBMs") to help optimize reimbursement and patient access.

- *Effective commercial product launch capabilities*: We help our customers navigate the global complexities of launching a product by orchestrating interconnected work streams to develop and execute an effective product launch strategy that incorporates current therapeutic insights and market realities.

- *Full service commercial:* We enable companies to develop, launch, and commercially support their brands by accessing our comprehensive solutions, and acting as their virtual commercialization infrastructure. In 2020, approximately 28% of our commercialization customers purchased services from more than one of our commercialization services offerings. These customers represented approximately 89% of our Commercial Solutions revenue in 2020.

- *Efficient project ramp-up:* We scale clinical or commercial projects rapidly and effectively through our recruiting, training, and deployment capabilities, leveraging our dedicated recruiting personnel and our proprietary database of approximately 700,000 industry professionals.

Harmonizing diverse data via Dynamic Assembly® to create "asset customized" insights. Our strategic, capital-efficient approach to data and technology, Dynamic Assembly®, allows us to quickly address the nuances of each customer challenge, including trial protocol, and product launch. Our open, source-agnostic and flexible architecture focuses on integrating quality data with the insights and best practices we have established during our decades of developing and commercializing biopharmaceutical products. We have access to significant data assets from a diverse number of sources including a variety of third party data and technology providers, as well as our clinical and commercial operations. Our data lake harmonizes multiple data types and sources, both structured and unstructured, creating new "asset-customized" data aimed at achieving deeper patient behavioral learnings and insights.

Agile, insights-driven virtual/digital solutions. We believe our innovative digital solutions, underpinned by our unique combination of therapeutic and behavioral insights, position us to address the evolving market dynamics in which our customers operate. These solutions include:

- **Decentralized Solutions** is our clinical model that allows for configurable, decentralized trials using a patient-centric approach supported by Dynamic Assembly to move beyond traditional trial design. We partner with best of breed technology and data providers – and leverage our clinical and commercial insights, therapeutic expertise, and knowledge of the site and patient communities – to design solutions that best fits the needs of a particular customer and protocol.

- **Kinetic** is our modern customer engagement capability that integrates intelligence to accelerate impact and optimize commercial performance of customer brands. This omnichannel capability enables our field teams to transition to virtual and hybrid teams, while overlaying new digital capabilities. As adoption of telehealth and digital channels increase, a greater number of siloed and uncoordinated channels are touching HCPs. This leads to reduced effectiveness of commercial programs. Kinetic addresses this challenge by deploying advanced targeting, analytics, and the latest technologies – powered by a team of data scientists and behavioral experts – to create connected intelligence across channels, platforms, and content. The net result of Kinetic is optimized outcomes for our customers, leveraging the appropriate combination and timing of communications to drive improved brand performance.

- **Therapeutic expertise and organizational alignment.** We believe aligning our Clinical Solutions business units therapeutically down to the clinical research associate ("CRA") level differentiates us from our competitors and has played a key role in our growth, ability to win new clinical trials, and the successful relationships we have developed with clinical research sites. Our therapeutic expertise is managed by our senior leadership and delivered by our senior scientific and medical staff and our CRAs within our various therapeutic areas. We believe this therapeutic alignment improves the effectiveness and efficiency of our customers' clinical trials by ensuring that our clinical staff working at our investigative sites have the therapeutic expertise and experience required to manage clinical trials. We also believe our specialized therapeutic expertise within our Commercial Solutions segment is unique in our industry and is becoming increasingly important to our customers as therapies become more complex and targeted. Our experienced medical and scientific professionals include more than 1,600 employees with M.D.s, Ph.D.s, or Pharm D.s. These employees apply innovative insights and science to clinical trials as well as to the commercialization of products and support customers across both our Clinical Solutions and Commercial Solutions segments.

Industry-leading principal investigator and clinical research site relationships. We have extensive, often longstanding relationships with principal investigators and clinical research sites. We believe quality site relationships are critical for delivering clinical trial results on time and on budget for our customers. Motivated and engaged investigator sites can facilitate faster patient recruitment, increase retention, maintain safety, ensure compliance with protocols as well as with local and international regulations, and streamline reporting. We have dedicated personnel focused on enhancing clinical research site relationships. We work with these sites in collaborative partnerships to improve cycle times and standardize start-up activities to drive efficiency.

Diversified customer base with a growing number of preferred provider relationships. We have a customer base of over 600 customers that includes nearly all of the 50 largest global biopharmaceutical companies (based on annual investment in research and development). Additionally, our customer base is geographically diverse with well-established relationships in the United States, Europe, and Asia. We have several customers with whom we have achieved "preferred provider" or strategic alliance relationships. We define these customers as relationships from which we generate significant revenue and where we have executed master service agreements in addition to regularly scheduled strategy meetings to discuss the status of our relationship, and for which we serve as a preferred supplier of services. We believe these relationships provide us enhanced opportunities for more business, although they are not a guarantee of future business. With the acquisition (the "Synteract Acquisition") of SHCR Holdings Corporation ("Synteract"), a company with a leading reputation among emerging biopharmaceutical companies, we have also enhanced our leading position for serving customers across the small to mid-sized ("SMID") category, further diversifying our customer base and expanding support to the high-growth emerging biopharmaceutical segment. We continue to experience strong SMID demand, as evidenced by double-digit growth in our request-for-proposal volumes in 2020 as compared to 2019.

Highly experienced management team with a successful track record of delivering growth. We have a dedicated and experienced executive management team with significant experience and knowledge focused on the biopharmaceutical industry. Each member of our leadership team has 15 years or more of experience, including experience with biopharmaceutical companies, payers, healthcare systems, and outsourced services providers. This team has successfully grown our company into a leading biopharmaceutical solutions organization through a combination of organic growth and strategic acquisitions.

Our Business Strategy

Our goal is to increase our market share and improve our market position. We believe our end-to-end product development model, where clinical insights inform commercialization and commercial insights improve clinical trial design and execution, is unique to the industry. The key elements of our business strategy include:

Further penetrate the large pharmaceutical market. We believe one of the largest opportunities to increase our market share and improve our market position is to further penetrate large pharmaceutical companies. Large pharmaceutical companies have increasingly focused on partnering with larger outsourcing vendors that offer a full suite of service capabilities. We have invested in expanding our global scale, breadth of services, and infrastructure to build up our service capabilities for this customer sector. The Merger also significantly increased the depth of our relationships with many of these customers, particularly as a functional service provider.

Continued penetration of the small and mid-sized biopharmaceutical market. We are a leader in the small and mid-sized biopharmaceutical market, which is the fastest growing segment of the market, and we believe there is further opportunity to grow this segment. Small and mid-sized biopharmaceutical companies typically have fewer internal resources, less existing infrastructure, and less clinical development and commercialization experience. This customer segment is attracted to our full suite of clinical and commercialization services, our Syneos One® offering, our therapeutic expertise and organizational alignment down to the CRA level, and our Trusted Process® operating model. Additionally, with the Synteract acquisition during 2020, we have further enhanced our leading position serving SMID customers, diversifying our customer base and expanding support to high-growth emerging biopharmaceutical companies.

Bring differentiated solutions to the market and increase cross-selling opportunities. We believe we are uniquely positioned to address our customers' evolving needs as the only fully integrated provider of a full suite of services across the product development continuum. Our breadth of services enables us to provide customized solutions designed to successfully accelerate the time to market for our customers' clinical or commercial projects. We believe sharing commercial insights during the early phases of clinical trials can lead to better informed decisions around clinical trial design and strategies. Similarly, we believe our therapeutic and clinical trial expertise can lead to improved decisions about regulatory and payer approvals, market access, reimbursement and formulary inclusion, field team development, and other steps that are critical to the commercial success of our customers.

We believe that we have substantial opportunities to expand the reach of services that we provide to our existing customers. During 2020, 150 customers, of which 76 were also in our top 100 customers, utilized services from both our Clinical Solutions and Commercial Solutions segments, demonstrating that there is both market precedent and significant potential to sell additional services to our customer base. Given our past success in expanding the scope of services provided to current customers, we intend to further expand our business with our existing customers by cross-selling additional clinical and commercial services.

Strengthen our geographic footprint. We have developed a global platform with a presence in all of the major biopharmaceutical markets and intend to further expand our business outside of the United States, targeting regions where we are underpenetrated and that offer significant growth opportunities. We have expanded our capabilities, existing relationships, and local regulatory knowledge, which we believe will continue to position us well for new customer wins in a wide array of markets. We have added geographic reach through both acquisitions and organic growth in areas such as Asia-Pacific, Latin America, the Middle East and Africa, and Europe, which we believe is critical to obtaining business awards from large and mid-sized biopharmaceutical companies. We may also selectively identify and acquire complementary businesses to enhance our services, capabilities, and geographic presence.

Capitalize on industry trends favoring outsourcing. Our Clinical Solutions and Commercial Solutions segments are benefiting from specific industry trends that are expected to drive attractive growth rates. Global demand for biopharmaceutical products continues to increase, driven by expanding access to healthcare, increasing life expectancy, and the growing prevalence of chronic conditions in both developed and emerging markets. However, higher costs and increased complexity are driving our customers to seek efficiency and expertise through outsourcing services. We believe outsourcing both clinical development and commercialization services optimizes returns on invested R&D for biopharmaceutical companies. Further, as business models continue to evolve in the healthcare sector, we believe that the rate of commercial outsourcing may follow a similar long-term path as that of the clinical development market.

Drive acceleration of commercial outsourcing with our Syneos One® offering. We believe regulatory approval is only the first step towards a successful outcome, as our customers cannot earn a positive economic return for their asset until they achieve significant adoption in the commercial marketplace. We believe our Syneos One® offering is uniquely positioned to determine the appropriate mix of clinical and commercial solutions to help customers optimize the development process of their products and maximize the return on their investment. In addition, Syneos One® enables multiple selling points along the operational timeline of product development. The need for a full suite of product development services is particularly strong with our small to mid-sized customers in the near-term, given their increased access to funding to bring a product to the market coupled with their limited internal resources. Large biopharmaceutical companies may represent a long-term opportunity if market pressures to reduce fixed-cost infrastructures further intensify. Given our strong relationships in both customer segments and our breadth of services, we believe we are well positioned to capitalize on the needs of both customer types.

Meet demand for comprehensive commercialization solutions. Customer preference and the complexity of product development in the modern market is creating increasing demand for a full service experience for commercial customers. We believe a move to more integrated outsourcing will drive future growth and further diversify our revenue and backlog. This full service model creates a collaborative relationship, allowing for solutions that incorporate data and insights to drive patient-centric approaches. This combination helps achieve the customer's goal of maximizing product performance while diversifying our Commercial portfolio, which we believe can drive more predictable revenue.

Successfully acquire and integrate companies and evaluate and pursue other strategic initiatives to augment our organic growth. As part of our ongoing business strategy, we regularly evaluate new opportunities for growth through strategic initiatives, including potential acquisitions, investments, dispositions, or other transformative transactions.

We acquired the following companies during 2020:

- Synteract, a full service CRO, focused on the emerging biopharmaceutical segment. Synteract's client base is primarily comprised of emerging biopharmaceutical companies, a segment in which we have growth opportunities. Synteract has more than 700 employees across North America, Europe, Asia Pacific, and Africa that have supported more than 4,000 Phase I to IV clinical trials across 26,000 sites in more than 60 countries. The transaction provides significant revenue synergy opportunities, as we bring scale and new capabilities to Synteract's existing and prospective customers while maintaining Synteract's focus on the emerging biopharmaceutical segment. Building on our track record of delivering cost synergies, we will also leverage our global infrastructure and integration expertise to optimize operational efficiencies and drive improved margins.

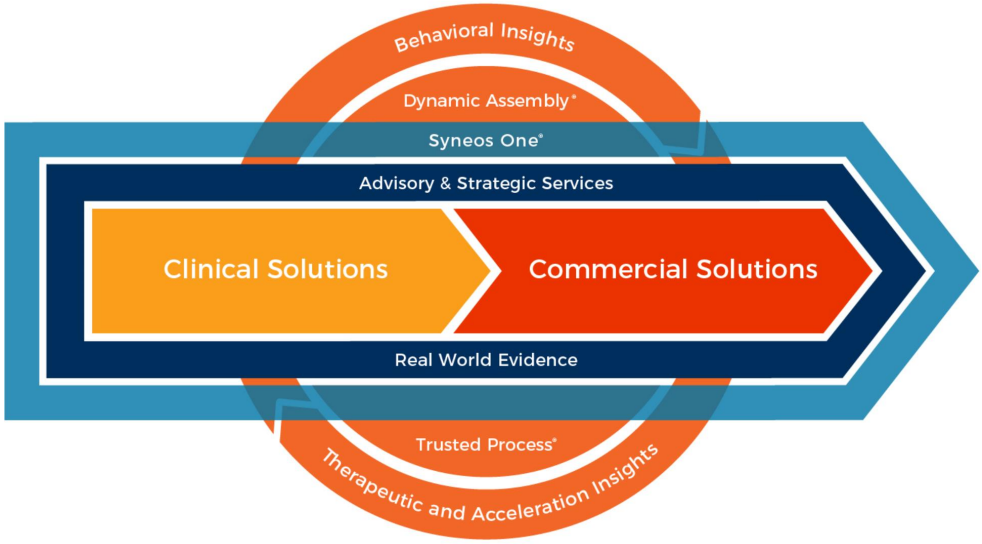
- Illingworth Research Group™ ("Illingworth Research"), a leading provider of clinical research home health services. This acquisition enhances our decentralized solutions offering by adding a patient-focused company that meets the growing demand for in-home clinical trial services. Illingworth Research provides mobile research nurse services, which eliminates wasted travel time and allows patients to remain at home for their participation in a clinical trial.

Over the past decade, we have developed a systematic approach for integrating strategic and tuck-in acquisitions. These acquisitions have enabled us to provide fully integrated clinical and commercial solutions and expand our global service offerings while also allowing us to achieve significant synergies and cost reductions. We intend to continue evaluating selective strategic growth opportunities that we believe will enhance our services offerings and geographic presence and thereby create value for our shareholders.

Continue to enhance our Trusted Process® methodology to deliver superior outcomes. We intend to continue the development and enhancement of our Trusted Process® methodology, which has delivered measurable, beneficial results for our customers and provides actionable data that can expedite drug development decisions. While originally developed through years of experience and refinement in our Clinical Solutions segment, we are proactively evaluating opportunities to also deploy the Trusted Process® within our RWLP, FSP and Syneos One® offerings and is being adapted and deployed as warranted across our commercial service portfolio to further drive efficiency, consistency, and quality in our integrated operations. We believe our Trusted Process® will continue to lead to high levels of customer satisfaction.

Our Services

We provide services through two reportable segments: Clinical Solutions and Commercial Solutions. Each reportable segment provides multiple service offerings that – when combined through the sharing of critical insights and data, which we refer to as our Biopharmaceutical Acceleration Model – creates a fully-integrated biopharmaceutical outsourced services provider. Our Clinical Solutions segment offers a variety of clinical development services spanning Phase I to Phase IV, including full service global studies, unbundled service offerings, and Real World Evidence studies. Our Commercial Solutions segment provides customers with the full range of commercialization solutions, which include specialized field teams, communications solutions (advertising, public relations, and medical communications), and consulting services.



Clinical Solutions

Our extensive range of clinical solutions supports the entire clinical development process from Phase I to Phase IV and allows us to offer our customers an integrated suite of investigative site support and clinical development services. We offer these services across a wide variety of therapeutic areas with deep clinical expertise with a primary focus on Phase II to Phase IV clinical trials. We have particular strengths in the complex therapeutic areas such as CNS and oncology with the latter representing the largest and fastest growing therapeutic area. We provide total biopharmaceutical program development through our full service platform, while also providing discrete services for any part of a trial, primarily through our FSP360 group. The combination of service area experts and the depth of clinical capability allows for enhanced protocol design and actionable clinical trial data. Importantly, all of our services in Clinical Solutions operate with the discipline of the Trusted Process®. Our comprehensive suite of clinical development services and delivery platforms includes:

Full Service Clinical Development

Our full service clinical development offering provides comprehensive solutions to address the clinical development needs of our customers, primarily in Phase II to Phase IV. Our solutions can be delivered on a full service project basis, on a functional or resource basis (see FSP360 below), or through a combination or hybrid approach depending on the needs of our customers. We are able to customize our services to provide customers support within an individual clinical study, a single function, multiple functions within a single therapeutic area, or across a customer's entire product portfolio. Our comprehensive suite of clinical development services includes the following, among others:

- *Patient Recruitment and Retention.* Our patient recruitment services group helps identify and manage appropriate vendors, focuses on patient recruitment and retention strategies, and acts as a liaison to media outlets and other vendors.

- *Site Start-Up*. Our site start-up team helps maximize the enrollment period of the study by arranging applicable regulatory authority and ethics committee approvals, site contract negotiations, regulatory authority submissions, and the corresponding oversight of those activities.

- *Project Management.* Our project managers and directors provide customer-focused leadership in managing clinical trials and are accountable for the successful execution of all assigned projects, where success includes on-time, on-budget, and high quality results that lead to satisfied customers. Project managers and directors have the skills, education, experience, and training to support the successful conduct of clinical trials.

- *Clinical Monitoring*. Our CRAs oversee the conduct of a clinical trial by working with and monitoring clinical research sites to ensure the quality of the clinical data being gathered by the sites. The clinical monitor ensures the clinical trial is conducted according to Good Clinical Practice ("GCP"), International Conference on Harmonisation ("ICH") guidelines, and local regulations, to meet the customers' and regulatory authorities' requirements according to the study protocol. CRAs engage with clinical research sites in site initiation, training, and patient recruitment. We deploy and manage CRAs in all regions of the globe.

- *Decentralized Solutions.* The COVID-19 pandemic has accelerated the adoption of remote engagement with HCPs and patients, creating increased demand for decentralized solutions capabilities. This is an area we invested in pre-pandemic, allowing us to quickly respond to demand. Our approach brings together our experts, data, process, and technology to create fit-for-purpose solutions to address the nuances of each study. This now includes the provision of in-home clinical trial services, including mobile research nurse services, through our acquisition of Illingworth Research. This approach delivers on our goal of achieving decentralized clinical trial operations supporting site and patients, focused on patient recruitment, engagement, improved access, and patient diversity.

- *Drug Safety/Pharmacovigilance.* Our drug safety teams are strategically located across the United States, Europe, Latin America, and Asia-Pacific. We provide global drug safety expertise in all phases of clinical research for serious adverse event/adverse event collection, evaluation, classification, reporting, reconciliation, post-marketing safety, and pharmacovigilance.

- *Medical Affairs.* We have in-house physicians who provide 24/7 medical monitoring, scientific and medical support for project management teams and clinical research sites. These in-house physicians consist of senior clinicians and former clinical researchers with patient care and clinical trial management expertise.

- *Quality Assurance.* Quality control steps are built into all of our processes. We have an independent quality assurance department that, in addition to conducting independent audits of all ongoing projects and processes as part of our internal quality assurance program, offers quality assurance services to customers, including audits of clinical research sites and of various vendors to the clinical research industry, mock regulatory inspections and clinical research site inspection-readiness training, standard operating procedure development, and quality assurance program development/consultation. Our customers also engage us to conduct third-party audits on behalf of their studies.

- *Regulatory and Medical Writing.* We offer regulatory and medical writing expertise across the entire biopharmaceutical product life cycle. Our team has hands-on regulatory and medical writing knowledge gained through experience from working in large biopharmaceutical companies, as well as high-growth, small and mid-sized biopharmaceutical companies, CROs, and the FDA. Additionally, each member is trained in FDA regulations, including GCP/standard operating practice compliance guidelines and guidelines established by the ICH.

- *Clinical Data Management.* Our clinical data management services allow us to confirm that the clinical trial database is ready, accurately populated, and locked in an expeditious manner, with verification and validation procedures throughout every phase of a clinical trial. This processing is done in synchronization with the clinical team, utilizing the information provided from the clinical trial to help ensure efficient processes are employed, regardless of the data collection method used.

- *Electronic Data Capture.* To compete in today's changing global drug and device development environment, companies must collect and distribute data faster than ever. We have the ability to manage electronic data capture ("EDC") systems and processes to help our customers take advantage of the efficiencies available through EDC, which include improved access to data, reduced cycle time, increased productivity, and improved relationships with customers, vendors, and other parties.

- *Biostatistics.* Our biostatistics team has a depth of experience with the FDA and EMA which allows our teams to provide customers with guidance on building a statistical plan to meet regulatory and safety requirements as well as a careful analysis of the resulting study data. In addition, we provide support for independent drug safety monitoring boards and a full range of related services. Our biostatisticians are also heavily involved in our Trusted Process® methodology, so that protocol and project development can be grounded in advanced statistical methodology. As part of a project team, our biostatisticians can provide data oversight throughout a clinical trial and address any data or data handling issues that may arise.

FSP360

Our FSP360 offering helps sponsors review their approach to key functional areas of clinical research, specifically those areas not core to their clinical development business or in areas where they need to augment internal resources. We are able to customize our full service offering to provide customers support within an individual clinical study, a single function, multiple functions within a single therapeutic area, or across a customer's entire product portfolio. Any of our full service clinical solutions outlined above can be delivered on an unbundled or functional basis or on a hybrid approach, based on our customers' specific needs. We currently operate FSP hubs in North America, South America, Europe, and Asia.

Early Phase

Our Early Phase offering provides a full range of services for Phase I to Phase IIA clinical trial conduct, bioanalytical assay development and analysis, targeted translational science offerings, and clinical pharmacology services, including modeling and simulation. We also provide validation and sample analysis services from pre-clinical development through post-marketing support and purpose-built phase biometrics support from North America and India. We conduct clinical trial studies at our facilities located in Quebec City, Canada, and Miami, Florida. We have extensive experience in first-in-human, proof-of concept, bioequivalence and bioavailability, biosimilars, and clinical pharmacology study conduct. We collaborate with leading hospitals for the conduct of early development and clinical pharmacology studies that require access to patients. We have a large base of available subjects, including patient populations with specific medical conditions, and healthy volunteers, which provide efficient and rapid patient recruitment. Furthermore, we can also provide early stage and clinical pharmacology studies through our Asia-Pacific Catalyst Model with Phase I to Phase IIA conduct capabilities in Australia, New Zealand, South Korea, and Japan.

Our two bioanalytical laboratories located in Quebec City, Canada and Princeton, New Jersey have extensive experience in method development, validation, and bioanalytical analysis support for both small molecule therapeutics and biologics using a variety of analytical techniques and instrumentation platforms, as well as the provision of critical reagents handling services for biologics.

Our translational sciences capability in Sophia-Antipolis, France provides targeted pharmacology, drug metabolism and pharmacokinetics analysis, molecular profiling, and pre-clinical project management capability, which when coupled with our early development and therapeutic expertise, can inform decisions regarding candidate selection and biomarker selection strategies when a compound is about to enter into clinical development.

Real World Evidence and Late Phase Services

Our RWLP group conducts studies to understand how a treatment, service, or method of delivering care works when applied in real world, clinical practice environments. Because real world evidence ("RWE") provides both clinical and commercial benefits, adding value for customers across the product lifecycle, our end-to-end model position allows us to uniquely provide value to our customers in this space.

The market for these services is increasing as regulatory changes are encouraging the use of RWE and payers are demanding these outcomes. Customers are using RWE to supplement clinical efficacy and safety data, to build a value story and in designing and implementing a successful commercialization strategy. RWE shows relatively low levels of outsourcing penetration, offering a growth opportunity for us.

We provide both consultative and operational expertise to our customers in real world data generation, from concept through core development, launch, and commercialization. This is informed by our Dynamic Assembly platform, which allows us to expand our data access and analytic capabilities, enhancing our ability to help customers demonstrate product value. By utilizing our successful drug life cycle management, we ensure we partner with our customers to gain better outcomes for patients, physicians, payers, and regulators. These services allow our customers to make timely and cost effective advances in clinical treatment by providing data about actual experience of doctors and patients outside of the regulated environment of clinical development. The data and insights from our experience across the commercialization spectrum inform the design and conduct of these studies. Our services include patient registries, surveillance and observational studies, patient/health outcomes research, and economic studies.

Commercial Solutions

Our Commercial Solutions segment provides a broad suite of complementary commercialization services including specialized field teams, communications solutions (advertising, public relations, and medical communications), and consulting services. Additionally, these capabilities provide behavioral and patient insights used by our Clinical Solutions segment to design smarter clinical trials and to accelerate patient recruitment. Our comprehensive capabilities portfolio also allows us to provide full service commercialization. This integrated approach allows us to maximize product or portfolio performance for customers, by sharing insights and expertise across the integrated commercial outsourcing team.

These services are enhanced by our Kinetic offering, our modern customer engagement capability. We use an intelligent and data-enabled approach to digitally enhance our Commercial Solutions by understanding the audiences for our customers' products, synchronizing their experiences across multiple personal and digital channels and decoding the performance of these interactions to adapt in real-time.

Deployment Solutions

Deployment Solutions include field-based promotional and market access solutions, field-based clinical solutions, inside sales and contact center, insight and strategy design, patient support services, training, talent sourcing, and end-to-end sales operations. We provide contract field promotion teams with a broad array of capabilities, support services, and non-personal engagement solutions including tele-detailing and electronic detailing ("e-detailing"). Our field-based promotional teams are supported by recruiting and training capabilities, clinical and scientific professionals who advocate for and inform markets of novel therapies, and our customized patient behavioral models built on our proprietary insights and data-driven analytics. Services offered include market research, commercial analytics, managed markets access, biotechnology and specialty managed markets, and full service commercialization. Our field promotion teams can be supported by our communications and consulting services.

- *Value Access and Medical Teams.* We are a leading provider of outsourced Value Access and Medical Team solutions to the biopharmaceutical industry. Our Teams - consisting of Field Reimbursement and Market Access Specialists, Medical Science Liaisons ("MSLs"), Contract US Medical Directors, and/or Clinical Educators - educate healthcare professionals, patients, advocacy organizations, and others with evidence-based scientific and practical information about disease states, current treatments, the reimbursement, access and the use of customers' products.

- *Promotional Field Teams and Support.* We are an industry leader in providing scalable capabilities to recruit, train, target, deploy, and support successful biopharmaceutical sales teams. As one of the largest providers of outsourced sales teams and sales solutions to the healthcare industry, we have well-established flexible processes and infrastructure to efficiently build, scale, deploy, execute, and retain a high-performing field sales team.

- *Commercial Recruiting Solutions.* We are a market leading recruiting partner to the commercial life science industry based on our experience, branding capabilities, talent assessment process, and our proprietary talent database of the top MSL, Nurse Educator, Sales, Sales Management, and Market Access performers.

- *Operations Support Services.* We offer comprehensive, best-in-class operations support services that include field automation hardware/software, data management, targeting and alignment, analytics and reporting, incentive plan design and implementation, quality management, and help desk. These capabilities are used both individually and collectively to ensure that our deployed field teams perform optimally, respond rapidly to changing marketplace dynamics, and continuously improve.

- *Digital Enhancement.* Our Deployment Solutions offerings leverage Kinetic to enhance established relationships. The relationships between HCPs and our field representatives remain central to the customer experience. However, Kinetic allows us to create virtually-enabled representatives, especially important for continuity during the pandemic, while overlaying new digital capabilities to optimize brand performance.

Communications Services

Our healthcare focused communications services offering provides advertising, public relations, interactive digital strategies, branding and identity consulting services, and medical communications and education services. These services are scalable, as we can support product commercialization both domestically and internationally. Communications services are deployed throughout a product's existence, beginning well before commercial launch, encompassing regulatory approval and market introduction, and continuing throughout the life of a product.

- *Healthcare Advertising.* We believe that we offer the largest independent healthcare communications network in the world. Our advertising teams are immersed in healthcare data and connected to frontline experts who help them delve deeply into the real life experience of healthcare, harvesting insights to create optimal communications strategies. We help our customers navigate the most critical challenges in healthcare, including, but not limited to, brand launch, utilization of mass and personalized media, advertising content creation and campaigns, patient analysis, disease state campaigns, and market perception analysis. Our advertising teams have deep therapeutic expertise, with agencies solely dedicated to oncology, chronic disease care and activation, biologics, and industry innovation.

- *Public Relations.* Our Public Relations teams develop creative campaigns grounded in deep customer insight and integrated under a multi-channel strategy. These programs raise awareness and produce meaningful, measurable behavior change among audiences. With a diverse set of healthcare communications specialties under one umbrella, we deliver integrated advice and expert insight from a variety of strategic perspectives. We offer best-in-class capabilities spanning public relations, digital and social media, medical and scientific education, and research and analytics. Our teams create communications that enhance brand perception, drive engagement, and activate behavior shifts.

- *Medical Communications.* Medical Communications helps our customers to frame their product position in a way that clinicians will find relevant, and creates strategies, campaigns and tactics to help these stakeholders at the right time, with the right content. Our Medical Communications team provides support through strategic planning, publication planning, content development, and peer-to-peer education.

Consulting Services

Our consulting services support critical decision points during a biopharmaceutical product's life-cycle, from licensing, to product and portfolio strategy development, to drug commercialization. Consulting services include commercial strategy development and planning, pricing and market access, medical affairs advisory, quality management and regulatory advisory, and risk and program management. We offer specialized practices in business development, managed markets, and brand management, including strategic product launch planning. Consulting services teams generate insights and solutions developed from their deep, functional knowledge of our customers' core business. These services are centered on maximizing the commercial value of a client's product pipeline, helping clinical leaders better deploy strategic resources, improve efficiency, and enhance the effectiveness of marketing and sales activities. Our overall consulting services capabilities include the following:

- *Commercial Strategy Development and Planning.* Our strategic consulting group offers advisory services that include strategic drug development, clinical development plans, registration strategies, exit strategies, transitional clarity, good clinical practice compliance strategies, clinical operations optimization, pricing and reimbursement, and due diligence.

- *Pricing and Market Access.* Our team offers a full spectrum of market access solutions and services, including market assessment and analysis, comparative effectiveness research, pricing reimbursement, patient assistance services, and legislative and regulatory analysis.

- *Medical Affairs Advisory.* Our Medical Affairs Advisory team assesses where customers are in their medical transformation by helping them identify their competitive position, prioritize their needs, understand their brand perception, and inform their market engagement strategy.

- *Quality Management and Regulatory Compliance Advisory.* Our quality and compliance team delivers independent quality management services through audit, inspection, and implementation services, and assists our customers with developing and executing a clinical regulatory strategy through regulatory consulting, publishing and submission services globally.

- *Risk and Program Management.* Our communications consultants provide advice and subject matter expertise for risk evaluation on medicine affordability, compassionate use, and litigation and access barriers. We provide an evidence-based approach to ensure policy, patient, and provider acceptance on price, use best practices for how life-sciences companies can deploy effective preventative strategies, implement compliance strategies to prepare for expanded access and compassionate use inquiries, and execute an Institute for Clinical and Economic Review strategy to demonstrate product value.

Customers

We have a well-diversified customer base of over 600 customers that includes nearly all of the world's largest biopharmaceutical companies, which we define as the top 50 biopharmaceutical companies measured by annual R&D spend, as well as numerous emerging and specialty biotechnology companies, medical device and diagnostics companies. We are diversified across our segments, deriving 75% and 25% of our revenue during 2020 from our Clinical Solutions and Commercial Solutions segments, respectively.

For the year ended December 31, 2020, our revenue attributable to large biopharmaceutical companies represented approximately 55% of our total revenue and revenue attributable to small and mid-sized biopharmaceutical companies represented approximately 45%. Additionally, we serve customers in a variety of locations throughout the world, with approximately 63% of our 2020 revenue generated from work performed in the United States and Canada; 24% from Europe, the Middle East, and Africa; 11% from Asia-Pacific; and 2% from Latin America. This diversification allows us to grow our business in multiple customer segments and geographies.

Our top five customers accounted for approximately 22% of our revenue in 2020. Among the majority of our customers, revenue is diversified by multiple projects and services. For example, during 2020, we provided both clinical and commercial services to 150 customers. We believe that the tenure of our customer relationships as well as the depth of penetration of our services reflects our strong reputation and track record. We believe we are uniquely positioned to further penetrate our existing customer base and expand our services across the biopharmaceutical industry, as a significant number of the top 50 biopharmaceutical companies utilize both clinical and commercial services.

Sales and Marketing

Our global team of business development professionals and support staff identifies needs, designs solutions, and promotes our services to the biopharmaceutical, biotechnology, and medical device industries. In addition to significant customer engagement and development experience, many of these individuals have technical and scientific backgrounds.

Our business development organization works with our leadership team to identify, develop, and maintain key customer relationships in addition to new business development activities. Teams use an integrated, customer-focused approach to develop joint engagement plans for key accounts. For many of our largest customer relationships, dedicated strategic account management teams under our Global Client Solutions and Syneos One® groups provide account leadership to meet financial goals, align delivery with strategic goals, and promote innovation. These teams are directly accountable for gross business award growth in our largest accounts through creating a differentiated customer experience, which is a key aspect of our growth strategy to improve patient access to new medicines by unleashing the power of the biopharmaceutical acceleration model value proposition.

The global reach and strong operational experience of our business development personnel ensure project demands are fulfilled. In general, each business development employee is responsible for a specific customer segment and for strengthening and expanding customer relationships. Each individual is responsible for developing a customer base, responding to customer requests for information, developing and defending proposals, and presenting to customers.

Competition

We operate in a number of highly competitive markets. Our competitors include a variety of companies providing services to the biopharmaceutical industry, including large CROs and smaller specialty CROs, large global communications holding companies, smaller specialized communications agencies, contract sales organizations, and a wide range of consulting companies. Each of our reportable segments faces distinct competitors within the markets they serve. Notwithstanding competitive factors, we believe that our deep therapeutic expertise, global reach, integrated model, and operational strengths differentiate us from our competitors across both of our segments.

Clinical Solutions

Our Clinical Solutions segment competes primarily against other full service CROs and services provided by in-house R&D departments of biopharmaceutical companies, universities and teaching hospitals. Although the CRO industry has experienced increased consolidation over the past three years, the landscape remains fragmented. We generally compete on the basis of the following factors:

- experience within specific therapeutic areas;
- the quality of staff and services;
- the range of services provided;
- the ability to recruit principal investigators and patients into studies expeditiously;
- the ability to organize and manage large-scale, global clinical trials;
- an international presence with strategically located facilities;
- medical database management capabilities;
- the ability to deploy and integrate IT systems to improve the efficiency of contract research;
- experience with a particular customer;
- the ability to form strategic partnerships;
- speed to completion;
- financial strength and stability;
- price; and
- overall value.

Commercial Solutions

Our Commercial Solutions segment competes primarily against the in-house sales and marketing departments of biopharmaceutical companies, other contract pharmaceutical sales and service organizations, communications holding companies and specialized agencies, and consulting firms. We generally compete on the basis of the following factors:

- experience within the specific therapeutic area;
- quality of the staff and services;
- creativity of the proposed solution;
- perceived “chemistry” with the staff to be deployed;
- previous experience with a particular customer;
- price; and
- overall value.

Government Regulation

The biopharmaceutical industry is subject to a high degree of governmental regulation in both domestic and international markets. Regardless of the country or region in which approval is being sought, before a marketing application for a drug is ready for submission to regulatory authorities, the candidate drug must undergo rigorous testing in pre-clinical studies and clinical trials. The clinical trial process must be conducted in accordance with the Federal Food, Drug and Cosmetic Act in the United States and similar laws and regulations in the relevant foreign jurisdictions. These laws and regulations require the candidate drug to be tested and studied in certain ways prior to submission for approval.

Regulation of Our Clinical Solutions Segment

In the United States, the FDA regulates the conduct of clinical trials of drug products in human subjects, and the form and content of regulatory applications. The FDA also regulates the development, approval, manufacture, safety, labeling, storage, record keeping, import, export, distribution, advertising, sale, and marketing of drug products. The FDA has similar authority and similar requirements with respect to the clinical testing of biological products and medical devices. In the EU and other jurisdictions where our customers intend to apply for marketing authorization, similar laws and regulations apply. Within the EU, these requirements are enforced by the EMA, and requirements vary slightly from one member state to another. In Canada, clinical trials are regulated by the Health Products Food Branch of Health Canada as well as provincial regulations. Similar requirements also apply in other jurisdictions, including Australia, Japan, and other Asian countries, where we operate or where our customers intend to apply for marketing authorization. Sponsors of clinical trials also follow the International Council for Harmonisation (“ICH”) Good Clinical Practice (“GCP”) guidelines, which are enforced by the FDA and other comparable regulatory authorities, and may be amended from time to time.

Our services are subject to various regulatory requirements designed to ensure the quality and integrity of the clinical trial process. In the United States, we must perform our clinical development services in compliance with applicable laws, rules and regulations, including GCP and Good Pharmacovigilance Practice, which govern, among other things, the design, conduct, performance, monitoring, auditing, recording, analysis, and reporting of clinical trials. Before a human clinical trial may begin, the manufacturer or sponsor of the investigational drug or biologic must file an investigational new drug application (“IND”) with the FDA, which contains, among other things, the results of pre-clinical tests, manufacturing information, and other analytical data. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development. Each clinical trial conducted in the United States must be conducted pursuant to, and in accordance with, an effective IND. In addition, under GCP regulations, each human clinical trial we conduct is subject to the oversight of an independent institutional review board (“IRB”) which is an independent committee that has the regulatory authority to review, approve and monitor a clinical trial. The FDA, the IRB, or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the study subjects are being exposed to an unacceptable health risk.

Clinical trials conducted outside the United States are subject to the laws and regulations of the country where the trials are conducted. These laws and regulations might not be similar to the laws and regulations administered by the FDA and other laws and regulations regarding the protection of patient safety and privacy and the control of study pharmaceuticals, medical devices or other study materials. Studies conducted outside the United States can also be subject to regulation by the FDA if the studies are conducted pursuant to an IND, or in the case of a medical device, an investigational device exemption. It is the responsibility of the study sponsor or the parties conducting the studies to ensure that all applicable legal and regulatory requirements are fulfilled.

In order to comply with GCP and other regulations, we must, among other things:

- comply with specific requirements governing the selection of qualified principal investigators and clinical research sites;
- obtain specific written commitments from principal investigators;
- obtain review, approval, and supervision of the clinical trials by an IRB or ethics committee;
- obtain favorable opinion from regulatory agencies to commence a clinical trial;
- verify that appropriate patient informed consents are obtained before the patient participates in a clinical trial;
- ensure that adverse drug reactions resulting from the administration of a drug or biologic during a clinical trial are medically evaluated and reported in a timely manner;
- monitor the validity and accuracy of data;
- monitor drug, biologic or device accountability at clinical research sites; and
- verify that principal investigators and study staff maintain records and reports and permit appropriate governmental authorities access to data for review.

Similar guidelines exist in various states and in other countries. We may be subject to regulatory action if we fail to comply with applicable rules and regulations. Failure to comply with certain regulations can also result in the termination of ongoing research and disqualification of data collected during the clinical trials. For example, violations of GCP could result, depending on the nature of the violation and the type of product involved, in the issuance of a warning letter, suspension or termination of a clinical study, refusal of the FDA to approve clinical trial or marketing applications or withdrawal of such applications, injunction, seizure of investigational products, civil penalties, criminal prosecutions, or debarment from assisting in the submission of new drug applications. See Part I, Item 1A, “Risk Factors—Risks Related to Our Business—If we fail to perform our services in accordance with contractual requirements, regulatory requirements, and ethical considerations, we could be subject to significant costs or liability and our reputation could be harmed”.

We monitor our clinical trials to test for compliance with applicable laws and regulations in the United States and the foreign jurisdictions in which we operate. We have adopted standard operating procedures that are designed to satisfy regulatory requirements and serve as a mechanism for controlling and enhancing the quality of our clinical trials. In the United States, our procedures were developed to ensure compliance with GCP and associated guidelines.

In addition to its comprehensive regulation of safety in the workplace, the U.S. Occupational Safety and Health Administration has established extensive requirements relating to workplace safety for healthcare employers whose workers might be exposed to blood-borne pathogens such as HIV and the hepatitis virus. Furthermore, certain employees might have to receive initial and periodic training to ensure compliance with applicable hazardous materials regulations and health and safety guidelines. We are subject to similar regulations in Canada and Spain.

Regulation of Our Commercial Solutions Segment

The safety of medicines continues to be monitored after drug product approvals and throughout their use in healthcare practice. Post-marketing safety surveillance is therefore also subject to FDA regulations as well as the EU Pharmacovigilance Legislation and other countries’ regulations.

In addition, our field personnel are subject to all laws, rules and regulations governing the promotion of pharmaceutical products in the United States and in every other country where such personnel perform work. In particular, these rules and regulations include limitations on the indications for which a product may be promoted and on promotional spending. Additionally these laws, rules and regulations govern the manner in which the product may be promoted and the scientific exchange of information related to the product. Violations of these rules may leave us at risk of direct regulatory enforcement action and/or cause us to be in breach of contract with our customers.

Some of our field personnel handle and distribute samples of pharmaceutical products. In the United States, the handling and distribution of prescription drug product samples are subject to regulation under the Prescription Drug Marketing Act and other applicable federal, state and local laws and regulations and other countries may have similar laws or regulations. These laws and regulations regulate the distribution of drug samples by mandating procedures for storage and record-keeping requirements for drug samples and ban the purchase or sale of drug samples. Further, we must comply with the requirements of the U.S. Drug Enforcement Administration, which regulates the distribution, record-keeping, handling, security, and disposal of controlled substances.

Our communications solutions offerings are subject to all regulatory risks applicable to similar communications businesses as well as risks that relate specifically to the provision of these services to the biopharmaceutical industry. Such regulatory risks include enforcement by the FDA, Health Canada, the Department of Health in the United Kingdom, EMA and the Federal Trade Commission in the United States, as well as state agencies and other foreign regulators enforcing laws relating to product advertising, false advertising, and unfair and deceptive trade practices. In addition to enforcement actions initiated by government agencies, there has been an increasing tendency in the United States among biopharmaceutical companies to resort to the courts and industry and self-regulatory bodies to challenge comparative prescription drug advertising on the grounds that the advertising is false and deceptive. There continues to be an expansion of specific rules, prohibitions, media restrictions, labeling disclosures, and warning requirements with respect to the advertising for certain products.

Regulation of Personal Information

The confidentiality of personal information and records and the circumstances under which such personal information and records may be released for inclusion in our databases or used in other aspects of our business are heavily regulated by data protection laws and regulations in the countries in which we operate. These laws and regulations govern the collection, use, handling and disclosure of personal information and require that we adopt and maintain reasonable and appropriate security measures that are designed to protect the confidentiality, integrity and availability of the information. These laws and regulations also typically require the adoption and maintenance of procedures that facilitate the exercise of an individual's rights with respect to the information about them. Examples of data protection laws and regulations to which we may be subject include Canada's Personal Information Protection and Electronic Documents Act, the EU's General Data Protection Regulation ("GDPR"), the California Consumer Privacy Act ("CCPA"), and the California Privacy Rights Act ("CPRA").

Intellectual Property

We develop and use a number of proprietary methodologies, analytics, systems, technologies, and other intellectual property in the conduct of our business. We rely upon a combination of confidentiality policies, nondisclosure agreements, and other contractual arrangements to protect our trade secrets, and patent, copyright and trademark laws to protect other intellectual property rights. We have obtained or applied for patents, trademarks and copyright protection in the United States and in a number of foreign countries. Our material trademarks include Trusted Process®, PlanActivation®, QuickStart®, ProgramAccelerate®, QualityFinish®, Shortening the distance from lab to life®, Syneos One®, Biopharmaceutical Acceleration Model®, Dynamic Assembly®, Kinetic™, Syneos Health, and other corporate emblems. Although the duration of our intellectual property rights varies from country to country, trademarks generally may be renewed indefinitely so long as they are in use and/or their registrations are properly maintained, and so long as they have not been found to have become generic. Although we believe that the ownership of trademarks is an important factor in our business and that our success does depend in part on the ownership thereof, we rely primarily on the innovative skills, technical competence, and marketing abilities of our employees. We do not have any material patents, licenses, franchises, or concessions.

Human Capital Resources

As of December 31, 2020, we had 24,310 employees. Of these, 23,704 employees were regular and 606 were temporary. An additional 758 contingent workers provided services for us.

Our Culture and Values. Our Company culture is the cornerstone of all our human capital programs. Our shared purpose, Shortening the Distance of Lab to Life®, aligns our employees and the customers we serve. This purpose is surrounded by three agile-oriented values, designed to foster innovation, including Challenge the Status Quo, Collaborate to Deliver Solutions, and Passionate to Save Lives. We work hard and smart to speed much-needed therapies to those who need them most. This environment is fueled by a belief in caring for our collective wellbeing, which we refer to as Total Self. This belief enables employees to be their authentic selves at work, fostering a diverse, equitable, and inclusive culture where employees are empowered.

Safety and Health. The safety, health, and welfare of our employees are paramount to our Company. We work closely with our customers and regulatory agencies to continuously monitor our employees' working conditions and implement measures to ensure their wellness. During 2020, in response to the COVID-19 pandemic, we implemented extensive safety measures throughout our Company to protect our employees, enabling the organization to continue to work with customers pursuing innovative ways to get effective therapies to patients as quickly as possible. These efforts included adherence to stringent safety protocols for employees working at clinical study sites and the interim movement of our office-based staff to remote working environments. These efforts were further supported by extensive internal and external CEO-led communications making all stakeholders aware of the precautions taken to protect the health and safety of our employees and their families, our customers, patients, and communities.

Diversity, Equity and Inclusion ("DE&I"). We strive to lead our industry in our Diversity, Equity and Inclusion (DE&I) efforts. We believe that addressing complex healthcare challenges requires contributions from diverse viewpoints and an inclusive, equitable space where our employees are able to succeed to their highest potential. We strive to foster a work environment that includes and embraces racial, ethnic, and gender diversity and other individual differences. Our policies prohibit unlawful discrimination based on race, color, creed, gender, religion, marital status, age, national origin or ancestry, genetic information, physical or mental disability, medical condition, sexual orientation, gender expression or identity, or any other characteristic protected by applicable law. The emphasis placed on DE&I by the Company and by our Board of Directors (the "Board") is demonstrated by the inclusion of DE&I metrics in the materials for each meeting of the Compensation and Management Development Committee of the Board.

As of December 31, 2020, 67% of our total workforce were women. Additionally, 57% of our management roles at Director level and above and 66% of our new hires in 2020 were women. Throughout 2020, 32% of our new hires in the United States were minorities. Our DE&I strategy is enabled by our DE&I Council, which was established in 2020, led by an executive leadership team member and comprised of employees who are representative of our global, regionally diverse workforce, that oversees and strategically plans for diversity and inclusion within our Company. Throughout 2020, we formed and expanded several Employee Resources Groups ("ERG's"). These ERG's, which include Women, Black, Veteran's, and LGBTQIA+, further honor and support our inclusive environment of Total Self through building and supporting internal communities. We also have several development programs dedicated to women in leadership, and actively partner with the Healthcare Businesswomen's Association on development and recognition programs. We have a zero-tolerance policy on discrimination and harassment and have several programs under which employees can report incidents confidentially or anonymously and without fear of reprisal.

Recruitment, Retention and Development. The primary ways we recruit and retain employees are by (1) ensuring that our compensation and benefits are competitive in our industry and in local labor markets; and (2) ensuring our leadership and internal programs support our culture and values.

Our Global Talent Acquisition Team leverages numerous resources including industry networks, online and social media platforms, university relations, and industry-focused career events to source talent for open positions. Candidates are thoroughly screened and evaluated against job-specific skills, experience and education criteria.

We regularly evaluate our compensation and benefit programs using external market data and feedback from our Global Talent Acquisition Team, and have established processes in place to make necessary revisions. Our Total Rewards Team is introducing a new Global Salary Structure to drive consistent enterprise-wide compensation and job level practices.

We have an extensive, award-winning training program that provides regulatory, business, foreign language, and management training and other opportunities for professional and personal development and mentorship. Training is offered in online, self-directed sessions as well as group settings. Specific training highlights for 2020 include Unconscious Bias and Data Privacy training for all employees.

Forbes 2020 World's Best Employers. The Company was named to Forbes list of the World's Best Employers in 2020, ranking highest among our competitive set – biopharmaceutical outsourcing organizations. This recognition is realized just three years into the Company's journey to create a leading insights-driven, product development organization that is fueled by top talent and a collaborative culture.

Indemnification and Insurance

In conjunction with our Clinical Solutions services, we employ or contract with research institutions and, in some jurisdictions, principal investigators and pharmacies on behalf of biopharmaceutical companies to serve as research centers and principal investigators in conducting clinical trials to test new candidate drugs on human volunteers. Such testing creates the risk of liability for personal injury or death of volunteers, particularly to volunteers with life-threatening illnesses, resulting from adverse reactions to the candidate drugs administered. It is possible that we could be held liable for claims and expenses arising from any professional malpractice of the principal investigators with whom we contract or engage, or in the event of personal injury to or death of persons participating in clinical trials. In addition, as a result of our operation of Phase I clinical trial facilities, we could be liable for the general risks associated with clinical trials including, but not limited to, adverse events resulting from the administration of candidate drugs to clinical trial participants or the professional malpractice of medical care providers. We also could be held liable for errors or omissions in connection with the services we perform through each of our service groups. For example, we could be held liable for errors, omissions, or breach of contract, if monitoring obligations have been transferred to us and one of our CRA's inaccurately reports from source documents or fails to adequately monitor a human clinical trial resulting in inaccurately recorded results.

We have sought to reduce our risks by implementing the following where practicable:

- securing contractual assurances such as indemnification provisions and provisions seeking to limit or exclude liability contained in our contracts with customers, institutions, pharmacies, vendors and principal investigators;
- securing contractual and other assurances that adequate insurance will be maintained to the extent applicable by customers, institutions, pharmacies, vendors, principal investigators and us; and
- complying with various regulatory requirements, including monitoring that the oversight of independent review boards and ethics committees are intact where obligations are transferred to us and monitoring the oversight of the procurement by the principal investigator of each participant's informed consent to participate in the study.

Our contractual indemnifications generally do not fully protect us against certain of our own actions, such as negligence. Contractual arrangements are subject to negotiation with customers, and the terms and scope of any indemnification, limitation of liability or exclusion of liability varies from customer to customer and from clinical trial to clinical trial. Additionally, financial performance of these indemnities is not secured. Therefore, we bear the risk that any indemnifying party against which we have claims may not have the financial ability to fulfill its indemnification obligations to us.

While we maintain a global insurance program including professional liability and other types of insurance standard to our industry to cover our liability while conducting our business activities and contracted services, including drug safety issues as well as data processing and other errors and omissions, it is possible that we could become subject to claims not covered by insurance or that exceed our coverage limits. We could be materially and adversely affected if we were required to pay damages or bear the costs of defending any claim that is outside the scope of, or in excess of, a contractual indemnification provision, beyond the level of insurance coverage or not covered by insurance, or in the event that an indemnifying party does not fulfill its indemnification obligations.

Information about our Executive Officers

The following table sets forth information concerning our executive officers:

Name	Age	Position
Alistair Macdonald	51	Chief Executive Officer and Director
Jason Meggs	45	Chief Financial Officer
Paul Colvin	51	President, Clinical Solutions
Michelle Keefe	54	President, Commercial Solutions
Jonathan Olefson	45	General Counsel and Corporate Secretary

The following is a biographical summary of the experience of our executive officers:

Alistair Macdonald - Chief Executive Officer and Director

Alistair Macdonald has been our Chief Executive Officer ("CEO") and a member of the Board since October 2016. He joined our Company in May 2002 and has served in various senior leadership roles during that time. Prior to his current role, Mr. Macdonald most recently served as President and Chief Operating Officer from January 2015 to September 2016 and Chief Operating Officer from January 2013 to January 2015. He also served as our President, Clinical Development Services from March 2012 to January 2013, Executive Vice President of our Global Oncology Unit from February 2011 to March 2012, Executive Vice President, Strategic Development from October 2009 to February 2011, and Senior Vice President, Biometrics from May 2002 to September 2009. He also previously served as the Chairman of the Board for the Association of Clinical Research Organizations (ACRO). He received his Master of Science in Environmental Diagnostics from Cranfield University. We believe Mr. Macdonald brings to our Board valuable perspective and experience as our Chief Executive Officer, and as a former Chief Operating Officer of our Company, as well as extensive knowledge of the CRO and biopharmaceutical industries, all of which qualify him to serve as one of our directors.

Jason Meggs - Chief Financial Officer

Jason Meggs was appointed our Chief Financial Officer ("CFO") in May 2018 after serving as Executive Vice President and Interim CFO beginning in February 2018. Prior to his appointment to this role, he served as our Executive Vice President and CFO of the Commercial Solutions segment from August 2017 to February 2018. He also previously served as our Executive Vice President, Oncology Operations from January 2017 to August 2017 and our Senior Vice President, Business Finance from 2014 to 2016. Prior to joining Syneos Health, Mr. Meggs was Global Vice President, Internal Audit, at Quintiles Transnational Corporation, a leading global CRO, from 2013 to 2014 and held a number of finance roles at Quintiles from 2005 to 2013. He began his career as an auditor with Deloitte & Touche LLP and Arthur Anderson LLP, and is a certified public accountant. He also previously served as the Treasurer for the ACRO. He received his Bachelor of Science in Business Administration degree with a Major in Accounting from Western Carolina University.

Paul Colvin - President, Clinical Solutions

Paul Colvin has been our President, Clinical Solutions since December 2018. Prior to joining Syneos Health, Mr. Colvin held multiple leadership roles at PPD, a leading global CRO, from October 2007 to December 2018. From May 2010 to June 2016, Mr. Colvin served as Executive Vice President, Global Clinical Development, PPD. Mr. Colvin also served as Chairman and CEO of PPD-SNBL, a joint venture that grew to be one of the largest clinical development service providers in Japan, from December 2014 to December 2018. Mr. Colvin served as Executive Vice President, Biopharma Partnerships, PPD from June 2016 to December 2018. Prior to joining PPD, Mr. Colvin held various leadership positions at Eli Lilly and Company, a global pharmaceutical company, from January 1993 to October 2007. He received his Bachelor of Science in Pharmacy from Butler University. He is also a registered pharmacist and completed executive development programs at London Business School and the Center for Creative Leadership.

Michelle Keefe - President, Commercial Solutions

Michelle Keefe has been our President, Commercial Solutions since December 2017. Prior to joining Syneos Health, Ms. Keefe spent six years at the Publicis Groupe, a communications holding company, taking on roles of increasing responsibility culminating as a group president in the Publicis Health Division from February 2012 to December 2017. From January 2015 to April 2016, Ms. Keefe was President and CEO of Publicis Touchpoint Solutions. From May 2016 to November 2017, Ms. Keefe was Group President at Publicis Health. Ms. Keefe broadened her healthcare experience by joining the Visiting Nurse Service of New York ("VNSNY"), the largest not for profit homecare business in the United States, from 2010 to 2012 where she was the VP of market development. Prior to joining the VNSNY, Ms. Keefe spent 22 years rising through the ranks at Pfizer, a global pharmaceutical corporation, in a variety of sales, marketing and general management roles, culminating as a Regional President. Ms. Keefe received her Bachelor of Science in Marketing from Seton Hall University.

Jonathan Olefson - General Counsel and Corporate Secretary

Jonathan Olefson has been our General Counsel and Corporate Secretary since November 2018. Prior to joining Syneos Health, Mr. Olefson was Senior Vice President, General Counsel and Secretary at Cotiviti Holdings, Inc., a healthcare analytics firm, from October 2013 to October 2018. Prior to that, Mr. Olefson spent nine years in senior legal and compliance roles at Cognizant Technology Solutions, a multinational information technology and consulting services firm, most recently as Vice President and General Counsel (Corporate, M&A and Intellectual Property). Mr. Olefson received his Bachelor of Arts degree from Emory University and his J.D. from The George Washington University Law School, graduating with honors.

Available Information

Our website address is syneoshealth.com. Information on our website is not incorporated by reference herein. Copies of our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and our proxy statements for our annual stockholders meetings, and any amendments to those reports, as well as Section 16 reports filed by our insiders, are available free of charge on our website as soon as reasonably practicable after we file the reports with, or furnish the reports to, the Securities and Exchange Commission (the "SEC").

Item 1A. Risk Factors.

We operate in a rapidly changing environment that involves a number of risks, some of which are beyond our control. In evaluating our company, you should consider carefully the risks and uncertainties described below together with the other information included in this Annual Report on Form 10-K, including our consolidated financial statements and related notes included in Part II, Item 8, "Financial Statements and Supplementary Data" in this Annual Report on Form 10-K. The occurrence of any of the following risks may materially and adversely affect our business, financial condition, results of operations and future prospects.

Risks Related to Our Business

The COVID-19 pandemic has adversely impacted our business and results of operations, and is expected to continue to do so.

On March 11, 2020, the World Health Organization designated the outbreak of the novel strain of coronavirus that causes the disease known as COVID-19 as a global pandemic. Governments around the world have taken unprecedented actions to mitigate the spread of COVID-19, including stay-at-home orders, social distancing requirements, quarantine requirements, and limitations on travel, including the closing of national borders. Governments have also encouraged businesses to allow their employees to work remotely and minimize travel. As a result of these restrictions and recommendations, most of our employees are working remotely where possible and we have limited employee travel.

As a result of the COVID-19 pandemic, we have experienced, and expect to continue to experience, disruptions that have severely impacted, and are expected to continue to impact, our business and our operations, including:

- delays or difficulties in commencing new and operating ongoing clinical trials, including the inability to access investigative sites, delays in enrolling patients, inability of the FDA and other regulatory authorities to perform routine functions, and difficulty obtaining necessary pharmaceutical products and supplies;
- within the Commercial Solutions segment, delayed decision making related to new business awards, delays or cancellations of existing customer projects, and restrictions on the ability of our field teams to visit HCPs;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials, as well as the reduction of our customers' operating budgets;
- interruption of key clinical trial activities, such as clinical trial site data monitoring, due to social distancing requirements, stay-at-home orders imposed or recommended by federal or state governments, employers, and others or interruption of clinical trial subject visits and study procedures, which may impact the collection and integrity of study data and ability to measure clinical trial endpoints;
- shutdowns or other business disruptions at our customers;
- limitations on our employee resources, including because of stay-at-home orders from federal or state governments, sickness of employees or their families or the desire of employees to avoid contact with large groups of people;

- diversion of management resources to focus on mitigating the impacts of the COVID-19 pandemic; and
- impacts from prolonged remote work arrangements, such as strains on our business continuity plans, cybersecurity risks, and inability of certain employees to perform their work remotely.

We expect that these disruptions may continue to negatively impact our results of operations for the year ending December 31, 2021. The COVID-19 pandemic continues to evolve rapidly. The extent to which the pandemic will impact our business, liquidity and financial results will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the ultimate duration and severity of the pandemic; the effectiveness of COVID-19 vaccines and the mass distribution and administration of such vaccines; the frequency and severity of future waves of infections; travel restrictions and social distancing requirements in the countries where we conduct business; the effectiveness of actions taken to contain and treat the disease; and how quickly and to what extent more normalized economic and operating conditions can resume. If we or our customers experience prolonged shutdowns or other business disruptions beyond current expectations, our ability to conduct our business could be materially and adversely impacted, and our business, liquidity, and financial results may be adversely affected.

The continued spread of COVID-19 has led to disruption and volatility in the global capital markets, which increases the cost of, and adversely impacts access to, capital and increases economic uncertainty. This volatility and uncertainty adversely affected our stock price, and may again adversely affect our stock price in the future. The actions that governments and individuals have taken in response to COVID-19 have led to a sharp contraction in many aspects of the United States economy and a steep rise in unemployment. The pandemic has caused an economic recession, which may lead our customers to reduce their operating budgets or drive them to internally perform the clinical development and commercialization tasks that we provide, in which case our business would suffer. Even after the COVID-19 pandemic has subsided, we may continue to experience material adverse effects to our business as a result of the global economic impact of the pandemic.

If we do not generate a large number of new business awards, or if new business awards are delayed, terminated, reduced in scope, or fail to go to contract, our business, financial condition, results of operations, or cash flows may be materially adversely affected.

Our business is dependent on our ability to generate new business awards from new and existing customers and maintain existing customer contracts. Our inability to generate new business awards on a timely basis and subsequently enter into contracts for such awards could have a material adverse effect on our business, financial condition, results of operations or cash flows.

There is risk of cancelability in both the clinical and commercial businesses. The time between when a clinical study is awarded and when it goes to contract is typically several months, and prior to a new business award going to contract, our customer can cancel the award without notice. Once an award goes to contract, the majority of our customers can terminate the contract with little notice, in many cases 30 days or less. Our contracts may be delayed or terminated by our customers or reduced in scope for a variety of reasons beyond our control, including but not limited to:

- decisions to forego or terminate a particular trial;
- budgetary limits or changing priorities;
- actions by regulatory authorities;
- production problems resulting in shortages of the candidate drug being tested;

- failure of products being tested to satisfy safety requirements or efficacy criteria;
- unexpected or undesired clinical results for products;
- insufficient patient enrollment in a trial;
- insufficient principal investigator recruitment;
- production problems resulting in shortages of the product being tested;
- the customers' decision to terminate or scale back the development or commercialization of a product or to end a particular project;
- shift of business to a competitor or internal resources; or
- product withdrawal following market launch.

Our commercial services contracts typically have a significantly shorter wind down period than clinical contracts, particularly within our Deployment Solutions offerings. Furthermore, many of our communications services and consulting services projects are tied to a customer's annual marketing budget or ad hoc service requests, which can lead to seasonal variability in revenue and less predictability in future revenues. In addition, many of our biopharmaceutical Deployment Solutions service contracts provide our customers with the opportunity to internalize the resources provided under the contract and terminate all or a portion of the services we provide under the contract. Our customers may also decide to shift their business to a competitor. Each of these factors results in less visibility to future revenues and may result in high volatility in future revenues.

Contract terminations, delays and modifications are a regular part of our business across each of our segments. For example, our full service offering within our Clinical Solutions business has been, and may continue to be, negatively impacted by project delays, which impact near term revenue disproportionately. In addition, project delays, downsizings and cancellations, particularly within our Deployment Solutions and communications offerings, which are part of our Commercial Solutions business, have impacted our results in the past and might impact them in the future. The loss, reduction in scope or delay of a large project or of multiple projects could have a material adverse effect on our business, results of operations, and financial condition. In addition, we might not realize the full benefits of our backlog if our customers cancel, delay, or reduce their commitments to us.

In the event of termination, our contracts often provide for fees for winding down the project, which include both fees incurred and actual and non-cancellable expenditures and may include a fee to cover a percentage of the remaining professional fees on the project. These fees might not be sufficient for us to maintain our margins, and termination may result in lower resource utilization rates and therefore lower operating margins. In addition, cancellation of a contract or project for the reasons noted above may result in the unwillingness or inability of our customer to satisfy its existing obligations to us such as payments of accounts receivable, which may in turn result in a material impact to our results of operations and cash flow. Historically, cancellations and delays have negatively impacted our operating results, and they might again. In addition, we might not realize the full benefits of our backlog if our customers cancel, delay, or reduce their commitments to us, which may occur if, among other things, a customer decides to shift its business to a competitor or revoke our status as a preferred provider. Thus, the loss or delay of a large business award or the loss or delay of multiple awards could adversely affect our revenues and profitability. Additionally, a change in the timing of a new business award could affect the period over which we recognize revenue and reduce our revenue in any one quarter.

Our backlog might not be indicative of our future revenues, and we might not realize all of the anticipated future revenue reflected in our backlog.

Our backlog consists of anticipated revenue awarded from contract and pre-contract commitments that are supported by written communications. Once work begins on a project, revenue is recognized over the duration of the project, provided the award has gone to contract. Projects may be canceled or delayed by the customer or delayed by regulatory authorities for reasons beyond our control. To the extent projects are delayed, the timing of our revenue could be adversely affected. In addition, if a customer terminates a contract, we typically would be entitled to receive payment for all services performed up to the termination date and subsequent customer-authorized services related to terminating the canceled project. Typically, however, we have no contractual right to the full amount of the future revenue reflected in our backlog in the event of a contract termination or subsequent changes in scope that reduce the value of the contract. The duration of the projects included in our backlog, and the related revenue recognition, typically range from a few months to several years. Our backlog might not be indicative of our future revenues, and we might not realize all the anticipated future revenue reflected in that backlog. A number of factors may affect backlog, including:

- the size, complexity, and duration of projects or strategic relationships;
- the cancellation or delay of projects;
- the failure of one or more business awards to go to contract; and
- changes in the scope of work during the course of projects.

The rate at which our backlog converts to revenue may vary over time. The revenue recognition on larger, more global projects could be slower than on smaller, more regional projects for a variety of reasons, including, but not limited to, an extended period of negotiation between the time the project is awarded to us and the actual execution of the contract, as well as an increased time frame for obtaining the necessary regulatory approvals.

Our backlog at December 31, 2020 was $10.95 billion. Although an increase in backlog will generally result in an increase in revenues over time, an increase in backlog at a particular point in time does not necessarily correspond directly to an increase in revenues during any particular period, or at all. The extent to which contracts in backlog will result in revenue depends on many factors, including, but not limited to, delivery against project schedules, scope changes, contract terminations and the nature, duration, and complexity of the contracts, and can vary significantly over time.

Our operating results have historically fluctuated between fiscal quarters and may continue to fluctuate in the future, which may adversely affect the market price of our stock.

Our operating results have fluctuated in previous quarters and years and may continue to vary significantly from quarter to quarter and are influenced by a variety of factors, such as:

- timing of contract amendments for changes in scope that could affect the value of a contract and potentially impact the amount of net new business awards and revenue from quarter to quarter;
- commencement, completion, execution, postponement, or termination of large contracts;
- contract terms for the recognition of revenue milestones;
- progress of ongoing contracts and retention of customers;

- timing of and charges associated with completion of acquisitions, integration of acquired businesses, and other events;
- changes in the mix of services delivered, both in terms of geography and type of services;
- potential customer disputes, penalties or other issues that may impact the revenue we are able to recognize, or the collectability of our related accounts receivable; and
- exchange rate fluctuations.

Our operating results for any particular quarter are not necessarily a meaningful indicator of future results and fluctuations in our quarterly operating results could negatively affect the market price and liquidity of our stock.

If we underprice our contracts, overrun our cost estimates, or fail to receive approval for or experience delays in documentation of change orders, our business, financial condition, results of operations, or cash flows may be materially adversely affected.

We price our contracts based on assumptions regarding the scope of work required and cost to complete the work. We bear the financial risk if we initially underprice our contracts or otherwise overrun our cost estimates, which could adversely affect our cash flows and financial performance. In addition, contracts with our customers are subject to change orders, which occur when the scope of work we perform needs to be modified from that originally contemplated in our contract with the customers. This can occur, for example, when there is a change in a key study assumption or parameter or a significant change in timing. We may be unable to successfully negotiate changes in scope or change orders on a timely basis or at all, which could require us to incur cost outlays ahead of the receipt of any additional revenue. In addition, under generally accepted accounting principles in the United States of America (“GAAP”) we cannot recognize additional revenue anticipated from change orders until appropriate documentation is received by us from the customer authorizing the change. However, if we incur additional expense in anticipation of receipt of that documentation, we must recognize the expense as incurred. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations or cash flows.

Our business depends on the continued effectiveness and availability of our information systems, including the information systems we use to provide services to our customers and to store employee data, and failures of these systems, including cyber-attacks, may materially limit our operations or have an adverse effect on our reputation.

Our information systems consist of systems we have purchased or developed, legacy information systems from organizations we have acquired, including inVentiv and Synteract and, increasingly, web-enabled and other integrated information systems. In using these information systems, we frequently rely on third-party vendors to provide hosting and system management services, where our infrastructure is dependent upon the reliability of their underlying platforms, facilities, and communications systems. We also utilize integrated information systems that we provide customers access to or install for our customers in conjunction with our delivery of services.

As the breadth and complexity of our information systems continue to grow, we will increasingly be exposed to the risks inherent in maintaining the stability of our legacy systems due to prior customization, attrition of employees or vendors involved in their development, and obsolescence of the underlying technology, as well as risks from the increasing number and scope of external data breaches on multi-national companies. Because certain customers, clinical trials, and other long-term projects depend upon these legacy systems, we also face an increased level of embedded risk in maintaining the legacy systems and limited options to mitigate such risk. We are also exposed to risks associated with the availability of all our information systems, including:

- disruption, impairment or failure of data centers, telecommunications facilities or other key infrastructure platforms, including those maintained by our third-party vendors;
- security breaches of, cyber-attacks on, and other failures or malfunctions in our internal systems, including our employee data and communications, critical application systems or their associated hardware, software, and databases;
- excessive costs, excessive delays, or other deficiencies in systems development and deployment; and
- potential for encryption based “Ransomware” attacks that could hinder our ability to access our systems and data until we are able to recover from backups.

The materialization of any of these risks may impede the processing of data, the delivery of databases and services, and the day-to-day management of our business and could result in the corruption, loss or unauthorized disclosure of proprietary, confidential, or other data. In addition, a security breach could require that we expend substantial additional resources related to the security of our technical infrastructure, databases and services, diverting resources from other projects and disrupting our business. Our technology disaster recovery plans might not adequately protect us in the event of a system failure. Despite any precautions we take, damage from fire, floods, hurricanes, power loss, telecommunications failures, computer viruses, break-ins, and similar events at our various computer facilities or those of our third-party vendors could result in interruptions in the flow of data to us and from us to our customers. One such third party vendor is SolarWinds Corporation (“SolarWinds”), a provider of IT monitoring and management products and services, including its Orion Platform products, which are used by over 30,000 businesses including ours. SolarWinds experienced a cyberattack that appears likely to be the result of a supply chain attack by an outside nation state. SolarWinds has stated that, as a result of the attack, software updates related to its Orion Platform products delivered between March and June 2020 included vulnerabilities, and that its investigation is ongoing. Since being notified of the attack, we have taken steps to mitigate the vulnerabilities identified within the Orion Platform products. Corruption or loss of data may result in the need to repeat a project at no cost to the customer, but at significant cost to us, the termination of a contract, civil or criminal enforcement actions and penalties, or damage to our reputation. Additionally, significant delays in system enhancements or inadequate performance of new or upgraded systems once completed could damage our reputation and harm our business. Finally, long-term disruptions in the infrastructure caused by events such as natural disasters, the outbreak of war, the escalation of hostilities and acts of terrorism, particularly involving cities in which we have offices, and cyber-attacks such as those recently faced by other multi-national companies could adversely affect our businesses. As our business continues to expand globally, these types of risks may be further increased by instability in the geopolitical climate of certain regions, underdeveloped and less stable utilities and communications infrastructure, and other local and regional factors. Although we carry property, cyber incident, and business interruption insurance that we believe is customary for our industry, our coverage might not be adequate to compensate us for all losses that may occur.

Unauthorized disclosure of sensitive or confidential data, including personal data, whether through systems failure or employee actions, cyber-attacks, fraud, or misappropriation, could damage our reputation and cause us to lose customers. Similarly, we have been and expect that we will continue to be subject to attempts to gain unauthorized access to or through our information systems or those we internally or externally develop for our customers, including a cyber-attack by computer programmers and hackers who may develop and deploy viruses, worms, or other malicious software programs, process breakdowns, denial-of-service attacks, malicious social engineering or other malicious activities, or any combination of the foregoing. In addition, we may be susceptible to physical or computer-based attacks by terrorists or hackers due to our role in the biopharmaceutical service industry. These concerns about security are increased when information is transmitted over the Internet. In response to the COVID-19 pandemic, more of our employees are working remotely, which may increase the risk of such attacks. If such attacks are not detected immediately, their effect could be compounded. To date these attacks have not had a material impact on our operations or financial results. However, successful attacks in the future could result in negative publicity, significant remediation and recovery costs, legal liability and damage to our reputation and could have a material adverse effect on our financial condition, results of operations, and cash flows. In addition, our liability insurance might not be sufficient in type or amount to cover us against claims related to security breaches, cyber-attacks and other related breaches.

Additionally, we rely on service providers for the timely transmission of information across our global data network. If a service provider fails to provide the communications capacity or services we require for similar reasons, the failure could interrupt our services. Because of the centrality of our processing systems to our business, any interruption or degradation could adversely affect the perception of our brands' reliability and harm our business. If a service provider experiences the unauthorized disclosure of sensitive or confidential data they are processing on our behalf, whether through systems failure or employee actions, cyber-attacks, fraud, or misappropriation, it could damage our reputation and cause us to lose customers. Similarly, such disclosure could result in negative publicity, significant remediation and recovery costs, legal liability and damage to our reputation, and could have a material adverse effect on our financial condition, results of operations, and cash flows. In addition, contractual indemnity, the service provider's liability insurance and our liability insurance might not be sufficient in type or amount to cover us against claims related to security breaches, cyber-attacks, and other related breaches.

We are subject to governmental regulation and legal obligations in the areas of privacy, data, and security. Our actual or perceived failure to comply with such obligations could harm our business.

The laws and regulations governing the use of data, including data protection laws, continue to receive heightened legislative and regulatory focus in the United States, Europe and elsewhere. For example, in many jurisdictions, clients, regulators, individuals and other third parties may need to be notified in the event of a personal data breach. These laws may differ on what constitutes a personal data breach, who must be notified if a breach occurs, timelines for notifications, and the breadth of information notifications must include. Complying with these numerous, complex, and often changing requirements is expensive and difficult. As another example, the laws surrounding the movement of personal data across national or regional borders may be subject to complex legal requirements, which are evolving. We are likely to be required to expend capital and other resources to ensure ongoing compliance with these laws and regulations. Our failure, or the failure of our partners, our service providers, or our employees or contractors, to comply with these laws and regulations could result in fines, sanctions, litigation, damages, cost for mitigation activities and damage to our global reputation and our brands. For example, failures to comply with the EU's GDPR could result in regulatory investigations, orders to cease processing, and/or fines of up to the higher of 20,000,000 Euros or up to 4% of our total worldwide annual revenue. Relatedly, following the United Kingdom's withdrawal from the European Economic Area and the European Union, and the expiry of the transition period, companies have to comply with both the GDPR and the GDPR as incorporated into United Kingdom national law, the latter regime having the ability to separately fine up to the greater of £17.5 million or 4% of global turnover. The relationship between the United Kingdom and the European Union in relation to certain aspects of data protection law remains unclear, for example around how data can lawfully be transferred between each jurisdiction, which exposes us to further compliance risk. In addition, laws and expectations relating to privacy, security and data protection continue to evolve

in ways that may limit our data access, use and disclosure, and may require increased expenditures by us or may dictate that we not offer certain types of services.

Our customer or therapeutic area concentration may have a material adverse effect on our business, financial condition, results of operations or cash flows.

If any large customer decreases or terminates its relationship with us, our business, financial condition, results of operations or cash flows could be materially adversely affected. For the year ended December 31, 2020, our top ten customers based on revenue accounted for approximately 35% of our consolidated revenue and our top ten Clinical Solutions customers based on backlog accounted for approximately 43% of our total backlog. No single customer accounted for greater than 10% of our total consolidated revenue for the years ended December 31, 2020 or 2019. During the year ended December 31, 2018, one customer accounted for approximately 11% of our revenue, which was primarily earned in our Clinical Solutions Segment. It is possible that an even greater portion of our revenues will be attributable to a smaller number of customers in the future, including as a result of our entering into strategic provider relationships with customers. Also, consolidation in our potential customer base results in increased competition for important market segments and fewer available customer accounts.

Additionally, conducting multiple clinical trials for different sponsors in a single therapeutic class involving drugs with the same or similar chemical action may adversely affect our business if some or all of the trials are canceled because of new scientific information or regulatory judgments that affect the drugs as a class.

Similarly, marketing and selling products for different sponsors with similar drug action subjects us to risk if new scientific information or regulatory judgment prejudices the products as a class, leading to compelled or voluntary prescription limitations or withdrawal of some or all of the products from the market.

Our business is subject to international economic, political and other risks that could have a material adverse effect on our business, financial condition, results of operations, cash flows or reputation.

We have operations in many foreign countries, including, but not limited to, countries in the Asia-Pacific region, Europe, Latin America and the Middle East and Africa. As of December 31, 2020, approximately 56% of our workforce was located outside of the United States, and for the fiscal year ended December 31, 2020, approximately 40% of our revenue was earned from work performed outside of the United States. Our international operations are subject to risks and uncertainties inherent in operating in these regions, including:

- conducting a single project across multiple countries is complex, and issues in one country, such as a failure to comply with or unanticipated changes to local regulations, or restrictions such as restrictions on import or export of clinical trial material or availability of clinical trial data may affect the progress of the clinical trial in the other countries, resulting in delays or potential termination of contracts, which in turn may result in loss of revenue;

- the United States or other countries could enact legislation or impose regulations or other restrictions, including unfavorable labor regulations, tax policies, data protection regulations or economic sanctions, which could have an adverse effect on our ability to conduct business in or expatriate profits from the countries in which we operate;

- the United States has previously enacted and it or other countries may in the future enact legislation that limits or prohibits the use of foreign manufactured equipment, such as the National Defense Authorization Act for Fiscal Year 2019, which imposes a ban on the use of certain surveillance, telecommunications, and other equipment manufactured in China, which could have an adverse effect on our ability to conduct business;

- foreign countries are expanding or may expand their banking regulations that govern international currency transactions, particularly cross-border transfers, which may inhibit our ability to transfer funds into or within a jurisdiction, impeding our ability to pay our principal investigators, vendors and employees, thereby impacting our ability to conduct trials in such jurisdictions;

- foreign countries are expanding or may expand their regulatory framework with respect to patient informed consent, protection and compensation in clinical trials, or transparency reporting requirements (similar to the Physician Payments Sunshine Act in the United States), which could delay, inhibit or prohibit our ability to conduct projects in such jurisdictions;

- the regulatory or judicial authorities of foreign countries might not enforce legal rights and recognize business procedures in a manner in which we are accustomed or would reasonably expect;

- changes in political and economic conditions, including the United Kingdom's withdrawal from the European Union and the policies of the current U.S. presidential administration, may lead to changes in the business environment in which we operate, as well as changes in inflation and foreign currency exchange rates;

- potential violations of applicable anti-bribery/anti-corruption laws, including the United States Foreign Corrupt Practices Act ("FCPA") and the UK Bribery Act of 2010, may cause a material adverse effect on our business, financial condition, results of operations, cash flows, or reputation;

- customers in foreign jurisdictions may have longer payment cycles, and it may be more difficult to collect receivables in those jurisdictions;

- natural disasters, pandemics, or international conflict, including terrorist acts, could interrupt our services, endanger our personnel, or cause project delays or loss of clinical trial materials or results;

- political unrest, such as the current situation in the Middle East, could delay or disrupt the ability to conduct clinical trials or other business; and

- foreign governments may enact currency exchange controls that may limit the ability to fund our operations or significantly increase the cost of maintaining operations.

These risks and uncertainties could negatively impact our ability to, among other things, perform large, global projects for our customers. Furthermore, our ability to deal with these issues could be affected by applicable U.S. laws. Any such risks could have an adverse impact on our business, financial condition, results of operations, cash flows, or reputation.

The impact of the United Kingdom's withdrawal from the European Union may have a negative effect on global economic conditions, financial markets, and demand for our services, which could materially affect our financial condition and results of operations.

The United Kingdom withdrew from the European Union ("Brexit") and ratified an agreement on the future trading relationship between the parties (the "UK-EU Trade and Cooperation Agreement" or "TCA"). The TCA is subject to formal approval by the European Parliament and the Council of the European Union before it comes into effect and has been applied provisionally since January 1, 2021. Because the agreement merely sets forth a framework in many respects and will require complex additional bilateral negotiations between the United Kingdom and the European Union as both parties continue to work on the rules for implementation, significant uncertainty remains about how the precise terms of the relationship between the parties will differ from the terms before withdrawal.

These developments have had and may continue to have a material adverse effect on global economic conditions and the stability of global financial markets, and could significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Lack of clarity about future United Kingdom laws and regulations, including financial laws and regulations, tax and free trade agreements, and intellectual property and employment laws, could decrease foreign direct investment in the United Kingdom, increase costs, and could depress economic activity and restrict our access to capital. If other Member States pursue withdrawal, barrier free access between the United Kingdom and other Member States or among the European economic area overall could be diminished or eliminated.

Any of these factors could have a material adverse effect on our business, financial condition and results of operations. For the year ended December 31, 2020, revenue attributed to the United Kingdom represented 6% of our total revenue. In addition, we have a substantial physical presence in the United Kingdom, in particular at our Farnborough facility. These operations subject us to revenue risk with respect to our customers in the United Kingdom and adverse movements in foreign currency exchange rates, in addition to risks related to the general economic and legal uncertainty related to Brexit described above.

Governmental authorities may question our intercompany transfer pricing policies or change their laws in a manner that could increase our effective tax rate or otherwise harm our business.

As a U.S. company doing business in international markets through subsidiaries, we are subject to foreign tax and intercompany pricing laws, including those relating to the flow of funds between legal entities in various international jurisdictions. Tax authorities in the United States and in international markets have the right to examine our corporate structure and how we account for intercompany fund transfers. If such authorities challenge our corporate structure, transfer pricing mechanisms or intercompany transfers and the resulting assessments are upheld, our operations may be negatively impacted and our effective tax rate may increase. Tax rates vary from country to country and if a tax authority determines that our profits in one jurisdiction should be increased, we might not be able to realize the full tax benefits in the event we cannot utilize all foreign tax credits that are generated, or we do not realize a compensating offsetting adjustment in another taxing jurisdiction. The effects of either would increase our effective tax rate. Additionally, the Organization for Economic Cooperation and Development has issued certain guidelines regarding base erosion and profit shifting. As these guidelines continue to be formally adopted by separate taxing jurisdictions, we may need to change our approach to intercompany transfer pricing in order to maintain compliance under the new guidelines. Our effective tax rate may increase or decrease depending on the current location of global operations at the time of the change. Finally, we might not always be in compliance with all applicable customs, exchange control, Value Added Tax, and transfer pricing laws despite our efforts to be aware of and to comply with such laws. If these laws change we may need to adjust our operating procedures and our business could be adversely affected.

If we are unable to successfully increase our market share, our ability to grow our business and execute our growth strategies could be materially adversely affected.

A key element of our growth strategy is increasing our market share within the biopharmaceutical services market, the clinical development market and in the geographic markets in which we operate. In addition, we continue to invest in expanding new services such as our late phase offerings, along with solutions for our medical device customers. As we grow our market share within the biopharmaceutical services and clinical development markets and make investments in growing our newer service offerings, we might not have or adequately build the competencies necessary to perform our services satisfactorily or may face increased competition. If we are unable to succeed in increasing our market share or realize the benefits of our investments in our new service offerings, we may be unable to implement this element of our growth strategy, and our ability to grow our business or maintain our operating margins could be adversely affected.

Upgrading the information systems that support our operating processes and evolving the technology platform for our services pose risks to our business.

Continued efficient operation of our business requires that we implement standardized global business processes and evolve our information systems to enable this implementation, especially in the course of integrating acquired businesses into our company. We have continued to undertake significant programs to optimize business processes with respect to our services. Our inability to effectively manage the implementation of new information systems or upgrades and adapt to new processes designed into these new or upgraded systems in a timely and cost-effective manner may result in disruption to our business and negatively affect our operations.

We have entered into agreements with certain vendors to provide systems development, integration, and hosting services that develop or license to us the information technology (“IT”) platforms and capacity for programs to optimize our business processes. If such vendors or their products fail to perform as required or if there are substantial delays in developing, implementing, securing, and updating our IT platforms, our customer delivery may be impaired, and we may have to make substantial further investments, internally or with third parties, to achieve our objectives. For example, we rely on an external vendor to provide the clinical trial management software used in managing the completion of our customer clinical trials. If that externally provided system is not properly maintained we might not be able to meet the obligations of our contracts or may need to incur significant costs to replace the system or capability. Additionally, our progress may be limited by parties with existing or claimed patents who seek to enjoin us from using preferred technology or seek license payments from us.

Meeting our objectives is dependent on a number of factors which might not take place as we anticipate, including obtaining adequate technology-enabled services, depending upon our third-party vendors to develop and enhance existing applications to adequately support our business, creating IT-enabled services that our customers will find desirable, and implementing our business model with respect to these services. Also, increased IT-related expenditures and our potential inability to anticipate increases in service costs may negatively impact our business, financial condition, results of operations, or cash flows.

If we fail to perform our services in accordance with contractual requirements, regulatory requirements, and ethical considerations, we could be subject to significant costs or liability and our reputation could be harmed.

We contract with biopharmaceutical companies to perform a wide range of services to assist them in bringing new drugs to market and to support the commercial activity of products already in the marketplace. Our services include monitoring clinical trials, data and laboratory analysis, electronic data capture, patient recruitment, product launch consulting, Deployment Solutions, advertising, publications, and medical communications, and other related services. Such services are complex and subject to contractual requirements, regulatory standards, and ethical considerations. For example, we must adhere to applicable regulatory requirements such as those required by the Food and Drug Administration and European Medicines Agency, including those laws and regulations governing the promotion, sales, and marketing of biopharmaceutical products, and Good Clinical Practice requirements, which govern, among other things, the design, conduct, performance, monitoring, auditing, recording, analysis, and reporting of clinical trials. Once initiated, clinical trials must be conducted pursuant to and in accordance with the applicable IND, the requirements of the relevant IRBs, and GCP regulations. We are also subject to regulation by the Drug Enforcement Administration ("DEA") which regulates the distribution, recordkeeping, handling, security, and disposal of controlled substances. If we fail to perform our services in accordance with these requirements, regulatory agencies may take action against us or our customers. Such actions may include sanctions such as injunctions or failure of such regulatory authorities to grant marketing approval of products, imposition of clinical holds or delays, suspension or withdrawal of approvals, rejection of data collected in our studies, license revocation, product seizures or recalls, operational restrictions, civil or criminal penalties or prosecutions, damages, or fines. Additionally, there is a risk that actions by regulatory authorities, if they result in significant inspectional observations or other measures, could harm our reputation and cause customers not to award us future contracts or to cancel existing contracts. Customers may also bring claims against us for breach of our contractual obligations, and patients in the clinical trials and patients taking drugs approved on the basis of those trials may bring personal injury claims against us. Any such action could have a material adverse effect on our business, financial condition, results of operations, cash flows, or reputation.

Such consequences could arise if, among other things, the following occur:

Improper performance of our services. The performance of our clinical development and other biopharmaceutical services is complex and time-consuming. For example, we may make mistakes in conducting a clinical trial that could negatively impact or obviate the usefulness of the clinical trial or cause the results of the clinical trial to be reported improperly. If the clinical trial results are compromised, we could be subject to significant costs or liability, which could have an adverse impact on our ability to perform our services and our reputation could be harmed. For example:

- non-compliance generally could result in the termination of ongoing clinical trials or the disqualification of data for submission to regulatory authorities;
- compromise of data from a particular trial, such as failure to verify that adequate informed consent was obtained from subjects or improper monitoring of data, could require us to repeat the clinical trial under the terms of our contract at no further cost to our customer, but at a substantial cost to us; and
- breach of a contractual term could result in liability for damages or termination of the contract.

Large clinical trials can cost hundreds of millions of dollars and improper performance of our services could have a material adverse effect on our financial condition, damage our reputation, and result in the termination of current contracts or failure to obtain future contracts from the affected customer or other customers.

Interactive Voice/Web Response Technology malfunction. We develop, maintain, and use third-party computer-based interactive voice/web response systems to automatically manage the randomization of patients in a given clinical trial to different treatment arms and regulate the supply of investigational drugs, all by means of interactive voice/web response systems. An error in the design, programming, or validation of these systems could lead to inappropriate assignment or dosing of patients which could give rise to patient safety issues, invalidation of the trial, or liability claims against us. Furthermore, negative publicity associated with such a malfunction could have an adverse effect on our business and reputation. Additionally, errors in randomization may require us to repeat the clinical trial at no further cost to our customer, but at a substantial cost to us.

Investigation of customers. From time to time, one or more of our customers are audited or investigated by regulatory authorities or enforcement agencies with respect to regulatory compliance of their clinical trials, programs, or the marketing and sale of their drugs. In these situations, we have often provided services to our customers with respect to the clinical trials, programs, or activities being audited or investigated, and we are called upon to respond to requests for information by the authorities and agencies. There is a risk that either our customers or regulatory authorities could claim that we performed our services improperly or that we are responsible for clinical trial or program compliance. If our customers or regulatory authorities make such claims against us and prove them, we could be subject to damages, fines, or penalties. In addition, negative publicity regarding regulatory compliance of our customers' clinical trials, programs, or drugs could have an adverse effect on our business and reputation.

Insufficient customer funding to complete a clinical trial. As noted above, clinical trials can cost hundreds of millions of dollars. There is a risk that we may initiate a clinical trial for a customer, and then the customer becomes unwilling or unable to fund the completion of the trial. In such a situation, notwithstanding the customer's ability or willingness to pay for or otherwise facilitate the completion of the trial, we may be ethically bound to complete or wind down the clinical trial at our own expense.

In addition to the above U.S. laws and regulations, we must comply with the laws of all countries where we do business, including laws governing clinical trials in the jurisdiction where the trials are performed. Failure to comply with applicable requirements could subject us to regulatory risk, liability, and potential costs associated with redoing the trials, which could damage our reputation and adversely affect our operating results.

The operation of our early phase (Phase I and IIA) clinical facilities and the services we provide there as well as our clinical trial management, including direct interaction with clinical trial patients or volunteers, and our in-home clinical trial services, could create potential liability that may adversely affect our business, financial condition, results of operations, cash flows, and reputation.

We operate facilities where early phase clinical trials are conducted, which ordinarily involve testing an investigational drug on a limited number of individuals to evaluate a product's safety, determine a safe dosage range and identify side effects. Additionally, our business involves clinical trial management, which is one of our clinical development service offerings, and includes the testing of investigational drugs on human volunteers. Some of these trials involve the administration of investigational drugs to known substance abusers or volunteers and patients that are already seriously ill and are at risk for further illness or death. Failure to operate any of our early phase facilities in accordance with applicable regulations could result in that facility being shut down, which could disrupt our operations and adversely affect our business, financial condition, results of operations, cash flows, and reputation.

Additionally, we face risks resulting from the administration of drugs to volunteers, including adverse events, and the professional malpractice of medical care providers, including improper administration of a drug or device. We also directly employ doctors, nurses, and other trained employees who assist in implementing the testing involved in our clinical trials, such as drawing blood from healthy volunteers. Our home health services employees engage in a wide range of services, from watching clinical trial participants ingest a drug, to administering an infusion of oncology medicine to a pediatric patient. Our exposure with respect to these activities could exceed any contractual limits on indemnification in our contracts with customers and vendors. Any professional malpractice or negligence by such doctors, nurses, principal investigators, or other employees could potentially result in liability to us in the event of personal injury to or death of a volunteer in clinical trials. This liability, particularly if it were to exceed the limits of any indemnification agreements and insurance coverage we may have, may adversely affect our business and financial condition, results of operations, cash flows, and reputation.

If we are unable to attract suitable principal investigators and recruit and enroll patients for clinical trials, our clinical development business might suffer.

The recruitment of principal investigators and patients for clinical trials is essential to our business. Principal investigators are typically located at hospitals, clinics, or other sites and supervise the administration of the investigational drug to patients during the course of a clinical trial. Patients generally include people from the communities in which the clinical trials are conducted. Several of our competitors have purchased site networks or site management organizations as a strategy for priority access to a specific site, which could put us at a competitive disadvantage. Our clinical development business could be adversely affected if we are unable to attract suitable and willing principal investigators or recruit and enroll patients for clinical trials on a consistent basis. The expanding global nature of clinical trials increases the risk associated with attracting suitable principal investigators and patients, especially if these trials are conducted in regions where our resources or experience may be more limited. For example, if we are unable to engage principal investigators to conduct clinical trials as planned or enroll sufficient patients in clinical trials, we might need to expend additional funds to obtain access to more principal investigators and patients than planned or else be compelled to delay or modify the clinical trial plans, which may result in additional costs to us or cancellation of the clinical trial by our customer. If realized, these risks may also inhibit our ability to attract new business, particularly in certain regions.

Our business could result in liability to us if a drug causes harm to a patient. While we are generally indemnified and insured against such risks, we may still suffer financial losses.

When we market drugs under contract for a biopharmaceutical company, we could suffer liability for harm allegedly caused by those drugs, either as a result of a lawsuit against the biopharmaceutical company to which we are joined, a lawsuit naming us or any of our subsidiaries, or an action launched by a regulatory body. Any claim could result in potential liability for us if the claim is outside the scope of the indemnification agreement we have with the biopharmaceutical company, the biopharmaceutical company does not abide by the indemnification agreement as required, or the liability exceeds the amount of any applicable indemnification limits or available insurance coverage. Such a result could have an adverse impact on our financial condition, results of operations, cash flows, and reputation. Furthermore, negative publicity associated with harm caused by drugs we helped to market could have an adverse effect on our business and reputation.

Investments in our customers' businesses or drugs and our related commercial rights strategies could have a negative impact on our financial performance.

We may enter into arrangements with our customers or other drug companies in which we take on some of the risk of the potential success or failure of their businesses or drugs, including making strategic investments in our customers or other drug companies, providing financing to customers or other drug companies, or acquiring an interest in the revenues from customers' drugs or in entities developing a limited number of drugs. Before entering into any such arrangements, we carefully analyze and select the customers and drugs with which we are willing to structure our risk-based deals. Our financial results could be adversely affected if these investments or the underlying drugs result in losses, do not achieve the level of success that we anticipate, and/or our return or payment from the drug investment or financing is less than our direct and indirect costs with respect to these arrangements. Additionally, there is a risk that we are not awarded projects by other customers who believe we are in competition with them because of these investments, which would negatively impact future awards.

If we lose the services of key personnel or are unable to recruit experienced personnel, our business, financial condition, results of operations, cash flows, or reputation could be materially adversely affected.

Our success substantially depends on the collective performance, contributions, and expertise of our senior management team and other key personnel including qualified management, professional, scientific, and technical operating staff, and business development personnel, particularly as we integrate acquired businesses into our company. There is significant competition for qualified personnel, particularly those with higher educational degrees, in the biopharmaceutical and related services industries. In addition, the close proximity of some of our facilities to offices of our major competitors could adversely impact our ability to successfully recruit and retain key personnel. The departure of any key executive, or our inability to continue to identify, attract and retain qualified personnel or replace any departed personnel in a timely fashion, might impact our ability to grow our business and compete effectively in our industry and might negatively affect our business, financial condition, results of operations, cash flows, or reputation.

Foreign currency exchange rate fluctuations may have a material adverse effect on our financial condition, results of operations, and cash flows.

Approximately 19% of our fiscal year 2020 revenue was contracted in currencies other than U.S. dollars and 37% of our direct and operating costs are incurred in countries with functional currencies other than the U.S. dollar. Our financial statements are reported in U.S. dollars and changes in foreign currency exchange rates could significantly affect our financial condition, results of operations, or cash flows. Our primary exposure to fluctuations in foreign currency exchange rates is related to the following risks:

Foreign Currency Risk from Differences in Customer Contract Currency and Operating Costs Currency. The majority of our global contracts are denominated in U.S. dollars or Euros while our operating costs in foreign countries are denominated in various local currencies. Fluctuations in the exchange rates of the currencies we use to contract with our customers and the currencies in which we incur cost to fulfill those contracts can have a significant impact on our results of operations.

Foreign Currency Translation Risk. The revenue and expenses of our international operations are generally denominated in local currencies and translated into U.S. dollars for financial reporting purposes. Accordingly, exchange rate fluctuations between the value of the U.S. dollar versus local currencies will affect the U.S. dollar value of our foreign currency denominated revenue, costs, and results of operations.

Foreign Currency Transaction Risk. We earn revenue from our service contracts over a period of several months and, in many cases, over several years, resulting in timing differences between the consummation and cash settlement of a transaction. Accordingly, profitability of the transactions denominated in foreign currencies is subject to effects of fluctuations in foreign currency exchange rates during the period of time between the consummation and cash settlement of a transaction.

We may seek to limit our exposure to these risks through inclusion of foreign currency exchange rate provisions in our service contracts, and/or by hedging certain exposures with foreign exchange derivative instruments. These measures, however, might not offset or mitigate any, or all of the adverse financial effects of unfavorable movements in foreign currency exchange rates.

Unfavorable economic conditions have previously and could in the future have a material adverse effect on our business, financial condition, results of operations, or cash flows.

Unfavorable economic conditions and other adverse macroeconomic factors on global and domestic markets have previously and may in the future result, among other matters, in tightening in the credit and capital markets, low liquidity, and volatility in fixed income, credit, currency, and equity markets. Such conditions have and could in the future have a negative effect on our business, financial condition, results of operations, or cash flows. For example, our customers might not be able to raise money to conduct existing clinical trials, or to fund new drug development and related future clinical trials. Resource-sharing customers may also scale back commercial support for their products. In addition, economic or market disruptions could negatively impact our vendors, contractors, or principal investigators which might have a negative effect on our business.

Our effective income tax rate may fluctuate, which may adversely affect our results of operations.

Our effective income tax rate is influenced by our profitability in the various taxing jurisdictions in which we operate. Changes in the distribution of profits and losses among taxing jurisdictions may have a significant impact on our effective income tax rate, which in turn could have an adverse effect on our results of operations. Factors that may affect our effective income tax rate include, but are not limited to:

- jurisdictional earnings;
- the repatriation of foreign earnings to the United States;
- uncertain tax positions;
- changes in tax laws in various taxing jurisdictions, including interpretations of regulations related to the Tax Cuts and Jobs Act;
- audits by taxing authorities;
- the establishment of valuation allowances against deferred income tax assets if we determine that it is more likely than not that future income tax benefits will not be realized;
- the release of a previously established valuation allowances against deferred income tax assets if we determine that it is more likely than not that future income tax benefits will be realized;
- changes in the relative mix and size of clinical studies in various tax jurisdictions; and
- the timing and amount of the vesting and exercising of share-based compensation.

These changes may cause fluctuations in our effective income tax rate that could adversely affect our results of operations and cause fluctuations in our earnings and earnings per share.

We have only a limited ability to protect our intellectual property rights, and these rights are important to our success.

We develop, use, and protect our proprietary methodologies, analytics, systems, technologies, and other intellectual property. Existing laws of the various countries in which we provide services or solutions offer only limited protection of our intellectual property rights, and the protection in some countries may be very limited. We rely upon a combination of trade secrets, confidentiality policies, nondisclosure agreements, and other contractual arrangements, as well as patent, copyright and trademark laws, to protect our intellectual property rights. These laws are subject to change at any time and certain agreements might not be fully enforceable, which could further restrict our ability to protect our innovations. Our intellectual property rights might not prevent competitors from independently developing services similar to or duplicative of ours or alleging infringement of their intellectual property rights in certain jurisdictions. The steps we take in this regard might not be adequate to prevent or deter infringement or misappropriation of our intellectual property or claims against us for alleged infringement or misappropriation by competitors, former employees, or other third parties. Furthermore, we might not be able to detect unauthorized use of, or take appropriate and timely steps to enforce, our intellectual property rights. Enforcing our rights might also require considerable time, money, and oversight, and we might not be successful in enforcing our rights.

Our acquisition strategy may present additional risks, including the risk that we may be unable to fully realize the competitive and operating synergies projected to be achieved through any specific acquisition.

We have historically grown our business both organically and through acquisitions, most notably through the Merger and the Synteract Acquisition. We have and will continue to assess the need and opportunity to offer additional services through acquisitions of other companies. Acquisitions involve numerous risks, including the following:

- ability to identify suitable acquisition opportunities or obtain any necessary financing on commercially acceptable terms;
- increased risk to our financial position and liquidity through changes to our capital structure and assumption of acquired liabilities, including any indebtedness incurred to finance the acquisitions and related interest expense;
- diversion of management’s attention from normal daily operations of the business;
- insufficient revenues to offset increased expenses associated with acquisitions;
- assumption of liabilities and exposure to unforeseen liabilities of acquired companies, including liabilities for their failure to comply with healthcare, tax, and other regulations;
- inability to achieve identified operating and financial synergies and other benefits anticipated to result from an acquisition;
- difficulties integrating and documenting processes and controls in conformance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002;
- ability to integrate acquired operations, products, and technologies into our business;
- difficulties retaining and integrating acquired personnel and distinct cultures into our business; and
- the potential loss of key employees, customers, or projects.

For example, fully realizing the anticipated benefits of the Merger and the Synteract Acquisition will depend on, among other things, our ability to integrate the businesses, achieve operating synergies and obtain the other expected benefits from the transactions. We have incurred and will continue to incur substantial expenses in connection with integration activities as a result of the Merger and the Synteract Acquisition and combining the businesses, operations, networks, systems, technologies, policies, and procedures of these companies, including integrating and documenting processes and controls in conformance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, which were not applicable to inVentiv prior to the Merger or Synteract prior to the Synteract Acquisition. If we are unsuccessful in managing our integrated operations, or if we do not fully realize the expected operating efficiencies, cost savings, and other benefits currently anticipated from the Merger or the Synteract Acquisition, our operations and financial condition could be adversely affected and we might not be able to take advantage of business development opportunities.

We may also spend time and money investigating and negotiating with potential acquisition targets but not complete the transaction. Any acquisition could involve other risks, including, among others, the assumption of additional liabilities and expenses, difficulties and expenses in connection with integrating the acquired companies and achieving the expected benefits, issuances of potentially dilutive securities or interest-bearing debt, loss of key employees of the acquired companies, transaction expenses, diversion of management's attention from other business concerns, and, with respect to the acquisition of international companies, the inability to overcome differences in international business practices, language and customs. Our failure to successfully integrate potential future acquisitions could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Our relationships with existing or potential customers who are in competition with each other may adversely impact the degree to which other customers or potential customers use our services, which may adversely affect our business, financial condition, results of operations, or cash flows.

The biopharmaceutical industry is highly competitive, with biopharmaceutical companies each seeking to persuade payers, providers, and patients that their drug therapies are better and more cost-effective than competing therapies marketed or being developed by competing firms. In addition to the adverse competitive interests that biopharmaceutical companies have with each other, biopharmaceutical companies also have adverse interests with respect to drug selection and reimbursement with other participants in the healthcare industry, including payers and providers. Biopharmaceutical companies also compete to be first to market with new drug therapies. We regularly provide services to biopharmaceutical companies that compete with each other, and we sometimes provide services to such customers regarding competing drugs in the market and in development. Our existing or future relationships, particularly broader strategic provider and commercial relationships, with our biopharmaceutical customers may therefore deter other biopharmaceutical customers from using our services or may result in our customers seeking to place limits on our ability to serve other biopharmaceutical industry participants. In addition, our further expansion into the broader healthcare market may adversely impact our relationships with biopharmaceutical customers, and such customers may elect not to use our services, reduce the scope of services that we provide to them or seek to place restrictions on our ability to serve customers in the broader healthcare market with interests that are adverse to theirs. Any loss of customers or reductions in the level of revenues from a customer could have a material adverse effect on our business, financial condition, results of operations, or cash flows.

Our results of operations may be adversely affected if we fail to realize the full value of our goodwill and intangible assets.

As of December 31, 2020, our goodwill and net intangible assets were valued at $5.71 billion, which constituted approximately 71% of our total assets.

Our goodwill is principally related to the acquisition of inVentiv completed in August 2017. Goodwill is tested for impairment at the reporting unit level, which is one level below the operating segment level. This test requires us to determine if the implied fair value of the reporting unit's goodwill is less than its carrying amount. The impairment analysis requires significant judgments, estimates and assumptions. There is no assurance that the actual future earnings or cash flows of the reporting units will not decline significantly from the projections used in the impairment analysis. Goodwill impairment charges may be recognized in future periods in one or more of the reporting units to the extent changes in factors or circumstances occur, including deterioration in the macroeconomic environment or industry, deterioration in our performance or our future projections, or changes in plans for one or more of our reporting units. As of December 31, 2020, our goodwill is assigned to five reporting units. We completed our annual impairment test as of October 1, 2020 for all of our reporting units, and concluded that there were no impairments.

Intangible assets consist of backlog, customer relationships, and trademarks. We review intangible assets at the end of each reporting period to determine if facts and circumstances indicate that the useful life is shorter than originally estimated or that the carrying amount of the assets might not be recoverable. If such facts and circumstances exist, we assess the recoverability of identified assets by comparing the projected undiscounted net cash flows associated with the related asset or group of assets over their remaining lives to their respective carrying amounts. Impairments, if any, are based on the excess of the carrying amount over the fair value of those assets and occur in the period in which the impairment determination was made. We have experienced material impairment losses in the past, including an impairment charge of $30.0 million in 2017 related to the impairment of the INC Research tradename in connection with our rebranding in 2018, and could experience additional material impairment losses in the future. The process of testing intangible assets for impairment involves numerous judgments, assumptions, and estimates made by management including expected future profitability, cash flows, and the fair values of assets and liabilities, which inherently reflect a high degree of uncertainty and may be affected by significant variability. If the business climate deteriorates, then actual results may not be consistent with these judgments, assumptions, and estimates, and our intangible assets may become impaired in future periods. Both the deterioration of the business climate and any potential impairment losses caused as a result of such deterioration could in turn have an adverse impact on our business, financial condition, and results of operations.

We face risks arising from the restructuring of our operations, which could adversely affect our financial condition, results of operations, cash flows, or business reputation.

From time to time, such as in connection with the Merger, we have adopted cost savings initiatives to improve our operating efficiency through various means such as: (i) the reduction of overcapacity, primarily in our costs of services (billable) function; (ii) elimination of non-billable support roles; and (iii) the consolidation or other realignment of our resources. During the year ended December 31, 2020, we recognized approximately $26.3 million of employee severance costs, facility closure and lease termination costs of $2.3 million, and other costs of $0.8 million related to our focus on optimizing our resources worldwide.

Restructuring actions present significant risks that could have a material adverse effect on our operations, financial condition, results of operations, cash flows, or business reputation. Such risks include:

- a decrease in employee morale and retention of key employees;
- a greater number of employment claims;
- actual or perceived disruption of service or reduction in service standards to customers;
- the failure to preserve supplier relationships and distribution, sales and other important relationships, and to resolve conflicts that may arise;

- the failure to achieve targeted cost savings; and
- the failure to meet operational targets and customer requirements due to the loss of employees and any work stoppages that might occur.

We operate in many different jurisdictions and we could be adversely affected by violations of the FCPA, U.K. Bribery Act of 2010, and/or similar worldwide anti-corruption and anti-bribery laws.

The FCPA, U.K. Bribery Act of 2010, and similar worldwide anti-corruption laws prohibit companies and their intermediaries from making improper payments for the purpose of obtaining or retaining business. Our internal policies mandate compliance with these anti-corruption laws. We operate in many parts of the world that have experienced corruption to some degree and, in certain circumstances, anti-corruption laws have appeared to conflict with local customs and practices. Despite our training and compliance programs, we cannot assure that our internal control policies and procedures will protect us from acts in violation of anti-corruption laws committed by persons associated with us, and our continued expansion outside the United States, including in developing countries, could increase such risk in the future. Violations of the FCPA or other ex-U.S. anti-corruption laws, or even allegations of such violations, could disrupt our business and result in a material adverse effect on our financial condition, results of operations, cash flows, and reputation. For example, violations of anti-corruption laws can result in restatements of, or irregularities in, our financial statements as well as severe criminal or civil sanctions. In some cases, companies that violate the FCPA (or similar laws in other jurisdictions outside the U.S.) might be debarred by the U.S. government and/or lose their U.S. export privileges. In addition, U.S. or other governments might seek to hold us liable for successor liability for FCPA violations or violations of other anti-corruption laws committed by companies that we acquire or in which we invest, or by or on behalf of persons working for or representing our Company. Changes in anti-corruption laws or enforcement priorities could also result in increased compliance requirements and related costs which could adversely affect our business, financial condition, results of operations, and cash flows.

The failure of third parties to provide us critical support services could adversely affect our business, financial condition, results of operations, cash flows, or reputation.

We depend on third parties for support services vital to our business. Such support services include, but are not limited to, IT services, laboratory services, third-party transportation and travel providers, freight forwarders and customs brokers, drug depots and distribution centers, suppliers or contract manufacturers of drugs for patients participating in clinical trials, and providers of licensing agreements, maintenance contracts, or other services. In addition, we also rely on third-party CROs and other contract clinical personnel for clinical services either in regions where we have limited resources, or in cases where demand cannot be met by our internal staff. The failure of any of these third parties to adequately provide us critical support services could have a material adverse effect on our business, financial condition, results of operations, cash flows, or reputation.

Our embedded and functional outsourcing services could subject us to employment liability, which may cause adverse effects on our business.

With our embedded and functional outsourcing services, we place employees at the physical workplaces of our customers. The risks of this activity include claims of errors and omissions, misuse or misappropriation of client proprietary information, theft of client property, and torts or other claims under employment liability, co-employment liability, or joint employment liability. We have policies and guidelines in place to reduce our exposure to such risks, but if we fail to follow these policies and guidelines we may suffer reputational damage, loss of customer relationships and business, and monetary damages.

We might not be able to utilize certain of our net operating loss carryforwards and certain other tax attributes, which could harm our profitability.

As of December 31, 2020, we had approximately $260.6 million of net operating loss carry forwards ("NOLs") available to reduce U.S. federal taxable income in future years. Under Section 382 and similar provisions of the Internal Revenue Code (the "Code"), if a corporation undergoes an "ownership change," that corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes, such as research tax credits, to offset its post-change income and taxes may be limited for U.S. federal income tax purposes (or similar provisions of other jurisdictions). These limitations may be subject to certain exceptions, including if there is "net unrealized built-in gain" in the assets of the corporation undergoing the ownership change.

A portion of our NOLs arise from certain transaction tax deductions associated with Double Eagle's acquisition of inVentiv on November 9, 2016. Pursuant to that acquisition, inVentiv generally has a contingent obligation to pay former shareholders of inVentiv Group Holdings the value of U.S. federal, state, and local tax benefits arising from those transaction tax deductions as such benefits are realized and, consequently, the ability of the combined company to benefit from inVentiv's NOLs will be limited to the extent of such contingent obligation. As of December 31, 2020, the remaining contingent obligation due to the former shareholders of inVentiv Group Holdings related to the benefits above is approximately $6.8 million.

Downgrades of our credit ratings could adversely affect us.

We can be adversely affected by downgrades of our credit ratings because ratings are a factor influencing our ability to access capital and the terms of any new indebtedness, including covenants and interest rates. Our customers and vendors may also consider our credit profile when negotiating contract terms, and if they were to change the terms on which they deal with us, it could have a material adverse effect on our business, results of operations, cash flows, and financial condition.

Many of our vendors have the right to declare us in default of our agreements if any such vendor, including the lessors under our vehicle fleet leases, determines that a change in our financial condition poses a substantially increased credit risk. Upon default, the lessors can repossess the vehicles and require us to compensate them for any remaining lease payments in excess of the value of the repossessed vehicles. As of December 31, 2020, we had $49.0 million in finance lease obligations, primarily related to vehicles used in Deployment Solutions in the United States. Deployment Solutions may be negatively impacted if we lose the use of vehicles for any period of time.

Our credit agreement (as amended, the "Credit Agreement") contains covenants that may restrict our ability to, among other things, borrow money, pay dividends, make capital expenditures, make strategic acquisitions and effect a consolidation, merger, or disposal of all or substantially all of our assets. Refer to "Risks Related to Our Indebtedness - Covenant restrictions under the Credit Agreement may limit our ability to operate our business" for further details on our covenant restrictions.

Risks Related to Our Industry

The biopharmaceutical services industry is highly competitive and our business could be materially impacted if we do not compete effectively.

The biopharmaceutical services industry is highly competitive. Our business often competes with other biopharmaceutical services companies, internal discovery departments, development departments, sales and marketing departments, information technology departments, and other departments within our customers, some of which could be considered large biopharmaceutical services companies in their own right with greater resources than ours. To the extent that our clients choose to internally perform the clinical development and commercialization tasks that we provide, our business will suffer. We also compete with universities, teaching hospitals, governmental agencies, and others. If we do not compete successfully, our business will suffer. The industry is highly fragmented, with numerous smaller specialized companies and a handful of companies with global capabilities similar to certain of our own capabilities. Increased competition has led to price and other forms of competition (such as acceptance of less favorable contract terms) that could adversely affect our operating results. There are few barriers to entry for companies considering offering any one or more of the services we offer. Because of their size and focus, these companies might compete effectively against us, which could have a material adverse impact on our business.

In recent years, our industry has experienced increased consolidation which may continue and might put us at risk of growing more slowly than our competitors that make acquisitions. This trend is likely to produce more competition from the resulting larger companies, and ones without the cost pressures of being public, for both customers and acquisition candidates. One specific aspect of this consolidation competition involves CROs entering into transactions to attempt to control more access to clinical trial participants, like acquisition of site networks and data. These trends could make it harder for us to compete successfully.

In addition, the emergence of the use of real world evidence and new tools such as machine learning and artificial intelligence that capitalize on the availability of large data sets may reduce the time and costs of the discovery and development process, may allow our clients to more readily perform clinical development tasks and services that we provide themselves or may cause price competition. Our failure to develop and offer the correct solutions that address these technological advances in a timely, cost-effective manner could adversely affect our business in a material way.

Our future growth and success will depend on our ability to successfully compete with other companies that provide similar services in the same markets, some of which may have financial, marketing, technical, and other advantages. We also expect that competition will continue to increase as a result of consolidation among these various companies. Large technology companies with substantial resources, technical expertise, and greater brand power could also decide to enter or further expand in the markets where our business operates and compete with us. If one or more of our competitors or potential competitors were to merge or partner with another of our competitors, or if a new entrant emerged with substantial resources, the change in the competitive landscape could adversely affect our ability to compete effectively. We compete on the basis of various factors, including breadth and depth of services, reputation, reliability, quality, innovation, security, price, and industry expertise and experience. In addition, our ability to compete successfully may be impacted by the growing availability of health information from social media, government health information systems, and other free or low-cost sources. In addition, consolidation or integration of wholesalers, retail pharmacies, health networks, payers, or other healthcare stakeholders may lead any of them to provide information services directly to customers or indirectly through a designated service provider, resulting in increased competition from firms that may have lower costs to market (e.g., no data supply costs). Any of the above may result in lower demand for our services, which could result in a material adverse impact on our operating results and financial condition.

Outsourcing trends in the biopharmaceutical industry and changes in aggregate spending and research and development budgets could adversely affect our operating results and growth rate.

Our revenues depend on the level of R&D and commercialization expenditures, size of the drug-development pipelines, and outsourcing trends of the biopharmaceutical industry, including the amount of such R&D and commercialization spend that is outsourced and subject to competitive bidding amongst us and our competitors. Accordingly, economic factors and industry trends that affect biopharmaceutical companies affect our business.

Biopharmaceutical companies continue to seek long-term strategic collaborations with global CROs with favorable pricing terms. Competition for these collaborations is intense and we might not be selected, in which case a competitor may enter into the collaboration and our business with the customer, if any, may be limited. Our success depends in part on our ability to establish and maintain preferred provider relationships with large biopharmaceutical companies. Our failure to develop or maintain these preferred provider relationships could have a material adverse effect on our business and results of operations. Furthermore, in order to obtain preferred provider relationships or other large contracts for commercialization services, we may have to reduce the prices for our services, which could negatively impact our gross margin for these services.

Our small and mid-sized biopharmaceutical company clients may rely on funding from venture capital and other sources to drive their business. To the extent that this funding is reduced, our small and mid-sized biopharmaceutical company clients may be forced to reduce their outsourced R&D and commercialization expenditures, which could have a material adverse effect on our business and results of operations.

In addition, if the biopharmaceutical industry reduces its outsourcing of clinical trials or commercialization services or such outsourcing fails to grow at projected rates, our business, financial condition, results of operations, and cash flows could be materially and adversely affected. We may also be negatively impacted by consolidation and other factors in the biopharmaceutical industry, which may slow decision making by our customers, result in the delay or cancellation of existing projects, cause reductions in overall R&D expenditures, or lead to increased pricing pressures. Further, in the event that one of our customers combines with a company that is using the services of one of our competitors, the combined company could decide to use the services of that competitor or another provider. All of these events could adversely affect our business, financial condition, cash flows, or results of operations.

Actions by government regulators or customers to limit a prescription's scope or withdraw an approved product from the market could adversely affect our business, results of operations, and financial condition.

Government regulators have the authority, after approving a biopharmaceutical product, to limit its indicated use, impose restrictions on its marketing, or withdraw it from the market completely based on safety or other concerns. Similarly, customers may act to voluntarily limit the sales of biopharmaceutical products or withdraw them from the market. Actions by payers to limit a product on a formulary list or restrict coverage or reimbursement for a product can influence customer decisions to withdraw or limit market support for a product. In the past, we have provided services with respect to products that have been limited or withdrawn. If we are providing services to customers for products that are limited or withdrawn, we may be required to narrow the scope of or terminate our services with respect to such products, which would prevent us from earning the full amount of revenues anticipated under the related contracts with negative impacts to our business, results of operations, cash flows, and financial condition.

If we fail to comply with federal, state, and foreign healthcare laws, including fraud and abuse laws, we could face substantial penalties and our business, financial condition, results of operations, cash flows, and prospects could be adversely affected.

Even though we do not and will not order healthcare services or bill directly to Medicare, Medicaid, or other third-party payers, certain federal and state healthcare laws and regulations pertaining to fraud and abuse are and will be applicable to our business. We could be subject to healthcare fraud and abuse laws of both the federal government and the states in which we conduct our business. Because of the breadth of these laws and the narrowness of available statutory and regulatory exceptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If we or our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, imprisonment, and the curtailment or restructuring of our operations, any of which could materially adversely affect our ability to operate our business, our financial results, and our reputation.

We may be affected by healthcare reform and potential additional reforms which may adversely impact the biopharmaceutical industry and reduce the need for our services or negatively impact our profitability.

Numerous government bodies are considering or have adopted healthcare reforms and may undertake, or are in the process of undertaking, efforts to control healthcare costs through legislation, regulation, and agreements with HCPs and biopharmaceutical companies, including many of our customers. As governmental administrations change and reforms take place, we are unable to predict what legislative proposals, if any, will be adopted in the future. If regulatory cost-containment efforts limit the profitability of new drugs by, for example, continuing to place downward pressure on pharmaceutical pricing and/or increasing regulatory burdens and operating costs of the biopharmaceutical industry, our customers may reduce their commercialization and R&D spending, which could reduce the business they outsource to us. In addition, if regulatory requirements are relaxed or simplified drug approval procedures are adopted, the demand for our services could decrease.

Government bodies have adopted and may continue to adopt new healthcare legislation or regulations that are more burdensome than existing regulations. For example, product safety concerns and recommendations by the Drug Safety Oversight Board could change the regulatory environment for drug products, and new or heightened regulatory requirements may increase our expenses or limit our ability to offer some of our services. We might have to incur additional costs to comply with these or other new regulations, and failure to comply could harm our financial condition, results of operations, cash flows, and reputation, and result in adverse legal action(s). Additionally, new or heightened regulatory requirements may have a negative impact on the ability of our customers to conduct industry-sponsored clinical trials, which could reduce the need for our post-approval development services.

Current and proposed laws and regulations regarding the protection of personal data could result in increased risks of liability or increased cost to us or could limit our service offerings.

The confidentiality, collection, use, and disclosure of personal data, including clinical trial information, are subject to governmental regulation. In addition, the United States, the EU and its member states, and other countries where we have operations, including but not limited to Japan, China, South Korea, Brazil, and Singapore, continue to issue new data protection laws, rules, and regulations that govern the processing of personal information. Federal, state, and foreign governments may propose or have adopted additional legislation governing the collection, possession, use, storage, or disclosure of personal data, including but not limited to health and financial data, as well as security breach notification rules for loss or theft of such data. Additional legislation or regulation of this type might, among other things, require us to implement additional security measures and processes or to anonymize or de-identify health or other personal data in excess of what we are already obliged to do, each of which may require substantial expenditures or limit our ability to offer some of our services. Failure to comply with these data protection and privacy laws, rules, and regulations, or to resolve any privacy or security complaints, could subject us to regulatory sanctions, fines, delays in clinical trials, criminal prosecution, or civil liability, as well as reputational damage.

We are subject to similar privacy laws in Canada (the Personal Information Protection and Electronic Documents Act, the Act Respecting the Protection of Personal Information in the Private Sector, and the Personal Health Information Protection Act) and in the EEA (the GDPR). We are also subject to applicable U.S. state privacy and data security laws and regulations in the states in which we operate, such as the CCPA, which became effective as of January 2020. The CCPA provides for a private right of action for unauthorized access, theft or disclosure of personal information in certain situations with possible damage awards of $100 to $750 per consumer per incident, or actual damages, whichever is greater, and also permits class action lawsuits. Additionally, a new ballot initiative, the CPRA, recently passed in California. The CPRA will impose additional data protection obligations on companies doing business in California, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. It will also create a new California data protection agency authorized to issue substantive regulations and could result in increased privacy and information security enforcement. The majority of the provisions will go into effect on January 1, 2023, and additional compliance investment and potential business process changes may be required. In order to comply with such laws, we may incur substantial expenses, which may divert resources from other initiatives and projects, and could limit the services we are able to offer.

In the EU, the GDPR defines personal data as any information that relates to an identified or identifiable natural person, and it covers individuals including employees, customer contacts, and patients or clinical trial participants. The GDPR contains provisions specifically directed at the processing of health information, rights of data subjects, data breach notification, and extra-territoriality measures intended to extend the applicability of the law to certain activities performed by non-EU organizations (such as the targeting or monitoring of individuals located in the EU by organizations located in other locations). Failure by us, or by our partners, our service providers, or our employees or contractors, to comply with the GDPR could result in regulatory investigations, reputational damage, orders to cease/ change our use of data, enforcement notices and/ or fines of the greater of 20,000,000 Euros or 4% of total global annual revenue, as well as potential civil claims including class actions where individuals suffer harm. Following Brexit, we will have to comply with the GDPR and separately the GDPR as implemented in the United Kingdom, the latter regime having the ability to separately fine up to the greater of £17.5 million or 4% of global turnover. The relationship between the United Kingdom and the EU in relation to certain aspects of data protection law remains unclear, e.g. how data transfers between EU member states and the United Kingdom will be treated. These changes may lead to additional compliance costs and could increase our overall risk. As we expand into other foreign countries and jurisdictions, we may be subject to additional laws and regulations that may affect how we conduct business.

In addition, we operate on a global basis and may transfer personal data to our affiliates and service providers in the course of administering our business and performing our services. As a result, we are subject to legal requirements that govern the cross-border transfer of personal data. As an example of these requirements, the EU's GDPR requires that transfers of personal data originating in the European Union to locations outside of the European Economic Area that are not subject to a so-called adequacy finding must be supported by certain approved safeguards or subject to an appropriate derogation. Where we transfer personal data out of the EU and EEA, we utilize standard data protection clauses approved by the European Commission and derogations, where appropriate.

As noted in prior disclosures, certain of our clinical entities relied in part on the EU-U.S. and Swiss-U.S. Privacy Shield frameworks to transfer certain personal data from the EU and Switzerland, respectively, to the United States. On July 16, 2020, the Court of Justice of the European Union issued a judgement invaliding the European Commission's Decision (EU) 2016/1250 of 12 July 2016 on the adequacy of the protection provided by the EU-US Privacy Shield. Similarly, on September 8, 2020, Switzerland's Federal Data Protection and Information Commissioner ("FDPIC") issued an opinion concluding that the Swiss-US Privacy Shield Framework does not provide an adequate level of protection to transfer Personal Data from Switzerland to the United States. Because of these developments, we no longer leverage these frameworks to support the transfer of personal data from the EU and Switzerland to the United States. As the US Department of Commerce continues to administer these programs, however, we have elected to continue our participation in them, in an effort to demonstrate our commitment to the protection of personal data.

We are accountable for the acts and omissions of our third-party service providers we engage to process personal data on our behalf, subject to limitations and exclusions provided by law. There is no assurance that contractual measures and our own privacy and security-related safeguards will protect us from the risks associated with the third-party processing, storage and transmission of such information. Any violation of data protection laws by our third party processors could have a material adverse effect on our business and result in the fines and penalties outlined above.

Our customers face intense competition from lower cost generic products and other competing products, which may lower the amount that they spend on our services and could have a material adverse effect on our business, results of operations, cash flows, and financial condition.

Our customers face increasing competition from competing products and, in particular, from lower cost generic products, which in turn may affect their ability to pursue clinical development and commercialization activities. In the United States, the EU and Japan, political pressure to reduce spending on prescription products has led to legislation and other measures which encourage the use of generic products. In addition, proposals emerge from time to time in the United States and other countries for legislation to further encourage the early and rapid approval of generic products. Loss of patent protection for a product typically is followed promptly by generic substitutes, reducing our customers' sales of that product and their overall profitability. Availability of generic substitutes for our customers' products or other competing products may cause them to lose market share and, as a result, may adversely affect their results of operations and cash flow, which in turn may mean that they would not have adequate capital to purchase our services. If competition from generic or other products impacts our customers' finances such that they decide to curtail our services, our net revenues may decline and this could have a material adverse effect on our business, results of operations, and financial condition.

If we do not keep pace with rapid technological change, our services may become less competitive or obsolete.

The biopharmaceutical industry generally, and drug development and clinical research more specifically, are subject to rapid technological change. Our current competitors or other businesses might develop technologies or services that are more effective or commercially attractive than, or render obsolete, our current or future technologies and services. If our competitors introduce superior technologies or services and if we cannot make enhancements to remain competitive, our competitive position would be harmed. If we are unable to compete successfully, we may lose customers or be unable to attract new customers, which could lead to a decrease in our revenue and have an adverse impact on our financial condition.

The biopharmaceutical industry has a history of patent and other intellectual property litigation and we might be involved in costly intellectual property lawsuits.

The biopharmaceutical industry has a history of intellectual property litigation and these lawsuits will likely continue in the future. Accordingly, we may face patent infringement suits or be called upon to provide documentation by companies that have patents for similar business processes or other suits alleging infringement of their intellectual property rights. Legal proceedings relating to intellectual property could be expensive, take significant time, and divert management's attention from other business concerns, regardless of the outcome of the litigation. In the event an infringement lawsuit were brought against us and we did not prevail, we might have to pay substantial damages and we could be required to stop infringing activity or obtain a license to use technology on unfavorable terms.

Risks Related to Our Indebtedness

Our substantial debt could adversely affect our financial condition and cash flows from operations.

As of December 31, 2020, our total principal amount of indebtedness was $2.97 billion, which consisted of: (i) a $1.46 billion Term Loan A facility; (ii) a $560.6 million Term Loan B facility; (iii) $600.0 million of 3.625% Senior Notes; (iv) borrowings of $300.0 million under our accounts receivable financing agreement; and (v) $49.0 million in current and non-current finance lease obligations. Our substantial indebtedness could adversely affect our financial condition and cash flows from operations and thus make it more difficult for us to satisfy our obligations with respect to our senior secured facilities. If our cash flow is not sufficient to service our debt and adequately fund our business, we may be required to seek further additional financing or refinancing or dispose of assets. We might not be able to influence any of these alternatives on satisfactory terms or at all. Our substantial indebtedness could also:

- increase our vulnerability to adverse general economic, industry, or competitive developments;
- require us to dedicate a more substantial portion of our cash flows from operations to payments on our indebtedness, thereby reducing the availability of our cash flows to fund working capital, investments, acquisitions, capital expenditures, and other general corporate purposes;
- limit our ability to make required payments under our existing contractual commitments, including our existing long-term indebtedness;
- limit our ability to fund a change of control offer;
- require us to sell certain assets;
- restrict us from making strategic investments, including acquisitions, or causing us to make non-strategic divestitures;
- limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;
- place us at a competitive disadvantage compared to our competitors that have less debt;
- cause us to incur substantial fees from time to time in connection with debt amendments or refinancings;

- increase our exposure to rising interest rates because a substantial portion of our borrowings is at variable interest rates; and
- limit our ability to borrow additional funds or to borrow on terms that are satisfactory to us.

Despite our level of indebtedness, we are able to incur more debt and undertake additional obligations. Incurring such debt or undertaking such additional obligations could further exacerbate the risks to our financial condition.

We also may be able to incur additional indebtedness in the future. Although covenants under the Credit Agreement limit our ability to incur certain additional indebtedness, these restrictions are subject to a number of qualifications and exceptions, and the indebtedness incurred in compliance with these restrictions could be substantial. To the extent we incur additional indebtedness, the risks associated with our leverage, including our possible inability to service our debt obligations, would increase.

Servicing our debt will require a significant amount of cash, and our ability to generate sufficient cash depends on many factors, some of which are beyond our control.

Our ability to make payments on and refinance our debt, make strategic acquisitions, and fund capital expenditures depends on our ability to generate cash flow in the future. To some extent, our ability to generate future cash flow is subject to general economic, financial, competitive, and other factors that are beyond our control. We cannot assure you that:

- our business will generate sufficient cash flow from operations;
- we will continue to realize the cost savings, revenue growth, and operating improvements that resulted from the execution of our long-term strategic plan; or
- future sources of funding will be available to us in amounts sufficient to enable us to fund our liquidity needs.

We also may experience difficulties repatriating cash from foreign subsidiaries and accounts due to law, regulation, or contracts which could further constrain our liquidity. If we cannot fund our liquidity needs, we will have to take actions such as reducing or delaying capital expenditures, marketing efforts, strategic acquisitions, investments and alliances, selling assets, restructuring or refinancing our debt, or seeking additional equity capital. We cannot assure you that any of these remedies could, if necessary, be effected on commercially reasonable or favorable terms, or at all, or that they would permit us to meet our scheduled debt service obligations. Any inability to generate sufficient cash flow or refinance our debt on favorable terms could have a material adverse effect on our financial condition.

Covenant restrictions under the Credit Agreement, our other financing arrangements, and lease agreement may limit our ability to operate our business.

The Credit Agreement and our indentures governing our senior unsecured notes contain covenants that may restrict our ability to, among other things, borrow money, pay dividends, make capital expenditures, make strategic acquisitions and effect a consolidation, merger or disposal of all or substantially all of our assets. Although the covenants in the Credit Agreement and our other debt instruments are subject to various exceptions, we cannot assure you that these covenants will not adversely affect our ability to finance future operations, capital needs, or to engage in other activities that may be in our best interest. In addition, in certain circumstances, our long-term debt requires us to maintain a specified financial ratio and satisfy certain financial condition tests, which may require that we take action to reduce our debt or to act in a manner contrary to our business objectives. A breach of any of these covenants could result in a default under our senior secured facilities or our indentures governing our senior unsecured notes. If an event of default under the Credit Agreement or our other debt instruments occurs, the lenders thereunder or holders of the defaulted debt could elect to declare all amounts outstanding, together with accrued

interest, to be immediately due and payable. In such case, we might not have sufficient funds to repay all the outstanding amounts. In addition, the Credit Agreement is secured by first priority security interests on substantially all of our real and personal property, including the capital stock of certain of our subsidiaries. If an event of default under the Credit Agreement occurs, the lenders thereunder could exercise their rights under the related security documents. Any acceleration of amounts due under the Credit Agreement or the substantial exercise by the lenders of their rights under the security documents would likely have a material adverse effect on us. Our receivables facility also contains covenants customary in such facilities that may restrict our ability to operate our business.

Under the terms of the lease agreement for our corporate headquarters in Morrisville, North Carolina we may be required to issue a letter of credit ("LOCs") to the landlord based on our debt rating issued by Moody's Investors Service (or other nationally-recognized debt rating agency, such as S&P Global Ratings).

As of December 31, 2020 (and through the date of this filing), our debt rating was such that no LOC is currently required. Any letters of credit issued in accordance with the aforementioned requirements could be issued under our revolving credit facility under the Credit Agreement ("Revolver"), and, if issued under our revolving credit facility, would reduce our available borrowing capacity by the same amount accordingly.

Interest rate fluctuations may have a material adverse effect on our business, financial condition, results of operations, or cash flows.

Because we have substantial variable rate debt, fluctuations in interest rates may affect our business, financial condition, results of operations, or cash flows. We currently utilize interest rate swaps to limit our exposure to interest rate fluctuations; however, such instruments may not be effective. At December 31, 2020, we had approximately $2.97 billion of total principal indebtedness consisting of $2.02 billion in term loan debt, $600.0 million in 3.625% Senior Notes, borrowings of $300.0 million under our accounts receivable financing agreement, and $49.0 million in current and non-current of finance lease obligations, of which $809.5 million (excluding finance leases) was subject to variable interest rates.

A lowering or withdrawal of the ratings assigned to our debt securities by rating agencies may increase our future borrowing costs and reduce our access to capital.

Our debt currently has a non-investment grade rating, and any rating assigned could be lowered or withdrawn entirely by a rating agency if, in that rating agency's judgment, future circumstances relating to the basis of the rating, such as adverse changes, so warrant. Consequently, real or anticipated changes in our credit ratings will generally affect the market value of our debt. Credit ratings are not recommendations to purchase, hold, or sell the notes. Any future lowering of our ratings likely would make it more difficult or more expensive for us to obtain additional debt financing.

Risks Related to Ownership of Our Common Stock

We do not expect to pay any cash dividends for the foreseeable future.

We do not anticipate that we will pay any dividends to holders of our stock for the foreseeable future. Any payment of cash dividends will be at the discretion of our Board of Directors (the "Board") and will depend on our financial condition, capital requirements, legal requirements, earnings, and other factors. Our ability to pay dividends is restricted by the terms of the Credit Agreement and might be restricted by the terms of any indebtedness that we incur in the future. Consequently, you should not rely on dividends in order to receive a return on your investment.

Future sales of our stock in the public market could cause the market price of our stock to decrease significantly.

As of December 31, 2020, we had 103,934,738 outstanding shares of Class A common stock. In addition, we had 3,034,940 shares of outstanding stock options and restricted stock units that, if exercised or sold, would result in these additional shares becoming available for sale subject, in some cases, to Rule 144 and Rule 701 under the Securities Act. Our private equity sponsors (the "Sponsors") together own approximately 28% of our outstanding shares and have contractual rights to cause us to register resales of those shares. During the fiscal year ended December 31, 2020, our Sponsors sold 13 million shares of our common stock in underwritten secondary offerings.

Sales or issuances of substantial amounts of our stock in the public market by us or our shareholders may cause the market price of our stock to decrease significantly. The perception that such sales or issuances could occur could also depress the market price of our stock. Any such sales or issuances could also create public perception of difficulties or problems with our business and might also make it more difficult for us to raise capital through the sale of equity securities in the future at a time and price that we deem appropriate.

Our Sponsors have significant influence over our company, and their interests may be different from or conflict with those of our other shareholders.

Our Sponsors collectively beneficially own approximately 28% of our outstanding common stock. As a consequence, the Sponsors continue to be able to exert a significant degree of influence over our management, affairs, and matters requiring shareholder approval, including the election of directors, a merger, consolidation or sale of all or substantially all of our assets, and any other significant transaction. Additionally, each of the Sponsors is party to a stockholders agreement with us (the "Stockholders Agreements"). The Stockholders Agreements, among other things, each requires such shareholders to vote in favor of certain nominees to our Board. The interests of the Sponsors might not always coincide with our interests or the interests of our other shareholders. For instance, this concentration of ownership and/or the restrictions imposed by the Stockholders Agreements may have the effect of delaying or preventing a change in control of us otherwise favored by our other shareholders and could depress our stock price.

The Sponsors each make investments in companies and may, from time to time, acquire and hold interests in businesses that compete directly or indirectly with us. Each of the Sponsors may also pursue, for its own account, acquisition opportunities that may be complementary to our business, and as a result, those acquisition opportunities might not be available to us. Our organizational documents contain provisions renouncing any interest or expectancy held by our directors affiliated with the Sponsors in certain corporate opportunities. Accordingly, the interests of the Sponsors may supersede ours, causing the Sponsors or their affiliates to compete against us or to pursue opportunities instead of us, for which we have no recourse. Such actions on the part of the Sponsors and inaction on our part could have a material adverse effect on our business, financial condition, results of operations and cash flows.

The Sponsors control two seats on our Board, although four directors affiliated with the Sponsors remain on the Board. Since the Sponsors could invest in entities that directly or indirectly compete with us, when conflicts arise between the interests of the Sponsors and the interests of our shareholders, these directors might not be disinterested.

Provisions of our corporate governance documents and Delaware law could make an acquisition of our company more difficult and may prevent attempts by our shareholders to replace or remove our current management, even if beneficial to our shareholders.

Provisions of our certificate of incorporation and our amended and restated bylaws contain provisions that delay, defer or discourage transactions involving an actual or potential change in control of us or change in our management that shareholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our stock, thereby depressing the market price of our stock. In addition, these provisions may frustrate or prevent any attempts by our shareholders to replace or remove our current management by making it more difficult for shareholders to replace members of the Board. Because the Board is responsible for appointing the members of our management team, these provisions could in turn affect any attempt to replace current members of our management team. Among others, these provisions include: (i) our ability to issue preferred stock without shareholder approval; (ii) the requirement that our shareholders may not act without a meeting; (iii) requirements for advance notification of shareholder nominations and proposals contained in our bylaws; (iv) the absence of cumulative voting for our directors; (v) requirements for shareholder approval of certain business combinations; and (vi) the limitations on director nominations contained in our Stockholders Agreements.

Additionally, Section 203 of the Delaware General Corporation Law prohibits a publicly held Delaware corporation from engaging in a business combination with an interested shareholder, generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the merger in which the person became an interested shareholder, unless the business combination is approved in a prescribed manner. The existence of the foregoing provision could also limit the price that investors might be willing to pay in the future for shares of our stock, thereby depressing the market price of our stock.

Our certificate of incorporation, as amended, provides, subject to certain exceptions, that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or stockholders.

Our certificate of incorporation, as amended, provides, subject to limited exceptions, that the Court of Chancery of the State of Delaware will, to the fullest extent permitted by law, be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty owed by, or any wrongdoing by, any of our directors, officers or stockholders to us or our stockholders; (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation, as amended, or our amended and restated bylaws; (4) any action to interpret, apply, enforce or determine the validity of our certificate of incorporation, as amended, or our amended and restated bylaws or (5) any action asserting a claim governed by the internal affairs doctrine. This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act, Securities Act, or, in each case, the rules and regulations thereunder, or any other claim for which the U.S. federal courts have exclusive jurisdiction. Any person or entity purchasing or otherwise acquiring or holding any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our certificate of incorporation, as amended, described above. This exclusive forum provision may increase the costs associated with bringing a claim, discourage claims or limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers or stockholders, any of which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the exclusive forum provision in our certificate of incorporation, as amended, to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially adversely affect our business, financial condition and results of operations.

The outcome of the putative class action lawsuit filed against us could have a material adverse effect on our business, financial condition, results of operation, and cash flows.

On January 25, 2018, a complaint was filed in the Eastern District of North Carolina on behalf of a putative class of shareholders who purchased our common stock during the period between May 10, 2017 and November 8, 2017. The complaint names us and certain of our executive officers as defendants and alleges violations of the Securities Exchange Act of 1934, as amended, based upon allegedly inaccurate or incomplete information regarding, among other things, the financial performance and business outlook for inVentiv's business prior to the Merger and with respect to the combined company following the Merger. The plaintiffs seek awards of compensatory damages, among other relief, and their costs and attorneys' and experts' fees. We are presently unable to predict the duration, scope or result of this putative class action, or any other related lawsuit or investigation.

The outcome of the putative class action litigation or any other litigation is necessarily uncertain. We could be forced to expend significant resources in the defense of this lawsuit or future ones, and we may not prevail.

Our internal control over financial reporting is required to meet all the standards of Section 404 of Sarbanes-Oxley, and failure to achieve and maintain effective internal controls over financial reporting could have a material adverse effect on our stock price, reputation, business, financial condition, results of operations and cash flows.

Section 404 of Sarbanes-Oxley requires management and our independent registered public accounting firm to assess and attest to the effectiveness of internal control over financial reporting on an annual basis. The rules governing the standards that must be met to assess our internal control over financial reporting are complex and require significant documentation, testing, and possible remediation of our existing controls and could result in incurring significant additional expenditures. We are required to design, implement, and test our internal control over financial reporting in order to comply with this obligation. The effort necessary to meet these requirements is time consuming, costly, and complicated, and we must continually evaluate and refine these processes on an ongoing basis. We might encounter problems or delays in completing the implementation of any required improvements and therefore fail to receive a favorable attestation provided by our independent registered public accounting firm.

Further, material weaknesses and significant deficiencies in our internal control over financial reporting have existed in the past. For example, in our Annual Report on Form 10-K for the year ended December 31, 2018, we concluded that material weaknesses in our internal control over financial reporting existed as of December 31, 2018. These material weaknesses have since been remediated, but additional material weaknesses or significant deficiencies may be discovered in the future. If we fail to maintain an effective internal control environment, such failure could limit our ability to report our financial results accurately and timely, resulting in misstatements and/or restatements of our consolidated financial statements, which may cause investors to lose confidence and have a material adverse effect on our stock price, reputation, business, financial condition, results of operations, and cash flows.

We are a holding company and rely on dividends and other payments, advances, and transfers of funds from our subsidiaries to meet our obligations and pay any dividends.

We have no direct operations and no significant assets other than ownership of 100% of the capital stock of our subsidiaries. Because we conduct our operations through our subsidiaries, we depend on those entities for dividends and other payments to generate the funds necessary to meet our financial obligations, and to pay any dividends with respect to our stock. Legal and contractual restrictions in the Credit Agreement and other agreements, which may govern future indebtedness of our subsidiaries, as well as the financial condition and operating requirements of our subsidiaries, may limit our ability to obtain cash from our subsidiaries. The earnings from, or other available assets of, our subsidiaries might not be sufficient to pay dividends, make distributions, or loans to enable us to pay any dividends on our stock or other obligations. Any of the foregoing could materially and adversely affect our business, financial condition, results of operations, and cash flows.

General Risk Factors

Our stock price is subject to volatility, which could have a material adverse impact on investors and employee retention.

Since our initial public offering in November 2014 (the "IPO"), the price of our stock, as reported by Nasdaq, has ranged from a low of $19.61 on November 7, 2014 to a high of $81.35 on February 16, 2021. In addition, securities markets worldwide have experienced, and are likely to continue to experience, significant price and volume fluctuations. This market volatility, as well as general economic, market or political conditions, could affect stock price in ways that may be unrelated to our operating performance. The trading price of our stock is subject to significant price fluctuations in response to many factors, including:

- market conditions or trends in our industry, including with respect to the regulatory environment, or the economy as a whole;
- fluctuations in quarterly operating results, as well as differences between our actual financial and operating results and those expected by investors;
- future performance guidance, if any, that we provide to the public, any changes in this guidance or our failure to meet this guidance;
- changes in financial estimates or ratings by any securities analysts who follow our stock, our failure to meet those estimates or the failure of those analysts to initiate or maintain coverage of our stock;
- changes in key personnel;
- entry into new markets;
- announcements by us or our competitors of new service offerings or significant acquisitions, divestitures, strategic partnerships, joint ventures or capital commitments;
- actions by competitors;
- changes in operating performance and market valuations of other companies in the industry;
- investors' perceptions of our prospects and the prospects of the industry;
- investors' perceptions of the investment opportunity associated with our stock relative to other investment alternatives;
- the public's reaction to press releases or other public announcements by us or third parties, including our filings with the SEC;
- announcements related to litigation;
- changes in the credit ratings of our debt;
- the sustainability of an active trading market for our stock;
- future sales of our stock by our significant shareholders, officers, and directors; and

- other events or factors, including those resulting from system failures and disruptions, cyber-attacks, earthquakes, hurricanes, war, acts of terrorism, pandemics, other natural disasters, or responses to these events.

These and other factors may cause the market price and demand for shares of our stock to fluctuate substantially, which could result in reduced liquidity and a decline in the price of our stock. When the market price of a stock is volatile, security holders often institute class action litigation against the company that issued the stock. If we become involved in this type of litigation, regardless of the outcome, we could incur substantial legal costs and our management's attention could be diverted from the operation of our business, which could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Any litigation against us could be costly and time-consuming to defend.

We are subject to and may become subject, from time to time, to additional legal proceedings and claims that arise in the ordinary course of business or pursuant to governmental or regulatory enforcement activity. While we do not believe that the resolution of any currently pending lawsuits against us will, individually or in the aggregate, have a material adverse effect on our business, financial condition, results of operations, or cash flows, we might be wrong, and future litigation might result in substantial costs and divert management's attention and resources, which might seriously harm our business, financial condition, results of operations, and cash flows. Insurance might not cover such claims, provide sufficient payments to cover all of the costs to resolve one or more such claims, or continue to be available on terms acceptable to us. In particular, any claim could result in potential liability for us if the claim is outside the scope of the indemnification agreement we have with our customers, our customers do not abide by the indemnification agreement as required or the liability exceeds the amount of any applicable indemnification limits or available insurance coverage. A claim brought against us that is uninsured or underinsured could result in unanticipated costs and could have a material adverse effect on our financial condition, results of operations, cash flows, or reputation.

If our insurance does not cover all of our indemnification obligations and other liabilities associated with our operations, our business, financial condition, results of operations, or cash flows may be materially adversely affected.

We maintain insurance designed to provide coverage for ordinary risks associated with our operations and our ordinary indemnification obligations that we believe to be customary for our industry. The coverage provided by such insurance might not be adequate for all claims we make or may be contested by our insurance carriers. If our insurance is not adequate or available to pay all claims or exposures associated with our operations, or if we are unable to purchase adequate insurance at reasonable rates in the future, our business, financial condition, results of operations, or cash flows may be materially adversely affected.

If securities analysts or industry analysts downgrade our shares, publish negative research or reports, or do not publish reports about our business, stock price and trading volume could decline.

The trading market for our stock is to some extent influenced by the research and reports that industry or securities analysts publish about us, our business and our industry. If one or more analysts adversely change their recommendation regarding our shares or our competitors' stock, our share price would likely decline. If one or more analysts cease coverage of us or fail to regularly publish reports on us, we might lose visibility in the financial markets, which in turn could cause our share price or trading volume to decline.

We incur increased costs and obligations as a result of being a public company.

As a public company, we are required to comply with certain additional corporate governance and financial reporting practices and policies. As a result, due to compliance requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley"), the Dodd-Frank Act, the listing requirements of the Nasdaq, and other applicable securities rules and regulations, we have and will continue to incur significant legal, accounting, and other expenses. The Exchange Act requires, among other things, that we file annual, quarterly, and current reports with respect to our business and operating results with the SEC. We are also required to ensure that we have the ability to prepare financial statements and other disclosures that are fully compliant with all SEC reporting requirements on a timely basis. Compliance with these rules and regulations has increased and may continue to increase our legal and financial compliance costs, make some activities more difficult, time-consuming, or costly, and increase demand on our systems and resources.

We might not be successful in complying with these requirements and the significant amount of resources required to ensure compliance could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

As of December 31, 2020, we had 130 facilities located in 49 countries. Most of our facilities consist solely of office space. We lease all of our facilities, with the exception of office space owned in Madrid, Spain. Our corporate headquarters and principal executive offices are located in Morrisville, North Carolina, where we lease space totaling approximately 214,450 square feet. The lease will expire in September 2031. We also lease space totaling approximately 62,000 square feet in Farnborough, United Kingdom, which will expire in January 2028.

In addition, we lease substantial facilities in Columbus, Ohio; Gurgaon, India; Hyderabad, India; Mexico City, Mexico; Munich, Germany; New York, New York; Newtown, Pennsylvania; Princeton, New Jersey; Pune, India; Quebec City, Canada; Somerset, New Jersey; and Tokyo, Japan. We also maintain offices in various other Asian-Pacific, European, Latin American and North American locations, as well as Australia, the Middle East and Africa. Our leases are not individually material to our business model and all either have options to renew or are located in major markets where we believe there are adequate opportunities to continue business operations at terms satisfactory to us.

Item 3. Legal Proceedings.

We are party to legal proceedings incidental to our business. While our management currently believes the ultimate outcome of these proceedings, individually and in the aggregate, will not have a material adverse effect on our consolidated financial statements, litigation is subject to inherent uncertainties. Were an unfavorable ruling to occur, there exists the possibility of a material adverse impact on our financial condition and results of operations.

Please refer to "Note 17 – Commitments and Contingencies" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" in this Annual Report on Form 10-K for information pertaining to legal proceedings.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrants' Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities.

Holders of Record

On February 11, 2021, there were approximately 31 shareholders of record of our common stock as reported by our transfer agent. Shareholders of record are those who have the rights, benefits, and responsibilities of ownership of shares registered in their own names. This number does not include shareholders for whom shares are held in "nominee" or "street" name or beneficial owners of common stock whose shares are held in the names of brokers, dealers, or clearing agencies outside of our transfer agent.

Dividend Policy

Since becoming a public company, we have not declared or paid cash dividends on our common stock, nor do we intend to pay cash dividends on our common stock in the foreseeable future. However, in the future, subject to the factors described below and our future liquidity and capitalization, we may change this policy and choose to pay dividends.

We are a holding company that does not conduct any business operations of our own. As a result, our ability to pay cash dividends on our common stock is dependent upon cash dividends, distributions, and other transfers from our subsidiaries. Our ability to pay dividends is currently restricted by the terms of our credit agreement, dated August 1, 2017, as amended (the "Credit Agreement"), and other financing agreements, and may be further restricted by any future indebtedness we or our subsidiaries incur. In addition, under Delaware law, the Board of Directors (the "Board") may declare dividends only to the extent of our surplus (which is defined as total assets at fair market value minus total liabilities, minus statutory capital) or, if there is no surplus, out of our net profits for the then current and/or immediately preceding fiscal year.

Any future determination to pay dividends will be at the discretion of the Board and will take into account restrictions in our debt instruments, including the Credit Agreement, general economic business conditions, our financial condition, results of operations and cash flows, our capital requirements, our business prospects, the ability of our operating subsidiaries to pay dividends and make distributions to us, legal restrictions, and such other factors as the Board may deem relevant. For additional information on these restrictive covenants, see Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources" and "Note 4 - Long-Term Debt Obligations" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" in this Annual Report on Form 10-K.

Recent Sales of Unregistered Equity Securities

We did not have any sales of unregistered equity securities during 2020.

Purchases of Equity Securities by the Issuer

On February 26, 2018, the Board authorized the repurchase of up to an aggregate of $250.0 million of our Class A common stock, par value $0.01 per share, to be executed from time to time in open market transactions effected through a broker at prevailing market prices, in block trades, or privately negotiated transactions through December 31, 2019 (the "2018 Stock Repurchase Program"). The 2018 Stock Repurchase Program commenced on March 1, 2018. On December 5, 2019, the Board increased the dollar amount authorized under the 2018 Stock Repurchase Program to an aggregate of $300.0 million and extended the term of the program to December 31, 2020. The 2018 Stock Repurchase Program expired on December 31, 2020.

On November 17, 2020, the Board authorized the repurchase of up to an aggregate of $300.0 million of our Class A common stock, par value $0.01 per share, to be executed from time to time in open market transactions effected through a broker at prevailing market prices, in block trades, or privately negotiated transactions through December 31, 2022 (the "2021 Stock Repurchase Program"). The 2021 Stock Repurchase Program took effect on January 1, 2021.

Share repurchases are funded primarily with our working capital, cash flow from operations, and funds available through various borrowing arrangements.

The 2021 Stock Repurchase Program does not obligate us to repurchase any particular amount of our Class A common stock, and may be modified, extended, suspended, or discontinued at any time. The timing and amount of repurchases are determined by our management based on a variety of factors such as the market price of our Class A common stock, our corporate cash requirements, and overall market conditions. The 2021 Stock Repurchase Program is subject to applicable legal requirements, including federal and state securities laws and applicable Nasdaq rules. We may also repurchase shares of our Class A common stock pursuant to a trading plan meeting the requirements of Rule 10b5-1 under the Securities Exchange Act of 1934, as amended, which would permit shares of our Class A common stock to be repurchased when we might otherwise be precluded from doing so by law.

For the year ended December 31, 2020, we repurchased 750,000 shares of Class A common stock in open market transactions at an average price of $53.53 per share, resulting in a total purchase price of approximately $40.2 million. Additionally, we repurchased 506,244 shares of our Class A common stock in private transactions, for a total purchase price of approximately $30.0 million. All such shares were purchased under our 2018 Stock Repurchase Program. We immediately retired all of the repurchased common stock and charged the par value of the shares to common stock. The excess of the repurchase price over the par value was applied on a pro rata basis against additional paid-in capital, with the remainder applied to accumulated deficit.

The following table summarizes the monthly equity repurchase activity for the three months ended December 31, 2020 and the approximate dollar value of shares that, as of the applicable period, could have been purchased pursuant to the 2018 Stock Repurchase Program.

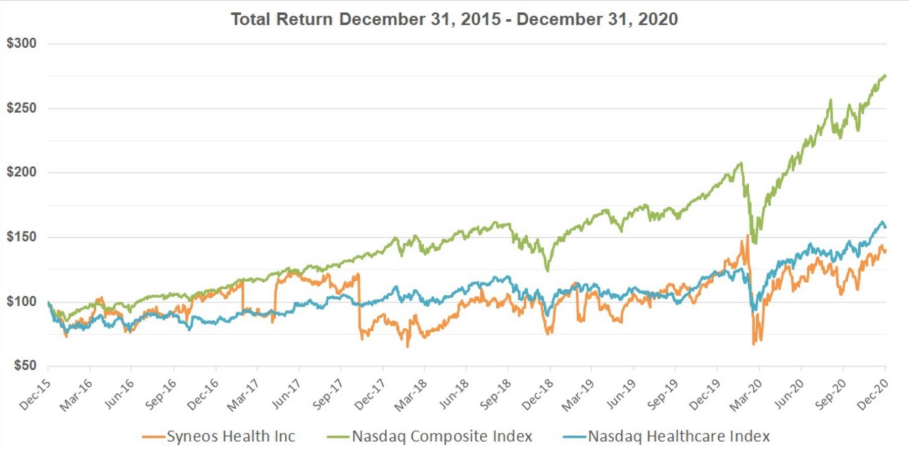
Period	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs	Approximate dollar value of shares that could have been purchased under the plans or programs (in thousands)
October 1, 2020 - October 31, 2020	150,000	$ 54.14	150,000	$ 98,148
November 1, 2020 - November 30, 2020	—	$ —	—	$ 98,148
December 1, 2020 - December 31, 2020(1)	—	$ —	—	$ 98,148
	150,000		150,000	

(1) As noted above, the 2018 Stock Repurchase Program expired on December 31, 2020. The 2021 Stock Repurchase Program took effect on January 1, 2021 and, as of January 1, 2021, we were authorized to repurchase up to an aggregate of $300.0 million in shares of our Class A common stock.

Stock Performance Graph

The information included under the heading “Stock Performance Graph” is “furnished” and not “filed” for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that section, nor shall it be deemed to be “soliciting material” subject to Regulation 14A or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act of 1934, as amended.

Our common stock is traded on the Nasdaq under the symbol “SYNH.” From November 7, 2014 through January 7, 2018, our common stock was listed on the Nasdaq under the trading symbol “INCR.” The Stock Price Performance Graph set forth below compares the cumulative total shareholder return on our common stock for the period from December 31, 2015 through December 31, 2020, with the cumulative total return of the Nasdaq Composite Index and the Nasdaq Health Care Index over the same period. The comparison assumes $100 was invested on December 31, 2015 in our common stock, in the Nasdaq Composite Index, and in the Nasdaq Health Care Index and assumes reinvestment of dividends, if any.



The stock price performance shown on the graph above is not necessarily indicative of future price performance. Information used in the graph was obtained from the Nasdaq Stock Market, a source believed to be reliable, but we are not responsible for any errors or omissions in such information.

Item 6. Selected Financial Data.

[Reserved.]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of our financial condition and results of operations should be read together with the consolidated financial statements and the related notes included in Part II, Item 8, "Financial Statements and Supplementary Data" in this Annual Report on Form 10-K. This discussion contains forward-looking statements related to future events and our future financial performance that are based on current expectations and subject to risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many important factors, including those described in Part I, Item 1A, "Risk Factors" and elsewhere in this Annual Report on Form 10-K.

This section of the Form 10-K generally discusses our results of operations for the years ended December 31, 2020 and 2019, including a year-to-year comparison between 2020 and 2019. For a full discussion related to the results of operations for the year ended December 31, 2018, including a year-to-year comparison between 2019 and 2018, refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Form 10-K for the year ended December 31, 2019.

Overview of Our Business and Services

We are a leading global biopharmaceutical solutions organization providing a full suite of clinical and commercial services to customers in the pharmaceutical, biotechnology, and healthcare industries. We offer both stand-alone and integrated biopharmaceutical product development solutions ranging from Early Phase (Phase I) clinical trials to the full commercialization of biopharmaceutical products, with the goal of increasing the likelihood of regulatory approval and commercial success.

Our operations are divided into two reportable segments, Clinical Solutions and Commercial Solutions. Our Clinical Solutions segment offers a variety of services spanning Phases I to IV of clinical development, including full service global studies and real world evidence programs, as well as individual service offerings such as clinical monitoring, investigator recruitment, patient recruitment, data management, and study startup to assist customers with their drug development process. Our Commercial Solutions segment provides commercialization services, including deployment solutions, communication solutions (public relations, advertising, and medical communications), and consulting services. We integrate our clinical and commercial capabilities into customized solutions by sharing knowledge, data, and insights through our Biopharmaceutical Acceleration Model. This collaboration across the development and commercialization continuum facilitates unique insights into patient populations, therapeutic environments, product timelines, and the competitive landscape. For further discussion, refer to Part I, Item 1, "Business" in this Annual Report on Form 10-K.

We acquired the following companies during 2020:

- Synteract, a full service CRO, focused on the emerging biopharmaceutical segment. Synteract's client base is primarily comprised of emerging biopharmaceutical companies, a segment in which we have growth opportunities. Synteract has more than 700 employees across North America, Europe, Asia Pacific, and Africa that have supported more than 4,000 Phase I to IV clinical trials across 26,000 sites in more than 60 countries. The transaction provides significant revenue synergy opportunities, as we bring scale and new capabilities to Synteract's existing and prospective customers while maintaining Synteract's focus on the emerging biopharmaceutical segment. Building on our track record of delivering cost synergies, we will also leverage our global infrastructure and integration expertise to optimize operational efficiencies and drive improved margins.

- Illingworth Research, a leading provider of clinical research home health services. This acquisition enhances our decentralized solutions offering by adding a patient-focused company that meets the growing demand for in-home clinical trial services. Illingworth Research provides mobile research nurse services, which eliminates wasted travel time and allows patients to remain at home for their participation in a clinical trial.

COVID-19 Pandemic

On March 11, 2020, the World Health Organization designated the outbreak of the novel strain of coronavirus that causes the disease known as COVID-19 as a global pandemic. Governments and businesses around the world have taken unprecedented actions to mitigate the spread of COVID-19, including, but not limited to, shelter-in-place orders, quarantines, significant restrictions on travel, social distancing practices as well as restrictions that prohibit many employees from going to work.

The COVID-19 pandemic and its adverse effects have impacted the locations where we, our customers, suppliers, and partners conduct significant portions of our business, such as Europe and North America, and, as a result, we experienced pronounced disruptions in our operations during the year ended December 31, 2020, the largest of which occurred during the second and third quarters of 2020 before starting to gradually recover.

As a result of these conditions, we took decisive actions to mitigate the revenue, profitability, and cash flow impacts from COVID-19. These actions included cost management strategies consisting of certain temporary compensation adjustments, hiring restrictions, staffing reductions, voluntary and involuntary employee furloughs, reductions in third-party costs, and other initiatives. The majority of the temporary cost savings measures ended in the third quarter of 2020. In addition to these temporary actions, we continued to implement our *ForwardBound* margin enhancement initiative.

We are guided by our global and regional crisis team, which monitors the evolving situation and recommends risk mitigation actions related to business continuity and employee health and safety. Throughout the pandemic, we have assessed and implemented continuity plans to provide customers with continued services. We also continue to implement contingency planning to protect the health and well-being of our employees. This includes having employees work remotely where possible, implementing travel restrictions and visitor protocols, and following social distancing practices.

While the potential for further disruption to our business from the pandemic is difficult to predict and depends on factors not in our control, such as the degree of success of vaccinations and other treatments for COVID-19, we began to see a recovery in the latter half of 2020 in both our Clinical Solutions and Commercial Solutions segments and expect this recovery to continue in 2021. As of December 31, 2020, a substantial number of our clinical trial sites have returned to allowing physical monitoring visits, and in 2021, we expect a continued increase in patient enrollment rates and a moderate increase in the use of remote monitoring from pre-COVID-19 levels, although below levels necessitated in 2020. Further, in our Commercial Solutions segment, we expect to continue to see an increase in site access as well as the use of remote field team visits.

While certain governments eased restrictions during the balance of 2020, the pandemic remains disruptive to our business operations. As we look ahead, we continue to expect impacts in our Clinical Solutions segment to be temporary and primarily relate to limitations on our ability to physically access investigative sites, delays in patient enrollment and trial start-up activities, as well as delayed decision making related to new business awards. Our full service studies and, to a lesser extent, our functional service provider offering have been impacted, and we expect them to continue to be impacted, by a switch from site-based physical monitoring visits to remote monitoring visits, and reduced capacity of businesses that utilize our services or facilities we use to conduct our business during the pandemic. In our Commercial Solutions segment, we continue to expect impacts to be temporary and primarily relate to delayed decision making related to new business awards, delays or cancellations of existing projects, declines in field team visits to HCPs, and travel disruptions.

The extent to which COVID-19 impacts our future results will depend on future developments. National, state, and local governments may impose, and have imposed in certain areas, additional restrictions or may extend the restrictions already in place if the pandemic continues or if new waves of infection occur. The continuing spread of COVID-19 and the related safety and business operating restrictions could result in a number of adverse impacts to our business, including, but not limited to, additional disruption to the economy and our customers, additional work restrictions, and supply chains being interrupted or slowed. Also, governments may impose other laws, policies, regulations, or taxes that could adversely impact our business, financial condition, or results of operations. Depending on the extent to which our customers continue to be affected, they could further delay or reduce purchases of services we provide. The effects of COVID-19 also could impact us in a number of other ways including, but not limited to, additional reductions to our profitability, fluctuations in foreign currency markets, the availability of future borrowings, the cost of borrowings, credit risks of our customers and counterparties, and potential impairment of the carrying amount of goodwill or other long-lived assets.

Despite these impacts, we remain confident in our liquidity position, which includes cash on hand of $242.5 million as of December 31, 2020, and access to our revolving credit facility. We have also implemented cash conservation initiatives, including reducing operating costs, deferring certain payroll taxes and other tax payments during the year ended December 31, 2020, as permitted by various government stimulus packages in multiple jurisdictions, and entering into interest rate swaps to fix certain variable rate debt at lower interest rates.

See Part I, Item 1A “Risk Factors” in this Annual Report on Form 10-K for further discussion of the potential impact of the pandemic on our business.

New Business Awards and Backlog

We add new business awards to backlog when we enter into a contract or when we receive a written commitment from the customer selecting us as a service provider, provided that:

- collection of the award value is probable;
- the project or projects are expected to commence within a certain period of time from the end of the quarter in which the award was granted;
- project contingencies such as the outcome of other clinical trials, funding approvals, or other events, are not anticipated to prevent the project or projects from commencing in accordance with the expected timeline;
- the customer has entered or intends to enter into a comprehensive contract as soon as practicable; and
- for awards related to deployment solutions and functional service provider offerings, a maximum of twelve months of services are included in the award value.

In addition, we continually evaluate our backlog to determine if any of the previously awarded work is no longer expected to be performed, regardless of whether we have received formal cancellation notice from the customer. If we determine that any previously awarded work is no longer probable of being performed, we remove the value from our backlog based on the risk of cancellation. We recognize revenue from these awards as services are performed, provided we have received proper authorization from the customer.

We report new business awards for our Clinical Solutions and Commercial Solutions segments as well as backlog for our Clinical Solutions segment and the deployment solutions offering within our Commercial Solutions segment. We do not report backlog for the remaining service offerings in the Commercial Solutions segment.

Backlog

Our backlog consists of anticipated future revenue from new business awards that either have not started, or that are in process and have not been completed. Our backlog also reflects any cancellation or adjustment activity related to these awards. The average duration of our backlog will fluctuate from period to period based on the contracts comprising our backlog at any given time. The majority of our contracts contain early termination provisions that typically require notice periods ranging from 30 to 90 days.

Our backlog as of December 31 was as follows (in millions):

	2020	2019	Change	
Clinical Solutions	$ 10,239.5	$ 8,220.0	$ 2,019.5	24.6%
Commercial Solutions - Deployment Solutions	711.6	684.2	27.4	4.0%
Total backlog	$ 10,951.1	$ 8,904.2	$ 2,046.9	23.0%

We expect approximately $4.63 billion of our backlog as of December 31, 2020 will be recognized as revenue during 2021. We adjust the amount of our backlog each quarter for the effects of fluctuations in foreign currency exchange rates.

Net New Business Awards

New business awards, net of cancellations, were as follows (in millions):

	Year Ended December 31,			Change			
	2020	2019	2018	2020 to 2019		2019 to 2018	
Clinical Solutions	$ 4,698.7	$ 4,148.0	$ 2,747.8	$ 550.7	13.3%	$ 1,400.2	51.0%
Commercial Solutions	1,164.4	1,305.6	1,140.6	(141.2)	(10.8)%	165.0	14.5%
Total net new business awards	$ 5,863.1	$ 5,453.6	$ 3,888.4	$ 409.5	7.5%	$ 1,565.2	40.3%

New business awards have varied and may continue to vary significantly from year to year. Fluctuations in our net new business award levels often result from the fact that we may receive a small number of relatively large orders in any given reporting period. Because of these large orders, our backlog and net new business awards in a reporting period may reach levels that are not sustainable in subsequent reporting periods.

We believe that our backlog and net new business awards might not be consistent indicators of future revenue because they have been, and likely will continue to be, affected by a number of factors, including the variable size and duration of projects, many of which are performed over several years, and changes to the scope of work during the course of projects. Additionally, projects may be canceled or delayed by the customer or regulatory authorities. Net new business awards and backlog have been and we expect will continue to be affected by the broad effects of the COVID-19 pandemic on the global economy and major financial markets, as well as various other risks and uncertainties detailed in Part I, Item 1A, “Risk Factors - Risks Related to Our Business - The COVID-19 pandemic has adversely impacted our business and results of operations, and is expected to continue to do so” of this Annual Report on Form 10-K. We generally do not have a contractual right to the full amount of the awards reflected in our backlog. If a customer cancels an award, we might be reimbursed for the costs we have incurred. As we increasingly compete for and enter into large contracts that are more global in nature, we expect that the rate at which our backlog and net new business awards convert into revenue is likely to decrease, and the duration of projects and the period over which related revenue is recognized to lengthen. For more information about risks related to our backlog see Part I, Item 1A, “Risk Factors—Risks Related to Our Business—Our backlog might not be indicative of our future revenues, and we might not realize all of the anticipated future revenue reflected in our backlog” of this Annual Report on Form 10-K.

Results of Operations

Year Ended December 31, 2020 Compared to the Year Ended December 31, 2019

The following table sets forth amounts from our consolidated financial statements along with dollar and percentage changes (in thousands, except percentages):

	Year Ended December 31,			Change			
	2020	2019	2018	2020 to 2019		2019 to 2018	
Revenue	$ 4,415,777	$ 4,675,815	$ 4,390,116	$ (260,038)	(5.6)%	$ 285,699	6.5%
Costs and operating expenses:							
Direct costs (exclusive of depreciation and amortization)	3,398,142	3,645,905	3,434,310	(247,763)	(6.8)%	211,595	6.2%
Selling, general, and administrative expenses	442,484	446,281	406,305	(3,797)	(0.9)%	39,976	9.8%
Restructuring and other costs	29,414	42,135	50,793	(12,721)	(30.2)%	(8,658)	(17.0)%
Transaction and integration-related expenses	30,242	61,275	64,841	(31,033)	(50.6)%	(3,566)	(5.5)%
Depreciation and amortization	222,352	242,465	273,685	(20,113)	(8.3)%	(31,220)	(11.4)%
Total operating expenses	4,122,634	4,438,061	4,229,934	(315,427)	(7.1)%	208,127	4.9%
Income from operations	293,143	237,754	160,182	55,389	23.3%	77,572	48.4%
Total other expense, net	89,485	136,045	102,924	(46,560)	(34.2)%	33,121	32.2%
Income before provision for income taxes	203,658	101,709	57,258	101,949	100.2%	44,451	77.6%
Income tax expense (benefit)	10,871	(29,549)	32,974	40,420	n/m	(62,523)	n/m
Net income	$ 192,787	$ 131,258	$ 24,284	$ 61,529	46.9%	$ 106,974	440.5%

Revenue

For the year ended December 31, 2020, our revenue decreased by $260.0 million, or 5.6%, to $4.42 billion from $4.68 billion for the year ended December 31, 2019. This decrease was primarily driven by the impacts of the COVID-19 pandemic, including the related decline in reimbursable out-of-pocket expenses, in both our Clinical Solutions and Commercial Solutions segments, as discussed below.

No single customer accounted for greater than 10% of our total consolidated revenue for the year ended December 31, 2020 or 2019. Revenue from our top five customers accounted for approximately 22% and 23% of revenue for the years ended December 31, 2020 and 2019, respectively.

Revenue for each of our segments was as follows (dollars in thousands):

	Year Ended December 31,			Change			
	2020	2019	2018	2020 to 2019		2019 to 2018	
Clinical Solutions	$ 3,306,736	$ 3,421,596	$ 3,211,202	$ (114,860)	(3.4)%	$ 210,394	6.6%
% of total	74.9%	73.2%	73.1%				
Commercial Solutions	1,109,041	1,254,219	1,178,914	(145,178)	(11.6)%	75,305	6.4%
% of total	25.1%	26.8%	26.9%				
Total revenue	$ 4,415,777	$ 4,675,815	$ 4,390,116	$ (260,038)	(5.6)%	$ 285,699	6.5%

Clinical Solutions

For the year ended December 31, 2020, revenue attributable to our Clinical Solutions segment decreased compared to the prior year primarily due to the impacts of the COVID-19 pandemic, including the related decline in reimbursable out-of-pocket expenses, and the sale of the contingent staffing business during the second quarter. For the year ended December 31, 2020, revenue was positively impacted by $4.3 million from foreign currency exchange rates fluctuations compared to the prior year.

The pandemic continues to impact our ability to physically access investigative sites and delay patient enrollment and trial start-up activities. However, there were positive trends related to these activities in the second half of 2020. The negative impacts of the pandemic were partially mitigated by performing remote monitoring visits where these visits had previously been conducted on-site. As a result, revenue for the second half of 2020 was less impacted than it was in the second quarter, although we continue to experience lower reimbursable out-of-pocket expenses primarily as a result of remote monitoring. The decrease in revenue for the year ended December 31, 2020 was partially offset by revenue growth during the first quarter and incremental revenue from our recent acquisition of Synteract in December 2020.

Although we are aggressively managing our response to the COVID-19 pandemic, it may continue to negatively impact our Clinical Solutions revenue in 2021, depending on the continuation of the pandemic. At this time, we believe that the ongoing impacts to revenue in our Clinical Solutions segment will be similar in nature to those experienced in 2020 with the most significant being the trend of more remote monitoring visits and delayed patient enrollment, resulting in lower reimbursable out-of-pocket expenses and related revenue as the recovery continues. We expect a moderate increase in the use of remote monitoring from pre-COVID-19 levels, although below levels necessitated in 2020. As of December 31, 2020, a substantial number of our clinical trial sites have returned to allowing physical monitoring visits, although capacity constraints remain at those sites, which we are mitigating through remote monitoring activities. Although patient enrollment rates have increased, they remain below pre-COVD-19 levels. We believe an increase in patient enrollment and the use of remote monitoring, where necessary, will result in year over year revenue growth in 2021.

Commercial Solutions

For the year ended December 31, 2020, revenue attributable to our Commercial Solutions segment decreased compared to the prior year primarily due to the impacts of elevated cancellations in the first half of 2020, as well as the impacts of the COVID-19 pandemic, including the related decline in reimbursable out-of-pocket expenses and the negative impact of delays in new project starts. We sold our medication adherence business in November 2020, which will negatively impact our year over year revenue growth in 2021.

Although we are aggressively managing our response to the COVID-19 pandemic, it may continue to negatively impact our Commercial Solutions revenue in 2021, depending on the continuation of the pandemic. At this time, we believe that the ongoing impacts to revenue in our Commercial Solutions segment will be temporary and relate to delayed decision-making related to new business awards, delays or cancellations of existing projects, declines in field team visits to HCPs, and travel disruptions, similar to those experienced in 2020. While the potential for further disruption to our business from the pandemic is difficult to predict, we expect to continue to see an increase in site access as well as the use of remote field team visits in 2021, as necessitated by travel restrictions and other factors.

Direct Costs

Direct costs consist principally of compensation expense and benefits associated with our employees and other employee-related costs, and reimbursable out-of-pocket expenses directly related to delivering on our projects. While we have some ability to manage the majority of these costs relative to the amount of contracted services we have during any given period, direct costs as a percentage of revenue can vary from period to period. Such fluctuations are due to a variety of factors, including, among others: (i) the level of staff utilization on our projects; (ii) adjustments to the timing of work on specific customer contracts; (iii) the experience mix of personnel assigned to projects; (iv) the service mix and pricing of our contracts; and (v) the timing of the incurrence of reimbursable out-of-pocket expenses. As a result of the COVID-19 pandemic, we have experienced reduced travel and other reimbursable out-of-pocket expenses related to lower physical monitoring visits for Clinical Solutions, as well as lower physician office visits and investigator meetings for Commercial Solutions.

Direct costs consisted of the following (dollars in thousands):

	Year Ended December 31,			Change			
	2020	2019	2018	2020 to 2019		2019 to 2018	
Direct costs (exclusive of depreciation and amortization)	$ 3,398,142	$ 3,645,905	$ 3,434,310	$ (247,763)	(6.8)%	$ 211,595	6.2%
% of revenue	77.0%	78.0%	78.2%				
Gross margin %	23.0%	22.0%	21.8%				

For the year ended December 31, 2020, our direct costs decreased by $247.8 million, or 6.8%, compared to the year ended December 31, 2019, primarily driven by the impacts of the COVID-19 pandemic, including the related decline in reimbursable out-of-pocket expense and our cost management strategies, in both our Clinical Solutions and Commercial Solutions segments, as discussed below.

Clinical Solutions

Direct costs for our Clinical Solutions segment, excluding share-based compensation expense, were as follows (dollars in thousands):

	Year Ended December 31,			Change			
	2020	2019	2018	2020 to 2019		2019 to 2018	
Direct costs	$ 2,493,453	$ 2,616,249	$ 2,477,920	$ (122,796)	(4.7)%	$ 138,329	5.6%
% of segment revenue	75.4%	76.5%	77.2%				
Segment gross margin %	24.6%	23.5%	22.8%				

For the year ended December 31, 2020, our Clinical Solutions segment direct costs decreased by $122.8 million, or 4.7%, compared to the year ended December 31, 2019, primarily due to lower reimbursable out-of-pocket expenses and billable headcount as a result of the COVID-19 pandemic. There were additional decreases in direct costs from the impact of various cost management strategies, which included certain temporary compensation adjustments, hiring restrictions, staffing reductions, voluntary and involuntary employee furloughs, reductions in third-party costs, and other initiatives. The majority of the temporary cost savings measures ended in the third quarter of 2020. In addition to these temporary actions, we continued to implement our *ForwardBound* margin enhancement initiative.

Gross margins for our Clinical Solutions segment were 24.6% and 23.5% for the years ended December 31, 2020 and 2019, respectively. Gross margin was higher during 2020 as compared to the prior year primarily due to reduced travel and other reimbursable out-of-pocket expenses and the impact of our cost management strategies, partially offset by the impact from lower revenue.

Although lower reimbursable out-of-pocket expenses during 2020 have resulted in a higher gross margin, we continue to aggressively manage our response to the COVID-19 pandemic to limit any impact to Clinical Solutions profitability in 2021. At this time, we continue to believe that the most significant impacts to margins in our Clinical Solutions segment will be those noted in the above Revenue section, partially offset by the impact of our cost management strategies and the impact of lower reimbursable out-of-pocket expenses. The trend of more remote monitoring visits is expected to continue after the pandemic, although below levels necessitated in 2020, resulting in both lower reimbursable out-of-pocket expenses and related revenue on a per visits basis, with no impact to profitability. As of December 31, 2020, a substantial number of our clinical trial sites have returned to allowing physical monitoring visits and we expect an increase in patient enrollment rates to result in a year over year increase in Clinical Solutions segment direct costs in 2021.

Commercial Solutions

Direct costs for our Commercial Solutions segment, excluding share-based compensation expense, were as follows (dollars in thousands):

	Year Ended December 31,			Change			
	2020	2019	2018	2020 to 2019		2019 to 2018	
Direct costs	$ 873,342	$ 1,000,645	$ 937,060	$ (127,303)	(12.7)%	$ 63,585	6.8%
% of segment revenue	78.7%	79.8%	79.5%				
Segment gross margin %	21.3%	20.2%	20.5%				

For the year ended December 31, 2020, our Commercial Solutions segment direct costs decreased by $127.3 million, or 12.7%, compared to the year ended December 31, 2019. These decreases were primarily related to declines in reimbursable out-of-pocket expenses, reduced billable headcount, and the impact of our cost management strategies, which were all primarily in response to the COVID-19 pandemic. These cost management strategies included certain temporary compensation adjustments, hiring restrictions, staffing reductions, voluntary and involuntary employee furloughs, reductions in third-party costs, and other initiatives. The majority of the temporary cost savings measures ended in the third quarter of 2020. In addition to these temporary actions, we continued to implement our *ForwardBound* margin enhancement initiative.

Gross margins for our Commercial Solutions segment were 21.3% and 20.2% for the years ended December 31, 2020 and 2019, respectively. Gross margin was higher during 2020 as compared to the prior year primarily due to lower reimbursable out-of-pocket expenses and the impact of our cost management strategies, partially offset by the impact from lower revenue.

Although lower reimbursable out-of-pocket expenses during 2020 have resulted in a higher gross margin, we continue to aggressively manage our response to the COVID-19 pandemic to limit any impact to Commercial Solutions profitability in 2021. At this time, we continue to believe that the most significant impacts in our Commercial Solutions segment will be those noted in the above Revenue section, partially offset by the impact of our cost management strategies.

Selling, General and Administrative Expenses

Selling, general and administrative expenses were as follows (dollars in thousands):

	Year Ended December 31,			Change			
	2020	2019	2018	2020 to 2019		2019 to 2018	
Selling, general and administrative expenses	$ 442,484	$ 446,281	$ 406,305	$ (3,797)	(0.9)%	$ 39,976	9.8%
% of total revenue	10.0%	9.5%	9.3%				

Selling, general, and administrative expenses for the year ended December 31, 2020 declined compared to the prior year due to favorable impacts from our cost management strategies, primarily in response to the COVID-19 pandemic, as well as our *ForwardBound* margin enhancement initiative. Our cost management strategies implemented in response to the uncertainty caused by the pandemic included certain temporary compensation adjustments, hiring restrictions, staffing reductions, voluntary and involuntary employee furloughs, reductions in third-party costs, and other initiatives. The majority of the temporary cost savings measures ended in the third quarter of 2020.

Restructuring and Other Costs

Restructuring and other costs were $29.4 million and $42.1 million for the years ended December 31, 2020 and 2019, respectively. The costs incurred during 2020 were primarily related to our cost management strategies in response to the COVID-19 pandemic, as well as our *ForwardBound* initiative. In connection with the Merger, we established a restructuring plan to eliminate redundant positions and reduce our facility footprint worldwide that partially contributed to our restructuring costs incurred in 2020 and 2019. Additionally, during 2020 and 2019, we incurred employee severance costs and facility closure costs for non Merger-related restructuring activities, as we continued ongoing evaluations of our workforce and facilities infrastructure needs in an effort to optimize our resources.

Restructuring and other costs consisted of the following (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Merger-related restructuring and other costs:			
Employee severance and benefit costs	$ 951	$ 12,029	$ 18,021
Facility and lease termination costs	1,733	12,940	24,090
Other Merger-related costs	—	—	560
Non Merger-related restructuring and other costs:			
Employee severance and benefit costs	25,370	13,214	5,410
Facility and lease termination costs	580	3,262	1,567
Other costs	780	690	1,145
Total restructuring and other costs	$ 29,414	$ 42,135	$ 50,793

We expect to continue to incur significant costs related to the restructuring of our operations. However, the timing and the amount of these costs depend on various factors, including, but not limited to, identifying and realizing synergy opportunities and executing the integration of our combined operations for our recent acquisitions. We may also continue to incur additional restructuring and other costs during 2021 related to our cost savings initiatives, our *ForwardBound* margin enhancement initiative, our recent acquisitions, and our response to the COVID-19 pandemic.

Transaction and Integration-Related Expenses

Transaction and integration-related expenses consisted of the following (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Professional fees	$ 30,059	$ 34,538	$ 56,230
Debt modification and related expenses	76	5,396	1,726
Integration and personnel retention-related costs	3,771	4,081	18,475
Fair value adjustments to contingent obligations	(3,664)	17,260	(11,590)
Total transaction and integration-related expenses	$ 30,242	$ 61,275	$ 64,841

Our transaction and integration-related expenses decreased in 2020 as compared to 2019. We expect to continue to incur professional fees and integration-related costs associated with the Synteract and Illingworth Research acquisitions, as well as the continued consolidation of our legal entities and information technology systems.

During the year ended December 31, 2020, there was a decrease in fair value adjustments to contingent obligations primarily due to a decrease in the estimate of the contingent earn-out liability associated with our acquisition of Kinapse Topco Limited in 2018. During the year ended December 31, 2019, there was an increase in the fair value adjustments to contingent obligations primarily due to an increase in the estimate of the transaction tax deduction benefit associated with Double Eagle's acquisition of inVentiv in 2016.

Depreciation and Amortization Expense

Total depreciation and amortization expense was $222.4 million and $242.5 million for the years ended December 31, 2020 and 2019, respectively. The decrease in total depreciation and amortization expense in 2020 compared to 2019 was primarily due to a decrease in amortization expense from intangible assets resulting from business combinations completed in prior years and a decrease in depreciation expense related to fully depreciated assets.

Total Other Expense, Net

Total other expense, net consisted of the following (dollars in thousands):

	Year Ended December 31,			Change			
	2020	2019	2018	2020 to 2019		2019 to 2018	
Interest income	$ (265)	$ (7,542)	$ (3,686)	$ 7,277	(96.5)%	$ (3,856)	104.6%
Interest expense	91,145	129,820	130,701	(38,675)	(29.8)%	(881)	(0.7)%
Loss (gain) on extinguishment of debt	1,581	(10,395)	4,153	11,976	n/m	(14,548)	n/m
Other (income) expense, net	(2,976)	24,162	(28,244)	(27,138)	n/m	52,406	n/m
Total other expense, net	$ 89,485	$ 136,045	$ 102,924	$ (46,560)	(34.2)%	$ 33,121	32.2%

Total other expense, net was $89.5 million and $136.0 million for the years ended December 31, 2020 and 2019, respectively. The decrease in interest expense was primarily due to reductions in our higher interest rate debt as a result of debt prepayments and refinancing transactions as well as lower interest rates on our variable interest rate debt. Other (income) expense, net primarily consists of a $7.1 million gain related to the sale of the medication adherence business and a $3.7 million gain related to certain of our equity investments, partially offset by $7.3 million of foreign currency losses that resulted from exchange rate fluctuations on our monetary asset balances denominated in currencies other than our functional currency.

The loss on extinguishment of debt was $1.6 million for the year ended December 31, 2020 compared to a gain on extinguishment of debt of $10.4 million for the year ended December 31, 2019. These were incurred primarily as a result of our debt prepayments and refinancing transactions.

Income Tax Expense

For the year ended December 31, 2020, we recorded income tax expense of $10.9 million, on pre-tax income of $203.7 million. The effective income tax rate for the year ended December 31, 2020 varied from the U.S. federal statutory income tax rate of 21.0% primarily due to: (i) the recognition of U.S. federal and foreign unrecognized tax benefits, (ii) changes to income tax valuation allowances on deferred tax assets, and (iii) tax benefits recognized related to the elections to retroactively apply recently issued regulations relative to Global Intangible Low-Taxed Income ("GILTI") high-tax exclusion and Section 163(j) CFC group election for interest deductibility.

For the year ended December 31, 2019, we recorded an income tax benefit of $29.5 million, on pre-tax income of $101.7 million. The effective income tax rate for the year ended December 31, 2019 varied from the U.S. federal statutory income tax rate of 21.0% primarily due to: (i) the recognition of tax benefits as a result of releasing the prior year accrual for the base erosion and anti-abuse tax; (ii) foreign income inclusions such as the GILTI provisions; and (iii) valuation changes on domestic deferred tax assets. During 2019, sufficient positive evidence became available to allow us to reach a conclusion that a significant portion of our domestic valuation allowance was no longer needed. Consequently, such release of our valuation allowance resulted in a decrease to income tax expense of $68.5 million.

We currently maintain a valuation allowance against a portion of our state deferred tax assets and a portion of our foreign deferred tax assets as of December 31, 2020. We intend to continue to maintain a valuation allowance on these deferred tax assets until there is sufficient evidence to support the reversal of all or some portion of these allowances.

The Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") was enacted on March 27, 2020 in the United States to address the economic impacts of the COVID-19 pandemic. The CARES Act includes corporate income tax, payroll tax, and other relief provisions. There was not a significant impact to our income tax provision as a result of the CARES Act and other global measures for the year ended December 31, 2020. Throughout the year ended December 31, 2020, we qualified for certain employer payroll tax credits, which have been treated as government subsidies that offset the related operating expenses, as well as the deferral of certain payroll and other tax payments into the future. We have deferred the timing of certain income tax payments and other taxes as permitted by the CARES Act and other stimulus measures enacted globally.

Numerous final and proposed tax regulations were issued during the year ended December 31, 2020, including additional guidance related to changes included in the Tax Cuts and Jobs Act. The regulations included updated guidance related to revenue recognition pursuant to Section 451, interest expense limitations pursuant to Section 163(j), GILTI high-tax exclusion, and foreign tax credits. The GILTI high-tax and Section 163(j) regulations included certain elective provisions that we have retroactively applied to our 2018 and 2019 tax years.

Liquidity and Capital Resources

Key measures of our liquidity were as follows as of December 31 (in thousands):

	2020	2019
Balance sheet statistics:		
Cash and cash equivalents	$ 271,901	$ 163,227
Restricted cash	272	462
Working capital (excluding restricted cash)	160,409	45,241

As of December 31, 2020, we had $272.2 million of cash, cash equivalents, and restricted cash. As of December 31, 2020, substantially all of our cash, cash equivalents, and restricted cash was held within the United States. In addition, we had $584.0 million (net of $16.0 million in outstanding letters of credit ("LOCs")) available for borrowing under our $600.0 million revolving credit facility (the "Revolver"), of which $134.0 million was available for LOCs.

We have historically funded our operations and growth, including acquisitions, primarily with our working capital, cash flow from operations and funds available through various borrowing arrangements. Our principal liquidity requirements are to fund our debt service obligations, capital expenditures, expansion of service offerings, possible acquisitions, integration and restructuring costs, geographic expansion, stock repurchases, working capital, and other general corporate expenses. Cash from operations also could be affected by various risks and uncertainties, including, but not limited to, the effects of the COVID-19 pandemic on the global economy and major financial markets, as well as other risks detailed in Part I, Item 1A, "Risk Factors" in this Annual Report on Form 10-K. We have implemented cash conservation initiatives, including delaying certain capital expenditures, reducing operating costs, deferring certain payroll taxes and other tax payments during the year ended December 31, 2020, as permitted by various government stimulus packages in multiple jurisdictions, and entering into interest rate swaps to fix certain variable rate debt at lower interest rates. Based on past performance and current expectations, we believe our cash and cash equivalents, cash generated from operations, and funds available under the Revolver will be sufficient to meet our working capital needs, capital expenditures, scheduled debt and interest payments, income tax obligations, and other currently anticipated liquidity requirements for at least the next 12 months.

As the impact of the COVID-19 pandemic on the economy and our operations evolves, we will continue to assess our liquidity needs. A continued worldwide disruption could materially affect our future access to sources of liquidity, particularly our cash flows from operations, and financial condition. We may seek to raise additional capital, particularly in the event of a sustained market deterioration, which could be in the form of bonds, convertible debt, or equity. If we obtain additional capital by issuing equity, the interests of our existing stockholders will be diluted. If we incur additional indebtedness, that indebtedness may contain significant financial and other covenants that may significantly restrict our operations. We cannot assure you that we could obtain refinancing or additional financing on favorable terms or at all.

Indebtedness

As of December 31, 2020, we had approximately $2.97 billion of total principal indebtedness (including $49.0 million in finance lease obligations), consisting of $2.02 billion in term loan debt, $600.0 million of 3.625% senior notes (the "Notes"), and $300.0 million in borrowings against our accounts receivable financing agreement. Approximately $809.5 million of our indebtedness (excluding finance leases) was subject to variable interest rates.

3.625% Senior Notes Due 2029

On November 24, 2020, we completed the issuance and sale of $600.0 million aggregate principal amount of the Notes. We received net proceeds, after deducting offering expenses, of $592.5 million. The net proceeds of the offering were used for general corporate purposes and to fund the Synteract and Illingworth Research acquisitions.

The Notes were issued pursuant to an indenture, dated as of November 24, 2020 (the "Base Indenture"), among us and Wells Fargo Bank, National Association, as trustee (the "Trustee"), as supplemented by a first supplemental indenture, dated as of November 24, 2020 (the "Supplemental Indenture", and together with the Base Indenture, the "Indenture"), among us, the subsidiary guarantors named therein, and the Trustee. The Indenture provides, among other things, that the Notes are senior unsecured obligations of us and are guaranteed, jointly and severally, on a senior unsecured basis, by certain of our subsidiaries.

We may redeem some or all of the Notes at any time prior to January 15, 2024 at a redemption price equal to 100% of the aggregate principal amount of the Notes to be redeemed plus a "make-whole" premium and accrued and unpaid interest. In addition, prior to July 15, 2023, we may redeem up to 40% of the original principal amount of the Notes with proceeds of certain equity offerings at a redemption price equal to 103.625% of the aggregate principal amount of such Notes plus accrued and unpaid interest. On or after January 15, 2024, we may redeem some or all of the Notes at the redemption prices set forth in the Indenture plus accrued and unpaid interest. The Indenture contains covenants that limit the ability of us and our restricted subsidiaries to, among other things, (1) incur additional liens, (2) engage in certain sale and leaseback transactions, and (3) conduct mergers, consolidations, or asset sales. These covenants are subject to exceptions and qualifications set forth in the Indenture.

If we sell certain of our assets or experience specific kinds of changes of control, we are required to offer to repurchase the Notes at a repurchase price equal to (1) par plus any accrued and unpaid interest in the case of an asset sale or (2) 101% of the aggregate principal amount thereof plus any accrued and unpaid interest in the case of a change of control.

The Notes have not been registered under the Securities Act of 1933, as amended (the "Securities Act") or the securities laws of any other jurisdiction. The Notes were sold to persons reasonably believed to be qualified institutional buyers pursuant to Rule 144A and outside the United States pursuant to Regulation S of the Securities Act.

Credit Agreement

We are party to a credit agreement (as amended, the "Credit Agreement") that includes a $1.55 billion Term Loan A facility ("Term Loan A") that has two tranches, tranche one that matures on March 26, 2024 and tranche two that matures on August 1, 2024, a $1.60 billion Term Loan B facility ("Term Loan B") that matures on August 1, 2024, and a $600.0 million Revolver that matures on August 1, 2024. The Revolver includes LOCs with a sublimit of $150.0 million.

On November 24, 2020, we entered into an amendment to the Credit Agreement that extended the maturity date of the Revolver and a portion of Term Loan A to August 1, 2024.

In February 2020, as a result of our Secured Leverage Ratio (as defined in the Credit Agreement) being less than or equal to 2.75x, the Adjusted Eurocurrency Rate Spread (as defined in the Credit Agreement) on our Term B Loans decreased from 2.00% to 1.75%.

During the year ended December 31, 2020, we made $53.5 million and $235.0 million of voluntary prepayments against Term Loan A and Term Loan B, respectively that were applied to future mandatory principal payments due. As a result of these and previous voluntary prepayments, we are not required to make a mandatory payment against the principal balance of Term Loan A until April 2022 and Term Loan B until maturity in August 2024. Additionally, during the year ended December 31, 2020, we made $38.8 million of mandatory principal payments towards Term Loan A.

We pay a quarterly commitment fee between 0.25% and 0.375% on the average daily unused balance of the Revolver based on the "First Lien Leverage Ratio" at the adjustment date. Fees are charged on all outstanding LOCs at an annual rate equal to the margin in effect on Eurocurrency Rate revolving loans plus participation and fronting fees. As of December 31, 2020, the interest rate on the Term Loan A and the Revolver was 1.646% and the interest rate on the Term Loan B was 1.896%.

Our ability to make payments on our indebtedness and to fund planned capital expenditures and necessary working capital will depend on our ability to generate cash in the future. Our ability to meet our cash needs through cash flows from operations will depend on the demand for our services, as well as general economic, financial, competitive, and other factors, many of which are beyond our control, including the broad effects of the COVID-19 pandemic on the global economy and major financial markets. Our business may not generate cash flow in an amount sufficient to enable us to pay the principal of, or interest on, our indebtedness, or to fund our other liquidity needs, including working capital, capital expenditures, acquisitions, investments, and other general corporate requirements. If we cannot fund our liquidity needs, we will have to take actions such as reducing or delaying capital expenditures, acquisitions or investments, selling assets, restructuring or refinancing our debt, reducing the scope of our operations and growth plans, or seeking additional capital. We cannot assure you that any of these remedies could, if necessary, be affected on commercially reasonable terms, or at all, or that they would permit us to meet our scheduled debt service obligations. The Credit Agreement contains covenant restrictions that limit our ability to direct the use of proceeds from any disposition of assets and, as a result, we may not be allowed to use the proceeds from any such dispositions to satisfy all current debt service obligations.

Debt Covenants

The Credit Agreement contains usual and customary restrictive covenants that, among other things, place limitations on our ability to pay dividends or make other restricted payments; prepay, redeem or purchase debt; incur liens; make loans and investments; incur additional indebtedness; amend or otherwise alter debt and other material arrangements; make acquisitions and dispose of assets; transact with affiliates; and engage in transactions that are not related to our existing business. Each of the restrictive covenants is subject to important exceptions and qualifications that would allow us to engage in these activities under certain conditions, including our ability to: (i) pay dividends each year in an amount up to the greater of (a) 6% of the net cash proceeds received by us from any public offering and (b) 5% of our market capitalization; and (ii) pay unlimited dividends if our Secured Leverage Ratio (as defined in the Credit Agreement) is no greater than 3.0 to 1.0.

In addition, with respect to the Term Loan A and the Revolver, the Credit Agreement requires us to maintain a maximum First Lien Leverage Ratio (as defined in the Credit Agreement) of no more than 4.5 to 1.0 as of the last day of each fiscal quarter.

The Indenture also contains customary events of default, including (1) failure to make required payments, (2) failure to comply with certain covenants, (3) failure to pay certain other indebtedness, (4) certain events of bankruptcy and insolvency, and (5) failure to pay certain judgments. An event of default under the Indenture allows either the Trustee or the holders of at least 25% in aggregate principal amount of the Notes, as applicable, issued under such Indenture, to accelerate the amounts due under the Notes, or in the case of a bankruptcy or insolvency, will automatically cause the acceleration of the amounts due under the Notes.

As of December 31, 2020, we were in compliance with all applicable debt covenants.

Covenant Restrictions under our Lease Agreement

The lease agreement for our corporate headquarters in Morrisville, North Carolina includes a provision that may require us to issue a LOC to the landlord based on our debt rating issued by Moody's Investors Service (or other nationally-recognized debt rating agency, such as S&P Global Ratings). As of December 31, 2020 (and through the date of this filing), our debt rating was such that no LOC is currently required. Any letters of credit issued in accordance with the aforementioned requirements could be issued under our Revolver, and if issued under our Revolver, would reduce its available borrowing capacity by the same amount.

Accounts Receivable Financing Agreement

On September 25, 2020, we amended our accounts receivable financing agreement to increase the amount we can borrow from $275.0 million to $300.0 million and extend the maturity date to October 2022, and drew down the additional $25.0 million. This agreement is secured by a lien on certain receivables and other assets, and we have guaranteed the performance of the obligations of existing and future subsidiaries that sell and service the accounts receivable under this agreement. The available borrowing capacity varies monthly according to the levels of our eligible accounts receivable and unbilled receivables. Loans under this agreement will accrue interest at a reserve-adjusted LIBOR rate or a base rate equal to the higher of (i) the applicable lender's prime rate and (ii) the federal funds rate plus 0.50%. We may prepay loans upon one business day's prior notice and may terminate or reduce the facility limit of the accounts receivable financing agreement with 15 days' prior notice. As of December 31, 2020, we had $300.0 million of outstanding borrowings under this agreement with no remaining borrowing capacity available.

On January 28, 2021, we amended our accounts receivable financing agreement to increase the amount we can borrow from $300.0 million to $365.0 million, and drew down the additional $65.0 million. At the same time, we made voluntary prepayments on our term loans totaling $65.0 million; therefore, there was no incremental impact on our debt.

Interest Rates

We have entered into various interest rate swaps to mitigate our exposure to changes in interest rates on our term loans. As of December 31, 2020, the percentage of our total principal debt (excluding finance leases) that is subject to fixed interest rates was approximately 72%. Each quarter-point increase or decrease in the applicable floating interest rate at December 31, 2020 would change our annual interest expense by approximately $2.0 million.

Stock Repurchase Program

On February 26, 2018, our Board of Directors (our "Board") authorized the repurchase of up to an aggregate of $250.0 million of our common stock to be executed from time to time in open market transactions effected through a broker at prevailing market prices, in block trades, or privately negotiated transactions through December 31, 2019 (the "2018 stock repurchase program"). On December 5, 2019, our Board approved an expansion and extension of the stock repurchase program. Our Board increased the share repurchase authorization of our common stock to $300.0 million and extended the term of the program to December 31, 2020. Share repurchases are funded primarily with our working capital, cash flow from operations, and funds available through various borrowing arrangements. The 2018 stock repurchase program expired on December 31, 2020.

On November 17, 2020, our Board approved a new stock repurchase program (the "2021 stock repurchase program") that took effect on January 1, 2021, and which succeeded our 2018 stock repurchase program. The 2021 stock repurchase program authorizes us to repurchase up to $300.0 million of our Class A common stock, par value $0.01, and will expire on December 31, 2022.

We are not obligated to repurchase any particular amount of our common stock, and the 2021 stock repurchase program may be modified, extended, suspended, or discontinued at any time. The timing and amount of repurchases is determined by our management based on a variety of factors such as the market price of our common stock, our corporate requirements for cash, and overall market conditions. The 2021 stock repurchase program is subject to applicable legal requirements, including federal and state securities laws and applicable Nasdaq rules.

The following table sets forth repurchase activity under the 2018 stock repurchase program from inception through December 31, 2020:

Period	Total number of shares purchased	Average price paid per share	Approximate dollar value of shares purchased (in thousands)
March 2018	948,100	$ 39.55	$ 37,493
April 2018	1,024,400	36.60	37,492
January 2019	552,100	39.16	21,623
February 2019	120,600	41.40	4,993
June 2019	509,100	45.29	23,055
August 2019	141,100	49.93	7,045
March 2020	600,000	53.38	32,029
September 2020	506,244	59.26	30,000
October 2020	150,000	54.14	8,122
Total	4,551,644		$ 201,852

Cash, Cash Equivalents and Restricted Cash

Our cash flows from operating, investing, and financing activities were as follows (in thousands):

	Year Ended December 31,			Change			
	2020	2019	2018	2020 to 2019		2019 to 2018	
Net cash provided by operating activities	$ 425,493	$ 318,481	$ 303,448	$ 107,012	33.6%	$ 15,033	5.0%
Net cash used in investing activities	(504,084)	(81,661)	(145,485)	(422,423)	517.3%	63,824	(43.9)%
Net cash provided by (used in) financing activities	178,265	(215,469)	(319,356)	393,734	n/m	103,887	(32.5)%

Cash Flows from Operating Activities

Cash flows provided by operating activities increased by $107.0 million during the year ended December 31, 2020 as compared to the prior year. The increase was primarily due to both higher cash-related net income and positive changes in operating assets and liabilities relative to the prior year, including the deferral of certain income tax payments and other taxes as permitted by the CARES Act. The CARES Act deferrals ended on December 31, 2020, with required payments in 2021 and 2022. Fluctuations in accounts receivable, unbilled services (including contract assets), and deferred revenue occur on a regular basis as we perform services, achieve milestones or other billing criteria, send invoices to customers, and collect outstanding accounts receivable. This activity varies by individual customer and contract. We attempt to negotiate payment terms that provide for payment of services prior to or soon after the provision of services, but the levels of accounts receivable, unbilled services (including contract assets), and deferred revenue can vary significantly from period to period.

Cash Flows from Investing Activities

For the year ended December 31, 2020, we used $504.1 million in cash for investing activities, which primarily consisted of $456.5 million of cash paid for the acquisitions of Synteract and Illingworth Research. Additionally, we used $50.0 million in cash for purchases of property and equipment and $15.6 million in cash for investments in unconsolidated affiliates, partially offset by cash received of $18.0 million for the sale of our medication adherence business. We continue to closely monitor our capital expenditures, especially in light of the COVID-19 pandemic, while making strategic investments in the development of our information technology infrastructure to meet the needs of our workforce, enable efficiencies, reduce business continuity risks, and conform to changes in governing rules and regulations.

For the year ended December 31, 2019, we used $81.7 million in cash for investing activities, which consisted primarily of $64.0 million for purchases of property and equipment and $17.0 million for investments in unconsolidated affiliates.

Cash Flows from Financing Activities

For the year ended December 31, 2020, financing activities provided $178.3 million in cash, primarily resulting from a net increase in long term debt from the issuance of the Notes, partially offset by repayments of other long-term debt, repurchases of our common stock, and contingent consideration payments.

For the year ended December 31, 2019, we used $215.5 million in cash for financing activities, which consisted primarily of net repayments on term loan debt and our former senior notes that were retired in 2019, as well as payments for the repurchase of our common stock. These payments were partially offset by net proceeds from our Term Loan A, our accounts receivable financing agreement, and proceeds received from the exercise of stock options.

Inflation

Our long-term contracts generally include inflation or cost of living adjustments for the portion of the services to be performed beyond one year from the contract date. In the event actual inflation rates are greater than our contractual inflation rates or cost of living adjustments, inflation could have a material adverse effect on our operations or financial condition.

Critical Accounting Policies and Estimates

The preparation of the consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) requires management to make estimates, judgments, and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses during the period, as well as disclosures of contingent assets and liabilities at the date of the financial statements. We evaluate our estimates on an ongoing basis, including those related to revenue recognition, valuation of goodwill and identifiable intangibles, and tax-related contingencies and valuation allowances. These estimates are based on the information available to management at the time these estimates, judgments, and assumptions are made. Actual results may differ materially from these estimates.

Business Combinations

We account for business combinations in accordance with ASC Topic 805, *Business Combinations*, using the acquisition method of accounting. The purchase price, or total consideration transferred, is determined as the fair value of assets exchanged, equity instruments issued, and liabilities assumed at the acquisition date. The acquisition method of accounting requires that the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree are measured and recorded at their fair values on the date of a business combination. Goodwill represents the excess of the purchase price over the estimated fair value of the net assets acquired, including the amount assigned to identifiable intangible assets. Acquisition-related costs are expensed as incurred. The consolidated financial statements reflect the results of operations of the acquiree from the date of the acquisition. For additional information, see Part II, Item 8, “Financial Statements and Supplemental Data - Note 3 - Business Combinations.”

Revenue Recognition

We adopted ASC Topic 606, *Revenue from Contracts with Customers* and all the related amendments (“new revenue standard” or “ASC 606”) on January 1, 2018 using the modified retrospective method for all contracts not completed as of the date of adoption. In accordance with ASC 606, revenue is recognized when, or as, a customer obtains control of promised services. The amount of revenue recognized reflects the consideration to which we expect to be entitled to receive in exchange for these services.

The majority of our Clinical Solutions segment revenue is for service offerings that range in duration from a few months to several years and typically represent a single performance obligation. Revenue for these service contracts is recognized over time using an input measure of progress. The input measure reflects costs (including investigator payments and pass-through costs) incurred to date relative to total estimated costs to complete the contract (“cost-to-cost measure of progress”). Under the cost-to-cost measure of progress methodology, revenue is recorded proportionally to costs incurred. Contract costs principally include direct labor, investigator payments, and pass-through costs. The estimate of total revenue and costs to completion requires significant judgment. Contract estimates are based on various assumptions to project future outcomes of events that often span several years, as well on evaluations and updates made on an ongoing basis. These estimates are reviewed periodically and any adjustments are recognized on a cumulative catch up basis in the period they become known. Updates and adjustments to estimates are likely to result in variability in revenue recognized from period to period and may cause unexpected variability in our operating results. In addition, in certain instances a customer contract may include forms of variable consideration such as incentive fees, volume rebates or other provisions that can increase or decrease the transaction price. This variable consideration is generally awarded upon achievement of certain performance metrics, program milestones or cost targets. For the purposes of revenue recognition, variable consideration is assessed on a contract-by-contract basis and the amount to be recorded is estimated based on the assessment of our anticipated performance and consideration of all information that is reasonably available. Variable consideration is recognized as revenue if and when it is deemed probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved in the future.

The largest of the service offerings within the Commercial Solutions segment relates to Deployment Solutions. Deployment Solutions contracts consist of services to promote and sell commercial products on behalf of a customer. The remaining Commercial Solutions contracts are generally short-term, month-to-month contracts or time and materials contracts. As such, Commercial Solutions revenue is generally recognized as services are performed for the amount we estimate we are entitled to for the period. For contracts billed on a fixed price basis, revenue is recognized over time based on the proportion of labor costs expended to total labor costs expected to complete the contract.

Most of our contracts can be terminated by the customer without cause with a 30-day notice. In the event of termination, our contracts generally provide that the customer pay us for fees earned through the termination date; fees and expenses for winding down the project, which include both fees incurred and actual expenses; non-cancellable expenditures; and in some cases, a fee to cover a portion of the remaining professional fees on the project. Our long-term clinical trial contracts contain implied substantive termination penalties because of the significant wind-down cost of terminating a clinical trial. These provisions for termination penalties result in these types of contracts being treated as long-term for revenue recognition purposes.

Changes in the scope of work are common, especially under long-term contracts, and generally result in a renegotiation of future contract pricing terms and change in contract transaction price. If the customer does not agree to a contract modification, we could bear the risk of cost overruns. Most of our contract modifications are for services that are not distinct from the services under the existing contract due to the significant integration service provided in the context of the contract and therefore result in a cumulative catch-up adjustment to revenue at the date of contract modification.

Timing of Billing and Performance

Differences in the timing of revenue recognition and associated billings and cash collections result in recording of billed accounts receivable, unbilled accounts receivable, contract assets, and deferred revenue on the consolidated balance sheet. Amounts are billed as work progresses in accordance with agreed-upon contractual terms either at periodic intervals or upon achievement of contractual milestones. Billings generally occur subsequent to revenue recognition, resulting in recording of unbilled accounts receivable in instances where the right to bill is contingent solely on the passage of time (e.g., in the following month) and contract assets in instances where the right to bill is associated with a contingency (e.g., achievement of a milestone).

Accounts receivable are recorded at net realizable value. Unbilled accounts receivable (including contract assets) arise when services have been rendered for which revenue has been recognized but the customers have not been billed. In general, prerequisites for billings and payments are established by contractual provisions, including predetermined payment schedules, which may or may not correspond to the timing of the performance of services under the contract. Contract assets include unbilled amounts typically resulting from revenue recognized in excess of the amounts billed to the customer for which the right to payment is subject to factors other than the passage of time. These amounts may not exceed their net realizable value. Contract assets are generally classified as current. Deferred revenue represents contract liabilities and consists of customer payments received in advance of performance and billings in excess of revenue recognized, net of revenue recognized from the balance at the beginning of the period. Contract assets and deferred revenue are presented on the balance sheet on a net contract-by-contract basis at the end of each reporting period.

Goodwill and Intangible Assets

Goodwill represents the excess of purchase price over the estimated fair value of net assets acquired, including the amount assigned to identifiable intangible assets, in business combinations. In accordance with ASC Topic 350, *Intangibles - Goodwill and Other*, goodwill is not subject to amortization but must be tested for impairment annually or more frequently if events or changes in circumstances indicate that goodwill might be impaired. Goodwill is tested for impairment at the reporting unit level, which is one level below the operating segment level. This test requires us to determine if the implied fair value of the reporting unit's goodwill is less than its carrying amount.

The impairment analysis requires significant judgments, estimates and assumptions. There is no assurance that the actual future earnings or cash flows of the reporting units will not decline significantly from the projections used in the impairment analysis. Goodwill impairment charges may be recognized in future periods in one or more of the reporting units to the extent changes in factors or circumstances occur, including deterioration in the macroeconomic environment, industry, deterioration in our performance or our future projections, or changes in plans for one or more of our reporting units.

We completed our annual impairment test for potential impairment as of October 1, 2020 for all five of our reporting units, determining that there were no impairments. Our goodwill is principally related to the Merger completed on August 1, 2017. The COVID-19 pandemic negatively impacted our results of operations during 2020, however, at this time, we do not believe there has been a significant change in the long-term fundamentals of our business. We will continue to evaluate the impacts of the COVID-19 pandemic on our business. Depending on the extent to which future developments negatively impact our results of operations and financial outlook, an interim impairment test may be required in the future.

Intangible assets consist of backlog, customer relationships, trade names, trademarks, and other intellectual property. We amortize intangible assets related to customer relationships, trade names, trademarks, and other intellectual property on a straight-line basis over the estimated useful life of the asset. Intangible assets related to backlog are amortized based on our expectations of the timing of when revenue associated with the backlog is expected to be recognized.

We review intangible assets at the end of each reporting period to determine if facts and circumstances indicate that the useful life is shorter than originally estimated or that the carrying amount of the assets might not be recoverable. If such facts and circumstances exist, we assess the recoverability of identified assets by comparing the projected undiscounted net cash flows associated with the related asset or group of assets over their remaining lives to their respective carrying amounts. Impairments, if any, are based on the excess of the carrying amount over the fair value of those assets and occur in the period in which the impairment determination is made.

Income Taxes

We and our U.S. subsidiaries file a consolidated U.S. federal income tax return. Our other subsidiaries file tax returns in their local jurisdictions.

We provide for income taxes on all transactions that have been recognized in the consolidated financial statements. Specifically, we estimate our tax liability based on current tax laws in the statutory jurisdictions in which we operate. Accordingly, the impact of changes in income tax laws on deferred tax assets and deferred tax liabilities are recognized in net earnings in the period during which such changes are enacted. We record deferred tax assets and liabilities based on temporary differences between the financial statement and tax bases of assets and liabilities and for tax benefit carryforwards using enacted tax rates in effect in the year in which the differences are expected to reverse.

We provide valuation allowances against deferred tax assets for amounts that are not considered more likely than not to be realized. The valuation of the deferred tax asset is dependent on, among other things, our ability to generate a sufficient level of future taxable income. In estimating future taxable income, we have considered both positive and negative evidence, such as historical and forecasted results of operations, and have considered the implementation of prudent and feasible tax planning strategies. If the objectively verifiable negative evidence outweighs any available positive evidence (or the only available positive is subjective and cannot be verified), then a valuation allowance will likely be deemed necessary. If a valuation allowance is deemed to be unnecessary, such allowance is released and any related benefit is recognized in the period of the change.

We recognize a tax benefit from an uncertain tax position only if we believe it is more likely than not to be sustained upon examination based on the technical merits of the position. Judgment is required in determining what constitutes an individual tax position, as well as the assessment of the outcome of each tax position. We consider many factors when evaluating and estimating tax positions and tax benefits. In addition, the calculation of tax liabilities involves dealing with uncertainties in the application of complex tax regulations in domestic and foreign jurisdictions. The amount of the accrual for which an exposure exists is measured as the largest amount of benefit determined on a cumulative probability basis that we believe is more likely than not to be realized upon ultimate settlement of the position. If the calculation of liability related to uncertain tax positions proves to be more or less than the ultimate assessment, a tax expense or benefit, respectively, would result. Unrecognized tax benefits are presented as either a reduction to a deferred tax asset for a net operating loss (“NOL”) carryforward, a similar tax loss, or a tax credit carryforward or as a separate liability.

Recently Issued Accounting Standards

For a description of recently issued accounting pronouncements, including the expected dates of adoption and the estimated effects, if any, on our consolidated financial statements, see “Note 1 - Basis of Presentation and Summary of Significant Accounting Policies” to our consolidated financial statements in Part II, Item 8, “Financial Statements and Supplementary Data” in this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Market risk is the potential loss arising from adverse changes in market rates and prices, such as foreign currency exchange rates, interest rates, and other relevant market rate or price changes. In the ordinary course of business, we are exposed to various market risks, including changes in foreign currency exchange rates and interest rates, and we regularly evaluate our exposure to such changes. Our overall risk management strategy seeks to balance the magnitude of the exposure and the cost and availability of appropriate financial instruments. From time to time, we have utilized forward exchange contracts to manage our foreign currency exchange rate and interest rate risk.

Foreign Currency Exchange Rates

Approximately 19% of our revenues for the year ended December 31, 2020 were denominated in currencies other than the U.S. dollar. Our financial statements are reported in U.S. dollars and, accordingly, fluctuations in exchange rates will affect the translation of our revenues and expenses denominated in foreign currencies into U.S. dollars for purposes of reporting our consolidated financial results. During 2020 and 2019, the most significant currency exchange rate exposures were the British Pound, Euro, Canadian Dollar, and Japanese Yen. A hypothetical change of 10% in average exchange rates used to translate all foreign currencies to U.S. dollars would have impacted income before income taxes for 2020 by approximately $13.4 million. The impact of this could be partially offset by exchange rate fluctuation provisions stated in some of our contracts with customers designed to mitigate our exposure to fluctuations in currency exchange rates over the life of the contract. For example during the year ended December 31, 2020, our revenue was reduced by $5.7 million to reflect the reduced operating costs required to fulfill the contracts as a result of the fluctuations in foreign currency exchange rates. We do not have significant operations in countries in which the economy is considered to be highly inflationary.

We are subject to foreign currency transaction risk for fluctuations in exchange rates during the period of time between the consummation and cash settlement of a transaction. Accordingly, exchange rate fluctuations during this period may affect our profitability with respect to such contracts. We are able to partially offset our foreign currency transaction risk through exchange rate fluctuation adjustment provisions stated in our contracts with customers, or we may hedge our transaction risk with foreign currency exchange contracts.

Foreign Exchange Forward

On October 30, 2020, we entered into a foreign exchange forward in order to minimize monthly foreign currency remeasurement gains or losses on non-functional currency monetary balances. The foreign exchange forward notional value may be adjusted each month as the exposure balance changes. We elected not to designate the derivative as a hedge. All changes in the mark-to-market of the foreign exchange forward are recorded in earnings every month to other (income) expense, net in the accompanying consolidated statements of income. We recognized $1.5 million of realized gains during the year ended December 31, 2020 related to this foreign exchange forward. As of December 31, 2020, the notional value of this foreign exchange forward was $50.0 million.

Interest Rates

We are subject to market risk associated with changes in interest rates. In May 2016, we entered into floating to fixed interest rate swaps with a combined notional value of $300.0 million to reduce our earnings exposure related to changes in floating interest rates on our term loans. The swaps became effective on June 30, 2016, and a portion of the interest rate swaps expired on June 30, 2018, and the remainder expired on May 14, 2020.

In June 2018, we entered into two additional interest rate swaps with multiple counterparties. The first interest rate swap had an aggregate notional value of $1.22 billion, began accruing interest on June 29, 2018, and expired on December 31, 2018. The second interest rate swap had an initial aggregate notional value of $1.01 billion, an effective date of December 31, 2018, and will expire on June 30, 2021. As of December 31, 2020, the remaining notional value of this interest rate swap was $905.6 million.

In March 2020, we entered into interest rate swaps with an initial aggregate notional value of $549.2 million, increasing to $1.42 billion in 2021, an effective date of March 31, 2020, and will expire on March 31, 2023. As of December 31, 2020, the notional value of these interest rate swaps was $603.2 million.

At December 31, 2020 and 2019, we had $2.97 billion and $2.68 billion, respectively, of total principal indebtedness (including finance leases of $49.0 million and $54.7 million, respectively), of which $809.5 million and $1.67 billion, respectively, was subject to variable interest rates (excluding finance leases). Each quarter-point increase or decrease in the applicable interest rate at December 31, 2020 and 2019 would change our annual interest expense by approximately $2.0 million and $4.2 million, respectively.

Item 8. Financial Statements and Supplementary Data.

Index to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Syneos Health, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Syneos Health, Inc. and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income (loss), cash flows, and shareholders' equity, for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 17, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for leases in 2019 due to the adoption of Accounting Standards Update No. 2016-02, *Leases*.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue — Full Service Clinical Contracts — Refer to Notes 1 and 12 to the consolidated financial statements

Critical Audit Matter Description

The majority of the Company's Clinical Solutions segment contracts have a single performance obligation because the promise to transfer individual services is not separately identifiable from other promises in the contracts, and therefore, is not distinct. Revenue is recognized over time using an input measure of progress. The input measure reflects costs (including investigator payments and pass-through costs) incurred to date relative to total estimated costs to complete ("cost-to-cost measure of progress"). Under the cost-to-cost measure of progress methodology, revenue is recorded proportionally to costs incurred. Contract costs principally include direct labor, investigator payments, and pass-through costs. The accounting for these contracts involves judgment, particularly as it relates to estimating total contract costs based on the scope of work, the complexity of the clinical trial services, the geographical locations involved, industry information, and historical experience, among other factors.

Given the judgments necessary to estimate total contract costs in order to estimate the amount of revenue to recognize for certain long-term clinical research contracts which use the cost-to-cost method, auditing such estimates required extensive audit effort due to the complexity of these contracts and a high degree of auditor judgment when performing audit procedures and evaluating the results of those procedures.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to management's estimates of total contract costs to estimate the amount of revenue to recognize for full service clinical research contracts included the following, among others:

- We tested the effectiveness of controls over long-term contract revenue, including those over the estimates of total contract costs related to the performance obligation.
- We selected a sample of long-term contracts and performed the following:
  - Evaluated whether the contracts were properly included in management's calculation of long-term contract revenue based on the terms and conditions of each contract, including whether continuous transfer of control to the customer occurred as progress was made toward fulfilling the performance obligation.
  - Compared the transaction prices to the consideration expected to be received based on current rights and obligations under the contracts and any contract modifications that were agreed upon with the customers.
  - Evaluated management's identification of distinct performance obligations by assessing whether the underlying services were highly interdependent and interrelated.
  - Tested the accuracy and completeness of the total contract costs incurred to date for the performance obligation.
  - Evaluated the estimates of total contract cost for the performance obligation by:
    - Comparing costs incurred to date to the costs management estimated to be incurred to date.
    - Evaluating management's ability to achieve the estimates of total contract cost by performing corroborating inquiries with the Company's project managers and project financial analysts, and comparing the estimates to management's work plans and cost estimates.
    - Comparing management's estimates for the selected contracts to historical experience and original budgets, when applicable.

- Tested the mathematical accuracy of management's calculation of revenue for the performance obligation.

- We evaluated management's ability to accurately estimate total contract costs and revenue by comparing actual costs to management's historical estimates for performance obligations that have been fulfilled.

/s/ Deloitte & Touche LLP
Raleigh, North Carolina
February 17, 2021

We have served as the Company's auditor since 2016.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Syneos Health, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Syneos Health, Inc. and subsidiaries (the "Company") as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2020, of the Company and our report dated February 17, 2021 expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP
Raleigh, North Carolina
February 17, 2021

SYNEOS HEALTH, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME

	Year Ended December 31,		
	2020	2019	2018
	(in thousands, except per share data)		
Revenue	$ 4,415,777	$ 4,675,815	$ 4,390,116
Costs and operating expenses:			
Direct costs (exclusive of depreciation and amortization)	3,398,142	3,645,905	3,434,310
Selling, general, and administrative expenses	442,484	446,281	406,305
Restructuring and other costs	29,414	42,135	50,793
Transaction and integration-related expenses	30,242	61,275	64,841
Depreciation	70,185	76,532	72,158
Amortization	152,167	165,933	201,527
Total operating expenses	4,122,634	4,438,061	4,229,934
Income from operations	293,143	237,754	160,182
Total other expense, net:			
Interest income	(265)	(7,542)	(3,686)
Interest expense	91,145	129,820	130,701
Loss (gain) on extinguishment of debt	1,581	(10,395)	4,153
Other (income) expense, net	(2,976)	24,162	(28,244)
Total other expense, net	89,485	136,045	102,924
Income before provision for income taxes	203,658	101,709	57,258
Income tax expense (benefit)	10,871	(29,549)	32,974
Net income	$ 192,787	$ 131,258	$ 24,284
Earnings per share:			
Basic	$ 1.85	$ 1.27	$ 0.23
Diluted	$ 1.83	$ 1.25	$ 0.23
Weighted average common shares outstanding:			
Basic	104,168	103,618	103,414
Diluted	105,465	105,005	104,701

The accompanying notes are an integral part of these consolidated financial statements.

SYNEOS HEALTH, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Net income	$ 192,787	$ 131,258	$ 24,284
Unrealized loss on derivative instruments, net of income tax benefit of $1,394, $2,122, and $782, respectively	(3,925)	(7,596)	(8,625)
Foreign currency translation adjustments, net of income tax expense of $(1,354), $0, and $0, respectively	34,717	24,198	(61,035)
Comprehensive income (loss)	$ 223,579	$ 147,860	$ (45,376)

The accompanying notes are an integral part of these consolidated financial statements.

SYNEOS HEALTH, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2020	2019
	(in thousands, except par value)	
ASSETS		
Current assets:		
Cash, cash equivalents, and restricted cash	$ 272,173	$ 163,689
Accounts receivable and unbilled services, net	1,344,781	1,303,641
Prepaid expenses and other current assets	121,058	94,834
Total current assets	1,738,012	1,562,164
Property and equipment, net	216,200	203,926
Operating lease right-of-use assets	223,285	218,531
Goodwill	4,776,178	4,350,380
Intangible assets, net	933,525	973,081
Deferred income tax assets	35,059	37,012
Other long-term assets	141,047	108,701
Total assets	$ 8,063,306	$ 7,453,795
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 113,684	$ 136,686
Accrued expenses	611,042	568,911
Deferred revenue	793,068	696,907
Current portion of operating lease obligations	42,082	38,055
Current portion of finance lease obligations	17,455	17,777
Current portion of long-term debt	—	58,125
Total current liabilities	1,577,331	1,516,461
Long-term debt	2,902,054	2,550,395
Operating lease long-term obligations	221,760	218,343
Finance lease long-term obligations	31,522	36,914
Deferred income tax liabilities	20,216	11,101
Other long-term liabilities	68,311	90,927
Total liabilities	4,821,194	4,424,141
Commitments and contingencies (Note 17)		
Shareholders' equity:		
Preferred stock, $0.01 par value; 30,000 shares authorized, 0 shares issued and outstanding at December 31, 2020 and 2019	—	—
Common stock, $0.01 par value; 600,000 shares authorized, 103,935 and 103,866 shares issued and outstanding at December 31, 2020 and 2019, respectively	1,039	1,039
Additional paid-in capital	3,461,747	3,441,471
Accumulated other comprehensive loss, net of tax	(40,801)	(71,593)
Accumulated deficit	(179,873)	(341,263)
Total shareholders' equity	3,242,112	3,029,654
Total liabilities and shareholders' equity	$ 8,063,306	$ 7,453,795

The accompanying notes are an integral part of these consolidated financial statements.

SYNEOS HEALTH, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Cash flows from operating activities:			
Net income	$ 192,787	$ 131,258	$ 24,284
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	222,352	242,465	273,685
Share-based compensation	58,491	55,193	34,323
Provision for (recovery of) doubtful accounts	695	1,897	(4,587)
(Benefit from) provision for deferred income taxes	(3,839)	(40,069)	240
Foreign currency transaction adjustments	4,148	11,166	(16,165)
Fair value adjustment of contingent obligations	(3,664)	17,260	(11,590)
Gain on sale of business	(7,133)	—	—
Loss (gain) on extinguishment of debt	1,581	(10,395)	4,153
Other non-cash items	1,765	2,766	2,849
Changes in operating assets and liabilities, net of effect of business combinations:			
Accounts receivable, unbilled services, and deferred revenue	16,316	(120,389)	(97,621)
Accounts payable and accrued expenses	(2,561)	28,316	60,024
Other assets and liabilities	(55,445)	(987)	33,853
Net cash provided by operating activities	425,493	318,481	303,448
Cash flows from investing activities:			
Payments associated with business combinations, net of cash acquired	(456,455)	(712)	(90,890)
Proceeds from sale of business	17,970	—	—
Purchases of property and equipment	(50,010)	(63,973)	(54,595)
Investments in unconsolidated affiliates	(15,589)	(16,976)	—
Net cash used in investing activities	(504,084)	(81,661)	(145,485)
Cash flows from financing activities:			
Proceeds from issuance of long-term debt, net of discount	600,000	582,000	—
Payments of debt financing costs	(9,570)	(2,636)	(3,062)
Repayments of long-term debt	(327,294)	(437,936)	(390,646)
Proceeds from accounts receivable financing agreement	31,600	127,815	187,700
Repayments of accounts receivable financing agreement	(6,600)	(22,400)	(18,300)
Proceeds from revolving line of credit	300,000	—	—
Repayments of revolving line of credit	(300,000)	—	—
Redemption of Senior Notes and associated breakage fees	—	(418,112)	—
Payments of contingent consideration related to business combinations	(26,634)	(178)	(23,102)
Payments of finance leases	(16,434)	(14,493)	(15,423)
Payments for repurchases of common stock	(70,151)	(56,716)	(74,985)
Proceeds from exercises of stock options	24,568	40,322	21,821
Payments related to tax withholdings for share-based compensation	(21,220)	(13,135)	(3,359)
Net cash provided by (used in) financing activities	178,265	(215,469)	(319,356)
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	8,810	(13,594)	(4,651)
Net change in cash, cash equivalents, and restricted cash	108,484	7,757	(166,044)
Cash, cash equivalents, and restricted cash - beginning of period	163,689	155,932	321,976
Cash, cash equivalents, and restricted cash - end of period	$ 272,173	$ 163,689	$ 155,932

The accompanying notes are an integral part of these consolidated financial statements.

SYNEOS HEALTH, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Shareholders' equity, beginning balance	$ 3,029,654	$ 2,856,144	$ 3,022,579
Impact from adoption of ASU 2014-09	—	—	(98,815)
Impact from adoption of ASU 2016-13	(2,771)	—	—
Shareholders' equity, adjusted beginning balance	3,026,883	2,856,144	2,923,764
Common stock:			
Beginning balance	1,039	1,034	1,044
Repurchases of common stock	(13)	(13)	(19)
Issuances of common stock	13	18	9
Ending balance	1,039	1,039	1,034
Additional paid-in capital:			
Beginning balance	3,441,471	3,402,638	3,414,389
Repurchases of common stock	(41,512)	(43,515)	(64,482)
Issuances of common stock	3,297	27,155	18,408
Share-based compensation	58,491	55,193	34,323
Ending balance	3,461,747	3,441,471	3,402,638
Accumulated other comprehensive loss:			
Beginning balance	(71,593)	(88,195)	(22,385)
Impact from adoption of ASU 2018-02	—	—	3,850
Adjusted beginning balance	(71,593)	(88,195)	(18,535)
Unrealized loss on derivative instruments, net of taxes	(3,925)	(7,596)	(8,625)
Foreign currency translation adjustment, net of taxes	34,717	24,198	(61,035)
Ending balance	(40,801)	(71,593)	(88,195)
Accumulated deficit:			
Beginning balance	(341,263)	(459,333)	(370,469)
Impact from adoption of ASU 2014-09	—	—	(98,815)
Impact from adoption of ASU 2016-13	(2,771)	—	—
Impact from adoption of ASU 2018-02	—	—	(3,850)
Adjusted beginning balance	(344,034)	(459,333)	(473,134)
Repurchases of common stock	(28,626)	(13,188)	(10,483)
Net income	192,787	131,258	24,284
Ending balance	(179,873)	(341,263)	(459,333)
Shareholders' equity, ending balance	$ 3,242,112	$ 3,029,654	$ 2,856,144

The accompanying notes are an integral part of these consolidated financial statements.

Syneos Health, Inc. and Subsidiaries
Notes to Consolidated Financial Statements

1. Basis of Presentation and Summary of Significant Accounting Policies

Principal Business

Syneos Health, Inc. (the "Company") is a global provider of end-to-end biopharmaceutical outsourcing solutions. The Company operates under two reportable segments, Clinical Solutions and Commercial Solutions, and derives its revenue through a suite of services designed to enhance its customers' ability to successfully develop, launch, and market their products. The Company offers its solutions on both a standalone and integrated basis with biopharmaceutical development and commercialization services ranging from Phase I to IV clinical trial services to services associated with the commercialization of biopharmaceutical products. The Company's customers include small, mid-sized, and large companies in the pharmaceutical, biotechnology, and medical device industries.

Principles of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"), and include the accounts and results of operations of the Company and its controlled subsidiaries. All intercompany balances and transactions have been eliminated.

COVID-19 Pandemic

On March 11, 2020, the World Health Organization designated the outbreak of the novel strain of coronavirus that causes the disease known as COVID-19 as a global pandemic. Governments and businesses around the world have taken unprecedented actions to mitigate the spread of COVID-19, including, but not limited to, shelter-in-place orders, quarantines, significant restrictions on travel, social distancing practices as well as restrictions that prohibit many employees from going to work in person. The Company experienced significant impacts to its business and results of operations during 2020 due to COVID-19. While certain governments have eased restrictions, the pandemic continues to be disruptive to the Company's business. The pandemic and associated economic impacts could continue to significantly impact the Company's future financial condition, results of operations and cash flows.

Use of Estimates

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and the disclosures of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenue and expenses for the periods presented in the financial statements. Examples of estimates and assumptions include, but are not limited to, determining the fair value of goodwill and intangible assets and their potential impairment, useful lives of tangible and intangible assets, useful lives of assets subject to leases, valuation of the Company's right of use assets, allowances for doubtful accounts, potential future outcomes of events for which income tax consequences have been recognized in the Company's consolidated financial statements or tax returns, valuation allowances for deferred tax assets, fair value of share-based compensation and its recognition period, loss contingencies, fair value of derivative instruments and related hedge effectiveness, fair value of contingent tax sharing obligations, and judgments related to revenue recognition, among others. In addition, estimates and assumptions are used in the accounting for business combinations, including the fair value and useful lives of acquired tangible and intangible assets and the fair value of assumed liabilities.

The Company evaluates its estimates and assumptions on an ongoing basis and bases its estimates on historical experience, current and expected future conditions, third-party evaluations, and various other assumptions that management believes are reasonable under the circumstances based on the information available to management at the time these estimates and assumptions are made. Actual results and outcomes may differ significantly from these estimates and assumptions.

Business Combinations

The Company accounts for business combinations in accordance with ASC Topic 805, *Business Combinations*, using the acquisition method of accounting. The purchase price, or total consideration transferred, is determined as the fair value of assets exchanged, equity instruments issued, and liabilities assumed at the acquisition date. The acquisition method of accounting requires that the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree are measured and recorded at their fair values on the date of a business combination. Goodwill represents the excess of the purchase price over the estimated fair value of the net assets acquired, including the amount assigned to identifiable intangible assets. Acquisition-related costs are expensed as incurred. The consolidated financial statements reflect the results of operations of the acquiree from the date of the acquisition. For additional information, see “Note 3 - Business Combinations.”

Foreign Currency Translation and Transactions

For subsidiaries outside of the U.S. that operate in a local currency environment, revenue and expenses are translated to U.S. dollars at the monthly average rates of exchange prevailing during the period, assets and liabilities are translated at period-end exchange rates, and equity accounts are translated at historical exchange rates. The net effect of foreign currency translation adjustments is included in shareholders’ equity as a component of accumulated other comprehensive loss in the accompanying consolidated balance sheets.

Foreign currency transaction gains and losses are the result of exchange rate changes during the period of time between the consummation and cash settlement of transactions denominated in currencies other than the functional currency. Foreign currency transaction gains and losses are recognized in earnings as incurred and are included in other (income) expense, net in the accompanying consolidated statements of income.

Comprehensive Income (Loss)

Comprehensive income (loss) refers to revenue, expenses, gains, and losses that, under U.S. GAAP, are recorded as an element of shareholders’ equity but are excluded from net income. The Company’s comprehensive income (loss) consists of foreign currency translation adjustments, net of applicable taxes, resulting from the translation of foreign subsidiaries with functional currencies other than the U.S. dollar and the effective portions of the unrealized gains or losses associated with derivative instruments designated and accounted for as hedging instruments.

Cash and Cash Equivalents

Cash and cash equivalents consist of demand deposits with banks and other financial institutions and highly liquid investments with an original maturity of three months or less at the date of purchase. Cash and cash equivalents are carried at cost, which approximates their fair value.

Certain of the Company's subsidiaries participate in a notional cash pooling arrangement to manage global liquidity requirements. As part of a master netting arrangement, the participants combine their cash balances in pooling accounts at the same financial institution with the ability to offset bank overdrafts of one participant against positive cash account balances held by another participant. Under the terms of the master netting arrangement, the financial institution has the right, ability, and intent to offset a positive balance in one account against an overdrawn amount in another account. Amounts in each of the accounts are unencumbered and unrestricted with respect to use. As such, the net cash balance related to this pooling arrangement is included in cash, cash equivalents, and restricted cash in the accompanying consolidated balance sheets.

The Company's net cash pool position consisted of the following as of December 31 (in thousands):

	2020	2019
Gross cash position	$ 220,261	$ 326,002
Less: cash borrowings	(204,647)	(307,647)
Net cash position	$ 15,614	$ 18,355

Restricted Cash

Restricted cash represents cash and deposits held as security over bank deposits, lease guarantees, and insurance obligations that are restricted as to withdrawal or use. Restricted cash is classified as a current or long-term asset based on the timing and nature of when and how the cash is expected to be used or when the restrictions are expected to lapse. As of December 31, 2020 and 2019, restricted cash balances were $0.3 million and $0.5 million, respectively.

Fair Value

The Company records certain assets and liabilities at fair value in accordance with ASC Topic 820, *Fair Value Measurement* (see "Note 7 - Fair Value Measurements"). Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. This guidance also specifies a fair value hierarchy that distinguishes between valuation assumptions developed based on market data obtained from independent external sources and the reporting entity's own assumptions. Fair value measurements are classified according to the lowest level input or value-driver that is significant to the valuation. In accordance with this guidance, fair value measurements are classified under the following hierarchy:

Level 1 — Unadjusted quoted prices in active markets for identical instruments;

Level 2 — Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs or significant value-drivers are observable in active markets; and

Level 3 — Model-derived valuations in which one or more significant inputs or significant value-drivers are unobservable, including internally developed models.

Derivative Financial Instruments

Interest Rate Swaps

The Company uses interest rate swaps to manage exposure to variable interest rates on its debt obligations. The Company designates its interest rate swaps as cash flow hedges because they are executed to hedge the Company's exposure to the variability in expected future cash flows that are attributable to changes in interest rates.

Derivative financial instruments are measured at fair value and recognized in the accompanying consolidated balance sheets in prepaid expenses and other current assets, other long-term assets, accrued expenses, and other long-term liabilities, as disclosed in "Note 6 - Derivatives." The fair value of interest rate swaps is determined using the market standard methodology of discounted future variable cash receipts. The variable cash receipts are determined by discounting the future expected cash receipts that would occur if variable interest rates rise above the fixed rate of the swaps. The variable interest rates used in the calculation of projected receipts on the swap are based on an expectation of future interest rates derived from observable market interest rate curves and volatilities. Changes in the fair value of derivative instruments designated as hedging instruments are recorded each period according to the determination of the derivative's effectiveness. The effective portion of changes in the fair value of derivatives designated as cash flow hedges is recorded in accumulated other comprehensive loss and subsequently reclassified into earnings in the period during which the hedged transaction is recognized in earnings. The ineffective portion of the change in fair value of the derivatives is recognized as non-operating income or expense immediately when incurred and included in interest expense in the accompanying consolidated statements of income.

Foreign Exchange Forward

The Company utilizes a foreign exchange forward in order to minimize monthly foreign currency remeasurement gains or losses on non-functional currency monetary balances. The Company did not designate the derivative as a hedge. All changes in the fair value of the foreign exchange forward are recorded in earnings every month to other (income) expense, net in the accompanying consolidated statements of income, as disclosed in "Note 6 - Derivatives."

Allowance for Doubtful Accounts

The Company maintains a credit approval process and makes judgments in connection with assessing its customers' ability to pay for contracted services. Generally, the Company has the ability to limit credit exposure by discontinuing services in the event of non-payment. The Company monitors its customers' credit worthiness and applies judgment in establishing a provision for estimated credit losses based on historical experience, the aging of receivables, and customer-specific circumstances that would affect the customers' ability to pay for services rendered.

Property and Equipment

Property and equipment primarily consists of furniture, vehicles, software, office equipment, computer equipment, and lab equipment. Purchased and constructed property and equipment is initially recorded at historical cost plus the estimated value of any associated legally or contractually required retirement obligations. Property and equipment acquired in a business combination are recorded based on the estimated fair value as of the acquisition date. The Company leases vehicles for certain sales representatives in the Commercial Solutions segment. These leases are classified and accounted for as leases in accordance with ASC Topic 842, *Leases* ("ASC 842"). For further information about lease arrangements, see "Note 5 - Leases."

Property and equipment assets are depreciated using the straight-line method over the respective estimated useful lives as follows:

	Useful Life
Buildings	39 years
Furniture and fixtures	7 years
Equipment	5 to 10 years
Computer equipment and software	2 to 3 years
Vehicles	Lesser of lease term or the estimated economic life of the leased asset
Leasehold improvements	Lesser of remaining life of lease or the useful life of the asset

Expenditures for repairs and maintenance are expensed as incurred and expenditures for major improvements that increase the functionality or extend the useful life of the asset are capitalized and depreciated over the estimated useful life of the asset.

The Company capitalizes costs of computer software obtained for internal use and amortizes these costs on a straight-line basis over the estimated useful life of the product, not to exceed five years. Software cloud computing arrangements containing a software license are accounted for consistently with the acquisition of other software licenses. In the event such an arrangement does not contain a software license, the Company accounts for the arrangement as a service contract.

The Company reviews property and equipment for impairment whenever facts and circumstances indicate that the carrying amounts of these assets might not be recoverable. For assessment purposes, property and equipment are grouped with other assets and liabilities at the lowest level that identifiable cash flows are largely independent of the cash flows of other assets and liabilities. Recoverability of the carrying amount of an asset group is assessed by comparing its carrying amount to the estimated undiscounted future cash flows expected to be generated by the asset group. If the carrying value of the asset group exceeds its fair value, an impairment charge is recognized for the excess.

Leases

On January 1, 2019, the Company adopted ASC 842 using the revised modified retrospective approach. The revised modified retrospective approach recognizes the effects of initially applying the new leases standard as a cumulative effect adjustment to retained earnings as of the adoption date. Under this election, the provisions of ASC 840 apply to the accounting and disclosures for lease arrangements in the comparative periods in an entity's financial statements. In addition, the Company elected the package of practical expedients permitted under the transition guidance within ASC 842, in which the Company need not reassess (i) the historical lease classification, (ii) whether any expired or existing contract is or contains a lease, or (iii) the initial direct costs for any existing leases.

At inception, a contract contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. In evaluating whether it has the right to control the use of an identified asset, the Company assesses whether they have the right to direct the use of the identified asset and to obtain substantially all of the economic benefit from the use of the identified asset.

Right-of-use ("ROU") assets represent the Company's right to use an underlying asset during the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Assets and liabilities are recognized based on the present value of lease payments over the lease term. Most leases include one or more options to renew. The exercise of the renewal option is at the Company's sole discretion and the Company includes these options in determining the lease term used to establish its right-of-use assets and lease liabilities when it is reasonably certain the Company will exercise its option.

Because most of the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at the lease commencement date in determining the present value of lease payments. The Company uses the implicit rate when readily determinable. Operating lease expense is generally recognized on a straight-line basis over the lease term.

The Company has agreements with lease and non-lease components, which are accounted for as a single lease component. Leases with a lease term of 12 months or less are not recorded on the balance sheet. The Company recognizes lease expense for these leases on a straight-line basis over the lease term. Variable lease payment amounts that cannot be determined at the commencement of the lease, such as increases in lease payments based on changes in index rates, are not included in the right-of-use assets or liabilities. These variable lease payments are expensed as incurred.

Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price over the estimated fair value of net assets acquired, including the amount assigned to identifiable intangible assets, in business combinations. In accordance with ASC Topic 350, *Intangibles - Goodwill and Other*, goodwill is not subject to amortization but must be tested for impairment annually or more frequently if events or changes in circumstances indicate that goodwill might be impaired. Goodwill is tested for impairment at the reporting unit level, which is one level below the operating segment level. This test requires the Company to determine if the implied fair value of the reporting unit's goodwill is less than its carrying amount.

The Company has assigned goodwill to five reporting units. The Company completed an annual impairment test as of October 1, 2020 for all of its reporting units, and concluded that there were no impairments.

Intangible assets consist of backlog, customer relationships, trade names and trademarks, and intellectual property. The Company amortizes intangible assets related to customer relationships, trade names, trademarks, and intellectual property on a straight-line basis over the estimated useful life of the asset. Backlog is amortized based on the Company's expectations of when the resulting revenue is expected to be earned.

The Company reviews intangible assets at the end of each reporting period to determine if facts and circumstances indicate that the useful life is shorter than originally estimated or that the carrying amount of the assets might not be recoverable. If such facts and circumstances exist, the Company assesses the recoverability of identified assets by comparing the projected undiscounted cash flows associated with the related asset or group of assets to their respective carrying amounts. Impairments, if any, are based on the excess of the carrying amount over the fair value of those assets and occur in the period in which the impairment determination is made.

The weighted average estimated useful lives of the Company's intangible assets were as follows as of December 31:

	2020	2019
Customer relationships	9.9 years	9.9 years
Acquired backlog	2.6 years	2.2 years
Trade names and trademarks	5.5 years	4.2 years
Intellectual property (medical patent)	9.0 years	—

No intangible asset impairment charges were recorded for the years ended December 31, 2020 or 2019. For additional information regarding the carrying values of intangible assets, see "Note 2 - Financial Statement Details."

Contingencies

In the normal course of business, the Company periodically becomes involved in various proceedings and claims, including investigations, disputes, litigations, and regulatory matters that are incidental to its business. The Company evaluates the likelihood of an unfavorable outcome of all legal and regulatory matters and records accruals for probable loss contingencies for which the amount of the loss can be reasonably estimated. Gain contingencies are not recognized until realized. Legal fees are expensed as incurred.

Because these matters are inherently unpredictable, and unfavorable developments or resolutions can occur, assessing contingencies is highly subjective and requires judgments about future events. These judgments and estimates are based, among other factors, on the status of the proceedings, the merits of the Company's defenses, and the consultation with in-house and external counsel. The Company regularly reviews contingencies to determine whether its accruals and related disclosures are adequate. Although the Company believes that it has substantial defenses in these matters, the amount of losses incurred as a result of actual outcomes may differ significantly from the Company's estimates.

Revenue Recognition

In accordance with ASC Topic 606, *Revenue from Contracts with Customers* and all related amendments ("ASC 606"), revenue is recognized when, or as, a customer obtains control of promised services. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled to receive in exchange for these services.

A performance obligation is a promise (or a combination of promises) in a contract to transfer distinct goods or services to a customer and is the unit of accounting under ASC 606 for the purposes of revenue recognition. A contract's transaction price is allocated to each performance obligation and is recognized as revenue, when, or as, each performance obligation is satisfied. The majority of the Company's Clinical Solutions segment contracts have a single performance obligation because the promise to transfer individual services is not separately identifiable from other promises in the contracts, and therefore, is not distinct. For contracts with multiple performance obligations, the contract's transaction price is allocated to each performance obligation using the best estimate of the standalone selling price of each distinct good or service in the contract.

The majority of the Company's revenue arrangements are service contracts that range in duration from a few months to several years. Substantially all of the Company's performance obligations, and associated revenue, are transferred to the customer over time. The Company generally receives compensation based on measuring progress toward completion using anticipated project budgets for direct labor and prices for each service offering. The Company is also reimbursed for certain third party pass-through and out-of-pocket costs. In addition, in certain instances a customer contract may include forms of variable consideration such as incentive fees, volume rebates or other provisions that can increase or decrease the transaction price. This variable consideration is generally awarded upon achievement of certain performance metrics, program milestones or cost targets. For the purposes of revenue recognition, variable consideration is assessed on a contract-by-contract basis and the amount included in the transaction price is estimated based on the Company's anticipated performance and consideration of all information that is reasonably available. Variable consideration is recognized as revenue if and when it is deemed probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved in the future.

Most of the Company's contracts can be terminated by the customer without cause with a notice period that generally ranges from 30-90 days. In the event of termination, the Company's contracts generally provide that the customer pay the Company for: (i) fees earned through the termination date; (ii) fees and expenses for winding down the project, which include both fees incurred and actual expenses; (iii) non-cancellable expenditures; and (iv) in some cases, a fee to cover a portion of the remaining professional fees on the project.

Changes in the scope of work are common, especially under long-term contracts, and generally result in a change in the total contract transaction price. If the customer does not agree to a contract modification, the Company could bear the risk of cost overruns. Most of the Company's contract modifications are for services that are not distinct from the services under the existing contract due to the significant integration service provided in the context of the contract and therefore result in a cumulative catch-up adjustment to revenue at the date of contract modification.

Capitalized Costs

The Company capitalizes certain costs associated with commissions and bonuses paid to its employees in the Clinical Solutions segment because these costs are incurred in obtaining contracts that have a term greater than one year. Capitalized costs are included in prepaid expenses and other current assets and other long-term assets in the accompanying consolidated balance sheets. The Company amortizes these costs in a manner that is consistent with the pattern of revenue recognition described below. The Company expenses costs to obtain contracts that have a term of one year or less.

Clinical Solutions

The Company's Clinical Solutions segment provides solutions to address the clinical development needs of customers. The Company provides total biopharmaceutical program development through its full service platform, while also providing discrete services for any part of a clinical trial, primarily through functional service provider, Early Stage, and Real World and Late Phase ("RWLP") services. The services provided via the full service platform and RWLP platforms generally span several years and a significant benefit to the customer is provided by integrating the services provided by the Company's employees as well as those performed by third parties. Because the Company's full service platform provides a significant integration service to the customer, these contracts contain a single performance obligation. Revenue is recognized over time using an input measure of progress. The input measure reflects costs (including investigator payments and pass-through costs) incurred to date relative to total estimated costs to complete ("cost-to-cost measure of progress"). Under the cost-to-cost measure of progress methodology, revenue is recorded proportionally to costs incurred. Contract costs principally include direct labor, investigator payments, and pass-through costs. The estimate of total estimated costs at completion requires significant judgment. Contract estimates are based on various assumptions to project future outcomes of events that often span several years. These estimates are reviewed periodically and any adjustments are recognized on a cumulative catch-up basis in the period they become known.

The remaining service offerings within the Clinical Solutions segment are generally short-term, month-to-month contracts, time and materials basis contracts, or provide a series of distinct services that are substantially the same and have the same pattern of transfer to the customer ("series"). As such, revenue for these service offerings is generally recognized as services are performed for the amount the Company estimates it is entitled to for the period.

Commercial Solutions

The Company's Commercial Solutions segment provides a broad suite of complementary commercialization services including Deployment Solutions, communications (advertising and public relations), and consulting services. Deployment Solutions contracts offer outsourced services to promote commercial products on behalf of a customer.

The remaining Commercial Solutions contracts are generally short-term, month-to-month contracts or time and materials contracts. As such, Commercial Solutions revenue is generally recognized as services are performed for the amount of consideration the Company estimates it is entitled to for the period. For contracts billed on a fixed price basis, revenue is recognized over time based on the proportion of labor costs expended to total labor costs expected to complete the contract.

Accounts Receivable, Unbilled Services, and Deferred Revenue

Accounts receivable are recorded at net realizable value. Unbilled accounts receivable arise when services have been rendered for which revenue has been recognized but the customers have not been billed. Contractual provisions and payment schedules may or may not correspond to the timing of the performance of services under the contract.

Unbilled services include contract assets, under which the right to bill the customer is subject to factors other than the passage of time. These amounts may not exceed their net realizable value. Contract assets are generally classified as current.

Deferred revenue is a contract liability that consists of customer payments received in advance of performance and billings in excess of revenue recognized, net of revenue recognized from the balance at the beginning of the period.

Timing of Billing and Performance

Differences in the timing of revenue recognition and associated billings and cash collections result in recording of billed accounts receivable, unbilled accounts receivable (including contract assets), and deferred revenue on the consolidated balance sheet. Amounts are billed as work progresses in accordance with agreed-upon contractual terms either at periodic intervals or upon achievement of contractual milestones. Billings generally occur subsequent to revenue recognition, resulting in recording unbilled accounts receivable in instances where the right to bill is contingent solely on the passage of time (e.g., in the following month), and contract assets in instances where the right to bill is associated with achievement of a milestone.

Reimbursable Out-of-Pocket Expenses

The Company incurs and is reimbursed by its customers for certain costs, including fees paid to principal investigators and for other out-of-pocket costs (such as travel expenses for the Company's clinical monitors and sales representatives). The Company includes these costs in total operating expenses, and the related reimbursements in revenue, as the Company is the principal in the applicable arrangements and is responsible for fulfilling the promise to provide the specified services.

Share-Based Compensation

The Company measures and recognizes compensation expense related to all share-based awards based on the estimated fair value of the awards. The fair value of restricted stock and stock unit awards is measured on the grant date based on the fair market value of the Company's common stock.

Share-based compensation expense is recognized on a straight-line basis over the shorter of the requisite service period or the vesting term. For awards with performance conditions, stock-based compensation expense is recognized when the achievement of each individual performance target becomes probable, and the number of shares expected to vest is adjusted for the weighted probability of attainment of the relevant performance targets. Forfeitures are accounted for as they occur.

All excess tax benefits and tax deficiencies (including tax benefits of dividends on share-based payment awards, if applicable) are recognized as income tax expense or benefit in the consolidated statements of income. The tax effects of exercised or vested awards are treated as discrete items in the reporting period in which they occur. The Company also recognizes excess tax benefits regardless of whether the benefit reduces taxes payable in the current period.

Income Taxes

The Company and its United States (U.S.) subsidiaries file a consolidated U.S. federal income tax return. Other subsidiaries of the Company file tax returns in their local jurisdictions.

The Company estimates its tax liability based on current tax laws in the statutory jurisdictions in which it operates. Accordingly, the impact of changes in income tax laws on deferred tax assets and deferred tax liabilities is recognized in earnings in the period during which such changes are enacted. The Company records deferred tax assets and liabilities based on temporary differences between the financial reporting basis and tax basis of the Company's assets and liabilities at enacted tax rates expected to be in effect when the differences are realized or settled.

Deferred income tax assets represent amounts available to reduce income taxes payable on taxable income in future years. Such assets arise because of temporary differences between the financial reporting and tax bases of assets and liabilities, as well as from net operating loss and tax credit carryforwards. The Company evaluates recoverability of these future tax deductions. The Company establishes a valuation allowance for deferred income tax assets when the Company believes it is more likely than not the assets will not be realized. The Company evaluates the recoverability of these future tax deductions by assessing future expected taxable income. In estimating future taxable income, the Company considers both positive and negative evidence, such as historical and forecasted results of operations, and implementation of prudent and feasible tax planning strategies. If the objectively verifiable negative evidence outweighs any available positive evidence (or the only available positive is subjective and cannot be verified), then a valuation allowance will likely be deemed necessary. If a valuation allowance is deemed to be unnecessary, such allowance is released and any related benefit is recognized in the period of the change.

The Company recognizes a tax benefit from any uncertain tax positions only if they are more likely than not to be sustained upon examination based on the technical merits of the position. The amount of the accrual for which an exposure exists is measured as the largest amount of benefit determined on a cumulative probability basis that the Company believes is more likely than not to be realized upon ultimate settlement of the position. Components of the reserve for uncertain tax positions are classified as either a current or a long-term liability in the accompanying consolidated balance sheets based on when the Company expects each of the items to be settled.

Judgment is required in determining what constitutes an uncertain tax position, as well as assessing the outcome of each tax position. The Company considers many factors when evaluating and estimating tax positions and tax benefits. In addition, the calculation of tax liabilities involves dealing with uncertainties in the application of complex tax regulations in domestic and foreign jurisdictions. If the calculation of the liability related to uncertain tax positions proves to be more or less than the ultimate assessment, a tax expense or tax benefit, respectively, would result. Unrecognized tax benefits are presented as either a reduction to a deferred tax asset for a net operating loss ("NOL") carryforward, a similar tax loss, or a tax credit carryforward or as a separate liability.

Restructuring and Other Costs

Restructuring and other costs primarily consist of one-time employee termination benefits, contract termination costs, and other costs associated with an exit or disposal activity. The Company accounts for restructuring costs in accordance with ASC Topic 420, *Exit or Disposal Cost Obligations*. This guidance requires that a liability for a cost associated with an exit or disposal activity be recognized in the period in which the liability is incurred, as opposed to the period in which management commits to a plan of action for termination. The guidance also requires that the liabilities associated with an exit or disposal activity be measured at the fair value in the period in which the liability is incurred, except for: (i) liabilities related to one-time employee termination benefits, which shall be measured and recognized at the date the entity notifies employees of termination, unless employees are required to render services beyond a minimum retention period, in which case the liability is recognized ratably over the future service period; and (ii) liabilities related to an operating lease, which shall be measured and recognized when the contract does not have any future economic benefit to the entity (i.e., the entity ceases to utilize the rights conveyed by the contract). Restructuring liabilities are included in accrued expenses and other long-term liabilities in the accompanying consolidated balance sheets.

Earnings Per Share

The Company determines earnings per share in accordance with ASC Topic 260, *Earnings Per Share*. The Company has one class of common stock for purposes of the earnings per share calculation and therefore computes basic earnings per share by dividing net income (loss) by the weighted average number of common shares outstanding for the applicable period. Diluted earnings per share are computed in the same manner as basic earnings per share, except that the number of shares is increased to assume exercise of potentially dilutive equity awards using the treasury stock method, unless the effect of such increase would be anti-dilutive. Under the treasury stock method, the amount the employee must pay for exercising equity awards and the amount of compensation cost for future service that the Company has not yet recognized are assumed to be used to repurchase shares.

Subsequent Events

The Company considers events or transactions that occur after the balance sheet date but before the financial statements are issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. The Company evaluated all events and transactions through the date that these financial statements were issued.

Recently Adopted Accounting Standards

In June 2016, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2016-13 (“ASU 2016-13”), *Financial Instruments - Credit Losses (Topic 326)* to modify the impairment model to utilize an expected loss methodology in place of the previous incurred loss methodology and require consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The Company adopted ASU 2016-13 on January 1, 2020, and recorded the impact of the adoption through a cumulative-effect adjustment to accumulated deficit. Results for reporting periods beginning on January 1, 2020 are presented under ASU No. 2016-13, while prior period amounts continue to be reported and disclosed in accordance with the Company’s historical accounting treatment. Adoption of the new standard resulted in the recording of additional allowance for doubtful accounts of approximately $2.8 million as of January 1, 2020.

In March 2020, the FASB issued ASU No. 2020-04 (“ASU 2020-04”), *Reference Rate Reform (Topic 848)*. ASU 2020-04 contains practical expedients related to reference rate reform activities that impact debt, leases, derivatives and other contracts. The guidance in ASU 2020-04 is optional and may be elected over time as reference rate reform activities occur. The Company has elected to apply the hedge accounting expedients related to probability and the assessments of effectiveness for future LIBOR-indexed cash flows to assume that the index upon which future hedged transactions will be based matches the index on the corresponding derivatives. Application of these expedients preserves the presentation of derivatives consistent with the Company’s past presentation. The Company continues to evaluate the impact of the guidance and may apply other elections as applicable.

2. Financial Statement Details

Accounts Receivable and Unbilled Services, net

Accounts receivable and unbilled services (including contract assets), net of allowance for doubtful accounts, consisted of the following as of December 31 (in thousands):

	2020	2019
Accounts receivable billed	$ 774,605	$ 787,652
Unbilled services (including contract assets)	577,791	521,370
Less: Allowance for doubtful accounts	(7,615)	(5,381)
Accounts receivable and unbilled services, net	$ 1,344,781	$ 1,303,641

Unbilled services is comprised of approximately equal parts of unbilled accounts receivables and contract assets. Accounts receivable and unbilled services, net increased compared to the prior year primarily as a result of the Company’s acquisition of SHCR Holdings Corporation (“Synteract”) and Illingworth Research Group™ (“Illingworth Research”) during 2020.

The following table summarizes the changes in the allowance for doubtful accounts (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Balance at the beginning of the period	$ (5,381)	$ (4,587)	$ (9,076)
Impact from adoption of ASU 2016-13	(2,771)	—	—
Current year (provision) recovery	(695)	(1,897)	4,589
Write-offs, net of recoveries and the effects of foreign currency exchange	1,232	1,103	(100)
Balance at the end of the period	$ (7,615)	$ (5,381)	$ (4,587)

Accounts Receivable Factoring Arrangement

The Company has an accounts receivable factoring agreement to sell certain eligible unsecured trade accounts receivable, without recourse, to an unrelated third-party financial institution for cash. For the year ended December 31, 2020, the Company factored $152.4 million of trade accounts receivable on a non-recourse basis and received $151.9 million in cash proceeds from the sale. For the year ended December 31, 2019, the Company factored $210.5 million of trade accounts receivable on a non-recourse basis and received $209.0 million in cash proceeds from the sale. The fees associated with these transactions were insignificant.

Property and Equipment, net

Property and equipment, net of accumulated depreciation, consisted of the following as of December 31 (in thousands):

	2020	2019
Software	$ 129,731	$ 99,500
Vehicles	63,985	70,440
Computer equipment	108,230	95,228
Leasehold improvements	94,596	86,327
Office furniture, fixtures, and equipment	37,287	33,388
Buildings and land	5,211	4,256
Assets not yet placed in service	28,129	20,262
Property and equipment, gross	467,169	409,401
Less: Accumulated depreciation	(250,969)	(205,475)
Property and equipment, net	$ 216,200	$ 203,926

As of December 31, 2020 and 2019, the gross book value of vehicles under finance leases was $64.0 million and $70.4 million, respectively, and accumulated depreciation was $20.5 million and $20.6 million, respectively. For the years ended December 31, 2020 and 2019, amortization charges related to these assets, net of rebates, were $15.8 million and $16.8 million, respectively, and were included in depreciation on the accompanying consolidated statements of income.

Goodwill and Intangible Assets

The changes in carrying amount of goodwill by segment were as follows (in thousands):

	Clinical Solutions (a)	Commercial Solutions (b)	Total
Balance as of December 31, 2018	$ 2,772,803	$ 1,560,356	$ 4,333,159
Business combinations (c)	1,092	(204)	888
Impact of foreign currency translation and other	11,057	5,276	16,333
Balance as of December 31, 2019	2,784,952	1,565,428	4,350,380
Business combinations and divestitures (d)	418,619	(14,453)	404,166
Impact of foreign currency translation	12,764	8,868	21,632
Balance as of December 31, 2020	$ 3,216,335	$ 1,559,843	$ 4,776,178

(a) Accumulated impairment losses of $8.1 million associated with the Clinical Solutions segment were recorded prior to 2016 and related to the former Phase I Services segment, now a component of the Clinical Solutions segment. No impairment of goodwill was recorded for the years ended December 31, 2020, 2019, or 2018.

(b) Accumulated impairment losses of $8.0 million associated with the Commercial Solutions segment were recorded prior to 2015 and related to the former Global Consulting segment, now a component of the Commercial Solutions segment. No impairment of goodwill was recorded for the years ended December 31, 2020, 2019, or 2018.

(c) Amounts represent goodwill recognized in connection with an insignificant acquisition within the Clinical Solutions segment and measurement period adjustments in connection with the 2018 acquisition of Kinapse Topco Limited (“Kinapse”).

(d) Amounts represent goodwill recognized in connection with the 2020 acquisitions of Synteract and Illingworth Research within the Clinical Solutions segment and goodwill disposed upon the sale of the medication adherence business within the Commercial Solutions segment.

Intangible assets, net consisted of the following (in thousands):

	December 31, 2020			December 31, 2019		
	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Customer relationships	$ 1,518,081	$ (685,021)	$ 833,060	$ 1,491,071	$ (546,835)	$ 944,236
Acquired backlog	174,180	(132,733)	41,447	136,972	(121,679)	15,293
Trade names and trademarks	52,475	(21,817)	30,658	31,326	(17,774)	13,552
Intellectual property	30,028	(1,668)	28,360	—	—	—
Intangible assets, net	$ 1,774,764	$ (841,239)	$ 933,525	$ 1,659,369	$ (686,288)	$ 973,081

The future estimated amortization expense for intangible assets is expected to be as follows (in thousands):

Fiscal Year Ending:	
2021	$ 157,394
2022	146,757
2023	139,140
2024	132,510
2025	118,510
2026 and thereafter	239,214
Total	$ 933,525

Accrued Expenses

Accrued expenses consisted of the following as of December 31 (in thousands):

	2020	2019
Compensation, including bonuses, fringe benefits, and payroll taxes	$ 255,042	$ 195,604
Professional fees, investigator fees, and pass-through costs	231,638	252,151
Income and other taxes	28,890	17,295
Rebates to customers	22,528	25,064
Interest rate swaps - current	17,045	11,358
Restructuring and other costs, current portion	5,830	5,750
Contingent tax-sharing obligations assumed through business combinations, current portion	4,327	26,557
Other liabilities	45,742	35,132
Total accrued expenses	$ 611,042	$ 568,911

Accumulated other comprehensive loss, net of taxes

Accumulated other comprehensive loss, net of taxes, consisted of the following (in thousands):

	Year Ended December 31,	
	2020	2019
Beginning balance	$ (71,593)	$ (88,195)
Foreign Currency Translation:		
Beginning balance	(56,757)	(80,955)
Other comprehensive income before reclassifications	34,717	24,198
Ending balance	(22,040)	(56,757)
Derivative Instruments:		
Beginning balance	(14,836)	(7,240)
Other comprehensive loss before reclassifications	(20,446)	(11,529)
Reclassification adjustments	16,521	3,933
Ending balance	(18,761)	(14,836)
Accumulated other comprehensive loss, net of taxes	$ (40,801)	$ (71,593)

Changes in accumulated other comprehensive loss consisted of the following (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Foreign currency translation adjustments:			
Foreign currency translation adjustments, before tax	$ 36,071	$ 24,198	$ (61,035)
Income tax expense	(1,354)	—	—
Foreign currency translation adjustments, net of tax	34,717	24,198	(61,035)
Unrealized loss on derivative instruments:			
Unrealized loss during period, before tax	(27,647)	(14,306)	(8,577)
Income tax benefit	7,201	2,777	770
Unrealized loss during period, net of tax	(20,446)	(11,529)	(7,807)
Reclassification adjustment, before tax	22,328	4,588	(830)
Income tax (expense) benefit	(5,807)	(655)	12
Reclassification adjustment, net of tax	16,521	3,933	(818)
Total unrealized loss on derivative instruments, net of tax	(3,925)	(7,596)	(8,625)
Total other comprehensive income (loss), net of tax	$ 30,792	$ 16,602	$ (69,660)

Transaction and Integration-Related Expenses

Transaction and integration-related expenses consisted of the following (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Professional fees	$ 30,059	$ 34,538	$ 56,230
Debt modification and related expenses	76	5,396	1,726
Integration and personnel retention-related costs	3,771	4,081	18,475
Fair value adjustments to contingent obligations	(3,664)	17,260	(11,590)
Total transaction and integration-related expenses	$ 30,242	$ 61,275	$ 64,841

Other (Income) Expense, Net

Other (income) expense, net consisted of the following (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Net realized foreign currency loss (gain)	$ 3,175	$ 11,853	$ (10,452)
Net unrealized foreign currency loss (gain)	4,147	11,166	(16,165)
Gain on sale of business	(7,133)	—	—
Equity investment (income) expense	(3,745)	261	(79)
Other, net	580	882	(1,548)
Total other (income) expense, net	$ (2,976)	$ 24,162	$ (28,244)

Supplemental disclosure of cash flow information

The following table provides details of supplemental cash flow information (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Cash paid for income taxes, net of refunds	$ 23,400	$ 12,200	$ 2,042
Cash paid for interest (excluding finance leases)	83,690	129,756	131,827
Supplemental disclosure of noncash investing and financing activities			
Non-cash investment to acquire certain intellectual property rights from a customer in lieu of cash payment for services rendered	27,300	—	—
Fair value of contingent consideration related to business combinations	—	—	4,353
Purchases of property and equipment included in liabilities	31,736	20,052	14,075
Vehicles acquired through finance lease agreements	20,203	37,701	30,374

3. Business Combinations and Divestitures

Synteract Acquisition

On December 9, 2020, the Company completed the acquisition of Synteract, effected through the purchase of 100% of the outstanding shares of Synteract for approximately $384.5 million in cash (net of approximately $28.0 million of cash acquired). Synteract is a contract research organization focused on the emerging biopharmaceutical industry, strengthening the Company's position in the small to mid-sized ("SMID") category.

Allocation of Consideration Transferred

The following table summarizes the estimated fair value of the net assets acquired at the date of the acquisition:

Assets acquired:		
Cash and cash equivalents	$	28,028
Accounts receivable and unbilled services		49,209
Prepaid expenses and other current assets		2,912
Property and equipment		3,978
Operating lease right-of-use assets		10,839
Other identifiable intangible assets		56,400
Goodwill		355,939
Other assets		4,121
Total assets acquired		511,426
Liabilities assumed:		
Accounts payable and accrued expenses		27,982
Deferred revenue		46,385
Operating lease obligations		15,693
Deferred income taxes, net		7,762
Other liabilities		1,127
Total liabilities assumed		98,949
Net assets acquired	$	412,477

The goodwill recognized in connection with the acquisition of Synteract was $355.9 million and was assigned to the Clinical Solutions segment. Goodwill is attributable to the acquired workforce as well as future synergies and is not deductible for income tax purposes. The operating results from the acquisition of Synteract have been included in the Company's Clinical Solutions segment from the date of acquisition.

The following table summarizes the fair value of identified intangible assets and their respective useful lives (dollars in thousands):

		Estimated Fair Value	Estimated Useful Life
Acquired backlog	$	37,200	4 years
Trade name		19,200	8 years
Total intangible assets	$	56,400	

Illingworth Research Group Acquisition

On December 17, 2020, the Company completed the acquisition of Illingworth Research, a leading provider of clinical research home health services, adding new scale and capabilities to the Company's clinical trial solutions. The total purchase consideration was $80.4 million, which includes payment of approximately $8.4 million made in January 2021 and is net of cash acquired of $1.1 million. The Company recognized $62.7 million of goodwill and $21.5 million of intangible assets, principally customer relationships, as a result of the acquisition. The purchase price has been allocated to the tangible assets and identifiable intangible assets acquired and liabilities assumed based upon their fair values. The excess of the purchase price over the tangible and intangible assets acquired and liabilities assumed has been recorded as goodwill. Goodwill is attributable to the acquired workforce as well as future synergies and is not deductible for income tax purposes. The operating results from the acquisition of Illingworth Research have been included in the Company's Clinical Solutions segment from the date of acquisition.

The Company's assessment of fair value and the purchase price allocation related to these 2020 acquisitions is preliminary and further adjustments may be necessary as additional information related to the fair values of assets acquired and liabilities assumed is assessed during the measurement period (up to one year from the acquisition date).

Kinapse Limited Acquisition

In August 2018, the Company completed the acquisition of Kinapse, a provider of advisory and operational solutions to the global life sciences industry. The total purchase consideration was $100.1 million plus assumed debt, and included cash acquired of $4.9 million. The Company recognized $74.6 million of goodwill and $57.3 million of intangible assets, principally customer relationships, as a result of the acquisition. The goodwill is not deductible for income tax purposes. The purchase price has been allocated to the tangible assets and identifiable intangible assets acquired and liabilities assumed based upon their fair values. The excess of the purchase price over the tangible and intangible assets acquired and liabilities assumed has been recorded as goodwill. The operating results from the Kinapse acquisition have been included in the Company's Commercial Solutions segment from the date of acquisition.

Pro forma information for these acquisitions is not presented as the operations of the acquired businesses, individually and in the aggregate, are not significant to the overall operations of the Company.

Divestitures

During the fourth quarter of 2020, the Company sold its medication adherence business for consideration of $23.0 million, including cash consideration of $18.0 million, net of cash transferred, and convertible notes of $5.0 million. The Company is entitled to future cash consideration that is contingent on the financial performance of the sold business through 2021. The Company will recognize the contingent consideration in the consolidated statements of income in the period the contingency is resolved. The Company recorded a gain on sale of $7.1 million and $3.6 million of contingent consideration based on the financial performance of the sold business in 2020. These items are included within other (income) expense, net in the accompanying consolidated statement of income.

During the second quarter of 2020, the Company sold its contingent staffing business to a related party, in an arms-length transaction, in exchange for potential future cash consideration not to exceed $4.0 million. The future cash consideration is contingent on the financial performance of the sold business over the next three years. The Company will recognize the contingent consideration in the consolidated statements of income in the period the contingency is resolved.

4. Long-Term Debt Obligations

The Company's debt obligations consisted of the following as of December 31 (in thousands):

	2020	2019
Secured Debt		
Term Loan A - tranche one due March 2024	$ 183,715	$ 1,550,000
Term Loan A - tranche two due August 2024	1,273,991	—
Term Loan B due August 2024	560,564	795,564
Accounts receivable financing agreement due October 2022	300,000	275,000
Total secured debt	2,318,270	2,620,564
Unsecured Debt		
3.625% Senior Unsecured Notes due 2029 (the "Notes")	600,000	—
Total debt obligations	2,918,270	2,620,564
Less: Term loans original issuance discount	(3,500)	(4,928)
Less: Unamortized deferred issuance costs	(12,716)	(7,116)
Less: Current portion of debt	—	(58,125)
Total debt obligations, non-current portion	$ 2,902,054	$ 2,550,395

Credit Agreement

The Company is party to a credit agreement (as amended, the "Credit Agreement") that includes a $1.55 billion Term Loan A facility ("Term Loan A") that has two tranches, tranche one that matures on March 26, 2024 and tranche two that matures on August 1, 2024, a $1.60 billion Term Loan B facility ("Term Loan B") that matures on August 1, 2024, and a $600.0 million revolving credit facility (the "Revolver") that matures on August 1, 2024.

All obligations under the Credit Agreement are guaranteed by the Company and certain of the Company's direct and indirect wholly-owned domestic subsidiaries. The obligations under the Credit Agreement are secured by substantially all of the assets of the Company and the guarantors, including 65% of the capital stock of certain controlled foreign subsidiaries.

On November 24, 2020, the Company entered into an amendment to the Credit Agreement that extended the maturity date of the Revolver and a portion of Term Loan A to August 1, 2024.

During the year ended December 31, 2020, the Company made $53.5 million of voluntary prepayments against Term Loan A that were applied to future mandatory principal payments due. As a result of these voluntary prepayments, the Company is not required to make a mandatory principal payment against the principal balance of Term Loan A until April 2022. Additionally, during the years ended December 31, 2020 and 2019, the Company made mandatory principal repayments of $38.8 million and $12.5 million, respectively, towards its Term Loan A.

Under the Credit Agreement, the Company is required to make quarterly principal payments of the initial principal borrowed under the Term Loan B of 0.25%, or $4.0 million per quarter; with the remaining outstanding principal due on August 1, 2024. During the years ended December 31, 2020 and 2019, the Company made voluntary prepayments of $235.0 million and $246.8 million, respectively, on the Term Loan B. Additionally, as a result of these and previous voluntary prepayments, the Company is not required to make a mandatory principal payment against the principal balance of Term Loan B until maturity in August 2024.

The term loans and the Revolver bear interest at a rate per annum equal to the Adjusted Eurocurrency Rate ("Eurocurrency Rate") plus an applicable margin or an Alternate Base Rate plus an applicable margin. The Company may select among the Adjusted Eurocurrency Rate or the Alternate Base Rate, whichever is lower, except in circumstances where the Company requests a loan with less than a three-day notice. In such cases, the Company must use the Alternate Base Rate. The Adjusted Eurocurrency Rate is equal to LIBOR, subject to adjustment for reserve requirements. The Alternate Base Rate is equal to the highest of: (i) the federal funds rate plus 0.50%; (ii) the Adjusted Eurocurrency Rate for an interest period of one month plus 1.00%; (iii) the rate of interest per annum quoted by The Wall Street Journal as the prime rate; and (iv) 0.00%.

The applicable margins with respect to Alternate Base Rate and Adjusted Eurocurrency Rate borrowings are determined depending on the "First Lien Leverage Ratio" or the "Secured Net Leverage Ratio" (as defined in the Credit Agreement) and range as follows:

	Alternate Base Rate	Adjusted Eurocurrency Rate
Term Loan A	0.25% - 0.50%	1.25% - 1.50%
Term Loan B	0.75% - 1.00%	1.75% - 2.00%
Revolver	0.25% - 0.50%	1.25% - 1.50%

The Company also pays a quarterly commitment fee between 0.25% and 0.375% on the average daily unused balance of the Revolver depending on the "First Lien Leverage Ratio" at the adjustment date. As of December 31, 2020, the interest rate on the Term Loan A and the Revolver was 1.646% and the interest rate on the Term Loan B was 1.896%.

Letters of Credit

The Revolver includes letters of credit ("LOCs") with a sublimit of $150.0 million. Fees are charged on all outstanding LOCs at an annual rate equal to the margin in effect on Eurocurrency Rate revolving loans plus participation and fronting fees. The fee is payable quarterly in arrears on the last day of each quarter ending April, July, October and January until the underlying LOC expires. As of December 31, 2020, there were no outstanding Revolver borrowings and $16.0 million of LOCs outstanding, leaving $584.0 million in available borrowings under the Revolver.

Additionally, the lease for the corporate headquarters in Morrisville, North Carolina includes a provision that may require the Company to issue a letter of credit in certain amounts to the landlord based on the debt rating of the Company issued by Moody's Investors Service (or other nationally-recognized debt rating agency, such as S&P Global Ratings).

As of December 31, 2020 (and through the date of this filing), the Company's debt rating was such that no LOC is currently required. Any LOC issued in accordance with the aforementioned requirements could be issued under the Company's Revolver, and, if issued under the Revolver, would reduce its available borrowing capacity by the same amount accordingly.

Debt Covenants

The Credit Agreement contains usual and customary restrictive covenants that, among other things, place limitations on the Company's ability to pay dividends or make other restricted payments; prepay, redeem or purchase debt; incur liens; make loans and investments; incur additional indebtedness; amend or otherwise alter debt and other material arrangements; make acquisitions and dispose of assets; transact with affiliates; and engage in transactions that are not related to the Company's existing business. Each of the restrictive covenants is subject to important exceptions and qualifications that would allow the Company to engage in these activities under certain conditions, including the Company's ability to: (i) pay dividends each year in an amount up to the greater of (a) 6% of the net cash proceeds received by the Company from any public offering and (b) 5% of the Company's market capitalization; and (ii) pay unlimited dividends if the Company's Secured Leverage Ratio (as defined in the Credit Agreement) is no greater than 3.0 to 1.0.

In addition, with respect to the Term Loan A and the Revolver, the Credit Agreement requires the Company to maintain a maximum First Lien Leverage Ratio (as defined in the Credit Agreement) of no more than 5.0 to 1.0 as of the last day of each fiscal quarter ending on or before December 31, 2019 (beginning with the first full fiscal quarter ending after the closing date of the Credit Agreement), and 4.5 to 1.0 from and after March 31, 2020.

As of December 31, 2020, the Company was in compliance with all applicable debt covenants.

Accounts Receivable Financing Agreement

On September 25, 2020, the Company amended its accounts receivable financing agreement to increase the amount it can borrow from $275.0 million to $300.0 million and to extend the maturity to October 2022, unless terminated earlier pursuant to its terms, and drew down the additional $25.0 million. Under this agreement, certain of the Company's consolidated subsidiaries sell accounts receivable and unbilled services (including contract assets) balances to a wholly-owned, bankruptcy-remote special purpose entity ("SPE"), which is the borrower under the facility. The facility is without recourse to the Company or any subsidiaries of the Company other than the SPE, other than with respect to limited indemnity obligations of the selling entities and the servicer of the receivables in respect of the character of the receivables sold by them and the performance of the servicing duties. The Company has guaranteed the performance of these obligations. The available borrowing capacity varies according to the levels of the Company's eligible accounts receivable and unbilled services (including contract assets) sold to the SPE. Loans under this agreement will accrue interest at a reserve-adjusted LIBOR rate or a base rate equal to the higher of the overnight bank funding rate plus 0.50% and the applicable lender's prime rate. The Company may prepay loans upon one business day's prior notice and may terminate or reduce the facility limit of the accounts receivable financing agreement with 15 days' prior notice.

As of December 31, 2020, the Company had $300.0 million of outstanding borrowings under the accounts receivable financing agreement, which are recorded in long-term debt on the accompanying consolidated balance sheet. As of December 31, 2020, there was no remaining borrowing capacity available. As of December 31, 2020, the interest rate on the outstanding borrowings under the accounts receivable financing agreement was 1.400%.

On January 28, 2021, the Company amended its accounts receivable financing agreement to increase the amount it can borrow from $300.0 million to $365.0 million, and drew down the additional $65.0 million. At the same time, the Company made voluntary prepayments on its term loans totaling $65.0 million; therefore, there was no incremental impact on the Company's debt.

3.625% Senior Notes Due 2029

On November 24, 2020, the Company completed the issuance and sale of $600.0 million aggregate principal amount of 3.625% senior notes due 2029 (the "Notes"). The Company received net proceeds, after deducting offering expenses, of $592.5 million. The net proceeds of the offering were used for general corporate purposes and to fund the Synteract and Illingworth Research acquisitions.

The Notes were issued pursuant to an indenture, dated as of November 24, 2020 (the "Base Indenture"), among the Company and Wells Fargo Bank, National Association, as trustee (the "Trustee"), as supplemented by a first supplemental indenture, dated as of November 24, 2020 (the "Supplemental Indenture", and together with the Base Indenture, the "Indenture"), among the Company, the subsidiary guarantors named therein, and the Trustee. The Indenture provides, among other things, that the Notes are senior unsecured obligations of the Company and are guaranteed, jointly and severally, on a senior unsecured basis, by certain of the Company's subsidiaries.

The Company may redeem some or all of the Notes at any time prior to January 15, 2024 at a redemption price equal to 100% of the aggregate principal amount of the Notes to be redeemed plus a "make-whole" premium and accrued and unpaid interest. In addition, prior to July 15, 2023, the Company may redeem up to 40% of the original principal amount of the Notes with proceeds of certain equity offerings at a redemption price equal to 103.625% of the aggregate principal amount of such Notes plus accrued and unpaid interest. On or after January 15, 2024, the Company may redeem some or all of the Notes at the redemption prices set forth in the Indenture plus accrued and unpaid interest. The Indenture contains covenants that limit the ability of the Company and its restricted subsidiaries to, among other things, (1) incur additional liens, (2) engage in certain sale and leaseback transactions, and (3) conduct mergers, consolidations, or asset sales. These covenants are subject to exceptions and qualifications set forth in the Indenture.

If the Company sells certain of its assets or experience specific kinds of changes of control, the Company is required to offer to repurchase the Notes at a repurchase price equal to (1) par plus any accrued and unpaid interest in the case of an asset sale or (2) 101% of the aggregate principal amount thereof plus any accrued and unpaid interest in the case of a change of control.

The Indenture also contains customary events of default, including (1) failure to make required payments, (2) failure to comply with certain covenants, (3) failure to pay certain other indebtedness, (4) certain events of bankruptcy and insolvency, and (5) failure to pay certain judgments. An event of default under the Indenture allows either the Trustee or the holders of at least 25% in aggregate principal amount of the Notes, as applicable, issued under such Indenture, to accelerate the amounts due under the Notes, or in the case of a bankruptcy or insolvency, will automatically cause the acceleration of the amounts due under the Notes.

The Notes have not been registered under the Securities Act of 1933, as amended (the "Securities Act") or the securities laws of any other jurisdiction. The Notes were sold to persons reasonably believed to be qualified institutional buyers pursuant to Rule 144A and outside the United States pursuant to Regulation S of the Securities Act.

Maturities of Debt Obligations

As of December 31, 2020, the contractual maturities of the Company's debt obligations (excluding finance leases that are presented in "Note 5 - Leases") were as follows (in thousands):

2021	$ —
2022	362,569
2023	107,313
2024	1,848,388
2025	—
2026 and thereafter	600,000
Less: Deferred issuance costs	(12,716)
Less: Term loans original issuance discount	(3,500)
Total	$ 2,902,054

5. Leases

The Company's operating leases are primarily related to its office facilities. The Company's finance leases are related to vehicles that the Company leases for certain sales representatives in its Commercial Solutions segment. The Company's leases have remaining lease terms of less than one year to 12 years, some of which include options to extend the term or terminate the lease.

ROU assets and lease liabilities are recognized based on the present value of the fixed lease payments over the lease term at the commencement date. The ROU assets also include any initial direct costs incurred and lease payments made at or before the commencement date, and are reduced by lease incentives. The Company uses its incremental borrowing rate as the discount rate to determine the present value of the lease payments for leases that do not have a readily determinable implicit discount rate. The Company's incremental borrowing rate is the rate of interest that it would have to borrow on a collateralized basis over a similar term and amount in a similar economic environment. The Company determines the incremental borrowing rates for its leases by adjusting the local risk free interest rate with a credit risk premium corresponding to the Company's credit rating.

The Company records rent expense for its operating leases on a straight-line basis from the lease commencement date until the end of the lease term. The Company records finance lease cost as a combination of the amortization expense for the ROU assets and interest expense for the outstanding lease liabilities using the discount rate discussed above. Variable lease payments for operating leases are related to office facilities and include but are not limited to common area maintenance, parking, electricity, and management fees. The variable lease payments for finance leases are related to maintenance programs for leased vehicles. Variable lease payments are based on occurrence or based on usage; therefore, they are not included as part of the initial calculations of the ROU assets and liabilities.

The components of lease cost were as follows for the year ended December 31 and the line items on the accompanying consolidated statements of income to which they were recorded were as follows (in thousands):

	Statement of Income Classification	2020	2019
Operating leases:			
Fixed lease costs	Direct costs, selling, general, and administrative expenses and restructuring and other costs	$ 53,531	$ 63,215
Short-term lease costs	Direct costs and selling, general, and administrative expenses	2,930	1,531
Variable lease costs	Direct costs, selling, general, and administrative expenses and restructuring and other costs	29,572	34,803
Total operating lease costs		$ 86,033	$ 99,549
Finance leases:			
Amortization of right-of-use assets	Depreciation	$ 15,843	$ 16,810
Interest on lease liabilities	Interest expense	944	1,778
Variable lease costs	Direct costs	6,321	7,795
Total finance lease costs		$ 23,108	$ 26,383

Supplemental balance sheet information related to finance leases was as follows as of December 31 (in thousands):

	2020	2019
Property and equipment, gross	$ 63,985	$ 70,440
Accumulated depreciation	(20,479)	(20,594)
Property and equipment, net	$ 43,506	$ 49,846
Current portion of finance lease obligations	$ 17,455	$ 17,777
Finance lease long-term obligations	31,522	36,914
Total finance lease liabilities	$ 48,977	$ 54,691

Supplemental cash flow information related to leases was as follows for the year ended December 31 (in thousands):

	2020	2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows for operating leases	$ (60,361)	$ (50,792)
Operating cash flows for finance leases	(944)	(1,778)
Financing cash flows for finance leases	(16,434)	(14,493)
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases	$ 47,415	$ 55,376
Finance leases	20,203	38,144
Lease obligations closed out in exchange for right-of-use assets:		
Operating leases	$ (2,834)	$ (1,214)

Weighted average remaining lease term as of December 31:	2020	2019
Operating leases	7 years	7 years
Finance leases	3 years	3 years

Weighted average discount rate as of December 31:	2020	2019
Operating leases	4.8%	5.0%
Finance leases	1.3%	2.9%

As of December 31, 2020, maturities of lease liabilities were as follows (in thousands):

	Operating Leases	Finance Leases	Total
2021	$ 54,180	$ 18,248	$ 72,428
2022	51,849	17,443	69,292
2023	45,092	10,931	56,023
2024	37,326	4,176	41,502
2025	29,893	14	29,907
2026 and thereafter	99,031	—	99,031
Total lease payments	317,371	50,812	$ 368,183
Less: management fee	—	(680)	
Less: imputed interest	(53,529)	(1,155)	
Total lease liabilities	$ 263,842	$ 48,977	

Under ASC Topic 840, *Leases*, the Company recorded rent expense of $62.9 million for operating leases for the year ended December 31, 2018.

6. Derivatives

Interest Rate Swaps

The Company has entered into various interest rate swaps in an effort to limit its exposure to variable interest rates on its term loans.

In May 2016, the Company entered into an interest rate swap that had an initial notional value of $300.0 million and became effective on June 30, 2016. A portion of the interest rate swaps expired on June 30, 2018, and the remainder expired on May 14, 2020.

In June 2018, the Company entered into two interest rate swaps with multiple counterparties. The first interest rate swap had an aggregate notional value of $1.22 billion, began accruing interest on June 29, 2018, and expired on December 31, 2018. The second interest rate swap had an initial aggregate notional value of $1.01 billion, an effective date of December 31, 2018, and will expire on June 30, 2021. As of December 31, 2020, the remaining notional value of this interest rate swap was $905.6 million.

In March 2020, the Company entered into interest rate swaps with multiple counterparties. The interest rate swaps had an initial aggregate notional value of $549.2 million that will increase to $1.42 billion in 2021, an effective date of March 31, 2020, and will expire on March 31, 2023. As of December 31, 2020, the notional value of these interest rate swaps was $603.2 million.

The significant terms of these derivatives are substantially the same as those contained within the Credit Agreement, including monthly settlements with the swap counterparties. Interest rate swaps are designated as hedging instruments. The amounts of hedge ineffectiveness recorded in net income during the years ended December 31, 2020, 2019, and 2018 were insignificant.

Foreign Exchange Forward

On October 30, 2020, the Company entered into a foreign exchange forward in order to minimize monthly foreign currency remeasurement gains or losses on non-functional currency monetary balances. The foreign exchange forward notional value may be adjusted each month as the exposure balance changes. The Company did not designate the derivative as a hedge. All changes in the fair value of the foreign exchange forward are recorded in earnings every month to other (income) expense, net in the accompanying consolidated statements of income. The Company recognized $1.5 million of realized gains during the year ended December 31, 2020 related to this foreign exchange forward. As of December 31, 2020, the notional value of this foreign exchange forward was $50.0 million.

Fair Values

The fair values of the Company's derivative financial instruments as of December 31 and the line items on the accompanying consolidated balance sheets to which they were recorded were as follows (in thousands):

	Balance Sheet Classification	2020	2019
Interest rate swaps - current	Prepaid expenses and other current assets	$ —	$ 155
Fair value of derivative assets		$ —	$ 155
Interest rate swaps - current	Accrued expenses	$ 17,045	$ 11,358
Interest rate swaps - non-current	Other long-term liabilities	5,572	6,095
Fair value of derivative liabilities		$ 22,617	$ 17,453

7. Fair Value Measurements

Assets and Liabilities Carried at Fair Value

As of December 31, 2020 and 2019, the Company's financial assets and liabilities carried at fair value included cash and cash equivalents, restricted cash, trading securities, accounts receivable, unbilled services (including contract assets), accounts payable, accrued expenses, deferred revenue, contingent obligations, liabilities under the accounts receivable financing agreement, and derivative instruments.

The fair values of cash and cash equivalents, restricted cash, accounts receivable, unbilled services (including contract assets), accounts payable, accrued expenses, deferred revenue, and the liabilities under the accounts receivable financing agreement approximate their respective carrying amounts because of the liquidity and short-term nature of these financial instruments.

Financial Instruments Subject to Recurring Fair Value Measurements

As of December 31, 2020, the fair values of the major classes of the Company's assets and liabilities measured at fair value on a recurring basis were as follows (in thousands):

	Level 1	Level 2	Level 3	Investments Measured at Net Asset Value	Total
Assets:					
Trading securities (a)	$ 22,950	$ —	$ —	$ —	$ 22,950
Partnership interest (b)	—	—	—	8,665	8,665
Total assets	$ 22,950	$ —	$ —	$ 8,665	$ 31,615
Liabilities:					
Derivative instruments (c)	$ —	$ 22,617	$ —	$ —	$ 22,617
Contingent obligations related to business combinations (d)	—	—	6,793	—	6,793
Total liabilities	$ —	$ 22,617	$ 6,793	$ —	$ 29,410

As of December 31, 2019, the fair value of the major classes of the Company's assets and liabilities measured at fair value on a recurring basis were as follows (in thousands):

	Level 1	Level 2	Level 3	Investments Measured at Net Asset Value	Total
Assets:					
Trading securities (a)	$ 21,552	$ —	$ —	$ —	$ 21,552
Partnership interest (b)	—	—	—	7,226	7,226
Derivative instruments (c)	—	155	—	—	155
Total assets	$ 21,552	$ 155	$ —	$ 7,226	$ 28,933
Liabilities:					
Derivative instruments (c)	$ —	$ 17,453	$ —	$ —	$ 17,453
Contingent obligations related to business combinations (d)	—	—	37,324	—	37,324
Total liabilities	$ —	$ 17,453	$ 37,324	$ —	$ 54,777

(a) Represents fair value of investments in mutual funds based on quoted market prices that were used to fund the liability associated with the Company's deferred compensation plan.

(b) The Company has committed to invest $21.5 million as a limited partner in two private equity funds. The private equity funds invest in opportunities in the healthcare and life sciences industry. As of December 31, 2020, the Company's remaining unfunded commitment in the private equity funds was $14.1 million. The Company holds minor ownership interests (less than 3%) in each of the private equity funds and has determined that it does not exercise significant influence over operating or finance activities. As the private equity funds do not have readily determinable fair values, the Company has estimated the fair values using each fund's Net Asset Value, the amount by which the value of all assets exceeds all debt and liabilities, in accordance with ASC Topic 946, *Financial Services – Investment Companies.*

(c) Represents fair value of interest rate swap arrangements (see "Note 6 - Derivatives" for further information).

(d) Represents fair value of contingent consideration obligations related to business combinations. The fair value of these liabilities were determined based on the Company's best estimate of the probable timing and amount of settlement.

The following table presents a reconciliation of changes in the carrying amount of contingent obligations classified as Level 3 for the years ended December 31, 2020 and 2019 (in thousands):

Balance at December 31, 2018	$ 20,127
Additions	—
Changes in fair value recognized in earnings (a)	17,375
Payments	(178)
Balance at December 31, 2019	37,324
Additions	—
Changes in fair value recognized in earnings (b)	(3,897)
Payments	(26,634)
Balance at December 31, 2020	$ 6,793

(a) The change in fair value recognized in earnings for the year ended December 31, 2019 is primarily due to a reduction in the estimate of the transaction tax deduction benefit associated with Double Eagle's acquisition of inVentiv in 2016.

(b) The change in fair value recognized in earnings for the year ended December 31, 2020 is primarily due to a decrease in the estimate of the contingent earn-out liability associated with the acquisition of Kinapse (see "Note 17 – Commitments and Contingencies" for further information).

During the years ended December 31, 2020 and 2019, there were no transfers of assets or liabilities between Level 1, Level 2, or Level 3 fair value measurements.

Financial Instruments Subject to Non-Recurring Fair Value Measurements

Certain assets, including goodwill and identifiable intangible assets, are carried on the accompanying consolidated balance sheets at cost and, subsequent to initial recognition, are measured at fair value on a non-recurring basis when certain identified events or changes in circumstances that may have a significant adverse effect on the carrying values of these assets occur. These assets are classified as Level 3 fair value measurements within the fair value hierarchy. Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate a triggering event has occurred. Intangible assets are tested for impairment upon the occurrence of certain triggering events. As of December 31, 2020 and 2019, assets carried on the consolidated balance sheets and not remeasured to fair value on a recurring basis totaled $5.71 billion and $5.32 billion, respectively.

Fair Value Disclosures for Financial Instruments Not Carried at Fair Value

The estimated fair value of the term loans and the Senior Notes is determined based on the price that the Company would have to pay to settle the liabilities. As these liabilities are not actively traded, they are classified as Level 2 fair value measurements. The estimated fair values of the Company's term loans and the Notes were as follows (in thousands):

	December 31, 2020		December 31, 2019	
	Carrying Value (a)	Estimated Fair Value	Carrying Value (a)	Estimated Fair Value
Term Loan A due March 2024	$ 1,454,575	$ 1,452,239	$ 1,545,721	$ 1,550,000
Term Loan B due August 2024	560,194	560,144	794,915	795,564
3.625% Senior Unsecured Notes due 2029	600,000	602,412	—	—

(a) The carrying value of the term loan debt is shown net of original issue discounts.

8. Restructuring and Other Costs

Merger-Related Restructuring

During 2017, in connection with the merger (the "Merger") with Double Eagle Parent, Inc. ("inVentiv"), the parent company of inVentiv Health, Inc., the Company established a restructuring plan to eliminate redundant positions and reduce its facility footprint worldwide. The Company expects to continue the ongoing evaluations of its workforce and facilities infrastructure needs in an effort to optimize its resources.

Restructuring and other costs related to the Merger consisted of the following (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Employee severance and benefit costs	$ 951	$ 12,029	$ 18,021
Facility and lease termination costs	1,733	12,940	24,090
Other Merger-related costs	—	—	560
Total Merger-related restructuring and other costs	$ 2,684	$ 24,969	$ 42,671

The Company expects to continue to incur costs related to restructuring of its operations in order to achieve targeted synergies. However, the timing and the amount of these costs depends on various factors, including, but not limited to, identifying and realizing synergy opportunities and executing the integration of its combined operations.

Non Merger-Related Restructuring and Other Costs

During the years ended December 31, 2020, 2019, and 2018, the Company incurred employee severance and benefit costs, facility closure and lease termination costs, consulting fees, and other costs related to the Company's non Merger-related restructuring activities.

The costs incurred during the year ended December 31, 2020 were primarily related to the Company's cost management strategies in response to the COVID-19 pandemic as well as the Company's *ForwardBound* initiative.

Restructuring and other costs related to these actions consisted of the following (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Employee severance and benefit costs	$ 25,370	$ 13,214	$ 5,410
Facility and lease termination costs	580	3,262	1,567
Other costs	780	690	1,145
Total non Merger-related restructuring and other costs:	$ 26,730	$ 17,166	$ 8,122

Accrued Restructuring Liabilities

The following table summarizes the activity related to the liabilities associated with restructuring and other costs (in thousands):

	Employee Severance Costs	Facility Closure and Lease Termination Costs	Other Costs	Total
Balance at December 31, 2018	$ 7,474	$ 16,761	$ 52	$ 24,287
Adoption of ASC 842 (a)	—	(16,761)	—	(16,761)
Expenses incurred (b)	25,243	—	690	25,933
Payments	(26,989)	—	(720)	(27,709)
Balance at December 31, 2019	5,728	—	22	5,750
Expenses incurred (b)	26,321	—	791	27,112
Payments	(26,219)	—	(813)	(27,032)
Balance at December 31, 2020	$ 5,830	$ —	$ —	$ 5,830

(a) As a result of the adoption of ASC 842, accrued expenses related to facility closure and lease termination costs are reflected within the current portion of operating lease obligations and operating lease long-term obligations on the consolidated balance sheets as of December 31, 2020 and 2019. These facility costs will be paid over the remaining terms of exited facilities, which range from 2021 through 2027.

(b) There were no non-cash restructuring and other expenses incurred for the year ended December 31, 2020. The amount of expenses incurred excludes $6.7 million and $4.0 million of non-cash restructuring and other expenses incurred for the years ended December 31, 2019, and 2018, respectively, because these expenses were not subject to accrual prior to the period in which they were incurred. Expenses incurred for the years ended December 31, 2020 and 2019 also exclude $2.3 million and $9.5 million, respectively, of facility lease closure and lease termination costs that are reflected as a reduction of operating lease right-of-use assets on the consolidated balance sheets under ASC 842.

The Company expects the employee severance costs accrued as of December 31, 2020 will be paid within the next twelve months. Liabilities associated with these costs are included in accrued expenses and other long-term liabilities on the accompanying consolidated balance sheets.

9. Shareholders' Equity

Shares Outstanding

Shares of common stock outstanding were as follows (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Common stock shares, beginning balance	103,866	103,372	104,436
Repurchases of common stock	(1,256)	(1,323)	(1,973)
Issuances of common stock	1,325	1,817	909
Common stock shares, ending balance	103,935	103,866	103,372

Stock Repurchase Program

On February 26, 2018, the Company's Board of Directors (the "Board") authorized the repurchase of up to an aggregate of $250.0 million of the Company's common stock to be executed from time to time in open market transactions effected through a broker at prevailing market prices, in block trades or through privately negotiated transactions through December 31, 2019 (the "2018 stock repurchase program"). On December 5, 2019, the Board increased the dollar amount authorized under the 2018 stock repurchase program to up to an aggregate of $300.0 million and extended the term of the 2018 stock repurchase program to December 31, 2020. The 2018 stock repurchase program expired on December 31, 2020.

On November 17, 2020, the Company's Board approved a new stock repurchase program (the "2021 stock repurchase program") that will take effect on January 1, 2021, and which will succeed the Company's 2018 stock repurchase program. The 2021 stock repurchase program authorizes the Company to repurchase up to $300.0 million of the Company's Class A common stock, par value $0.01, and will expire on December 31, 2022.

The 2021 stock repurchase program does not obligate the Company to repurchase any particular amount of the Company's common stock and may be modified, extended, suspended, or discontinued at any time. The timing and amount of repurchases will be determined by the Company's management based on a variety of factors such as the market price of the Company's common stock, the Company's corporate requirements for cash, and overall market conditions. The 2021 stock repurchase program is subject to applicable legal requirements, including federal and state securities laws and applicable Nasdaq rules.

The Company may also repurchase shares of its common stock pursuant to a trading plan meeting the requirements of Rule 10b5-1 under the Securities Exchange Act of 1934, as amended, which permits shares of the Company's common stock to be repurchased when the Company might otherwise be precluded from doing so by law.

During the year ended December 31, 2020, the Company repurchased 506,244 shares of its Class A common stock in private transactions under the 2018 stock repurchase program described above, for a total purchase price of approximately $30.0 million. The remainder of the shares of repurchased common stock were repurchased in open market transactions.

The following table sets forth repurchase activity under the 2018 stock repurchase program from inception through December 31, 2020:

	Total number of shares purchased	Average price paid per share	Approximate dollar value of shares purchased (in thousands)
March 2018	948,100	$ 39.55	$ 37,493
April 2018	1,024,400	36.60	37,492
January 2019	552,100	39.16	21,623
February 2019	120,600	41.40	4,993
June 2019	509,100	45.29	23,055
August 2019	141,100	49.93	7,045
March 2020	600,000	53.38	32,029
September 2020	506,244	59.26	30,000
October 2020	150,000	54.14	8,122
Total	4,551,644		$ 201,852

The Company immediately retired all of the repurchased common stock and charged the par value of the shares to common stock. The excess of the repurchase price over the par value was applied on a pro rata basis against additional paid-in capital, with the remainder applied to accumulated deficit.

The following is a summary of the Company's authorized, issued, and outstanding shares at December 31:

	2020	2019
Shares Authorized:		
Class A common stock	300,000,000	300,000,000
Class B common stock	300,000,000	300,000,000
Preferred stock	30,000,000	30,000,000
Total shares authorized	630,000,000	630,000,000
Shares Issued and Outstanding:		
Class A common stock	103,934,738	103,865,770
Class B common stock	—	—
Preferred stock	—	—
Total shares issued and outstanding	103,934,738	103,865,770

Voting Rights and Conversion Rights of Common Stock

Each share of Class A common stock is entitled to one vote on all matters to be voted on by the shareholders of the Company, including the election of directors. Each share of Class B common stock is entitled to one vote on all matters to be voted on by the shareholders of the Company, except for the right to vote in the election of directors. Additionally, each share of Class B common stock is convertible (on a one-for-one basis) into Class A common stock at any time at the election of the holder.

Dividend Rights and Preferences of Common Stock

The holders of Class A and Class B common stock are entitled to dividends on a pro rata basis at such time and in such amounts as declared by the Board. There were no dividends paid during the years ended December 31, 2020, 2019, or 2018.

Liquidation Rights and Preferences of Common Stock

The holders of Class A and Class B common stock are entitled to participate on a pro rata basis in all distributions made in connection with a voluntary or involuntary liquidation, dissolution, or winding up of the affairs of the Company.

10. Earnings Per Share

The following table provides a reconciliation of the numerators and denominators of the basic and diluted earnings per share computations (in thousands, except per share data):

	Year Ended December 31,		
	2020	2019	2018
Numerator:			
Net income	$ 192,787	$ 131,258	$ 24,284
Denominator:			
Basic weighted average common shares outstanding	104,168	103,618	103,414
Effect of dilutive securities:			
Stock options and other awards under deferred share-based compensation programs	1,297	1,387	1,287
Diluted weighted average common shares outstanding	105,465	105,005	104,701
Earnings per share:			
Basic	$ 1.85	$ 1.27	$ 0.23
Diluted	$ 1.83	$ 1.25	$ 0.23

Potential common shares outstanding that are considered anti-dilutive are excluded from the computation of diluted earnings per share. Potential common shares related to stock options and other awards under share-based compensation programs may be determined to be anti-dilutive based on the application of the treasury stock method. Potential common shares are also anti-dilutive in periods when the Company incurs a net loss.

The number of potential shares outstanding that were anti-dilutive and therefore excluded from the computation of diluted earnings per share, weighted for the portion of the period they were outstanding, were 582,760, 277,128, and 744,445 for the years ended December 31, 2020, 2019, and 2018, respectively.

11. Income Taxes

The components of income before provision for income taxes were as follows (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Domestic	$ 122,659	$ (17,066)	$ (26,263)
Foreign	80,999	118,775	83,521
Income before provision for income taxes	$ 203,658	$ 101,709	$ 57,258

The components of income tax expense (benefit) were as follows (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Federal income taxes:			
Current	$ (15,537)	$ (13,952)	$ 19,949
Deferred	10,188	(11,693)	(3,081)
Foreign income taxes:			
Current	16,019	21,452	10,398
Deferred	(3,106)	(2,206)	(2,382)
State income taxes:			
Current	14,229	2,850	2,387
Deferred	(10,922)	(26,000)	5,703
Income tax expense (benefit)	$ 10,871	$ (29,549)	$ 32,974

Foreign Earnings

The Company has approximately $712.9 million of undistributed foreign earnings, of which approximately $324.9 million will remain indefinitely reinvested in the foreign jurisdictions. These earnings are expected to be used to support the growth and working capital needs of the Company's foreign subsidiaries. It is impracticable to determine the total amount of unrecognized deferred taxes with respect to these indefinitely reinvested earnings. The remaining $388.0 million of undistributed foreign earnings are not considered indefinitely reinvested, and the Company has provided a $10.9 million deferred tax liability, primarily related to the estimated withholding tax and state taxes that would be due upon repatriation.

BEAT

The Company's base eroding payments do not exceed the three percent threshold of its deductible payments in 2020; therefore, the Company has not recorded any base erosion and anti-abuse minimum tax ("BEAT") liability for the years ended December 31, 2020 and December 31, 2019.

Tax Legislation

The Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") was enacted on March 27, 2020 in the United States to address the economic impacts of the COVID-19 pandemic. The CARES Act includes corporate income tax, payroll tax, and other provisions. There was not a significant impact to the Company's income tax provision as a result of the CARES Act and other global measures for the year ended December 31, 2020. Throughout the year ended December 31, 2020, the Company qualified for certain employer payroll tax credits, which have been treated as government subsidies to offset related operating expenses, as well as the deferral of certain payroll and other tax payments into the future. The Company has deferred the timing of certain income tax payments and other taxes as permitted by the CARES Act and other stimulus measures enacted globally.

Numerous final and proposed tax regulations were issued during the year ended December 31, 2020, including additional guidance related to changes included in the Tax Cuts and Jobs Act. The regulations included updated guidance related to revenue recognition pursuant to Section 451, interest expense limitations pursuant to Section 163(j), Global Intangible Low-Taxed Income provisions ("GILTI") high-tax exclusion, and foreign tax credits. The GILTI high-tax and Section 163(j) regulations included certain elective provisions which the Company has retroactively applied to the Company's 2018 and 2019 tax years.

Actual income tax expense differed from the amount computed by applying the U.S. federal tax rate of 21% to pre-tax income as a result of the following (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Expected income tax expense (benefit) at statutory rate	$ 42,768	$ 21,359	$ 12,024
Change in income tax expense resulting from:			
Foreign income inclusion	6,013	39,557	20,916
Foreign earnings reinvestment assertion reversal	5,071	—	(3,823)
Changes in income tax valuation allowance (all jurisdictions)	14,503	(68,537)	(15,228)
Change in fair value of contingent obligations	(769)	3,625	(2,434)
Share-based compensation	(2,800)	1,094	2,677
Research and general business tax credits (a)	(12,872)	(1,871)	(10,937)
State and local taxes, net of federal benefit	6,924	(9,085)	7,715
Capital loss carryforward (b)	(16,506)	—	—
Foreign rate differential	(1,777)	(3,595)	(4,071)
Changes in reserve for uncertain tax positions including interest	(18,839)	5,393	(1,190)
Provision to tax return and other deferred tax adjustments	(12,325)	(6,950)	12,251
Gain on sale of business	(2,350)		
Base erosion and anti-abuse tax	—	(15,054)	15,054
Federal rate change	—	—	(1,226)
Nondeductible executive compensation	367	1,802	159
Other, net	3,463	2,713	1,087
Income tax expense (benefit)	$ 10,871	$ (29,549)	$ 32,974

(a) Year ended December 31, 2020 is offset by $9.4 million in valuation allowances.

(b) Year ended December 31, 2020 is offset by $16.5 million in valuation allowances.

The changes in the valuation allowance for deferred tax assets were as follows (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Balance at the beginning of the period	$ 84,159	$ 150,316	$ 159,646
Deferred tax assets assumed through business combinations	479	—	—
Deferred tax assets released through business dispositions	(271)	—	—
Charged (credited) to income tax expense	14,503	(68,537)	(15,228)
Charged (credited) to equity	—	42	11,848
Foreign currency exchange	1,440	2,338	(5,950)
Balance at the end of the period	$ 100,310	$ 84,159	$ 150,316

As of December 31, 2020, the valuation allowance increased by $16.2 million, resulting primarily from a net increase of $14.5 million primarily due to recording a domestic valuation allowance related to capital loss carryforwards as well as valuation allowance recorded on foreign R&D credits, offset with the release of valuation allowance on U.S. state deferred tax assets and an increase of $1.4 million for changes related to foreign currency exchange.

As of December 31, 2019, the valuation allowance decreased by $66.2 million, resulting primarily from a net decrease of $68.5 million primarily due to the release of the valuation allowance on U.S. deferred tax assets and an increase of $2.3 million for changes related to foreign currency exchange.

The income tax effects of temporary differences that give rise to significant portions of the deferred tax assets and liabilities are as follows at December 31 (in thousands):

	2020	2019
Deferred tax assets:		
Net operating losses	$ 122,018	$ 199,002
Tax credits	58,603	51,273
Deferred revenue	77,138	13,598
Employee compensation and other benefits	29,048	27,287
Allowance for doubtful accounts	1,739	1,091
Lease obligations	57,142	64,114
Accrued expenses	6,526	8,508
Prepaid royalty	3,451	6,525
Capital loss carryforward	20,157	—
Interest limitation carryforwards	20,219	15,624
Other	7,913	10,154
Total deferred tax assets	403,954	397,176
Less: valuation allowance	(100,310)	(84,159)
Net deferred tax assets	303,644	313,017
Deferred tax liabilities:		
Undistributed foreign earnings	(10,912)	(3,366)
Right of use asset	(49,316)	(57,055)
Depreciation and amortization	(226,170)	(226,252)
Other	(2,404)	(433)
Total deferred tax liabilities	(288,802)	(287,106)
Net deferred tax assets	$ 14,842	$ 25,911

As of December 31, 2020 and 2019, the Company had U.S. federal NOL carryforwards of approximately $260.6 million and $569.5 million, respectively. These carryforwards begin to expire in 2029, but the Company anticipates utilizing such carryforwards prior to that date.

As of December 31, 2020 and 2019, the Company had state NOL carryforwards of approximately $821.0 million and $1.04 billion, respectively, a portion of which expires annually. The Company also had foreign NOL carryforwards of $80.1 million and $85.8 million as of December 31, 2020 and 2019, respectively. The majority of these carryforwards have indefinite carryforward periods, but a valuation allowance has been established for jurisdictions where the future benefit of the NOL carryforwards is not more likely than not to be realized.

As of December 31, 2020 and 2019, the Company had Canadian research and development credit carry forwards of $56.7 million and $48.5 million, respectively. These credit carryforwards have an indefinite life, but for the years ended December 31, 2020 and 2019, a valuation allowance of $56.7 million and $48.5 million, respectively, has been established against these tax credits where the future benefit of the credits is not more likely than not to be realized.

The Company had gross unrecognized tax benefits, exclusive of associated interest and penalties, of approximately $9.0 million and $23.2 million as of December 31, 2020 and 2019, respectively. The Company recognizes accrued interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2020 and 2019, the Company had accrued interest and penalties related to uncertain tax positions of $2.8 million and $6.4 million, respectively. For the years ended December 31, 2020 and 2019, the Company recorded tax expense in the accompanying consolidated statements of income related to interest and penalties associated with uncertain tax positions of $3.7 million income tax benefit, and $2.1 million income tax expense, respectively.

The Company anticipates that during the next 12 months, the unrecognized tax benefits may decrease by approximately $1.3 million. A reconciliation of the beginning and ending balances of unrecognized tax benefits, excluding accrued interest and penalties, is as follows (in thousands):

Unrecognized tax benefits balance at December 31, 2017	$	43,678
Increases for tax positions in the current year		673
Increases for tax positions of prior years		344
Decreases for tax positions in prior year		(25,309)
Impact of foreign currency translation		(141)
Unrecognized tax benefits balance at December 31, 2018		19,245
Increases for tax positions in the current year		2,222
Increases for tax positions of prior years		2,255
Decreases for tax positions in prior year		(440)
Impact of foreign currency translation		(44)
Unrecognized tax benefits balance at December 31, 2019		23,238
Increases for tax positions in the current year		254
Increases for tax positions of prior years		3,237
Decreases for tax positions in prior year		(2,540)
Impact of foreign currency translation		132
Lapse of statute limitations		(15,288)
Unrecognized tax benefits balance at December 31, 2020	$	9,033

Due to the geographic breadth of the Company's operations, numerous tax audits may be ongoing throughout the world at any point in time. Income tax liabilities are recorded based on estimates of additional income taxes which will be due upon the conclusion of these audits. Estimates of these income tax liabilities are made based upon prior experience and are updated in light of changes in facts and circumstances. However, due to the uncertain and complex application of tax regulations, it is possible that the ultimate resolution of audits may result in liabilities which could be materially different from these estimates. In such an event, the Company will record additional income tax expense or benefit in the period in which such resolution occurs.

The Company is not currently under any U.S. federal income tax audits, however, income tax returns are under examination by tax authorities in several state and foreign jurisdictions. The Company's federal and state tax filings are open to investigation in numerous years due to NOL carryforwards. Additionally, the Company currently has an ongoing examination for tax years 2017 and 2018 in the United Kingdom. The United Kingdom is the jurisdiction with the Company's largest foreign operations. The Company believes that its reserve for uncertain tax positions is adequate to cover existing risks or exposures related to all open tax years.

12. Revenue from Contracts with Customers

Unsatisfied Performance Obligations

As of December 31, 2020, the total aggregate transaction price allocated to the unsatisfied performance obligations under contracts with contract terms greater than one year and that are not accounted for as a series pursuant to ASC 606 was $7.20 billion. This amount includes revenue associated with reimbursable out-of-pocket expenses. The Company expects to recognize revenue over the remaining contract term of the individual projects, with contract terms generally ranging from one to five years. The amount of unsatisfied performance obligations is presented net of any constraints and as a result, is lower than the potential contractual revenue. The contracts excluded due to constraints include contracts that do not commence within a certain period of time or that require the Company to undertake numerous activities to fulfill these performance obligations, including various activities that are outside of the Company's control.

Timing of Billing and Performance

During the year ended December 31, 2020, the Company recognized approximately $498.5 million of revenue that was included in the deferred revenue balance at the beginning of the year. During the year ended December 31, 2020, approximately $66.8 million of the Company's revenue recognized was allocated to performance obligations partially satisfied in previous periods, substantially all of which was associated with changes in scope or price for full service clinical studies. The gross and net amounts of revenue recognized solely from changes in estimates were not material.

13. Segment Information

The Company is managed through two reportable segments: Clinical Solutions and Commercial Solutions. Each reportable segment consists of multiple service offerings that, when combined, create a fully integrated biopharmaceutical services organization. Clinical Solutions offers a variety of services spanning Phase I to IV of clinical development, including full service global studies, as well as individual service offerings such as clinical monitoring, investigator recruitment, patient recruitment, data management, and study startup to assist customers with their drug development process. Commercial Solutions provides the pharmaceutical, biotechnology, and healthcare industries with commercialization services, including deployment solutions, communications solutions (public relations, advertising, and medical communications), and consulting services.

The Company's Chief Operating Decision Maker (the "CODM") reviews segment performance and allocates resources based upon segment revenue and income from operations. Inter-segment revenue is eliminated from the segment reporting provided to the CODM and is not included in the segment revenue presented in the table below. Certain costs are not allocated to the Company's reportable segments and are reported as general corporate expenses. These costs primarily consist of share-based compensation and general operating expenses associated with the Board and the Company's senior leadership, finance, investor relations, and internal audit functions. The Company does not allocate depreciation, amortization, asset impairment charges, restructuring and other costs, or transaction and integration-related expenses to its segments. Additionally, the CODM reviews the Company's assets on a consolidated basis and does not allocate assets to its reportable segments for purposes of assessing segment performance or allocating resources.

Information about reportable segment operating results was as follows (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Revenue:			
Clinical Solutions	$ 3,306,736	$ 3,421,596	$ 3,211,202
Commercial Solutions	1,109,041	1,254,219	1,178,914
Total revenue	4,415,777	4,675,815	4,390,116
Segment direct costs:			
Clinical Solutions	2,493,453	2,616,249	2,477,920
Commercial Solutions	873,342	1,000,645	937,060
Total segment direct costs	3,366,795	3,616,894	3,414,980
Segment selling, general, and administrative expenses:			
Clinical Solutions	277,775	275,645	266,381
Commercial Solutions	88,567	92,287	86,333
Total segment selling, general, and administrative expenses	366,342	367,932	352,714
Segment operating income:			
Clinical Solutions	535,508	529,702	466,901
Commercial Solutions	147,132	161,287	155,521
Total segment operating income	682,640	690,989	622,422
Direct costs and operating expenses not allocated to segments:			
Share-based compensation included in direct costs	31,347	29,011	19,330
Share-based compensation included in selling, general, and administrative expenses	27,144	26,182	14,902
Corporate selling, general, and administrative expenses	48,998	52,167	38,689
Restructuring and other costs	29,414	42,135	50,793
Transaction and integration-related expenses	30,242	61,275	64,841
Depreciation and amortization	222,352	242,465	273,685
Total income from operations	$ 293,143	$ 237,754	$ 160,182

14. Operations by Geographic Location

The following table summarizes total revenue by geographic area (in thousands, all intercompany transactions have been eliminated):

	Year Ended December 31,		
	2020	2019	2018
Revenue:			
North America (a)	$ 2,791,590	$ 3,079,608	$ 2,974,330
Europe, Middle East and Africa	1,059,968	1,055,007	955,882
Asia-Pacific	465,116	444,819	375,351
Latin America	99,103	96,381	84,553
Total revenue	$ 4,415,777	$ 4,675,815	$ 4,390,116

(a) Revenue for the North America region includes revenue attributable to the United States of $2.64 billion, $2.93 billion, and $2.82 billion, or 59.9%, 62.7%, and 64.3% of total revenue, for the years ended December 31, 2020, 2019 and 2018, respectively. No other country represented more than 10% of total revenue for any year.

The following table summarizes long-lived assets by geographic area as of December 31 (in thousands, all intercompany transactions have been eliminated):

	2020	2019
Property and equipment, net:		
North America (a)	$ 161,531	$ 159,709
Europe, Middle East and Africa	38,745	28,514
Asia-Pacific	11,167	12,742
Latin America	4,757	2,961
Total property and equipment, net	$ 216,200	$ 203,926

(a) Long-lived assets for the North America region include property and equipment, net attributable to the United States of $156.0 million and $153.1 million as of December 31, 2020 and 2019, respectively.

15. Concentration of Credit Risk

Financial assets that subject the Company to credit risk primarily consist of cash and cash equivalents, accounts receivable and unbilled services (including contract assets). The Company's cash and cash equivalents consist principally of cash and are maintained at several financial institutions with reputable credit ratings. The Company maintains cash depository accounts with several financial institutions worldwide and is exposed to credit risk related to the potential inability to access liquidity in financial institutions where its cash and cash equivalents are concentrated. The Company has not historically incurred any losses with respect to these balances and believes that they bear minimal credit risk.

As of December 31, 2020 and 2019, substantially all of the Company's cash and cash equivalents were held within the United States.

Substantially all of the Company's revenue is earned by performing services under contracts with pharmaceutical and biotechnology companies. The concentration of credit risk is equal to the outstanding accounts receivable and unbilled services (including contract assets) balances less deferred revenue.

No single customer accounted for greater than 10% of the Company's revenue for the years ended December 31, 2020 or 2019. During the year ended December 31, 2018, one customer accounted for approximately 11% of the Company's revenue, which was primarily earned in the Clinical Solutions segment.

No single customer accounted for greater than 10% of the Company's accounts receivable and unbilled services (including contract assets) balances for the year ended December 31, 2020 or 2019.

16. Related-Party Transactions

For the year ended December 31, 2020, the Company had revenue of $1.8 million and, as of December 31, 2020, receivables of $1.3 million from a customer whose board of directors included a member who was also a member of the Company's Board. This customer became a related party during the third quarter of 2020. During the second quarter of 2020, the Company sold its contingent staffing business to a related party, via an arms-length transaction, in exchange for potential future cash consideration not to exceed $4.0 million. The acquiring company had a significant shareholder who was also a significant shareholder of the Company. For additional information, refer to "Note 3 – Business Combinations and Divestitures."

For the year ended December 31, 2019, the Company had revenue of $0.4 million from a customer whose board of directors included a member who was also a member of the Company's Board. This customer became a related party of the Company during the fourth quarter of 2019. For the year ended December 31, 2018, the Company had revenue of $0.4 million from two customers each of whose respective boards of directors included a member who was also a member of the Company's Board.

For the year ended December 31, 2019, the Company incurred reimbursable out-of-pocket expenses of $1.1 million for professional services obtained from a provider whose board of directors included a member who was also a member of the Company's Board. These expenses are included within direct costs on the consolidated statements of income. This provider ceased to be a related-party as of December 31, 2019. For the year ended December 31, 2018, the Company incurred reimbursable out-of-pocket expenses of $3.5 million for professional services obtained from two related-party providers. One provider had a member of its board of directors who was also a member of the Company's Board and the other provider had a significant shareholder who was also a significant shareholder of the Company.

17. Commitments and Contingencies

Legal Contingencies

The Company is involved in various claims and legal actions arising in the ordinary course of business. The Company accrues a liability when a loss is considered probable and the amount can be reasonably estimated. When a material loss contingency is reasonably possible but not probable, the Company does not record a liability, but instead discloses the nature and the amount of the claim, and an estimate of the loss or range of loss, if such an estimate can be made. Legal fees are expensed as incurred. In the opinion of management, the outcome of any existing claims and legal or regulatory proceedings, other than the specific matters described below, if decided adversely, is not expected to have a material adverse effect on the Company's business, financial condition, results of operations, or cash flows.

On December 1, 2017, the first of two virtually identical actions alleging federal securities law claims was filed against the Company and certain of its officers on behalf of a putative class of its shareholders. The first action, captioned Bermudez v. INC Research, Inc., et al, No. 17-09457 (S.D.N.Y.) in the Southern District of New York, names as defendants the Company, Michael Bell, Alistair Macdonald, Michael Gilbertini, and Gregory S. Rush (the "Bermudez action"), and the second action, Vaitkuvienė v. Syneos Health, Inc., et al, No. 18-0029 (E.D.N.C.) in the Eastern District of North Carolina, filed on January 25, 2018 (the "Vaitkuvienė action"), names as defendants the Company, Alistair Macdonald, and Gregory S. Rush (the "Initial Defendants"). Both complaints allege similar claims under Section 10(b) and Section 20(a) of the Securities Exchange Act of 1934 on behalf of a putative class of purchasers of the Company's common stock between May 10, 2017 and November 8, 2017 (the Vaitkuvienė action) and November 9, 2017 (the Bermudez action). The complaints allege that the Company published inaccurate or incomplete information regarding, among other things, the financial performance and business outlook for inVentiv's business prior to the Merger and with respect to the combined company following the Merger. On January 30, 2018, two alleged shareholders separately filed motions seeking to be appointed lead plaintiff and approving the selection of lead counsel. On March 30, 2018, Plaintiff in the Bermudez action filed a notice of voluntary dismissal of the Bermudez action, without prejudice, and as to all defendants. On May 29, 2018, the Court in the Vaitkuvienė action appointed the San Antonio Fire & Police Pension Fund and El Paso Firemen & Policemen's Pension Fund as Lead Plaintiffs and, on June 7, 2018, the Court entered a schedule providing for, among other things, Lead Plaintiffs to file an amended complaint by July 23, 2018 (later extended to July 30, 2018). Lead Plaintiffs filed their amended complaint on July 30, 2018, which also includes a claim against the Initial Defendants, as well as each member of the board of directors at the time of the INC Research - inVentiv Health merger vote in July 2017 (the "Defendants"), contending that the inVentiv merger proxy was misleading under Section 14(a) of the Act. Lead Plaintiffs seek, among other things, orders (i) declaring that the lawsuit is a proper class action and (ii) awarding compensatory damages in an amount to be proven at trial, including interest thereon, and reasonable costs and expenses incurred in this action, including attorneys' fees and expert fees, to Lead Plaintiffs and other class members. Defendants filed a Motion to Dismiss Plaintiffs' Amended Complaint on September 20, 2018. Lead Plaintiffs filed a Response in Opposition to such motion on November 21, 2018, and Defendants filed a Reply to such response on December 5, 2018. The District Court referred the Motion to Dismiss to a magistrate judge for a report and recommendation. On September 26, 2019, the magistrate judge stayed the action and, on August 7, 2020, the magistrate judge lifted the stay. Also on August 7, 2020, the magistrate judge issued a report (the "Magistrate Report") recommending to the District Court that Defendants' Motion to Dismiss be denied. On September 4, 2020, Defendants filed written objections to the Magistrate Report, requesting that the District Court grant the Motion to Dismiss. Lead Plaintiffs filed

a Response in Opposition to such objections on October 2, 2020. The Company and the other defendants deny the allegations in these complaints and intend to defend vigorously against these claims.

The Company is presently unable to predict the duration, scope, or result of the foregoing putative class actions, or any other related lawsuit. As such, the Company is presently unable to develop a reasonable estimate of a possible loss or range of losses, if any, related to these matters. While the Company intends to defend the putative class action litigation vigorously, the outcome of such litigation or any other litigation is necessarily uncertain. The Company could be forced to expend significant resources in the defense of these lawsuits or future ones, and it may not prevail. As such, these matters could have a material adverse effect on the Company's business, annual, or interim results of operations, cash flows, or its financial condition.

Assumed Contingent Tax-Sharing Obligation

As a result of the Merger, the Company assumed contingent tax-sharing obligations arising from inVentiv Health, Inc.'s 2016 merger with Double Eagle Parent, Inc. As of December 31, 2020 and 2019, the estimated fair value of the assumed contingent tax-sharing obligations was $6.8 million and $32.7 million, respectively.

Contingent Earn-out Liability

In connection with the Kinapse acquisition, the Company recorded a contingent earn-out liability to be paid based on Kinapse meeting revenue targets as of March 31, 2021. The estimated fair value of the contingent earn-out liability was $4.6 million as of December 31, 2019 and was included in other long-term liabilities in the accompanying consolidated balance sheet. During the first quarter of 2020, the Company adjusted the fair value of the contingent earn-out liability to zero to reflect the updated probability of achievement of the revenue targets. The change in fair value of the earn-out liability was recorded in transaction and integration-related expenses in the accompanying consolidated statement of income. For additional information, refer to "Note 3 - Business Combinations."

18. Share-Based Compensation

Overview of Employee Share-Based Compensation Plans

The Company has two share-based compensation plans, the Syneos Health, Inc. 2018 Equity Incentive Plan ("2018 Plan") and the Syneos Health, Inc. 2016 Employee Stock Purchase Plan, as amended and restated ("ESPP"). In addition, the Company had the INC Research Holdings, Inc. 2014 Equity Incentive Plan ("2014 Plan") and the INC Research Holdings, Inc. 2010 Equity Incentive Plan ("2010 Plan") that were terminated effective May 24, 2018 and October 30, 2014, respectively, except as to outstanding awards. No further awards can be issued under the 2014 Plan or 2010 Plan. The 2018 Plan was effective on May 24, 2018, and permits granting of stock options, stock appreciation rights, restricted stock awards, restricted stock units ("RSUs"), or stock awards to employees, as well as non-employee directors, consultants, or other personal service providers. The terms of share-based instruments granted are determined at the time of grant and are typically subject to such conditions as continued employment, passage of time, and/or satisfaction of performance criteria. The Company has granted stock options and RSUs, which typically vest ratably over a three-year period from the grant date. In addition, the Company has granted performance-vesting RSUs. The Board and the Compensation and Management Development Committee have the discretion to determine different vesting schedules. Stock options have a maximum term of ten years. The exercise price per share of stock options may not be less than the fair market value of a share of the Company's common stock on the date of grant.

As of December 31, 2020, the maximum number of shares reserved for issuance under the Company's share-based compensation plans was 15,167,325, of which 4,188,878 shares were available for future grants as of December 31, 2020. In addition, under the 2018 Plan, any shares of the Company's common stock that are retained by or returned to the Company under any outstanding awards that are canceled, expired, forfeited, surrendered, settled in cash, or otherwise terminated without delivery of the shares, in each case, will prior to vesting or exercise become available for future grants.

Employee Stock Purchase Plan

In March 2016, the Board approved the ESPP, which was also approved by the Company's shareholders in May 2016. The ESPP was subsequently amended and restated and approved by the Board in March 2018, and also approved by the Company's shareholders in May 2018. The ESPP allows eligible employees to authorize payroll deductions of up to 10% of their annual base salary or wages to be applied toward the purchase of full shares of the Company's common stock on the last trading day of the offering period. Participating employees can purchase shares of the Company's common stock at a 15% discount to the lesser of the closing price of the Company's common stock as quoted on the Nasdaq Stock Exchange on (i) the first trading day of the offering period or (ii) the last trading day of the offering period. Offering periods under the ESPP are six months in duration, and the first offering period began on September 1, 2016. Under the ESPP, the Company recognized share-based compensation expense of $5.8 million, $6.5 million, and $5.7 million for the years ended December 31, 2020, 2019, and 2018, respectively. As of December 31, 2020, there were 1,262,184 shares issued and 2,237,816 shares reserved for future issuance under the ESPP.

The fair values of ESPP offerings were determined using the Black-Scholes valuation model and the following assumptions:

	Year Ended December 31,		
	2020	**2019**	**2018**
Expected volatility	27.7% - 55.1%	39.1% - 51.9%	32.3% - 69.3%
Risk-free interest rate	0.13% - 0.95%	1.88% - 2.52%	1.85% - 2.28%
Expected term (in years)	0.5	0.5	0.5

Stock Option Awards

The following table sets forth the summary of stock option activity for the year ended December 31, 2020:

	Number of Options	**Weighted Average Exercise Price**	**Weighted Average Remaining Contractual Life (in years)**	**Aggregate Intrinsic Value (in thousands) (a)**
Outstanding at December 31, 2019	984,177	$ 28.01		
Exercised	(319,562)	23.58		
Forfeited	(1,056)	41.26		
Outstanding at December 31, 2020	663,559	30.12	4.48	$ 25,220
Vested and expected to vest at December 31, 2020	663,559	30.12	4.48	$ 25,220
Exercisable at December 31, 2020	663,559	$ 30.12	4.48	$ 25,220

(a) Represents the total pre-tax intrinsic value (i.e., the aggregate difference between the closing price of the Company's common stock on December 31, 2020 of $68.13 and the exercise price for in-the-money options) that would have been received by the holders if all instruments had been exercised on December 31, 2020.

As of December 31, 2020, there was no unrecognized compensation expense related to non-vested stock options.

There have been no stock options granted since 2017. The total intrinsic value of options exercised was $12.7 million, $20.3 million, and $9.2 million for the years ended December 31, 2020, 2019, and 2018, respectively.

Restricted Stock Units Awards

The following table sets forth a summary of RSUs outstanding under the 2014 and 2018 Plans as of December 31, 2020 and changes during the year then ended:

	Number of Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2019	2,551,376	$ 43.48
Granted	1,118,467	62.17
Vested	(990,770)	43.37
Forfeited	(307,692)	50.30
Non-vested at December 31, 2020	2,371,381	$ 51.40

At December 31, 2020, there was $62.4 million unrecognized compensation expense related to unvested RSUs, which is expected to be recognized over a weighted average period of 1.8 years.

Performance-Based Awards

During the years ended December 31, 2020, 2019, and 2018, the Board and Compensation and Management Development Committee granted certain executive officers performance-based RSUs (“PRSUs”). The PRSUs are subject to the Company’s achieving certain performance targets including revenue growth, adjusted diluted EPS growth, and return on invested capital. These awards are included in the RSU table above. Compensation expense related to PRSUs is recorded based on the estimated quantity of awards that are expected to vest. At each reporting period, management re-assesses the probability that the performance conditions will be achieved and adjusts compensation expense to reflect any changes in the estimated probability of vesting until the actual level of achievement of the performance targets is known.

Share-Based Compensation Expense

Total share-based compensation expense recognized was as follows (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Direct costs	$ 31,347	$ 29,011	$ 19,330
Selling, general, and administrative expenses	27,144	26,182	14,902
Restructuring and other costs	—	—	91
Total share-based compensation expense	$ 58,491	$ 55,193	$ 34,323

The total income tax benefit recognized in the consolidated statements of income for share-based compensation arrangements was approximately $11.8 million, $10.8 million, and $1.7 million for the years ended December 31, 2020, 2019, and 2018, respectively.

19. Employee Benefit Plans

Defined Contribution Retirement Plans

In the U.S., the Company offers defined contribution retirement benefit plans that comply with Section 401(a) of the Internal Revenue Code under which it matches employee deferrals at varying percentages and at specified limits of the employee's salary. In 2020, the Company implemented cost management strategies, including suspending the Company match on U.S. employee 401(k) contributions for six months. The match was resumed in the fourth quarter of 2020.

The Company's contributions related to these defined contribution retirement plans were as follows (in thousands):

	Year Ended December 31,		
	2020	2019	2018
Defined contribution retirement plan contributions	$ 15,049	$ 29,834	$ 24,801

The Company also has defined contribution retirement plans outside of the U.S. The Company's contributions related to these plans were approximately $18.4 million and $10.0 million for the years ended December 31, 2020 and 2019, respectively. The Company's contributions associated with all of its defined contribution retirement plans are recorded in direct costs and selling, general, and administrative expenses on the accompanying consolidated statements of income.

Deferred Compensation Plan

The Company offers a Nonqualified Deferred Compensation Plan for certain employees pursuant to Section 409A of the Internal Revenue Code ("NQDC Plan"). Under this plan, participants can defer, on a pre-tax basis, from 1.0% up to a maximum of 80.0% of salary and from 1.0% up to a maximum of 100.0% of commissions and annual bonuses. The Company does not make matching contributions into the NQDC Plan. Distributions will be made to participants upon termination of employment or death in a lump sum, unless installments are selected.

As of December 31, 2020 and 2019, the NQDC Plan deferred compensation liabilities were $22.3 million and $21.2 million, respectively, and are included in other long-term liabilities on the accompanying consolidated balance sheets. The assets associated with the NQDC Plan are subject to the claims of the creditors and primarily consist of investments in mutual funds maintained in a "rabbi trust". These investments are classified as trading securities and are included in other long-term assets on the accompanying consolidated balance sheets.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Exchange Act, our management, with the participation of our CEO and CFO, carried out an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act). There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

Based upon their evaluation, our CEO and CFO concluded that, as of December 31, 2020, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Annual Report on Internal Control Over Financial Reporting

The management of Syneos Health, Inc. (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles in the United States of America, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting might not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2020. In making this assessment, management used the framework established in the Internal Control-Integrated Framework issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). As a result of this assessment and based on the criteria in the COSO framework, management has concluded that, as of December 31, 2020, the Company's internal control over financial reporting was effective.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2020 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their attestation report which appears herein.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Pursuant to General Instruction G(3) on Form 10-K, information required by this Item concerning our directors and corporate governance is incorporated by reference from the sections captioned “Election of Directors” and “Corporate Governance Matters” contained in our 2021 Proxy Statement related to our Annual Meeting of Stockholders, which we intend to file with the SEC within 120 days of the end of our fiscal year.

We have adopted a code of business conduct and ethics relating to the conduct of our business by all of our employees, officers, and directors, as well as a code of ethics specifically for our principal executive officer and senior financial officers. Each of these policies is posted on our website: www.syneoshealth.com. We intend to post on our website all disclosures that are required by law or Nasdaq Stock Market listing standards concerning any amendments to, or waivers from, any provision of our code of business conduct and ethics and our code of ethics.

The information required by this Item concerning our executive officers is set forth at the end of Part I, Item 1, “Business” in this Annual Report on Form 10-K under the section captioned “Information About Executive Officers.”

The information required by this Item concerning compliance with Section 16(a) of the Securities Exchange Act of 1934, as amended, if applicable, is incorporated by reference from the section of the 2021 Proxy Statement captioned “Delinquent Section 16(a) Reports,” if any.

Item 11. Executive Compensation.

The information required by this Item is incorporated by reference to the information under the sections captioned “Executive Compensation and Other Matters,” “Director Compensation for Fiscal Year 2020” and “Corporate Governance Matters” in the 2021 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table sets forth the indicated information as of December 31, 2020 with respect to our equity compensation plans approved by security holders:

Plan Description	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans
2018 Equity Incentive Plan	—	$ —	4,188,878
2016 Employee Stock Purchase Plan	—	$ —	2,237,816
2014 Equity Incentive Plan	265,379	$ 42.67	—
2010 Equity Incentive Plan	207,492	$ 13.49	—
2016 Omnibus Equity Incentive Plan(1)	190,688	$ 30.76	—
Total	663,559		6,426,694

(1) On August 1, 2017, in connection with the Merger, the Company filed a Form S-8 Registration Statement for the Double Eagle Parent, Inc. 2016 Omnibus Equity Incentive Plan. The number of shares registered in that filing was 1,500,000. Under this plan, the Company issued replacement awards consisting of stock options and RSUs. No further awards can be issued under the Double Eagle Plan.

Our equity compensation plans consist of the 2018 Equity Incentive Plan, the 2016 Employee Stock Purchase Plan, the 2014 Equity Incentive Plan, the 2010 Equity Incentive Plan, and the 2016 Omnibus Equity Incentive Plan, which were approved by our shareholders. We do not have any equity compensation plans or arrangements that have not been approved by our shareholders.

The remaining information in response to this Item is incorporated by reference to the information under the section captioned “Security Ownership of Certain Beneficial Owners and Management” in the 2021 Proxy Statement.

Item 13. Certain Relationships and Related Transactions and Director Independence.

The information required by this Item is incorporated by reference to the information under the section captioned “Certain Relationships and Related Person Transactions” and “Corporate Governance Matters” in the 2021 Proxy Statement.

Item 14. Principal Accounting Fees and Services.

The information required by this Item is incorporated by reference to the information under the section captioned “Audit Committee Report” in the 2021 Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) The following documents are filed as part of this report:

(1) Financial Statements

The financial statements and report of the independent registered public accounting firm are filed as part of this Annual Report (see "Index to Consolidated Financial Statements" at Item 8).

(2) Financial Statement Schedules

The financial statements schedules are omitted because they are not applicable or the required information is shown in the consolidated financial statements or notes thereto.

(b) Exhibits

		Incorporated by Reference (Unless Otherwise Indicated)			
Exhibit Number	**Exhibit Description**	**Form**	**File No.**	**Exhibit**	**Filing Date**
2.1	Agreement and Plan of Merger, dated as of May 10, 2017, by and between Double Eagle Parent, Inc. and INC Research Holdings, Inc.	8-K	001-36730	2.1	May 10, 2017
2.2	Stock Purchase Agreement, dated as of October 26, 2020, by and between SHCR Holdings, LLC and Syneos Health Clinical, Inc.	10-Q	001-36730	2.1	October 29, 2020
3.1	Certificate of Incorporation of INC Research Holdings, Inc.	8-K	001-36730	3.1	August 1, 2017
3.2	Certificate of Amendment of Certificate of Incorporation of Syneos Health, Inc.	8-K	001-36730	3.1	January 8, 2018
3.3	Amended and Restated Bylaws of Syneos Health, Inc.	8-K	001-36730	3.2	January 8, 2018
4.1	Specimen Certificate for Class A Common Stock.	S-1/A	333-199178	4.1	October 27, 2014
4.2	Indenture, dated as of November 24, 2020, between Syneos Health, Inc. and Wells Fargo Bank, National Association, as trustee.	8-K	001-36730	4.1	November 25, 2020
4.3	Form of 3.625% senior note due 2029 (included in Exhibit 4.2).	8-K	001-36730	4.2	November 25, 2020
4.4	First Supplemental Indenture, dated as of November 24, 2020, between the Company, the subsidiary guarantors named on the signature pages thereto and Wells Fargo Bank, National Association, as trustee.	8-K	001-36730	4.3	November 25, 2020
4.5	Description of Capital Stock.	10-K	001-36730	4.4	February 20, 2020
10.1.1#	INC Research Holdings, Inc. 2014 Equity Incentive Plan, as Amended and Restated.	S-8	333-212154	4.4	June 21, 2016
10.1.2#	Form of Stock Option Award Agreement for U.S. Participants under INC Research Holdings, Inc. 2014 Equity Incentive Plan.	S-1/A	333-199178	10.6	October 17, 2014
10.1.3#	Form of Stock Option Award Agreement for Non-U.S. Participant under INC Research Holdings, Inc. 2014 Equity Incentive Plan.	S-1/A	333-199178	10.15	October 17, 2014
10.1.4#	Form of Stock Option Award Agreement for Non-U.S. Participants under INC Research Holdings, Inc. 2014 Equity Incentive Plan.	10-Q	001-36730	10.2	October 29, 2015

10.1.5#	Form of Stock Option Award Agreement for U.S. Participants under INC Research Holdings, Inc. 2014 Equity Incentive Plan.	10-Q	001-36730	10.3	October 29, 2015
10.1.6#	Form of Global Restricted Stock Unit Award Agreement under INC Research Holdings, Inc. 2014 Equity Incentive Plan, as Amended and Restated.	10-Q	001-36730	10.1	May 10, 2017
10.1.7#	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors under INC Research Holdings, Inc. 2014 Equity Incentive Plan, as Amended and Restated.	10-Q	001-36730	10.3	May 10, 2017
10.1.8#	Form of Performance-Based Restricted Stock Unit Award Agreement under the INC Research Holdings, Inc. 2014 Equity Incentive Plan.	10-Q	001-36730	10.6	May 9, 2018
10.1.9#	Form of Global Restricted Stock Unit Award Agreement under the INC Research Holdings, Inc. 2014 Equity Incentive Plan for the Chief Executive Officer.	10-Q	001-36730	10.7	May 9, 2018
10.1.10#	Form of Global Restricted Stock Unit Award Agreement under the INC Research Holdings, Inc. 2014 Equity Incentive Plan for the Chief Financial Officer.	10-Q	001-36730	10.8	May 9, 2018
10.2#	Management Incentive Plan.	10-K	001-36730	10.3	February 20, 2020
10.3.1#	Executive Service Agreement, by and between INC Research Holding Limited and Alistair Macdonald, dated July 27, 2016.	8-K	001-36730	10.2	July 28, 2016
10.3.2#	Letter Agreement, by and between INC Research Holdings, Inc. and Alistair Macdonald, dated July 27, 2016.	8-K	001-36730	10.4	July 28, 2016
10.3.3#	Amendment One to the Executive Service Agreement, made as of April 1, 2017, between INC Research Holdings Limited and Alistair Macdonald.	8-K	001-36730	10.1	April 6, 2017
10.3.4#	Amendment Two to the Executive Service Agreement, made as of January 15, 2020, between INC Research Holding Limited and Alistair Macdonald.	10-K	001-36730	10.4.4	February 20, 2020
10.3.5#	Letter Agreement between Syneos Health UK Limited and Alistair Macdonald, dated May 3, 2019.	10-Q	001-36730	10.8	April 30, 2020
10.4.1#	Executive Employment Agreement, effective April 8, 2014, by and between INC Research, LLC and Jason Meggs.	10-Q	001-36730	10.3	May 9, 2018
10.4.2#	Letter Agreement, dated March 20, 2018, by and among Syneos Health, Inc. and Jason Meggs.	10-Q	001-36730	10.4	May 9, 2018
10.4.3#	Letter Agreement, effective May 6, 2018, by and among Syneos Health, Inc. and Jason Meggs.	10-Q	001-36730	10.5	May 9, 2018
10.5.1#	Letter Agreement, dated November 13, 2018, by and among Syneos Health, Inc. and Jonathan Olefson.	10-K	001-36730	10.6	March 18, 2019
10.6.1#	Letter Agreement, dated November 7, 2017, by and between INC Research/inVentiv Health and Michelle Keefe.	10-K	001-36730	10.7	February 20, 2020
10.7.1#	Letter Agreement, dated August 29, 2018, by and between Syneos Health, Inc. and Paul D. Colvin.	10-K	001-36730	10.8	February 20, 2020

10.8	Voting Agreement, dated as of May 10, 2017, by and among Double Eagle Parent, Inc., INC Research Holdings, Inc. and Thomas H. Lee Partners, L.P.	8-K	001-36730	10.1	May 10, 2017
10.9	Voting Agreement, dated as of May 10, 2017, by and among Double Eagle Parent, Inc., INC Research Holdings, Inc. and Advent International Corporation.	8-K	001-36730	10.2	May 10, 2017
10.10	Stockholders' Agreement, dated as of May 10, 2017, by and among INC Research Holdings, Inc. and the stockholders party thereto.	8-K	001-36730	10.3	May 10, 2017
10.11	Stockholders' Agreement, dated as of May 10, 2017, by and among INC Research Holdings, Inc. and the stockholders party thereto.	8-K	001-36730	10.4	May 10, 2017
10.12.1	Credit Agreement, dated as of August 1, 2017, among INC Research Holdings, Inc., the Administrative Borrower, other Borrowers party thereto, the financial institution party thereto as lenders party thereto, Credit Suisse AG, as Administrative Agent, and each of the other parties as Joint Lead Arrangers and Joint Bookrunners party thereto.	8-K	001-36730	10.1	August 1, 2017
10.12.2	Amendment No. 1 to the Credit Agreement, dated as of May 4, 2018, among Syneos Health, Inc., the lenders party thereto, Credit Suisse AG, Cayman Islands Branch, as Administrative Agent, and each of the other parties thereto.	8-K	001-36730	10.1	May 7, 2018
10.12.3	Amendment No.2 to the Credit Agreement, dated as of March 26, 2019, among the Company, the lenders party thereto, JPMorgan Chase Bank N.A., as Administrative Agent, and each of the other parties thereto.	8-K	001-36730	10.1	March 28, 2019
10.12.4	Amendment No. 3 to the Credit Agreement, dated as of April 7, 2020, by and between Syneos Health, Inc. as Administrative Borrower and JPMorgan Chase Bank, N.A., as Administrative Agent.	10-Q	001-36730	10.2	April 30, 2020
10.12.5	Amendment No. 4 to the Credit Agreement dated as of November 24, 2020, by and among the Borrowers, the Lenders from time to time party thereto, and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent for the Lenders.	8-K	001-36730	4.4	November 25, 2020
10.13#	Double Eagle Parent, Inc. 2016 Omnibus Equity Incentive Plan.	S-8	333-219607	4.3	August 1, 2017
10.14.1#	Syneos Health, Inc. 2018 Equity Incentive Plan.	8-K	001-36730	10.1	May 25, 2018
10.14.2#	Form of Global Restricted Stock Unit Award Agreement under Syneos Health, Inc. 2018 Equity Incentive Plan.	10-K	001-36730	10.17.2	March 18, 2019
10.14.3#	Form of Global Performance Restricted Stock Unit Award Agreement under Syneos Health, Inc. 2018 Equity Incentive Plan.	10-K	001-36730	10.17.3	March 18, 2019

10.14.4#	Form of Global Performance Restricted Stock Unit Award Agreement under Syneos Health, Inc. 2018 Equity Incentive Plan (U.S. Participants).	8-K	001-36730	10.1	January 21, 2021
10.14.5#	Form of Global Performance Restricted Stock Unit Award Agreement under Syneos Health, Inc. 2018 Equity Incentive Plan (Non-U.S. Participants).	8-K	001-36730	10.2	January 21, 2021
10.15#	Syneos Health, Inc. 2016 Employee Stock Purchase Plan (as Amended and Restated).	8-K	001-36730	10.2	May 25, 2018
10.16.1	Purchase and Sale Agreement dated June 29, 2018 among various entities listed on Schedule I thereto, as originators, INC Research, LLC, as servicer, and Syneos Health Receivables LLC, as buyer.	8-K	001-36730	10.2	June 29, 2018
10.16.2	First Amendment to the Purchase and Sale Agreement, dated as of January 2, 2019, among various entities listed on Schedule I thereto, as originators, and Syneos Health, LLC, as servicer, and Syneos Health Receivables LLC as buyer.	-	-	-	Filed herewith.
10.16.3	Second Amendment to the Purchase and Sale Agreement, dated as of July 25, 2019, among inVentiv Commercial Services, LLC, each of the entities listed on the signature pages as an Existing Originator, and Syneos Health, LLC, as servicer, and Syneos Health Receivables LLC.	10-Q	001-36730	10.3	October 29, 2020
10.16.4	Fourth Amendment to the Purchase and Sale Agreement, dated as of September 25, 2020, among each of the entities listed on the signature pages as a New Originator, each of the entities listed on the signature pages as an Existing Originator, and Syneos Health, LLC, as servicer, and Syneos Health Receivables LLC.	10-Q	001-36730	10.1	October 29, 2020
10.16.5	Fifth Amendment to the Purchase and Sale Agreement, dated as of January 22, 2021, among each of the entities listed on the signature pages hereto as an Originator, Syneos Health, LLC, as services, and Syneos Health Receivables LLC.	-	-	-	Filed herewith
10.17.1	Receivables Financing Agreement, dated June 29, 2018 among Syneos Health Receivables, LLC, as borrower, PNC Bank, National Association, as administrative agent, INC Research, LLC, as initial servicer, PNC Capital Markets LLC, as structuring agent and the additional persons from time to time party thereto, as lenders.	8-K	001-36730	10.1	June 29, 2018
10.17.2	First Amendment to the Receivables Financing Agreement, dated August 1, 2018 among Syneos Health Receivables LLC, as borrower, PNC Bank, National Association, as administrative agent and as lender and INC Research, LLC, as initial servicer.	10-Q	001-36730	10.6	August 2, 2018
10.17.3	Second Amendment to the Receivables Financing Agreement, dated August 29, 2018 among Syneos Health Receivables LLC, as borrower, PNC Bank, National Association, as administrative agent and as lender and INC Research, LLC, as initial servicer.	10-Q	001-36730	10.2	November 6, 2018

10.17.4	Third Amendment to the Receivables Financing Agreement, dated October 25, 2018 among Syneos Health Receivables LLC, as borrower, PNC Bank, National Association, as administrative agent and as lender and INC Research, LLC, as initial servicer.	10-Q	001-36730	10.3	November 6, 2018
10.17.5	Fourth Amendment to the Receivables Financing Agreement, dated January 2, 2019, among Syneos Health Receivables LLC, as borrower, PNC Bank, National Association, as administrative agent and as lender and Syneos Health, LLC as initial servicer.	10-Q	001-36730	10.1	August 6, 2019
10.17.6	Fifth Amendment to the Receivables Financing Agreement, dated July 25, 2019, among Syneos Health Receivables LLC, as borrower, PNC Bank, National Association, as administrative agent and as lender and Syneos Health, LLC as initial servicer.	10-Q	001-36730	10.2	August 6, 2019
10.17.7	Sixth Amendment to the Receivables Financing Agreement, dated September 30, 2019, among Syneos Health Receivables LLC, as borrower, PNC Bank, National Association, as administrative agent and as lender and Syneos Health, LLC as initial servicer.	10-Q	001-36730	10.1	October 31, 2019
10.17.8	Omnibus Amendment, dated January 31, 2020, that is the Third Amendment to the Purchase and Sale Agreement and the Seventh Amendment to the Receivables Financing Agreement, among Syneos Health Receivables LLC, as borrower, PNC Bank, National Association, as administrative agent and as lender, Syneos Health, LLC as the servicer and as a Remaining Originator, inVentiv Health Clinical, LLC as a released originator, and inVentiv Commercial Services, LLC as a remaining originator.	10-K	001-36730	10.19.8	February 20, 2020
10.17.9	Eighth Amendment to the Receivables Financing Agreement, dated March 18, 2020, among Syneos Health Receivables LLC, as borrower, Syneos Health, LLC as initial servicer, and PNC Bank, National Association, as administrative agent and as lender.	10-Q	001-36730	10.1	April 30, 2020
10.17.10	Ninth Amendment to the Receivables Financing Agreement, dated as of September 25, 2020, by and among Syneos Health Receivables LLC, as borrower, Syneos Health, LLC, as initial servicer, and PNC Bank, National Association, as administrative agent and as lender.	10-Q	001-36730	10.2	October 29, 2020
10.17.11	Tenth Amendment to the Receivables Financing Agreement, dated as of January 22, 2021, by and among Syneos Health Receivables LLC, as borrower, Syneos Health, LLC, as initial services, Regions Bank, as a lender, and PNC Bank, National Association, as administrative agent and as a lender.	-	-	-	Filed herewith

10.18#	Syneos Health, Inc. Executive Severance Plan, Adopted September 15, 2016, amended and restated August 20, 2018.	10-Q	001-36730	10.1	November 6, 2018
10.19#	Form of Director Indemnification Agreement	10-Q	001-36730	10.1	August 6, 2020
21.1	List of Subsidiaries of the Registrant.	—	—	—	Filed herewith
23.1	Consent of Deloitte & Touche LLP.	—	—	—	Filed herewith
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	—	—	—	Filed herewith
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	—	—	—	Filed herewith
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	—	—	—	Furnished herewith
32.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	—	—	—	Furnished herewith
101.INS	Inline XBRL Instance Document - the Instance Document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document.	—	—	—	Filed herewith
101.SCH	Inline XBRL Taxonomy Extension Schema Document.	—	—	—	Filed herewith
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	—	—	—	Filed herewith
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.	—	—	—	Filed herewith
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.	—	—	—	Filed herewith
101.PRE	Inline Taxonomy Extension Presentation Linkbase Document.	—	—	—	Filed herewith
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	—	—	—	Filed herewith

# Denotes management contract or compensatory plan.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Syneos Health, Inc.
By: /s/ Alistair Macdonald
Name: Alistair Macdonald
Title: Chief Executive Officer (Principal Executive Officer) and Director
Date: February 17, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Alistair Macdonald Alistair Macdonald	Chief Executive Officer (Principal Executive Officer) and Director	February 17, 2021
/s/ Jason Meggs Jason Meggs	Chief Financial Officer (Principal Financial Officer)	February 17, 2021
/s/ Donna Kralowetz Donna Kralowetz	Senior Vice President, Chief Accounting Officer (Principal Accounting Officer)	February 17, 2021
/s/ John M. Dineen John M. Dineen	Chairman and Director	February 17, 2021
/s/ Todd Abbrecht Todd Abbrecht	Director	February 17, 2021
/s/ Thomas Allen Thomas Allen	Director	February 17, 2021
/s/ Bernadette M. Connaughton Bernadette M. Connaughton	Director	February 17, 2021
/s/ Linda A. Harty Linda A. Harty	Director	February 17, 2021
/s/ William E. Klitgaard William E. Klitgaard	Director	February 17, 2021
/s/ John Maldonado John Maldonado	Director	February 17, 2021
/s/ Kenneth F. Meyers Kenneth F. Meyers	Director	February 17, 2021
/s/ Matthew E. Monaghan Matthew E. Monaghan	Director	February 17, 2021
/s/ Joshua M. Nelson Joshua M. Nelson	Director	February 17, 2021

Exhibit 10.16.2

EXECUTION VERSION

FIRST AMENDMENT TO THE
PURCHASE AND SALE AGREEMENT

THIS FIRST AMENDMENT TO THE PURCHASE AND SALE AGREEMENT (this "Amendment"), dated as of January 2, 2019, is entered into among the VARIOUS ENTITIES LISTED ON SCHEDULE I HERETO, as originators (each, an "Originator"; and collectively, the "Originators"), and SYNEOS HEALTH, LLC (f/k/a INC RESEARCH, LLC), as servicer (in such capacity, the "Servicer") and SYNEOS HEALTH RECEIVABLES LLC (the "Buyer").

Capitalized terms used but not otherwise defined herein (including such terms used above) have the respective meanings assigned thereto in the Purchase and Sale Agreement described below.

BACKGROUND

A. The parties hereto have entered into a Purchase and Sale Agreement, dated as of June 29, 2018 (as amended, restated, supplemented or otherwise modified through the date hereof, the "Purchase and Sale Agreement").

B. Concurrently herewith, the Buyer, as borrower, the Servicer and PNC Bank, National Association, as administrative agent and as a lender (the "Administrative Agent") are entering into that certain Fourth Amendment to Receivables Financing Agreement, dated as of the date hereof (the "RFA Amendment").

C. Concurrently herewith, the Borrower, the Servicer, the Administrative Agent and Bank of America, N.A. are entering into that certain First Amendment to the Deposit Account Control Agreement, dated as of the date hereof.

D. Concurrently herewith, the Borrower, the Servicer, the Administrative Agent and Wells Fargo Bank, National Association are entering into that certain First Amendment to the Deposit Account Control Agreement, dated as of the date hereof.

E. Effective as of the date hereof, INC Research, LLC, a Delaware limited liability company, is changing its name from "INC Research, LLC" to "Syneos Health, LLC".

F. The parties hereto desire to amend the Purchase and Sale Agreement as hereinafter set forth.

NOW THEREFORE, with the intention of being legally bound hereby, and in consideration of the mutual undertakings expressed herein, each party to this Amendment hereby agrees as follows:

SECTION 1. Amendments to the Purchase and Sale Agreement. The Purchase and Sale Agreement is hereby amended as follows:

(a) Schedule I to the Purchase and Sale Agreement is hereby replaced in its entirety with Schedule I attached hereto.

(b) Schedule II to the Purchase and Sale Agreement is hereby replaced in its entirety with Schedule II attached hereto.

(c) Schedule III to the Purchase and Sale Agreement is hereby replaced in its entirety with Schedule III attached hereto.

(d) Schedule IV to the Purchase and Sale Agreement is hereby replaced in its entirety with Schedule IV attached hereto.

SECTION 2. Representations and Warranties of the Originators. Each Originator hereby represents and warrants as of the date hereof as follows:

(a) *Representations and Warranties*. The representations and warranties made by it in the Purchase and Sale Agreement and each of the other Transaction Documents to which it is a party are true and correct as of the date hereof.

(b) *Enforceability*. The execution and delivery by it of this Amendment, and the performance of its obligations under this Amendment, the Purchase and Sale Agreement (as amended hereby) and the other Transaction Documents to which it is a party are within its organizational powers and have been duly authorized by all necessary action on its part, and this Amendment, the Purchase and Sale Agreement (as amended hereby) and the other Transaction Documents to which it is a party are (assuming due authorization and execution by the other parties thereto) its valid and legally binding obligations, enforceable in accordance with their terms, except (i) as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (ii) as such enforceability may be limited by general principles of equity, regardless of whether such enforceability is considered in a proceeding in equity or at law.

(c) *No Event of Default*. No Purchase and Sale Termination Event, Unmatured Purchase and Sale Termination Event, Event of Default or Unmatured Event of Default has occurred and is continuing, or would occur as a result of this Amendment or the transactions contemplated hereby.

SECTION 3. Effect of Amendment; Ratification. All provisions of the Purchase and Sale Agreement and the other Transaction Documents, as expressly amended and modified by this Amendment, shall remain in full force and effect. After this Amendment becomes effective, all references in the Purchase and Sale Agreement (or in any other Transaction Document) to "this Agreement", "hereof", "herein" or words of similar effect referring to the Purchase and Sale Agreement shall be deemed to be references to the Purchase and Sale Agreement as amended by this Amendment. This Amendment shall not be deemed, either expressly or impliedly, to waive, amend or supplement any provision of the Purchase and Sale Agreement other than as set forth herein. The Purchase and Sale Agreement, as amended by this Amendment, is hereby ratified and confirmed in all respects.

SECTION 4. Effectiveness. This Amendment shall become effective concurrently with the effectiveness of the RFA Amendment.

SECTION 5. Authorization to File Financing Statement Amendments. Upon the effectiveness of this Amendment, each of the parties hereto hereby authorize the Administrative Agent to file (at the expense of the Buyer) UCC-3 amendments in substantially the form of Exhibit A hereto amending the UCC-1 financing statements identified on Exhibit B hereto.

SECTION 6. Severability. Any provisions of this Amendment which are prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

SECTION 7. Transaction Document. This Amendment shall be a Transaction Document for purposes of the Receivables Financing Agreement.

SECTION 8. Counterparts. This Amendment may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which when taken together shall constitute one and the same agreement. Delivery of an executed counterpart hereof by facsimile or other electronic means shall be equally effective as delivery of an originally executed counterpart.

SECTION 9. GOVERNING LAW AND JURISDICTION.

(a) THIS AMENDMENT, INCLUDING THE RIGHTS AND DUTIES OF THE PARTIES HERETO, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK (INCLUDING SECTIONS 5-1401 AND 5-1402 OF THE GENERAL OBLIGATIONS LAW OF THE STATE OF NEW YORK, BUT WITHOUT REGARD TO ANY OTHER CONFLICTS OF LAW PROVISIONS THEREOF).

(b) EACH PARTY HERETO HEREBY IRREVOCABLY SUBMITS TO (I) WITH RESPECT TO THE BUYER, THE ORIGINATORS AND THE SERVICER, THE EXCLUSIVE JURISDICTION, AND (II) WITH RESPECT TO EACH OF THE OTHER PARTIES HERETO, THE NON-EXCLUSIVE JURISDICTION, IN EACH CASE, OF ANY NEW YORK STATE OR FEDERAL COURT SITTING IN NEW YORK CITY, NEW YORK IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AMENDMENT, AND EACH PARTY HERETO HEREBY IRREVOCABLY AGREES THAT ALL CLAIMS IN RESPECT OF SUCH ACTION OR PROCEEDING (I) IF BROUGHT BY THE BUYER, THE SERVICER, ANY ORIGINATOR OR ANY AFFILIATE THEREOF, SHALL BE HEARD AND DETERMINED, AND (II) IF BROUGHT BY ANY OTHER PARTY TO THIS AMENDMENT, MAY BE HEARD AND DETERMINED, IN EACH CASE, IN SUCH NEW YORK STATE COURT OR, TO THE EXTENT PERMITTED BY LAW, IN SUCH FEDERAL COURT. NOTHING IN THIS SECTION 9 SHALL AFFECT THE RIGHT OF THE ADMINISTRATIVE AGENT OR ANY OTHER CREDIT PARTY TO BRING ANY ACTION OR PROCEEDING AGAINST THE BUYER OR THE SERVICER OR ANY OF THEIR RESPECTIVE PROPERTY IN THE COURTS OF OTHER JURISDICTIONS. EACH OF THE BUYER, EACH ORIGINATOR AND THE SERVICER HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT IT MAY EFFECTIVELY DO SO, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR

PROCEEDING. THE PARTIES HERETO AGREE THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW.

SECTION 10. Section Headings. The various headings of this Amendment are included for convenience only and shall not affect the meaning or interpretation of this Amendment, the Purchase and Sale Agreement or any provision hereof or thereof.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment by their duly authorized officers as of the date first above written.

SYNEOS HEALTH, LLC,
as the Servicer and as an Originator

By: /s/ Jason Meggs
Name: Jason Meggs
Title: Chief Financial Officer

INVENTIV HEALTH CLINICAL, LLC,
as an Originator

By: /s/ Thomas E. Zajkowski
Name: Thomas E. Zajkowski
Title: Treasurer

SYNEOS HEALTH RECEIVABLES LLC,
as the Buyer

By: /s/ Thomas E. Zajkowski
Name: Thomas E. Zajkowski
Title: President

Consented to:

PNC BANK, NATIONAL ASSOCIATION,
as Administrative Agent and as a Lender

By: /s/ Christopher Blaney
Name: Christopher Blaney
Title: Senior Vice President

Schedule I

LIST AND LOCATION OF EACH ORIGINATOR

Originator	Location
Syneos Health, LLC	Delaware
inVentiv Health Clinical, LLC	Delaware

Schedule II

LOCATION OF BOOKS AND RECORDS OF ORIGINATORS

Originator	Location of Books and Records
Syneos Health, LLC	1030 Sync Street, Morrisville, NC 27560
inVentiv Health Clinical, LLC	1030 Sync Street, Morrisville, NC 27560

TRADE NAMES

Syneos Health, LLC

Syneos Health, LLC was formerly known as INC Research, LLC

Syneos Health has been used as a trade name since January 4, 2018.

Syneos Health, LLC has qualified to do business in the State of California under the name "Integrated Neurosciences Consortium, LLC".

inVentiv Health Clinical, LLC

Syneos Health has been used as a trade name since January 4, 2018.

NOTICE ADDRESSES

If to Syneos Health, LLC:

Syneos Health, LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Wyrick Robbins Yates & Ponton LLP
4101 Lake Boone Trail, Suite 300
Raleigh, NC 27607
Attention: Carolyn W. Minshall, Esq.

If to inVentiv Health Clinical, LLC:

inVentiv Health Clinical, LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Wyrick Robbins Yates & Ponton LLP
4101 Lake Boone Trail, Suite 300
Raleigh, NC 27607
Attention: Carolyn W. Minshall, Esq.

UCC-3s TO BE FILED

UCC-1 TO BE AMENDED

Debtor	Filing Office	Identification Number	Filing Date
INC Research, LLC	Delaware Secretary of State	20184470841	6/29/2018
inVentiv Health Clinical, LLC	Delaware Secretary of State	20184470494	6/29/2018
Syneos Health Receivables LLC	Delaware Secretary of State	20184471195	6/29/2018

Exhibit 10.16.5

EXECUTION VERSION

FIFTH AMENDMENT TO THE
PURCHASE AND SALE AGREEMENT

THIS FIFTH AMENDMENT TO THE PURCHASE AND SALE AGREEMENT (this "Amendment"), dated as of January 28, 2021, is entered into among each of the entities listed on the signature pages hereto as an Originator (each an "Originator", and collectively, the "Originators"), and SYNEOS HEALTH, LLC (f/k/a INC RESEARCH, LLC) ("Syneos Health"), as servicer (in such capacity, the "Servicer") and SYNEOS HEALTH RECEIVABLES LLC (the "Buyer").

Capitalized terms used but not otherwise defined herein (including such terms used above) have the respective meanings assigned thereto in the Purchase and Sale Agreement described below.

BACKGROUND

A. The parties hereto have entered into a Purchase and Sale Agreement, dated as of June 29, 2018 (as amended, restated, supplemented or otherwise modified through the date hereof, the "Purchase and Sale Agreement").

B. Concurrently herewith, the Buyer, as borrower, the Servicer and PNC Bank, National Association, as administrative agent and as a lender (the "Administrative Agent") are entering into that certain Tenth Amendment to Receivables Financing Agreement, dated as of the date hereof (the "RFA Amendment").

C. Effective as of the January 11, 2021, (such date, the "inVentiv Name Change Date"), inVentiv Commercial Services, LLC, a New Jersey limited liability company, changed its name from "inVentiv Commercial Services, LLC" to "Syneos Health Commercial Services, LLC".

D. The parties hereto desire to amend the Purchase and Sale Agreement as hereinafter set forth.

NOW THEREFORE, with the intention of being legally bound hereby, and in consideration of the mutual undertakings expressed herein, each party to this Amendment hereby agrees as follows:

SECTION 1. Amendments to the Purchase and Sale Agreement. As of the inVentiv Name Change date, the Purchase and Sale Agreement is hereby amended as follows:

(a) Schedule I to the Purchase and Sale Agreement is hereby replaced in its entirety with Schedule I attached hereto.

(b) Schedule II to the Purchase and Sale Agreement is hereby replaced in its entirety with Schedule II attached hereto.

(c) Schedule III to the Purchase and Sale Agreement is hereby replaced in its entirety with Schedule III attached hereto.

(d) Schedule IV to the Purchase and Sale Agreement is hereby replaced in its entirety with Schedule IV attached hereto.

SECTION 2. Representations and Warranties of the Originators. Each Originator hereby represents and warrants as of the date hereof as follows:

(a) *Representations and Warranties*. The representations and warranties made by it in the Purchase and Sale Agreement and each of the other Transaction Documents to which it is a party are true and correct as of the date hereof.

(b) *Enforceability*. The execution and delivery by it of this Amendment, and the performance of its obligations under this Amendment, the Purchase and Sale Agreement (as amended hereby) and the other Transaction Documents to which it is a party are within its organizational powers and have been duly authorized by all necessary action on its part, and this Amendment, the Purchase and Sale Agreement (as amended hereby) and the other Transaction Documents to which it is a party are (assuming due authorization and execution by the other parties thereto) its valid and legally binding obligations, enforceable in accordance with their terms, except (i) as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (ii) as such enforceability may be limited by general principles of equity, regardless of whether such enforceability is considered in a proceeding in equity or at law.

(c) *No Event of Default*. No Purchase and Sale Termination Event, Unmatured Purchase and Sale Termination Event, Event of Default or Unmatured Event of Default has occurred and is continuing, or would occur as a result of this Amendment or the transactions contemplated hereby.

SECTION 3. Effect of Amendment; Ratification. All provisions of the Purchase and Sale Agreement and the other Transaction Documents, as expressly amended and modified by this Amendment, shall remain in full force and effect. After this Amendment becomes effective, all references in the Purchase and Sale Agreement (or in any other Transaction Document) to "the Purchase and Sale Agreement", "this Agreement", "hereof", "herein" or words of similar effect referring to the Purchase and Sale Agreement shall be deemed to be references to the Purchase and Sale Agreement as amended by this Amendment. This Amendment shall not be deemed, either expressly or impliedly, to waive, amend or supplement any provision of the Purchase and Sale Agreement other than as set forth herein. The Purchase and Sale Agreement, as amended by this Amendment, is hereby ratified and confirmed in all respects.

SECTION 4. Effectiveness. This Amendment shall become effective concurrently with the effectiveness of the RFA Amendment.

SECTION 5. Authorization to File Financing Statement Amendments. Upon the effectiveness of this Amendment, each of the parties hereto hereby authorize the Administrative Agent to file (at the expense of the Buyer) UCC-3 amendments in substantially the form of Exhibit A hereto amending the UCC-1 financing statements identified on Exhibit B hereto.

SECTION 6. Severability. Any provisions of this Amendment which are prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

SECTION 7. Transaction Document. This Amendment shall be a Transaction Document for purposes of the Receivables Financing Agreement.

SECTION 8. Counterparts. This Amendment may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which when taken together shall constitute one and the same agreement. Delivery of an executed counterpart hereof by facsimile or other electronic means shall be equally effective as delivery of an originally executed counterpart. The words "execution," "execute", "signed," "signature," and words of like import in or related to any document to be signed in connection with this Amendment and the transactions contemplated hereby shall be deemed to include electronic signatures, the electronic matching of assignment terms and contract formations on electronic platforms approved by the Administrative Agent, or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

SECTION 9. GOVERNING LAW AND JURISDICTION.

(a) THIS AMENDMENT, INCLUDING THE RIGHTS AND DUTIES OF THE PARTIES HERETO, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK (INCLUDING SECTIONS 5-1401 AND 5-1402 OF THE GENERAL OBLIGATIONS LAW OF THE STATE OF NEW YORK, BUT WITHOUT REGARD TO ANY OTHER CONFLICTS OF LAW PROVISIONS THEREOF).

(b) EACH PARTY HERETO HEREBY IRREVOCABLY SUBMITS TO (I) WITH RESPECT TO THE BUYER, THE ORIGINATORS AND THE SERVICER, THE EXCLUSIVE JURISDICTION, AND (II) WITH RESPECT TO EACH OF THE OTHER PARTIES HERETO, THE NON-EXCLUSIVE JURISDICTION, IN EACH CASE, OF ANY NEW YORK STATE OR FEDERAL COURT SITTING IN NEW YORK CITY, NEW YORK IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AMENDMENT, AND EACH PARTY HERETO HEREBY IRREVOCABLY AGREES THAT ALL CLAIMS IN RESPECT OF SUCH ACTION OR PROCEEDING (I) IF BROUGHT BY THE BUYER, THE SERVICER, ANY ORIGINATOR OR ANY AFFILIATE THEREOF, SHALL BE HEARD AND DETERMINED, AND (II) IF BROUGHT BY ANY OTHER PARTY TO THIS AMENDMENT, MAY BE HEARD AND DETERMINED, IN EACH CASE, IN SUCH NEW YORK STATE COURT OR, TO THE EXTENT PERMITTED BY LAW, IN SUCH FEDERAL COURT. NOTHING IN THIS SECTION 9 SHALL AFFECT THE RIGHT OF THE ADMINISTRATIVE

AGENT OR ANY OTHER CREDIT PARTY TO BRING ANY ACTION OR PROCEEDING AGAINST THE BUYER OR THE SERVICER OR ANY OF THEIR RESPECTIVE PROPERTY IN THE COURTS OF OTHER JURISDICTIONS. EACH OF THE BUYER, EACH ORIGINATOR AND THE SERVICER HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT IT MAY EFFECTIVELY DO SO, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING. THE PARTIES HERETO AGREE THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW.

SECTION 10. Section Headings. The various headings of this Amendment are included for convenience only and shall not affect the meaning or interpretation of this Amendment, the Purchase and Sale Agreement or any provision hereof or thereof.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment by their duly authorized officers as of the date first above written.

SYNEOS HEALTH, LLC,
as the Servicer and as an Originator

By: /s/ Jason Meggs
Name: Jason Meggs
Title: Chief Financial Officer

SYNEOS HEALTH COMMERCIAL SERVICES, LLC,
as an Originator

By: /s/ Jason Meggs
Name: Jason Meggs
Title: Manager

ADDISON WHITNEY LLC,
as an Originator

By: _____
Name: Sara Epstein
Title: Vice President and Assistant Secretary

BIOSECTOR 2 LLC,
as an Originator

By: _____
Name: Sara Epstein
Title: Vice President and Assistant Secretary

IN WITNESS WHEREOF, the parties hereto have executed this Amendment by their duly authorized officers as of the date first above written.

SYNEOS HEALTH, LLC,
as the Servicer and as an Originator

By: _____
Name: Jason Meggs
Title: Manager

SYNEOS HEALTH COMMERCIAL SERVICES, LLC,
as an Originator

By: _____
Name: Jason Meggs
Title: Manager

ADDISON WHITNEY LLC,
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President and Assistant Secretary

BIOSECTOR 2 LLC,
as an Originator

By: Sara Epstein
Name: Sara Epstein
Title: Vice President and Assistant Secretary

CADENT MEDICAL COMMUNICATIONS, LLC,
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President and Assistant Secretary

CHAMBERLAIN COMMUNICATIONS GROUP LLC,
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President and Assistant Secretary

CHANDLER CHICCO AGENCY, L.L.C.,
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President

GERBIG, SNELL/WEISHEIMER ADVERTISING, LLC,
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President and Assistant Secretary

SYNEOS HEALTH MEDICAL COMMUNICATIONS, LLC,
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President and Assistant Secretary

NAVICOR GROUP, LLC,
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President and Assistant Secretary

PALIO + IGNITE, LLC,
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President and Assistant Secretary

THE SELVA GROUP, LLC
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President and Assistant Secretary

SYNEOS HEALTH COMMUNICATIONS, INC.,
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President and Secretary

TAYLOR STRATEGY PARTNERS, LLC,
as an Originator

By: /s/ Sara Epstein
Name: Sara Epstein
Title: Vice President and Assistant Secretary

SYNEOS HEALTH RECEIVABLES LLC,
as the Buyer

By: /s/ Robert Parks
Name: Robert Parks
Title: President

LIST AND LOCATION OF EACH ORIGINATOR

Originator	Location
Syneos Health, LLC	Delaware
Syneos Health Commercial Services, LLC	New Jersey
Addison Whitney LLC	North Carolina
BioSector 2 LLC	New York
Cadent Medical Communications, LLC	Ohio
Chamberlain Communications Group LLC	Delaware
Chandler Chicco Agency, L.L.C.	New York
Gerbig, Snell/Weisheimer Advertising, LLC	Ohio
Syneos Health Medical Communications, LLC	Ohio
Navicor Group, LLC	Ohio
Palio + Ignite, LLC	Ohio
Syneos Health Communications, Inc.	Ohio
The Selva Group, LLC	Ohio
Taylor Strategy Partners, LLC	Ohio

LOCATION OF BOOKS AND RECORDS OF ORIGINATORS

Originator	Location of Books and Records
Syneos Health, LLC	1030 Sync Street, Morrisville, NC 27560
Syneos Health Commercial Services, LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
Addison Whitney LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
BioSector 2 LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
CADENT MEDICAL COMMUNICATIONS, LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
Chamberlain Communications Group LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
CHANDLER CHICCO AGENCY, L.L.C.	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
GERBIG, SNELL/WEISHEIMER ADVERTISING, LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
Syneos Health Medical Communications, LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
NAVICOR GROUP, LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
Palio + Ignite, LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
Syneos Health Communications, Inc.	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
THE SELVA GROUP, LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210
Taylor Strategy Partners, LLC	470 Atlantic Avenue, 11th Floor, Boston, MA 02210

TRADE NAMES

Syneos Health, LLC

Syneos Health, LLC was formerly known as INC Research, LLC, INC Research, Inc., and Integrated Neuroscience Consortium, Inc.

Syneos Health has been used as a trade name since January 4, 2018.

Syneos Health, LLC has qualified to do business in the State of California.

Syneos Health Commercial Services, LLC

Syneos Health Commercial Services, LLC was formerly known as inVentiv Commercial Services, LLC; Ventiv Commercial Services, LLC; Ventiv Pharma Services, LLC; and Ventiv Health US. Sales LLC.

Syneos Health has been used as a trade name since January 4, 2018.

inVentiv Commercial Services, LLC has qualified to do business in the State of New Jersey and the State of Texas under the name "inVentiv Commercial, LLC".

Addison Whitney LLC

Addison Whitney LLC was formerly known as AW Acquisition LLC.

BioSector 2 LLC

BioSector 2 LLC was formerly known as Sector 2 LLC.

Cadent Medical Communications, LLC

Cadent Medical Communications, LLC was formerly known as S.G. Madison & Associates, LLC.

Cadent Medical Communications, LLC has qualified to do business in the State of Ohio under the name "Cadent Medical Communications".

Chamberlain Communications Group LLC

Chamberlain Communications Group LLC was formerly known as Chamberlin Communications LLC.

Chandler Chicco Agency, L.L.C.

N/A

Gerbig, Snell/Weisheimer Advertising, LLC

N/A

Syneos Health Medical Communications, LLC

Syneos Health Medical Communications, LLC was formerly known as inVentiv Medical Communications, LLC and inVentiv Medical Education Group, LLC.

Navicor Group, LLC

N/A

Palio + Ignite, LLC

Palio + Ignite, LLC was formerly known as Palio Communications, LLC.

The Selva Group, LLC

N/A

Syneos Health Communications, Inc.

Syneos Health Communications, Inc. was formerly known as inVentiv Health Communications, Inc, inVentiv Communications, Inc., inChord Communications, Inc., Gerbig, Snell/Weisheimer & Associates, Inc., and Gerbig, Snell, Weisheimer & Associates, Inc.

Syneos Health Communications, Inc. has qualified to do business in the state of New York under the name “inVentiv Communications, Inc.”

Taylor Strategy Partners, LLC

Taylor Strategy Partners, LLC was formerly known as Taylor Search Partners, LLC

NOTICE ADDRESSES

If to Syneos Health, LLC:

Syneos Health, LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to Syneos Health Commercial Services, LLC:

Syneos Health Commercial Services, LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to Addison Whitney LLC:

Addison Whitney LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP

885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to BioSector 2 LLC:

BioSector 2 LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to Cadent Medical Communications, LLC :

Cadent Medical Communications, LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to Chamberlain Communications Group LLC :

Chamberlain Communications Group LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue

New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to Chandler Chicco Agency, L.L.C.:

Chandler Chicco Agency, L.L.C.
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to Gerbig, Snell/Weisheimer Advertising, LLC:

Gerbig, Snell/Weisheimer Advertising, LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to Syneos Health Medical Communications LLC:

Syneos Health Medical Communications LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834

Attention: Graeme Smyth, Esq.

If to Navicor Group, LLC:

Navicor Group, LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to Palio + Ignite, LLC:

Palio + Ignite, LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to The Selva Group, LLC:

The Selva Group, LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to Syneos Health Communications, Inc.:

Syneos Health Communications, Inc.
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

If to Taylor Strategy Partners, LLC:

Taylor Strategy Partners, LLC
c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560
Attention: General Counsel

with a copy to:

Latham & Watkins LLP
885 3rd Avenue
New York, NY 10022-4834
Attention: Graeme Smyth, Esq.

UCC-3s TO BE FILED

UCC-1 TO BE AMENDED

Debtor	Filing Office	Identification Number	Filing Date
Syneos Health Commercial Services, LLC (f/k/a inVentiv Commercial Services, LLC)	New Jersey Secretary of State	26735252	07/25/2019

TENTH AMENDMENT TO THE RECEIVABLES FINANCING AGREEMENT

This TENTH AMENDMENT TO THE RECEIVABLES FINANCING AGREEMENT (this "Amendment"), dated as of January 28, 2021, is entered into by and among the following parties:

(i) SYNEOS HEALTH RECEIVABLES LLC, as Borrower;

(ii) SYNEOS HEALTH, LLC (f/k/a INC RESEARCH, LLC), as initial Servicer;

(iii) REGIONS BANK ("Regions") as a Lender; and

(iv) PNC BANK, NATIONAL ASSOCIATION ("PNC"), as Administrative Agent and as a Lender.

Capitalized terms used but not otherwise defined herein (including such terms used above) have the respective meanings assigned thereto in the Receivables Financing Agreement described below.

BACKGROUND

A. The parties hereto (other than Regions) have entered into a Receivables Financing Agreement, dated as of June 29, 2018 (as amended, restated, supplemented or otherwise modified through the date hereof, the "Receivables Financing Agreement").

B. Concurrently herewith, the Borrower, the Administrative Agent, the Lenders and PNC Capital Markets LLC are entering into that certain Amended and Restated Fee Letter dated as of the date hereof (the "Fee Letter").

C. Concurrently herewith, the Borrower, as buyer, the Servicer, as servicer and as an originator, and the other originators from time to time party thereto, are entering into that certain Fifth Amendment to the Purchase and Sale Agreement, dated as of the date hereof (the "PSA Amendment").

D. Regions desires to become party to the Receivables Financing Agreement on the terms set forth herein.

E. Effective as of January 11, 2021 (such date, the "inVentiv Name Change Date"), inVentiv Commercial Services, LLC, a New Jersey limited liability company, changed its name from "inVentiv Commercial Services, LLC" to "Syneos Health Commercial Services, LLC" (such change, the "inVentiv Name Change").

F. The parties hereto desire to amend the Receivables Financing Agreement as set forth herein.

NOW THEREFORE, with the intention of being legally bound hereby, and in consideration of the mutual undertakings expressed herein, each party to this Amendment hereby agrees as follows:

SECTION 1. Joinder of Regions; Initial Loan by Regions.

(a) Joinder. Effective as of the date hereof, Regions hereby becomes a party to the Receivables Financing Agreement and the Fee Letter as a Lender thereunder with all the rights, interests, duties and obligations of a Lender set forth therein. In its capacity as a Lender, Region's Commitment shall be the applicable amount set forth on Schedule I attached hereto.

(b) Initial Loan by Regions. The Borrower hereby request that Regions fund a Loan on the date hereof in the initial principal amount of $65,000,000. Such Loan shall be funded by Regions on the date hereof in accordance with the terms of the Receivables Financing Agreement and upon satisfaction of all conditions precedent thereto specified in the Receivables Financing Agreement.

(c) Consents. The parties hereto hereby consent to the joinder of Regions as party to the Receivables Financing Agreement and the Fee Letter on the terms set forth in clause (a) above and the foregoing non-ratable initial Loan to be funded by Regions on the terms set forth in clause (b) above on a one-time basis.

(d) Credit Decision. Regions (i) confirms to the Administrative Agent and the Lenders, that it has received a copy of the Receivables Financing Agreement, the other Transaction Documents, and such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Amendment and (ii) agrees that it will, independently and without reliance upon the Administrative Agent, the Lenders and their respective Affiliates, based on such documents and information as Regions shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Receivables Financing Agreement and any other Transaction Document. None of the Administrative Agent or the Lenders makes or has made any representation or warranty or assumes or has assumed any responsibility with respect to (x) any statements, warranties or representations made in or in connection with the Receivables Financing Agreement, any other Transaction Document or any other instrument or document furnished pursuant thereto or the execution, legality, validity, enforceability, genuineness, sufficiency or value of the Receivables Financing Agreement, the Receivables, the Collateral, any other Transaction Document or any other instrument or document furnished pursuant thereto or (y) the financial condition of the Borrower, the Servicer, the Performance Guarantor or the Originators or the performance or observance by any of them any of their respective obligations under the Receivables Financing Agreement, any other Transaction Document, or any instrument or document furnished pursuant thereto.

SECTION 2. Amendments to the Receivables Financing Agreement . The Receivables Financing Agreement is hereby amended to incorporate the changes shown on the marked pages of the Receivables Financing Agreement attached hereto as Exhibit A.

SECTION 3. Notices; Consents.

(a) Notice of the InVentiv Name Change. On December 10, 2020, the Servicer provided notice of the occurrence of the InVentiv Name Change, effective as of the inVentiv Name Change Date, and the Servicer hereby requests that each of the parties hereto hereby acknowledges and consents to the InVentiv Name Change effective as of the inVentiv Name Change Date.

(b) InVentiv Name Change Consent. Subject to the terms and conditions of this Amendment, including the accuracy of each of the representations and warranties set forth herein, each of the parties hereto hereby: (i) acknowledges receipt of the notice described in clause (a) above and (ii) consents to the occurrence of the InVentiv Name Change.

(c) General Limitations. The limited consent set forth in clause (b) above shall be strictly limited to its terms. Consistent with the foregoing, nothing contained herein shall be deemed to be a consent to any party to the Transaction Documents failing to perform its obligations under the Transaction Documents other than solely to the extent set forth in clause (b) above. Notwithstanding anything to the contrary herein or in the Transaction Documents, by executing this Amendment, no party hereto is now waiving or consenting to, nor has it agreed to waive or consent to in the future (i) the modification or breach of any provision of the Transaction Documents, other than as expressly set forth in clauses (a) and (b) above, (ii) any Event of Default or Unmatured Event of Default under the Receivables Financing Agreement or the other Transaction Documents (whether presently or subsequently existing or arising), other than as expressly set forth in clauses (a) and (b) above or (iii) any rights, powers or remedies presently or subsequently available to any of the parties hereto or any other Person against the Borrower or the Servicer under the Receivables Financing Agreement, any of the other Transaction Documents, applicable law or otherwise, relating to any matter other than solely to the extent expressly consented to herein, each of which rights, powers or remedies is hereby specifically and expressly reserved and continue.

(d) No Waiver of Indemnification, Etc. Without limiting the generality of the foregoing and for the avoidance of doubt, the parties hereto are not hereby waiving or releasing, nor have they agreed to waive or release in the future, any right or claim to indemnification or reimbursement by, or damages from, the Borrower or the Servicer or any other Person under any Transaction Document, including without limitation, for any liability, obligation, loss, damage, penalty, judgment, settlement, cost, expense or disbursement resulting or arising directly or indirectly from the InVentiv Name Change.

SECTION 3. Representations and Warranties of the Borrower and the Servicer. The Borrower and the Servicer each hereby represent and warrant to each of the parties hereto as of the date hereof as follows:

(a) *Representations and Warranties*. The representations and warranties made by it in the Receivables Financing Agreement and each of the other Transaction Documents to which it is a party are true and correct as of the date hereof.

(b) *Enforceability*. The execution and delivery by it of this Amendment, and the performance of its obligations under this Amendment, the PSA Amendment, the Fee Letter, the Receivables Financing Agreement (as amended hereby) and the other Transaction Documents to which it is a party are within its organizational powers and have been duly authorized by all necessary action on its part, and this Amendment, the PSA Amendment, the Fee Letter, the Receivables Financing Agreement (as amended hereby) and the other Transaction Documents to which it is a party are (assuming due authorization and execution by the other parties thereto) its valid and legally binding obligations, enforceable in accordance with their terms, except (i) as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (ii) as such enforceability may be limited by general principles of equity, regardless of whether such enforceability is considered in a proceeding in equity or at law.

(c) *No Event of Default*. After giving effect to this Amendment, no Event of Default or Unmatured Event of Default has occurred and is continuing, or would occur as a result of this Amendment, the PSA Amendment, the Fee Letter or the transactions contemplated hereby or thereby.

SECTION 4. Effect of Amendment; Ratification. All provisions of the Receivables Financing Agreement and the other Transaction Documents, as expressly amended and modified by this Amendment, shall remain in full force and effect. After this Amendment becomes effective, all references in the Receivables Financing Agreement (or in any other Transaction Document) to "the Receivables Financing Agreement", "this Agreement", "hereof", "herein" or words of similar effect referring to the Receivables Financing Agreement shall be deemed to be references to the Receivables Financing Agreement as amended by this Amendment. This Amendment shall not be deemed, either expressly or impliedly, to waive, amend or supplement any provision of the Receivables Financing Agreement other than as set forth herein. The Receivables Financing Agreement, as amended by this Amendment, is hereby ratified and confirmed in all respects.

SECTION 5. Effectiveness. This Amendment shall become effective as of the date hereof, subject to the conditions precedent that the Administrative Agent shall have received the following:

(a) counterparts to this Amendment executed by each of the parties hereto;

(b) counterparts to the PSA Amendment executed by each of the parties thereto;

(c) evidence that the "Upfront Fee" under and as defined in the Fee Letter has been paid;

(d) evidence of filing of the UCC-3 amendments described in Section 5 of the PSA Amendment;

(e) lien search reports with respect to Syneos Health Commercial Services, LLC, in its jurisdiction of organization; and

(f) such other agreements, documents, instruments, UCC financing statements, secretary certificates, lien searches, reliance letters and opinions listed on Annex A hereto or otherwise as the Administrative Agent may reasonably request prior to the date hereof.

SECTION 6. Severability. Any provisions of this Amendment which are prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

SECTION 7. Transaction Document. This Amendment shall be a Transaction Document for purposes of the Receivables Financing Agreement.

SECTION 8. Counterparts. This Amendment may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which when taken together shall constitute one and the same agreement. Delivery of an executed counterpart hereof by facsimile or other electronic means shall be equally effective as delivery of an originally executed counterpart. The words "execution," "execute", "signed," "signature," and words of like import in or related to any document to be signed in connection with this Amendment and the transactions contemplated hereby shall be deemed to include electronic signatures, the electronic matching of assignment terms and contract formations on electronic platforms approved by the Administrative Agent, or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

SECTION 9. GOVERNING LAW AND JURISDICTION.

(a) THIS AMENDMENT, INCLUDING THE RIGHTS AND DUTIES OF THE PARTIES HERETO, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK (INCLUDING SECTIONS 5-1401 AND 5-1402 OF THE GENERAL OBLIGATIONS LAW OF THE STATE OF NEW YORK, BUT WITHOUT REGARD TO ANY OTHER CONFLICTS OF LAW PROVISIONS THEREOF).

(b) EACH PARTY HERETO HEREBY IRREVOCABLY SUBMITS TO (I) WITH RESPECT TO THE BORROWER AND THE SERVICER, THE EXCLUSIVE JURISDICTION, AND (II) WITH RESPECT TO EACH OF THE OTHER PARTIES HERETO, THE NON-EXCLUSIVE JURISDICTION, IN EACH CASE, OF ANY NEW YORK STATE OR FEDERAL COURT SITTING IN NEW YORK CITY, NEW YORK IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AMENDMENT, AND EACH PARTY HERETO HEREBY IRREVOCABLY AGREES THAT ALL CLAIMS IN RESPECT OF SUCH ACTION OR PROCEEDING (I) IF BROUGHT BY THE BORROWER, THE SERVICER OR ANY AFFILIATE THEREOF, SHALL BE HEARD AND DETERMINED, AND (II) IF BROUGHT BY ANY OTHER

PARTY TO THIS AMENDMENT, MAY BE HEARD AND DETERMINED, IN EACH CASE, IN SUCH NEW YORK STATE COURT OR, TO THE EXTENT PERMITTED BY LAW, IN SUCH FEDERAL COURT. NOTHING IN THIS SECTION 9 SHALL AFFECT THE RIGHT OF THE ADMINISTRATIVE AGENT OR ANY OTHER CREDIT PARTY TO BRING ANY ACTION OR PROCEEDING AGAINST THE BORROWER OR THE SERVICER OR ANY OF THEIR RESPECTIVE PROPERTY IN THE COURTS OF OTHER JURISDICTIONS. EACH OF THE BORROWER AND THE SERVICER HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT IT MAY EFFECTIVELY DO SO, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING. THE PARTIES HERETO AGREE THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW.

SECTION 10. Section Headings. The various headings of this Amendment are included for convenience only and shall not affect the meaning or interpretation of this Amendment, the Receivables Financing Agreement or any provision hereof or thereof.

SECTION 11. Performance Guaranty Ratification. After giving effect to this Amendment, the Fee Letter and the transactions contemplated by this Amendment and the Fee Letter, all of the provisions of the Performance Guaranty shall remain in full force and effect and the Performance Guarantor hereby ratifies and affirms the Performance Guaranty and acknowledges that the Performance Guaranty has continued and shall continue in full force and effect in accordance with its terms.

SECTION 12. Certain Covenants Regarding Post-Closing Conditions. Not later than ten (10) Business Days following the date hereof (or such later date consented to by the Administrative Agent), the Servicer shall deliver (or cause to be delivered) to the Administrative Agent an officer's certificate of Syneos Health Commercial Services, LLC, in form and substance reasonably satisfactory to the Administrative Agent, which shall include certified copies of Syneos Health Commercial Services, LLC's operating agreement and the certificate of amendment to Syneos Health Commercial Services, LLC's certificate of formation in respect of the inVentiv Name Change attached thereto.

[Signature pages follow.]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment by their duly authorized officers as of the date first above written.

SYNEOS HEALTH RECEIVABLES LLC,
as the Borrower

By: /s/ Robert Parks
Name: Robert Parks
Title: President

SYNEOS HEALTH, LLC,
as the Servicer

By: _____
Name: Jason Meggs
Title: Chief Financial Officer

IN WITNESS WHEREOF, the parties hereto have executed this Amendment by their duly authorized officers as of the date first above written.

SYNEOS HEALTH RECEIVABLES LLC,
as the Borrower

By: _____
Name: Robert Parks
Title: President

SYNEOS HEALTH, LLC,
as the Servicer

By: /s/ Jason Meggs
Name: Jason Meggs
Title: Chief Financial Officer

PNC BANK, NATIONAL ASSOCIATION,
as Administrative Agent

By: /s/ Christopher Blaney
Name: Christopher Blaney
Title: Senior Vice President

PNC BANK, NATIONAL ASSOCIATION,
as a Lender

By: /s/ Christopher Blaney
Name: Christopher Blaney
Title: Senior Vice President

REGIONS BANK,
as a Lender

By: /s/ Cecil Noble
Name: Cecil Noble
Title: Managing Director

Acknowledged and agreed:

SYNEOS HEALTH, INC.,
as Performance Guarantor

By: /s/ Jason Meggs
Name: Jason Meggs
Title: Chief Financial Officer

EXHIBIT A

AMENDMENTS TO THE RECEIVABLES FINANCING AGREEMENT

(Attached)

Exhibit A

EXECUTION VERSION
EXHIBIT A to the TENTH AMENDMENT, dated as of January 28, 2021

ARTICLE I. CONFORMED COPY INCLUDES FIRST AMENDMENT, dated as of August 1, 2018 SECOND AMENDMENT, dated as of August 29, 2018 THIRD AMENDMENT, dated as of October 25, 2018 FOURTH AMENDMENT, dated as of January 2, 2019 FIFTH AMENDMENT, dated as of July 25, 2019 SIXTH AMENDMENT, dated as of September 30, 2019
ARTICLE II. OMNIBUS AMENDMENT, dated as of January 31, 2020 EIGHTH AMENDMENT, dated as of March 18, 2020 NINTH AMENDMENT, dated as of September 25, 2020

RECEIVABLES FINANCING AGREEMENT

Dated as of June 29, 2018 by and among
SYNEOS HEALTH RECEIVABLES LLC,
as Borrower,

THE PERSONS FROM TIME TO TIME PARTY HERETO,
as Lenders,

PNC BANK, NATIONAL ASSOCIATION,
as Administrative Agent,

SYNEOS HEALTH, LLC,
as initial Servicer, and
PNC CAPITAL MARKETS LLC,
as Structuring Agent

~~739775816 18569090~~

TABLE OF CONTENTS

TABLE OF CONTENTS
(continued)

TABLE OF CONTENTS
(continued)

"Adjusted LIBOR" means with respect to any Tranche Period, the interest rate per annum determined by the Administrative Agent by dividing (the resulting quotient rounded upwards, if necessary, to the nearest 1/100th of 1% per annum) (i) the rate of interest determined by the Administrative Agent in accordance with its usual procedures (which determination shall be conclusive absent manifest error) to be the rate per annum for deposits in Dollars as reported by Bloomberg Finance L.P. and shown on US0001M Screen as the composite offered rate for London interbank deposits for such Tranche Period (or on any successor or substitute page of such service, or any successor to or substitute for such service, providing rate quotations comparable to those currently provided on such page of such service, as determined by the Administrative Agent from time to time for purposes of providing quotations of interest rates applicable to dollar deposits in the London interbank market) at or about 11:00 a.m. (London time) on the Business Day which is two (2) Business Days prior to the first day of such Tranche Period for an amount comparable to the Portion of Capital to be funded at Adjusted LIBOR during such Tranche Period, by (ii) a number equal to 1.00 minus the Euro-Rate Reserve Percentage; provided, however, that with respect to the initial Tranche Period for a Loan that is not advanced on a Monthly Settlement Date, Adjusted LIBOR shall be the interest rate per annum equal to LMIR for each day during such initial Tranche Period from the date that such Loan is made pursuant to Section 2.01 until the next occurring Monthly Settlement Date. The calculation of Adjusted LIBOR may also be expressed by the following formula:

$$\text{Adjusted LIBOR} = \frac{\text{Composite of London interbank offered rates shown on Bloomberg Finance L.P. Screen US0001M or appropriate successor}}{\text{1.00 - Euro-Rate Reserve Percentage}}$$

Adjusted LIBOR shall be adjusted on the effective date of any change in the Euro-Rate Reserve Percentage as of such effective date. The Administrative Agent shall give prompt notice to the Borrower of Adjusted LIBOR as determined or adjusted in accordance herewith (which determination shall be conclusive absent manifest error). Notwithstanding the foregoing, if Adjusted LIBOR as determined herein would be less than ~~0.15~~0.00% or any other rate as may be agreed by the Borrower and Administrative Agent in writing, Adjusted LIBOR shall be deemed to be equal to ~~0.15~~0.00% or such other rate for purposes of this Agreement.

"Administrative Agent" means PNC, in its capacity as contractual representative for the Credit Parties, and any successor thereto in such capacity appointed pursuant to Article XI or Section 14.03(f).

"Advent" means Advent International Corporation and its Affiliates.

"Adverse Claim" means any ownership interest or claim, mortgage, deed of trust, pledge, lien, security interest, hypothecation, charge or other encumbrance or security arrangement of any nature whatsoever, whether voluntarily or involuntarily given, including, but not limited to, any conditional sale or title retention arrangement, and any assignment, deposit arrangement or lease intended as, or having the effect of, security and any filed financing statement or other notice of any of the foregoing (whether or not a lien or other encumbrance is created or exists at the time of the filing); it being understood that any of the foregoing in favor of, or assigned to, the

"Excluded Receivable Letter Agreement" means that certain letter agreement re: Excluded Receivables, dated as of September 25, 2020, among the Borrower, the Servicer, the Lenders and the Administrative Agent, as the same may be amended, restated, supplemented or otherwise modified from time to time.

"Excluded Taxes" means any of the following Taxes imposed on or with respect to an Affected Person or required to be withheld or deducted from a payment to an Affected Person:

(a) Taxes imposed on or measured by net income (however denominated), franchise Taxes and branch profits Taxes, in each case, (i) imposed as a result of such Affected Person being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in the Loans or Commitment pursuant to a law in effect on the date on which (i) such Lender makes a Loan or its Commitment or (ii) such Lender changes its lending office, except in each case to the extent that amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office and (c) any U.S. federal withholding Taxes imposed pursuant to FATCA.

"Facility Limit" means $~~300,000,000~~365,000,000 as reduced from time to time pursuant to Section 2.02(e). References to the unused portion of the Facility Limit shall mean, at any time of determination, an amount equal to (x) the Facility Limit at such time, minus (y) the Aggregate Capital at such time.

"FATCA" means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code, any applicable intergovernmental agreement entered into between the United States and any other Governmental Authority in connection with the implementation of the foregoing and any fiscal or regulatory legislation, rules or official practices adopted pursuant to any such intergovernmental agreement.

"Federal Reserve Board" means the Board of Governors of the Federal Reserve System, or any entity succeeding to any of its principal functions.

"Fee Letter" has the meaning specified in Section 2.03(a). "Fees" has the meaning specified in Section 2.03(a).

"Final Maturity Date" means the date that (i) is one hundred eighty (180) days following the Termination Date or (ii) such earlier date on which the Aggregate Capital becomes due and payable pursuant to Section 10.01.

"LIBOR Loan" means any Loan accruing Interest at Adjusted LIBOR.

"Linked Account" means any controlled disbursement account, controlled balance account or other deposit account maintained by a Collection Account Bank for the Parent, the Performance Guarantor, the Servicer, any Originator or any Affiliate thereof and linked to any Collection Account by a zero balance account connection or other automated funding mechanism or controlled balance arrangement.

"LMIR" means for any day during any Interest Period, the interest rate per annum determined by the Administrative Agent (which determination shall be conclusive absent manifest error) by dividing (i) the one-month Eurodollar rate for Dollar deposits as reported by Bloomberg Finance L.P. and shown on US0001M Screen or any other service or page that may replace such page from time to time for the purpose of displaying offered rates of leading banks for London interbank deposits in Dollars, as of 11:00 a.m. (London time) on such day, or if such day is not a Business Day, then the immediately preceding Business Day (or if not so reported, then as determined by the Administrative Agent from another recognized source for interbank quotation), in each case, changing when and as such rate changes, by (ii) a number equal to 1.00 minus the Euro-Rate Reserve Percentage on such day. The calculation of LMIR may also be expressed by the following formula:

$$\text{LMIR} = \frac{\text{One-month Eurodollar rate for Dollars shown on Bloomberg US0001M Screen or appropriate successor}}{\text{1.00 - Euro-Rate Reserve Percentage}}$$

LMIR shall be adjusted on the effective date of any change in the Euro-Rate Reserve Percentage as of such effective date. Notwithstanding the foregoing, if LMIR as determined herein would be less than ~~0.15~~0.00% or any other rate as may be agreed by the Borrower and Administrative Agent in writing, LMIR shall be deemed to be equal to ~~0.15~~0.00% or such other rate for purposes of this Agreement.

"Loan" means any loan made by a Lender pursuant to Section 2.02.

"Loan Request" means a letter in substantially the form of Exhibit A hereto executed and delivered by the Borrower to the Administrative Agent and the Lenders pursuant to Section 2.02(a).

"Lock-Box" means each locked postal box with respect to which a Collection Account Bank has executed an Account Control Agreement pursuant to which it has been granted exclusive access for the purpose of retrieving and processing payments made on the Receivables and which is listed on Schedule II (as such schedule may be modified from time to time in connection with the addition or removal of any Lock-Box in accordance with the terms hereof).

"Loss Horizon Ratio" means the ratio (expressed as a percentage and rounded to the nearest 1/100 of 1%, with 5/1000th of 1% rounded upward) computed as of the last day of each Fiscal Month by dividing:

$100,000 in excess thereof), (ii) the allocation of such amount among the Lenders (which shall be ratable based on the Commitments), (iii) the account to which the proceeds of such Loan shall be distributed and (iv) the date such requested Loan is to be made (which shall be a Business Day).

(b) Funding Loans.

(i) ~~(b)~~ On the date of each Loan specified in the applicable Loan Request, ~~the Lenders~~ each Lender shall, upon satisfaction of the applicable conditions set forth in Article VI and pursuant to the other conditions set forth in this Article II, deliver to the Administrative Agent by wire transfer of immediately available funds at the account from time to time designated in writing by the Administrative Agent, an amount equal to such Lender's ratable share (which shall be ratable based on the Commitments) of the amount of such Loan requested. On the date of each Loan specified in the applicable Loan Request, the Administrative Agent will make available to the Borrower in same day funds an aggregate amount equal to the amount of such Loans requested, at the account set forth in the related Loan Request, the amount of such Loan to be funded by all Lenders in respect of such Loan.

(ii) Unless the Administrative Agent shall have received notice from a Lender, with a copy to the Borrower, prior to the proposed date of any Loan that such Lender will not make available to the Administrative Agent such Lender's share of such Loan, the Administrative Agent may assume that such Lender has made such share available on such date in accordance with Section 2.02(b)(i) and may, in reliance upon such assumption, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its share of the applicable Loan available to the Administrative Agent, then such Lender and the Borrower severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount with interest thereon, for each day from and including the date such amount is made available to the Borrower to but excluding the date of payment to the Administrative Agent, at (i) in the case of such Lender, the greater of the Overnight Bank Funding Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation or (ii) in the case of the Borrower, the Base Rate. If such Lender pays such amount to the Administrative Agent, then such amount shall constitute such Lender's Loan. If the Borrower and such Lender shall pay such interest to the Administrative Agent for the same or an overlapping period, the Administrative Agent shall promptly remit to the Borrower the amount of such interest paid by the Borrower for such period. Any such payment by the Borrower shall be without prejudice to any claim the Borrower may have against a Lender that shall have failed to make such payment to the Administrative Agent.

(c) Each Lender's obligation shall be several, such that the failure of any Lender to make available to the Administrative Agent or Borrower any funds in connection with any Loan shall not relieve any other Lender of its obligation, if any, hereunder to make funds available on the date such Loans are requested (it being understood, that no Lender shall be responsible for the failure of any other Lender to make funds available to the Administrative Agent or Borrower in connection with any Loan hereunder).

(i) first, to the Servicer for the payment of the accrued Servicing Fees payable for the immediately preceding Interest Period (plus, if applicable, the amount of Servicing Fees payable for any prior Interest Period to the extent such amount has not been distributed to the Servicer);

(ii) second, to the Administrative Agent for distribution to each Lender ~~and other Credit Party~~ (ratably, based on the amount then due and owing to such Lender and any related Credit Parties), all accrued and unpaid Interest, Fees and Breakage Fees due to such Lender and other related Credit Party for the immediately preceding Interest Period (including any additional amounts or indemnified amounts payable under Sections 5.03 and 13.01 in respect of such payments), plus, if applicable, the amount of any such Interest, Fees and Breakage Fees (including any additional amounts or indemnified amounts payable under Sections 5.03 and 13.01 in respect of such payments) payable for any prior Interest Period to the extent such amount has not been distributed to such Lender or Credit Party;

(iii) third, as set forth in clause (x), (y) or (z) below, as applicable:

(x) prior to the occurrence of the Termination Date, to the extent that a Borrowing Base Deficit exists on such date, to the Administrative Agent for distribution to the Lenders (ratably, based on the aggregate outstanding Capital of each Lender at such time) for the payment of a portion of the outstanding Aggregate Capital at such time, in an aggregate amount equal to the amount necessary to reduce the Borrowing Base Deficit to zero ($0);

(y) on and after the occurrence of the Termination Date, to the Administrative Agent for distribution to each Lender (ratably, based on the aggregate outstanding Capital of each Lender at such time) for the payment in full of the aggregate outstanding Capital of such Lender at such time; or

(z) prior to the occurrence of the Termination Date, at the election of the Borrower and in accordance with Section 2.02(d), to the Administrative Agent for distribution to the payment of all or any portion of the outstanding Capital of the Lenders at such time (ratably, based on the aggregate outstanding Capital of each Lender at such time);

(iv) fourth, to the Administrative Agent for distribution to the Lenders for their own account and on behalf of any related Credit Parties, ~~the~~ Affected Persons and ~~the~~ Borrower Indemnified Parties (ratably, based on the amount due and owing at such time), for the payment of all other Borrower Obligations then due and owing by the Borrower to the Credit Parties, the Affected Persons and the Borrower Indemnified Parties; and

(v) fifth, the balance, if any, to be paid to the Borrower for its own account.

(b) All payments or distributions to be made by the Servicer, the Borrower and any other Person to the Lenders (or their respective related Credit Parties, related Affected Persons and related Borrower Indemnified Parties), shall be paid or distributed to the Administrative Agent for distribution to the applicable party to which such amounts are due. Each Lender, upon its receipt of such payments or distributions, shall distribute such amounts to the applicable Credit Parties, Affected Persons and Borrower Indemnified Parties ratably; provided, that if the Administrative Agent shall have received

insufficient funds to pay all of the above amounts in full on any such date, the Administrative Agent shall pay each Lender, and each Lender shall pay such amounts to the applicable Credit Parties, Affected Persons and Borrower Indemnified Parties in accordance with the priority of payments set forth above, and with respect to any such category above for which there are insufficient funds to pay all amounts owing on such date, ratably (based on the amounts in such categories owing to each such Person) among all such Persons entitled to payment thereof. Notwithstanding anything to the contrary set forth in this Section 4.01, the Administrative Agent shall have no obligation to distribute or pay any amount under this Section 4.01 except to the extent actually received by the Administrative Agent. Each payment by the Servicer or the Borrower to the Administrative Agent for the applicable party to which such amounts are due shall be deemed to constitute payment by the Servicer or the Borrower directly to such party, provided, however, that in the event any such payment by the Servicer or the Borrower is required to be returned to the Servicer or Borrower for any reason whatsoever, then the Servicer's or the Borrower's obligations to such party with respect to such payment shall be deemed to be automatically reinstated. Additionally, each Lender hereby covenants and agrees to provide timely and accurate responses to each of the Administrative Agent's requests for information necessary for the Administrative Agent to make allocations to the Lender required to be made by the Administrative Agent hereunder, including distribution to the applicable party to which such amounts should be distributed.

(c) If and to the extent the Administrative Agent, any Credit Party, any Affected Person or any Borrower Indemnified Party shall be required for any reason to pay over to any Person (including any Obligor or any trustee, receiver, custodian or similar official in any Insolvency Proceeding) any amount received on its behalf hereunder, such amount shall be deemed not to have been so received but rather to have been retained by the Borrower and, accordingly, the Administrative Agent, such Credit Party, such Affected Person or such Borrower Indemnified Party, as the case may be, shall have a claim against the Borrower for such amount.

(d) For the purposes of this Section 4.01:

(i) if on any day the Outstanding Balance of any Pool Receivable is reduced or adjusted as a result of any defective, rejected, returned, repossessed or foreclosed goods or services, or any revision, cancellation, allowance, rebate, credit memo, discount or other adjustment made by the Borrower, any Originator, the Servicer or any Affiliate of the Servicer, or any setoff, counterclaim or dispute between the Borrower or any Affiliate of the Borrower, an Originator or any Affiliate of an Originator, or the Servicer or any Affiliate of the Servicer, and an Obligor, the Borrower shall be deemed to have received on such day a Collection of such Pool Receivable in the amount of such reduction or adjustment and shall immediately pay any and all such amounts in respect thereof to a Collection Account (or as otherwise directed by the Administrative Agent at such time) for the benefit of the Credit Parties for application pursuant to Section 4.01(a);

(ii) if on any day any of the representations or warranties in Section 7.01 is not true with respect to any Pool Receivable, the Borrower shall be deemed to have received on such day a Collection of such Pool Receivable in full and shall immediately pay the amount of such deemed Collection to a Collection Account (or as otherwise directed by the Administrative Agent at such time) for the benefit of the Credit Parties for application pursuant to Section 4.01(a) (Collections deemed to have been received pursuant to Section 4.01(d) are hereinafter sometimes referred to as "Deemed Collections");

(iii) except as provided in clauses (i) or (ii) above or otherwise required by Applicable Law or the relevant Contract, all Collections received from an Obligor of any Receivable shall be applied to the Receivables of such Obligor in the order of the age of such Receivables, starting with the oldest such Receivable, unless such Obligor designates in writing its payment for application to specific Receivables; and

(iv) if and to the extent the Administrative Agent, any Credit Party, any Affected Person or any Borrower Indemnified Party shall be required for any reason to pay over to an Obligor (or any trustee, receiver, custodian or similar official in any Insolvency Proceeding) any amount received by it hereunder, such amount shall be deemed not to have been so received by such Person but rather to have been retained by the Borrower and, accordingly, such Person shall have a claim against the Borrower for such amount, payable when and to the extent that any distribution from or on behalf of such Obligor is made in respect thereof.

SECTION 4.02. Payments and Computations, Etc. (a) All amounts to be paid by the Borrower or the Servicer to the Administrative Agent, any Credit Party, any Affected Person or any Borrower Indemnified Party hereunder shall be paid no later than noon (New York City time) on the day when due in same day funds to the account so designated by the Administrative Agent. Unless the Administrative Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Administrative Agent for the distribution to the applicable party to which such amounts are due. that the Borrower will not make such payment (including because Collections are not available therefor), the Administrative Agent may assume that the Borrower has made or will make such payment on such date in accordance herewith and may (but shall not be obligated to), in reliance upon such assumption, distribute to the Lenders the amount due. In such event, if the Borrower has not in fact made such payment, then each Lender severally agrees to repay the Administrative Agent forthwith on demand the amount so distributed to such Lender, with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent in accordance with banking industry rules on interbank compensation.

(b) Each of the Borrower and the Servicer shall, to the extent permitted by Applicable Law, pay interest on any amount not paid or deposited by it when due hereunder, at an interest rate per annum equal to 2.50% per annum above the Base Rate, payable on demand.

PNC BANK, NATIONAL ASSOCIATION,
as Administrative Agent

By: _____
Name:
Title:

PNC BANK, NATIONAL ASSOCIATION,
as a Lender

By: _____
Name:
Title:

PNC CAPITAL MARKETS LLC, as Structuring Agent

By: _____
Name:
Title:

REGIONS BANK,
as a Lender

By:
Name:
Title:

EXHIBIT A
Form of Loan Request

[Letterhead of Borrower]

[Date]

[Administrative Agent]
[Lenders]
Re: Loan Request Ladies and Gentlemen:

Reference is hereby made to that certain Receivables Financing Agreement, dated as of June 29, 2018 among Syneos Health Receivables LLC (the "Borrower"), Syneos Health, LLC, as Servicer (the "Servicer"), the Lenders party thereto, PNC Bank, National Association, as Administrative Agent (in such capacity, the "Administrative Agent") and PNC Capital Markets LLC, as Structuring Agent (as amended, supplemented or otherwise modified from time to time, the "Agreement"). Capitalized terms used in this Loan Request and not otherwise defined herein shall have the meanings assigned thereto in the Agreement.

This letter constitutes a Loan Request pursuant to Section 2.02(a) of the Agreement. The Borrower hereby request a Loan in the aggregate amount of [$] to be made on [, 20] (of which $[ ] will be funded by PNC and $[ ] will be funded by [ ]). [The Borrower hereby requests that such Loan bear interest initially at Adjusted LIBOR for a Tranche Period of [one, two, three, six] months.][1] The proceeds of such Loan should be deposited by the Administrative Agent to [Account number], at [Name, Address and ABA Number of Bank]. After giving effect to such Loan, the Aggregate Capital will be [$].

The Borrower hereby represents and warrants as of the date hereof, and after giving effect to such Credit Extension, as follows:

(i) the representations and warranties of the Borrower and the Servicer contained in Sections 7.01 and 7.02 of the Agreement are true and correct in all material respects on and as of the date of such Credit Extension as though made on and as of such date unless such representations and warranties by their terms refer to an earlier date, in which case they shall be true and correct in all material respects on and as of such earlier date;

(ii) no Event of Default or Unmatured Event of Default has occurred and is continuing, and no Event of Default or Unmatured Event of Default would result from such Credit Extension;

[1] Applicable solely to the extent that the Loan is made on a Monthly Settlement Date.

ARTICLE III. SCHEDULE I
Commitments

PNC Bank, National Association		
Party	Capacity	Commitment
PNC Bank, National Association	Lender	$300,000,000

Regions Bank		
Party	Capacity	Commitment
Regions Bank	Lender	$65,000,000

ARTICLE IV. SCHEDULE III
Notice Addresses

(A) in the case of the Borrower, at the following address:

Syneos Health Receivables LLC c/o Syneos Health, Inc.
1030 Sync Street
Morrisville, NC 27560 Attention: General Counsel

with a copy to:

c/o Syneos Health, Inc. 1030 Sync Street
Morrisville, NC 27560 Attention: General Counsel
Email: legal@syneoshealth.com
treasury@syneoshealth.com

(B) in the case of the Servicer, at the following address:

Syneos Health, LLC c/o Syneos Health, Inc. 1030 Sync Street
Morrisville, NC 27560 Attention: General Counsel
Email: legal@syneoshealth.com
treasury@syneoshealth.com

(C) in the case of the Administrative Agent, at the following address:

PNC Bank, National Association The Tower at PNC Plaza
300 Fifth Avenue, 11th Floor Pittsburgh, PA 15222 Attention: Brian Stanley Telephone: 412-768-2001
Facsimile: 412-803-7142 Email: brian.stanley@pnc.com ABFAdmin@pnc.com

(D) in the case of Regions Bank, at the following address:

Regions Bank
1180 West Peachtree St. NW Suite 1000
Atlanta, GA 30309 Attention: Cecil
Noble Telephone: 404-
221-4571 Facsimile: N/A
Email: cecil.noble@regions.com
rbcbirmingham@regions.com

(E) in the case of any other Person, at the address for such Person specified in the other Transaction Documents; in each case, or at such other address as shall be designated by such Person in a written notice to the other parties to this Agreement.

Annex A

(attached)

SYNEOS HEALTH, LLC (f/k/a INC RESEARCH, LLC)

PNC BANK, NATIONAL ASSOCIATION

CLOSING MEMORANDUM

FOR

FACILITY UPSIZE

AND

JOINDER OF REGIONS BANK TO

TRADE RECEIVABLES SECURITIZATION PROGRAM

For January 28, 2021 Closing

Parties and Abbreviations:

Administrative Agent	PNC
BH	Baker & Hostetler LLP, Ohio counsel to the Syneos Parties
BofA	Bank of America, N.A.
Borrower	Syneos Health Receivables LLC, a Delaware limited liability company structured as a typical bankruptcy-remote special purpose entity
Collection Account Banks	Wells and BofA
DLA	DLA Piper LLP, North Carolina counsel to the Syneos Parties
Lenders	PNC and Regions
JPM	JPMorgan Chase Bank, N.A.
MB	Mayer Brown LLP, counsel to the Lenders
Originators	The Originators set forth on Schedule I
Performance Guarantor	Syneos
PNC	PNC Bank, National Association
Regions	Regions Bank
Servicer	Syneos Health
Syneos	Syneos Health, Inc., a Delaware corporation
Syneos Counsel	Latham & Watkins LLP, counsel to the Syneos Parties
Syneos Health	Syneos Health, LLC (f/k/a INC Research, LLC), a Delaware limited liability company
Syneos Parties	Each of the Servicer, the Originators, the Borrower and the Performance Guarantor
Structuring Agent	PNC Capital Markets LLC
Wyrick	Wyrick Robbins Yates & Ponton LLP, counsel to the Syneos Parties

Document
A. BASIC DOCUMENTS
Tenth Amendment to Receivables Financing Agreement
Fifth Amendment to Purchase and Sale Agreement
Amended and Restated Fee Letter
Amended and Restated Excluded Receivables Letter Agreement
B. LEGAL OPINIONS
Opinion of Syneos Counsel to Syneos Health, Syneos and the Borrower re: general corporate matters, enforceability, no-conflicts with organizational documents, material agreements, New York and Federal law, '40 Act and Volcker Rule matters
Syneos Counsel's Reliance Letters to Regions re: prior opinions
DLA 's Reliance Letters to Regions re: prior opinions
BH's Reliance Letters to Regions re: prior opinions
Wyrick's Reliance Letters to Regions re: prior opinions
C. UCC MATTERS
Lien Search Report for Syneos Health Commercial Services
UCC-3 filing amending the name of the debtor/seller from "inVentiv Commercial Services, LLC" to "Syneos Health Commercial Services, LLC"
D. MISCELLANEOUS
Pro Forma Information Package
E. POST-CLOSING DELIVERABLES
Officer's Certificate of Syneos Health Commercial Services, LLC (including certified organizational documents from the NJ SoS)

Schedule I

Name and Jurisdiction of the Originators

Legal Name	Jurisdiction
Addison Whitney LLC	North Carolina
BIOSECTOR 2 LLC	New York
CADENT MEDICAL COMMUNICATIONS, LLC	Ohio
Chamberlain Communications LLC	Delaware
CHANDLER CHICCO AGENCY, L.L.C.	New York
GERBIG, SNELL/WEISHEIMER ADVERTISING, LLC	Ohio
Syneos Health Medical Communications, LLC	Ohio
NAVICOR GROUP, LLC	Ohio
Palio + Ignite, LLC	Ohio
Syneos Health Communications, Inc.	Ohio
THE SELVA GROUP, LLC	Ohio
Taylor Strategy Partners, LLC	Ohio
Syneos Health, LLC (f/k/a/ INC Research, LLC)	Delaware
inVentiv Health Clinical, LLC	Delaware
inVentiv Commercial Services, LLC	New Jersey

Exhibit 21.1

List of Subsidiaries of Syneos Health, Inc.

Entity Name	Jurisdiction
Addison Whitney LLC	North Carolina
Allidura Communications LLC	Delaware
BioSector 2 LLC	New York
Cadent Medical Communications, LLC	Ohio
Chamberlain Communications Group LLC	Delaware
Chandler Chicco Agency, L.L.C.	New York
Cu-Tech, L.L.C.	New Jersey
Gerbig Snell/Weisheimer Advertising, LLC	Ohio
Haas & Health Partner Public Relations GmbH	Germany
Harrison Clinical Research AR S.A.	Argentina
Harrison Clinical Research Peru S.A.C.	Peru
HCR Acquisition GmbH	Germany
Illingworth Research Group (Australia) Pty Ltd.	Australia
Illingworth Research Group (France) SARL	France
Illingworth Research Group (Italy) S.R.L.	Italy
Illingworth Research Group (Spain) Sociedad Limatada	Spain
Illingworth Research Group (USA) Inc.	Delaware
Illingworth Research Group Limited	England & Wales
Illingworth Research Limited	England & Wales
Improved Outcome Kabushiki Kaisha	Japan
INC Research (Thailand) Limited	Thailand
INC Research Austria GmbH	Austria
INC Research BR Servicos de Pesquisas Clinicas Ltda.	Brazil
Inc Research Branches Limited - Jordan Branch	Jordan
INC Research Clinical Services Mexico Limited, S.A. de C.V.	Mexico
INC Research Company Limited	Hong Kong
INC Research CRO Argentina S.R.L.	Argentina
INC Research CRO Malaysia Sdn. Bhd.	Malaysia
INC Research Czech Republic s.r.o.	Czech Republic
INC Research d.o.o. Beograd - Palilula	Serbia
INC Research do Brasil - Pesquisas Clínicas Ltda.	Brazil
INC Research Europe Holdings Limited	United Kingdom
INC Research Hellas Single Member S.A.	Greece
INC Research Holding Limited	United Kingdom
INC Research Hungary Korlátolt Felelősségű Társaság	Hungary
INC Research Klinik Arastirma Limited Sirketi	Turkey
INC Research Philippines, Inc.	Philippines
Inc Research Pte. Ltd.	Singapore
INC Research Romania SRL	Romania
INC Research South Korea	Korea (the Republic of)
INC Research Sweden A.B.	Sweden
INC Research UK Limited - Portugal Rep Office	Portugal
INC Research, S.A. de C.V.	Mexico
INCResearch Australia Holdings Pty Limited	Australia
INCResearch Australia Pty Limited	Australia
inVentiv Commercial Services, LLC	New Jersey
inVentiv European Holdings Limited	United Kingdom
inVentiv Health (Hong Kong) Limited	Hong Kong

Entity Name	Jurisdiction
inVentiv Health (Malaysia) SDN. BHD.	Malaysia
inVentiv Health (Thailand) Limited	Thailand
inVentiv Health Clinical Australia Pty. Limited	Australia
inVentiv Health Clinical GmbH	Austria
inVentiv Health Clinical Mexico, S.A. de C.V.	Mexico
inVentiv Health Clinical Peru S.A.	Peru
inVentiv Health Clinical Romania SRL	Romania
inVentiv Health Clinical Uruguay SRL	Uruguay
inVentiv Health Clinical, LLC	Delaware
inVentiv Health Czech Republic s.r.o.	Czech Republic
inVentiv Health d.o.o. Beograd	Serbia
inVentiv Health Greece Clinical and Commercial Services Single Member Limited Liability Company	Greece
inVentiv Health Holdings (Hong Kong) Limited	Hong Kong
inVentiv Health Hungary Kft.	Hungary
inVentiv Health Korea LLC	Korea (the Republic of)
inVentiv Health Philippines, Inc.	Philippines
inVentiv Health Singapore Pte Ltd Taipei Branch	Taiwan (Province of China)
inVentiv Health Singapore Pte. Ltd.	Singapore
inVentiv Health Sweden AB	Sweden
inVentiv Health Turkey Klinik Hizmetleri Ve Ticaret Limited Sirketi	Turkey
inVentiv Health Ukraine LLC	Ukraine
inVentiv International Pharma Services Private Ltd.	India
JourneyBegins LLC	Delaware
Kendle Americas Investment Inc.	Ohio
Kendle Americas Management Inc.	Ohio
Kendle India Private Limited	India
Kendle NC LLC	North Carolina
Kendle Servicios, S.A. de C.V.	Mexico
Kinapse India Scientific Services Private Limited	India
Kinapse Limited	United Kingdom
Kinapse, Inc.	Delaware
Limited Liability Company Syneos Health RUS	Russian Federation
Litmus Medical Marketing Services LLC	New York
Navicor Group, LLC	Ohio
Palio + Ignite, LLC	Ohio
Pharmaceutical Institute, LLC	North Carolina
PNET US, LLC	Delaware
PT Syneos Health Indonesia	Indonesia
Research Nurses Limited	England & Wales
Servicios Clinicos INC Research Chile Limitada	Chile
SHCR Holdings Corporation	Delaware
Syneos Health (Barbados) SRL	Barbados
Syneos Health (Barbados) SRL, LLC	Texas
Syneos Health (Beijing) Inc. Ltd. 赛纽仕医药信息咨询（北京）有限公司	China
Syneos Health (Shanghai) Inc. Ltd. Dalian Branch 赛纽仕医药咨询（上海）有限公司大连分公司	China
Syneos Health (Shanghai) Inc. Ltd. 赛纽仕医药咨询（上海）有限公司	China
Syneos Health (Shanghai) Inc. Ltd. Jingan Branch 赛纽仕医药咨询（上海）有限公司静安分公司	China
Syneos Health Argentina S.A.	Argentina

Entity Name	Jurisdiction
Syneos Health BA Limited	United Kingdom
Syneos Health Belgium BV	Belgium
Syneos Health Branches Limited	United Kingdom
Syneos Health Brasil Ltda.	Brazil
Syneos Health Bulgaria EOOD	Bulgaria
Syneos Health Canada Inc.	Ontario
Syneos Health Canada LP	Ontario
Syneos Health Canada ULC	Nova Scotia
Syneos Health Chile S.A.	Chile
Syneos Health Clinical Development Services Limited	United Kingdom
Syneos Health Clinical K.K.	Japan
Syneos Health Clinical Lab, Inc.	New Jersey
Syneos Health Clinical Ltd	Israel
Syneos Health Clinical Research Services, LLC	Delaware
Syneos Health Clinical Spain, S.L.U.	Spain
Syneos Health Clinical SRE, LLC	Delaware
Syneos Health Clinical, Inc.	Delaware
Syneos Health Clinical, LLC	Delaware
Syneos Health Clinique Inc.	Canada
Syneos Health Colombia Ltda	Colombia
Syneos Health Commercial Europe Limited	United Kingdom
Syneos Health Commercial France Sarl	France
Syneos Health Commercial Germany GmbH	Germany
Syneos Health Commercial Italy S.R.L.	Italy
Syneos Health Commercial K.K.	Japan
Syneos Health Commercial Spain S.L.	Spain
Syneos Health Communications Europe Limited	United Kingdom
Syneos Health Communications France S.a.r.l.	France
Syneos Health Communications Germany GmbH	Germany
Syneos Health Communications Holding Corp.	Delaware
Syneos Health Communications UK Limited	United Kingdom
Syneos Health Communications, Inc.	Ohio
Syneos Health Consulting, Inc.	North Carolina
Syneos Health Costa Rica S.A.	Costa Rica
Syneos Health Croatia d.o.o.	Croatia
Syneos Health Denmark ApS	Denmark
Syneos Health Egypt, Limited Liability Company	Egypt
Syneos Health Finland Oy	Finland
Syneos Health France SARL	France
Syneos Health G.K.	Japan
Syneos Health Germany GmbH	Germany
Syneos Health Germany GmbH Sede Secondaria	Italy
Syneos Health Guatemala S.A.	Guatemala
Syneos Health Holdings Germany GmbH	Germany
Syneos Health Holdings UK Limited	United Kingdom
Syneos Health Holdings, Inc.	Delaware
Syneos Health I L.P.	United Kingdom
Syneos Health II L.P.	United Kingdom
Syneos Health International Holdings Limited	United Kingdom
Syneos Health International Limited	United Kingdom
Syneos Health Investment, LLC	Delaware

Entity Name	Jurisdiction
Syneos Health Ireland Limited	Ireland
Syneos Health Italy S.R.L.	Italy
Syneos Health IVH UK Limited	United Kingdom
Syneos Health Lebanon SARL	Lebanon
Syneos Health Medical Communications, LLC	Ohio
Syneos Health Netherlands B.V.	Netherlands
Syneos Health New Zealand Limited	New Zealand
Syneos Health Norway AS	Norway
Syneos Health Peru S.R.L.	Peru
Syneos Health Poland sp. z o.o.	Poland
Syneos Health Portugal, Unipessoal LDA	Portugal
Syneos Health Public Relations Holding, LLC	Delaware
Syneos Health Receivables LLC	Delaware
Syneos Health Research & Insights, LLC	Delaware
Syneos Health Singapore Pte. Ltd	Singapore
Syneos Health Slovakia s.r.o.	Slovakia
Syneos Health South Africa (Pty) Limited	South Africa
Syneos Health Switzerland GmbH	Switzerland
Syneos Health UK Limited	United Kingdom
Syneos Health UK Limited - Jordan Branch	Jordan
Syneos Health UK Limited Representative Office - Moscow	Russian Federation
Syneos Health UK Limited Representative Office - St. Petersburg	Russian Federation
Syneos Health UK Limited, Farnborough, Zurich Branch	Switzerland
Syneos Health Ukraine Limited Liability Company	Ukraine
Syneos Health US, Inc.	Delaware
Syneos Health, Inc.	Delaware
Syneos Health, LLC	Delaware
Synteract (Pty) Ltd	South Africa
Synteract GmbH	Germany
Synteract HCR Limited	United Kingdom
Synteract Lanka (Pvt) Ltd	Sri Lanka
Synteract, Inc.	California
SynteractHCR Benelux NV	Belgium
SynteractHCR Corporation	Delaware
SynteractHCR Denmark ApS	Denmark
SynteractHCR Eastern Europe Forschungsgesellschaft mbH	Austria
SynteractHCR France SAS	France
SynteractHCR Group GmbH	Germany
SynteractHCR Holdings Corporation	Delaware
SynteractHCR Iberica, S.L.	Spain
SynteractHCR Italia S.R.L.	Italy
SynteractHCR Latin America Holding GmbH	Germany
SynteractHCR Mexico S.A. de C.V.	Mexico
SynteractHCR Poland sp.zo.o	Poland
SynteractHCR Sweden AB	Sweden
SynteractHCR Ukraine LLC	Ukraine
SynteractHCR, s.r.o.	Czech Republic
Taiwan Syneos Health Company Limited 台灣賽紐仕醫藥股份有限公司	Taiwan (Province of China)
Taylor Strategy Partners, LLC	Ohio
The Selva Group, LLC	Ohio

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-225459, 333-219607, 333-212154, and 333-199960 on Forms S-8, and No. 333-228559 on Forms S-3 of our reports dated February 17, 2021, relating to the financial statements of Syneos Health, Inc. and the effectiveness of Syneos Health, Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended December 31, 2020.

/s/ Deloitte & Touche LLP

Raleigh, North Carolina
February 17, 2021

Exhibit 31.1

CERTIFICATIONS

I, Alistair Macdonald, certify that:

1. I have reviewed this Annual Report on Form 10-K of Syneos Health, Inc. (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 17, 2021

/s/ Alistair Macdonald
Alistair Macdonald
Chief Executive Officer
(Principal Executive Officer)

CERTIFICATIONS

I, Jason Meggs, certify that:

1. I have reviewed this Annual Report on Form 10-K of Syneos Health, Inc. (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 17, 2021

/s/ Jason Meggs
Jason Meggs
Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In accordance with 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Alistair Macdonald, Chief Executive Officer of Syneos Health, Inc. (the "registrant"), do hereby certify, that to the best of my knowledge:

1. The registrant's Annual Report on Form 10-K for the period ended December 31, 2020, (the "Report"), to which this Certification is attached as Exhibit 32.1, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 17, 2021

/s/ Alistair Macdonald
Alistair Macdonald
Chief Executive Officer
(Principal Executive Officer)

This certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed "filed" by the registrant for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be incorporated by reference into any filing of the registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of the Report, irrespective of any general incorporation language contained in such filing.

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In accordance with 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Jason Meggs, Chief Financial Officer of Syneos Health, Inc. (the "registrant"), do hereby certify, that to the best of my knowledge:

1. The registrant's Annual Report on Form 10-K for the period ended December 31, 2020 (the "Report"), to which this Certification is attached as Exhibit 32.2, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 17, 2021

/s/ Jason Meggs
Jason Meggs
Chief Financial Officer
(Principal Financial Officer)

This certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed "filed" by the registrant for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be incorporated by reference into any filing of the registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of the Report, irrespective of any general incorporation language contained in such filing.