UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2019

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 001-12215

Quest Diagnostics Incorporated

Delaware
(State of Incorporation)

16-1387862
(I.R.S. Employer Identification Number)

500 Plaza Drive
Secaucus, NJ 07094
(973) 520-2700

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 Par Value	DGX	New York Stock Exchange

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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of July 12, 2019, there were outstanding 134,670,050 shares of the registrant's common stock, $.01 par value.

PART I - FINANCIAL INFORMATION

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2019 AND 2018
(unaudited)
(in millions, except per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net revenues	$ 1,953	$ 1,919	$ 3,844	$ 3,803
Operating costs and expenses and other operating income:				
Cost of services	1,265	1,243	2,509	2,469
Selling, general and administrative	362	351	746	714
Amortization of intangible assets	25	22	49	44
Other operating income, net	(6)	(2)	(15)	(1)
Total operating costs and expenses, net	1,646	1,614	3,289	3,226
Operating income	307	305	555	577
Other income (expense):				
Interest expense, net	(45)	(42)	(89)	(83)
Other income (expense), net	3	1	12	(1)
Total non-operating expenses, net	(42)	(41)	(77)	(84)
Income from continuing operations before income taxes and equity in earnings of equity method investees	265	264	478	493
Income tax expense	(63)	(42)	(113)	(94)
Equity in earnings of equity method investees, net of taxes	17	11	30	23
Income from continuing operations	219	233	395	422
Income from discontinued operations, net of taxes	20	—	20	—
Net income	239	233	415	422
Less: Net income attributable to noncontrolling interests	13	14	25	26
Net income attributable to Quest Diagnostics	$ 226	$ 219	$ 390	$ 396
Amounts attributable to Quest Diagnostics' common stockholders:				
Income from continuing operations	$ 206	$ 219	$ 370	$ 396
Income from discontinued operations, net of taxes	20	—	20	—
Net income	$ 226	$ 219	$ 390	$ 396
Earnings per share attributable to Quest Diagnostics' common stockholders - basic:				
Income from continuing operations	$ 1.52	$ 1.60	$ 2.74	$ 2.90
Income from discontinued operations	0.15	—	0.15	—
Net income	$ 1.67	$ 1.60	$ 2.89	$ 2.90
Earnings per share attributable to Quest Diagnostics' common stockholders - diluted:				
Income from continuing operations	$ 1.51	$ 1.57	$ 2.71	$ 2.84
Income from discontinued operations	0.15	—	0.15	—
Net income	$ 1.66	$ 1.57	$ 2.86	$ 2.84
Weighted average common shares outstanding:				
Basic	135	136	134	136
Diluted	136	139	136	139

The accompanying notes are an integral part of these statements.

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2019 AND 2018
(unaudited)
(in millions)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net income	$ 239	$ 233	$ 415	$ 422
Other comprehensive income:				
Currency translation	(4)	(14)	—	(8)
Net deferred loss on cash flow hedges, net of taxes	1	—	1	1
Other comprehensive (loss) income	(3)	(14)	1	(7)
Comprehensive income	236	219	416	415
Less: Comprehensive income attributable to noncontrolling interests	13	14	25	26
Comprehensive income attributable to Quest Diagnostics	$ 223	$ 205	$ 391	$ 389

The accompanying notes are an integral part of these statements.

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
JUNE 30, 2019 AND DECEMBER 31, 2018
(unaudited)
(in millions, except per share data)

	June 30, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 273	$ 135
Accounts receivable, net of allowance for doubtful accounts of $17 and $15 as of June 30, 2019 and December 31, 2018, respectively	1,088	1,012
Inventories	105	99
Prepaid expenses and other current assets	100	144
Total current assets	1,566	1,390
Property, plant and equipment, net	1,307	1,288
Operating lease right-of-use assets	511	—
Goodwill	6,605	6,563
Intangible assets, net	1,172	1,207
Investment in equity method investees	458	436
Other assets	141	119
Total assets	$ 11,760	$ 11,003
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	$ 951	$ 1,021
Current portion of long-term debt	807	464
Current portion of long-term operating lease liabilities	146	—
Total current liabilities	1,904	1,485
Long-term debt	3,169	3,429
Long-term operating lease liabilities	413	—
Other liabilities	689	745
Commitments and contingencies		
Redeemable noncontrolling interest	76	77
Stockholders' equity:		
Quest Diagnostics stockholders' equity:		
Common stock, par value $0.01 per share; 600 shares authorized as of both June 30, 2019 and December 31, 2018; 217 shares issued as of both June 30, 2019 and December 31, 2018	2	2
Additional paid-in capital	2,686	2,667
Retained earnings	7,849	7,602
Accumulated other comprehensive loss	(58)	(59)
Treasury stock, at cost; 82 shares as of both June 30, 2019 and December 31, 2018	(5,020)	(4,996)
Total Quest Diagnostics stockholders' equity	5,459	5,216
Noncontrolling interests	50	51
Total stockholders' equity	5,509	5,267
Total liabilities and stockholders' equity	$ 11,760	$ 11,003

The accompanying notes are an integral part of these statements.

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE SIX MONTHS ENDED JUNE 30, 2019 AND 2018
(unaudited)
(in millions)

	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
Cash flows from operating activities:		
Net income	$ 415	$ 422
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	165	151
Provision for doubtful accounts	5	—
Deferred income tax provision	13	39
Stock-based compensation expense	32	34
Other, net	(33)	18
Changes in operating assets and liabilities:		
Accounts receivable	(81)	(127)
Accounts payable and accrued expenses	27	(64)
Income taxes payable	15	(7)
Other assets and liabilities, net	38	37
Net cash provided by operating activities	596	503
Cash flows from investing activities:		
Business acquisitions, net of cash acquired	(56)	(165)
Capital expenditures	(132)	(151)
Increase in investments and other assets	(14)	(14)
Net cash used in investing activities	(202)	(330)
Cash flows from financing activities:		
Proceeds from borrowings	1,484	1,520
Repayments of debt	(1,448)	(1,553)
Purchases of treasury stock	(103)	(50)
Exercise of stock options	66	71
Employee payroll tax withholdings on stock issued under stock-based compensation plans	(16)	(20)
Dividends paid	(143)	(129)
Distributions to noncontrolling interest partners	(27)	(28)
Contributions from noncontrolling interest partners	—	4
Other financing activities, net	(69)	7
Net cash used in financing activities	(256)	(178)
Net change in cash and cash equivalents and restricted cash	138	(5)
Cash and cash equivalents and restricted cash, beginning of period	135	137
Cash and cash equivalents and restricted cash, end of period	$ 273	$ 132
Cash and cash equivalents	$ 273	$ 132
Restricted cash	—	—
Cash and cash equivalents and restricted cash, end of period	$ 273	$ 132

The accompanying notes are an integral part of these statements.

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2019 AND 2018
(unaudited)
(in millions)

For the Three Months Ended June 30, 2019		Quest Diagnostics Stockholders' Equity							
	Shares of Common Stock Outstanding	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Compre-hensive Loss	Treasury Stock, at Cost	Non-controlling Interests	Total Stock-holders' Equity	Redeemable Non-controlling Interest
Balance, March 31, 2019	134	$ 2	$ 2,671	$ 7,694	$ (55)	$ (5,022)	$ 51	$ 5,341	$ 77
Net income				226			12	238	1
Other comprehensive loss, net of taxes					(3)			(3)	
Dividends declared				(71)				(71)	
Distributions to noncontrolling interest partners							(13)	(13)	(2)
Issuance of common stock under benefit plans			2			5		7	
Stock-based compensation expense			15					15	
Exercise of stock options	1		(1)			47		46	
Shares to cover employee payroll tax withholdings on stock issued under stock-based compensation plans			(1)					(1)	
Purchases of treasury stock						(50)		(50)	
Balance, June 30, 2019	135	$ 2	$ 2,686	$ 7,849	$ (58)	$ (5,020)	$ 50	$ 5,509	$ 76

For the Six Months Ended June, 30, 2019		Quest Diagnostics Stockholders' Equity							
	Shares of Common Stock Outstanding	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Compre-hensive Loss	Treasury Stock, at Cost	Non-controlling Interests	Total Stock-holders' Equity	Redeemable Non-controlling Interest
Balance, December 31, 2018	135	$ 2	$ 2,667	$ 7,602	$ (59)	$ (4,996)	$ 51	$ 5,267	$ 77
Net income				390			22	412	3
Other comprehensive income, net of taxes					1			1	
Dividends declared				(143)				(143)	
Distributions to noncontrolling interest partners							(23)	(23)	(4)
Issuance of common stock under benefit plans			4			9		13	
Stock-based compensation expense			31			1		32	
Exercise of stock options	1					66		66	
Shares to cover employee payroll tax withholdings on stock issued under stock-based compensation plans			(16)					(16)	
Purchases of treasury stock	(1)					(100)		(100)	
Balance, June 30, 2019	135	$ 2	$ 2,686	$ 7,849	$ (58)	$ (5,020)	$ 50	$ 5,509	$ 76

The accompanying notes are an integral part of these statements.

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2019 AND 2018
(unaudited)
(in millions)

For the Three Months Ended June 30, 2018		Quest Diagnostics Stockholders' Equity							
	Shares of Common Stock Outstanding	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Compre-hensive Loss	Treasury Stock, at Cost	Non-controlling Interests	Total Stock-holders' Equity	Redeemable Non-controlling Interest
Balance, March 31, 2018	136	$ 2	$ 2,616	$ 7,249	$ (41)	$ (4,796)	$ 36	$ 5,066	$ 77
Net income				219			12	231	2
Other comprehensive loss, net of taxes					(14)			(14)	
Dividends declared				(69)				(69)	
Distributions to noncontrolling interest partners							(10)	(10)	(3)
Issuance of common stock under benefit plans			2			3		5	
Stock-based compensation expense			14			1		15	
Exercise of stock options			1			36		37	
Contributions from noncontrolling interest partners							2	2	
Reclassification of stranded tax effects resulting from enactment of the Tax Cut and Jobs Act				2	(2)			—	
Balance, June 30, 2018	136	$ 2	$ 2,633	$ 7,401	$ (57)	$ (4,756)	$ 40	$ 5,263	$ 76

For the Six Months Ended June 30, 2018		Quest Diagnostics Stockholders' Equity							
	Shares of Common Stock Outstanding	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Compre-hensive Loss	Treasury Stock, at Cost	Non-controlling Interests	Total Stock-holders' Equity	Redeemable Non-controlling Interest
Balance, December 31, 2017	135	$ 2	$ 2,612	$ 7,138	$ (48)	$ (4,783)	$ 34	$ 4,955	$ 80
Net income				396			23	419	3
Other comprehensive loss, net of taxes					(7)			(7)	
Dividends declared				(135)				(135)	
Distributions to noncontrolling interest partners							(21)	(21)	(7)
Issuance of common stock under benefit plans			6			7		13	
Stock-based compensation expense			32			2		34	
Exercise of stock options	1		3			68		71	
Shares to cover employee payroll tax withholdings on stock issued under stock-based compensation plans			(20)					(20)	
Purchases of treasury stock						(50)		(50)	
Contributions from noncontrolling interest partners							4	4	
Reclassification of stranded tax effects resulting from enactment of the Tax Cut and Jobs Act				2	(2)			—	
Balance, June 30, 2018	136	$ 2	$ 2,633	$ 7,401	$ (57)	$ (4,756)	$ 40	$ 5,263	$ 76

The accompanying notes are an integral part of these statements.

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)
(in millions, except per share data)

1. DESCRIPTION OF BUSINESS

Background

Quest Diagnostics Incorporated and its subsidiaries ("Quest Diagnostics" or the "Company") empower people to take action to improve health outcomes. The Company uses its extensive database of clinical lab results to derive diagnostic insights that reveal new avenues to identify and treat disease, inspire healthy behaviors and improve healthcare management. The Company's diagnostic information services business ("DIS") provides information and insights based on the industry-leading menu of routine, non-routine and advanced clinical testing and anatomic pathology testing, and other diagnostic information services. The Company provides services to a broad range of customers, including patients, clinicians, hospitals, independent delivery networks ("IDNs"), health plans, employers and accountable care organizations ("ACOs"). The Company offers the broadest access in the United States to diagnostic information services through its nationwide network of laboratories, patient service centers and phlebotomists in physician offices and the Company's connectivity resources, including call centers and mobile paramedics, nurses and other health and wellness professionals. The Company is the world's leading provider of diagnostic information services. The Company provides interpretive consultation with one of the largest medical and scientific staffs in the industry and hundreds of M.D.s and Ph.D.s, many of whom are recognized leaders in their fields. The Company's Diagnostic Solutions businesses ("DS") are the leading provider of risk assessment services for the life insurance industry and offer healthcare organizations and clinicians robust information technology solutions.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The interim unaudited consolidated financial statements reflect all adjustments which in the opinion of management are necessary for a fair statement of results of operations, comprehensive income, financial condition, cash flows and stockholders' equity for the periods presented. Except as otherwise disclosed, all such adjustments are of a normal recurring nature. Operating results for the interim periods are not necessarily indicative of the results that may be expected for the full year. These interim unaudited consolidated financial statements should be read in conjunction with the audited consolidated financial statements included in the Company’s 2018 Annual Report on Form 10-K. The year-end balance sheet data was derived from the audited consolidated financial statements as of December 31, 2018, but does not include all the disclosures required by accounting principles generally accepted in the United States (“GAAP”).

The accounting policies of the Company are the same as those set forth in Note 2 to the consolidated financial statements contained in the Company’s 2018 Annual Report on Form 10-K except for the impact of the adoption of new accounting standards discussed under *New Accounting Pronouncements.*

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Earnings Per Share

The Company's unvested restricted stock units that contain non-forfeitable rights to dividends are participating securities and, therefore, are included in the earnings allocation in computing earnings per share using the two-class method. Basic earnings per common share is calculated by dividing net income, adjusted for earnings allocated to participating securities, by the weighted average number of common shares outstanding. Diluted earnings per common share is calculated by dividing net income, adjusted for earnings allocated to participating securities, by the weighted average number of common shares outstanding after giving effect to all potentially dilutive common shares outstanding during the period. Potentially dilutive common shares include the dilutive effect of outstanding stock options and performance share units granted under the Company's Amended and Restated Employee Long-Term Incentive Plan and its Amended and Restated Non-Employee

Director Long-Term Incentive Plan. Earnings allocable to participating securities include the portion of dividends declared as well as the portion of undistributed earnings during the period allocable to participating securities.

New Accounting Pronouncements

Adoption of New Accounting Standards

On January 1, 2019, the Company adopted a new accounting standard issued by the Financial Accounting Standards Board ("FASB") on accounting for leases using the modified retrospective method. This new accounting standard requires a lessee to recognize an asset and liability for most leases on its balance sheet. The Company elected the optional transition method that allowed for a cumulative-effect adjustment to the opening balance of retained earnings recorded on January 1, 2019 and did not restate previously reported results in the comparative periods. The Company also elected the package of practical expedients, which among other things, allowed it to carry forward its historical lease classification.

As a result of adoption of the new standard, the Company recorded operating lease assets and lease liabilities of approximately $500 million and $550 million, respectively as of January 1, 2019. The operating lease liability was determined based on the present value of the remaining minimum rental payments and the operating lease asset was determined based on the value of the lease liability, adjusted for the deferred rent balances of approximately $50 million, which were previously included in accounts payable and accrued expenses as well as other liabilities. Accounting for the Company's finance leases remains substantially unchanged. The adoption of the new standard did not materially impact the Company's consolidated results of operations or cash flows.

In addition, the adoption of this new accounting standard resulted in increased qualitative and quantitative disclosures regarding the amount, timing, and uncertainty of cash flows arising from leases. For further details, see Note 9.

On January 1, 2019, the Company adopted a new accounting standard issued by the FASB that includes the overnight index swap rate based on the Secured Overnight Financing Rate as an additional benchmark interest rate for hedge accounting purposes. Adoption of this new accounting standard applies prospectively to new or redesignated hedges entered into after the adoption date and, therefore, did not have an impact on the Company's existing interest rate swap agreements.

New Accounting Standards To Be Adopted

In August 2018, the FASB issued an Accounting Standard Update ("ASU") that aligns the requirements for deferring implementation costs incurred in a cloud computing arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. This ASU is effective for the Company in the first quarter of 2020 with early adoption permitted and can be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The Company is currently assessing the impact of the adoption of this ASU on the Company's results of operations, financial position and cash flows.

In June 2016, the FASB issued an ASU that changes the impairment model for most financial instruments, including trade receivables, from an incurred loss method to a new forward-looking approach, based on expected losses. The estimate of expected credit losses will require entities to incorporate considerations of historical information, current information and reasonable and supportable forecasts. This ASU is effective for the Company in the first quarter of 2020 and must be adopted using a modified retrospective transition approach. The Company is currently assessing the impact of the adoption of this ASU on the Company's results of operations, financial position and cash flows.

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – CONTINUED
(unaudited)
(in millions, except per share data)

3. EARNINGS PER SHARE

The computation of basic and diluted earnings per common share was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Amounts attributable to Quest Diagnostics' common stockholders:				
Income from continuing operations	$ 206	$ 219	$ 370	$ 396
Income from discontinued operations, net of taxes	20	—	20	—
Net income attributable to Quest Diagnostics' common stockholders	$ 226	$ 219	$ 390	$ 396
Income from continuing operations	$ 206	$ 219	$ 370	$ 396
Less: Earnings allocated to participating securities	—	—	1	1
Earnings available to Quest Diagnostics' common stockholders – basic and diluted	$ 206	$ 219	$ 369	$ 395
Weighted average common shares outstanding – basic	135	136	134	136
Effect of dilutive securities:				
Stock options and performance share units	1	3	2	3
Weighted average common shares outstanding – diluted	136	139	136	139
Earnings per share attributable to Quest Diagnostics' common stockholders - basic:				
Income from continuing operations	$ 1.52	$ 1.60	$ 2.74	$ 2.90
Income from discontinued operations	0.15	—	0.15	—
Net income	$ 1.67	$ 1.60	$ 2.89	$ 2.90
Earnings per share attributable to Quest Diagnostics' common stockholders – diluted:				
Income from continuing operations	$ 1.51	$ 1.57	$ 2.71	$ 2.84
Income from discontinued operations	0.15	—	0.15	—
Net income	$ 1.66	$ 1.57	$ 2.86	$ 2.84

The following securities were not included in the calculation of diluted earnings per share due to their antidilutive effect:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Stock options	5	2	5	2

(in millions, except per share data)

4. RESTRUCTURING ACTIVITIES

Invigorate Program

The Company is committed to a program called Invigorate which is designed to reduce its cost structure and improve performance. Invigorate consists of several flagship programs, with structured plans in each, to drive savings and improve performance across the customer value chain. These flagship programs include: organization excellence; information technology excellence; procurement excellence; service excellence; lab excellence; and billing excellence. In addition to these programs, the Company identified key themes to change how it operates including reducing denials and patient concessions; further digitizing the business; standardization and automation; and optimization initiatives in the areas of lab network and patient service center network. The Invigorate program is intended to partially offset reimbursement pressures and labor and benefit cost increases; free up additional resources to invest in science, innovation and other growth initiatives; and enable the Company to improve service quality and operating profitability.

Restructuring Charges

The following table provides a summary of the Company's pre-tax restructuring charges for the three and six months ended June 30, 2019 and 2018:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Employee separation costs	$ —	$ 4	$ (3)	$ 15
Facility-related costs	—	3	—	4
Total restructuring charges	$ —	$ 7	$ (3)	$ 19

The restructuring activity recorded in the six months ended June 30, 2019 represents a release of the liability relating to restructuring charges recorded in prior periods, which were determined to no longer be required. Of the total restructuring release recorded in the six months ended June 30, 2019, $(1) million and $(2) million were recorded in cost of services and selling, general and administrative expenses, respectively.

The restructuring charges incurred for the three and six months ended June 30, 2018 were primarily associated with various workforce reduction initiatives as the Company continued to simplify and restructure its organization. Of the total restructuring charges incurred during the three months ended June 30, 2018, $3 million and $4 million were recorded in cost of services and selling, general and administrative expenses, respectively. Of the total restructuring charges incurred during the six months ended June 30, 2018, $7 million and $12 million were recorded in cost of services and selling, general and administrative expenses, respectively.

Charges for all periods presented were primarily recorded in the Company's DIS business.

The restructuring liability as of June 30, 2019 and December 31, 2018, which is included in accounts payable and accrued expenses, was $17 million and $38 million, respectively.

(in millions, except per share data)

5. BUSINESS ACQUISITIONS

On February 11, 2019, the Company completed its acquisition of certain assets of the clinical laboratory services business of Boyce & Bynum Pathology Laboratories, P.C. ("Boyce & Bynum") in an all cash transaction for $61 million, which consisted of cash consideration of $55 million and contingent consideration estimated at $6 million. The contingent consideration arrangement is dependent upon the achievement of certain testing volume benchmarks. Based on the preliminary purchase price allocation, the assets acquired principally consist of $41 million of goodwill (of which $35 million is currently tax deductible) and $20 million of customer-related intangible assets. The intangible assets will be amortized over a useful life of 15 years. For further details regarding the fair value of the contingent consideration, see Note 6.

The acquisition was accounted for under the acquisition method of accounting. As such, the assets acquired and liabilities assumed were recorded based on their estimated fair values as of the closing date. Supplemental pro forma combined financial information has not been presented as the impact of the acquisition is not material to the Company's consolidated financial statements. The goodwill recorded primarily includes the expected synergies resulting from combining the operations of the acquired entity with those of the Company and the value associated with an assembled workforce and other intangible assets that do not qualify for separate recognition. All of the goodwill acquired in connection with the acquisition has been allocated to the Company's DIS business. For further details regarding business segment information, see Note 14.

For details regarding the Company's 2018 acquisitions, see Note 6 to the consolidated financial statements in the Company's 2018 Annual Report on Form 10-K.

6. FAIR VALUE MEASUREMENTS

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following table provides a summary of the recognized assets and liabilities that are measured at fair value on a recurring basis:

		Basis of Fair Value Measurements		
		Quoted Prices in Active Markets for Identical Assets / Liabilities	Significant Other Observable Inputs	Significant Unobservable Inputs
June 30, 2019	**Total**	**Level 1**	**Level 2**	**Level 3**
Assets:				
Trading securities	$ 56	$ 56	$ —	$ —
Cash surrender value of life insurance policies	40	—	40	—
Total	$ 96	$ 56	$ 40	$ —
Liabilities:				
Deferred compensation liabilities	$ 104	$ —	$ 104	$ —
Interest rate swaps	37	—	37	—
Contingent consideration	13	—	—	13
Total	$ 154	$ —	$ 141	$ 13
Redeemable noncontrolling interest	$ 76	$ —	$ —	$ 76

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – CONTINUED
(unaudited)
(in millions, except per share data)

		Basis of Fair Value Measurements		
December 31, 2018	**Total**	**Level 1**	**Level 2**	**Level 3**
Assets:				
Trading securities	$ 53	$ 53	$ —	$ —
Cash surrender value of life insurance policies	34	—	34	—
Total	$ 87	$ 53	$ 34	$ —
Liabilities:				
Deferred compensation liabilities	$ 96	$ —	$ 96	$ —
Interest rate swaps	93	—	93	—
Contingent consideration	14	—	—	14
Total	$ 203	$ —	$ 189	$ 14
Redeemable noncontrolling interest	$ 77	$ —	$ —	$ 77

A detailed description regarding the Company's fair value measurements is contained in Note 8 to the consolidated financial statements in the Company's 2018 Annual Report on Form 10-K.

The Company offers certain employees the opportunity to participate in non-qualified supplemental deferred compensation plans. A participant's deferrals, together with Company matching credits, are invested in a variety of participant-directed stock and bond mutual funds that are classified as trading securities. The trading securities are classified within Level 1 because the changes in the fair value of these securities are measured using quoted prices in active markets based on the market price per unit multiplied by the number of units held, exclusive of any transaction costs. A corresponding adjustment for changes in fair value of the trading securities is also reflected in the changes in fair value of the deferred compensation obligation. The deferred compensation liabilities are classified within Level 2 because their inputs are derived principally from observable market data by correlation to the trading securities.

The Company offers certain employees the opportunity to participate in a non-qualified deferred compensation program. A participant's deferrals, together with Company matching credits, are "invested" at the direction of the employee in a hypothetical portfolio of investments which are tracked by an administrator. The Company purchases life insurance policies, with the Company named as beneficiary of the policies, for the purpose of funding the program's liability. Changes in the cash surrender value of the life insurance policies are based upon earnings and changes in the value of the underlying investments. Changes in the fair value of the deferred compensation obligation are derived using quoted prices in active markets based on the market price per unit multiplied by the number of units. The cash surrender value and the deferred compensation obligations are classified within Level 2 because their inputs are derived principally from observable market data by correlation to the hypothetical investments. Deferrals under the plan currently may only be made by participants who made deferrals under the plan in 2017.

The fair value measurements of the Company's interest rate swaps classified within Level 2 of the fair value hierarchy are model-derived valuations as of a given date in which all significant inputs are observable in active markets including certain financial information and certain assumptions regarding past, present and future market conditions.

In connection with previous business acquisitions, the Company has contingent consideration obligations that are to be paid based on the achievement of certain testing volume or revenue benchmarks. These contingent consideration liabilities are measured at fair value using an option-pricing method and are classified within Level 3 of the fair value hierarchy as the fair value is determined based on significant inputs that are not observable. Significant inputs include management's estimate of volume or revenue and other market inputs including comparable company revenue volatility and a discount rate. A summary of the significant inputs is as follows:

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – CONTINUED
(unaudited)
(in millions, except per share data)

Business Acquisition	Fair Value of Contingent Consideration	Benchmark	Comparable Company Revenue Volatility	Discount rate	Maximum Contingent Consideration Payment
Certain assets of the clinical and anatomic pathology laboratory business of Shiel Holdings, LLC ("Shiel") in December 2017	$ 7	Volume	6.9%	4.5%	$ 15
Certain assets of the clinical laboratory services business of Boyce & Bynum in February 2019	$ 6	Volume	8.0%	7.2%	$ 25
ReproSource, Inc. in September 2018	$ —	Revenue	8.5%	6.5%	$ 10

For further details regarding the Company's acquisitions, see Note 6 to the consolidated financial statements in the Company's 2018 Annual Report on Form 10-K and Note 5 to the interim unaudited consolidated financial statements.

The following table provides a reconciliation of the beginning and ending balances of liabilities using significant unobservable inputs (Level 3):

	Contingent Consideration
Balance, December 31, 2018	$ 14
Purchases, additions and issuances	6
Settlements	(1)
Total gains/losses included in earnings - realized/unrealized	(6)
Balance, June 30, 2019	$ 13

The $6 million net gain included in earnings associated with the change in the fair value of contingent consideration for the six months ended June 30, 2019 is reported in other operating income, net.

In connection with the sale of an 18.9% noncontrolling interest in a subsidiary to UMass Memorial Medical Center ("UMass") on July 1, 2015, the Company granted UMass the right to require the Company to purchase all of its interest in the subsidiary at fair value commencing July 1, 2020. As of June 30, 2019, the redeemable noncontrolling interest was presented at its fair value. The fair value measurement of the redeemable noncontrolling interest is classified within Level 3 of the fair value hierarchy because the fair value is based on a discounted cash flow analysis that takes into account, among other items, the joint venture's expected future cash flows, long term growth rates, and a discount rate commensurate with economic risk.

The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable and accrued expenses approximate fair value based on the short maturities of these instruments. As of June 30, 2019 and December 31, 2018, the fair value of the Company’s debt was estimated at $4.2 billion and $4.0 billion, respectively. Principally all of the Company's debt is classified within Level 1 of the fair value hierarchy because the fair value of the debt is estimated based on rates currently offered to the Company with identical terms and maturities, using quoted active market prices and yields, taking into account the underlying terms of the debt instruments.

(in millions, except per share data)

7. GOODWILL AND INTANGIBLE ASSETS

The changes in goodwill for the six months ended June 30, 2019 and for the year ended December 31, 2018 were as follows:

	June 30, 2019	December 31, 2018
Balance, beginning of period	$ 6,563	$ 6,335
Goodwill acquired during the period	42	228
Balance, end of period	$ 6,605	$ 6,563

Principally all of the Company's goodwill as of June 30, 2019 and December 31, 2018 was associated with its DIS business.

For the six months ended June 30, 2019, goodwill acquired during the period was primarily associated with the acquisition of certain assets of the clinical laboratory services business of Boyce & Bynum (see Note 5). For the year ended December 31, 2018, goodwill acquired was principally associated with the acquisitions of the U.S. laboratory service business of Oxford Immunotec, Inc., Mobile Medical Examination Services, LLC., ReproSource, Inc. and the outreach laboratory service business of Cape Cod Healthcare, Inc. For details regarding the Company's 2018 acquisitions, see Note 6 to the consolidated financial statements in the Company's 2018 Annual Report on Form 10-K.

Intangible assets at June 30, 2019 and December 31, 2018 consisted of the following:

	Weighted Average Amortization Period (in years)	June 30, 2019			December 31, 2018		
		Cost	Accumulated Amortization	Net	Cost	Accumulated Amortization	Net
Amortizing intangible assets:							
Customer-related	18	$ 1,367	$ (517)	$ 850	$ 1,355	$ (478)	$ 877
Non-compete agreements	9	3	(2)	1	3	(2)	1
Technology	17	104	(53)	51	104	(50)	54
Other	9	113	(79)	34	114	(75)	39
Total	17	1,587	(651)	936	1,576	(605)	971
Intangible assets not subject to amortization:							
Trade names		235	—	235	235	—	235
Other		1	—	1	1	—	1
Total intangible assets		$ 1,823	$ (651)	$ 1,172	$ 1,812	$ (605)	$ 1,207

(in millions, except per share data)

The estimated amortization expense related to amortizable intangible assets for each of the five succeeding fiscal years and thereafter as of June 30, 2019 is as follows:

Year Ending December 31,		
Remainder of 2019	$	49
2020		97
2021		97
2022		91
2023		88
2024		86
Thereafter		428
Total	$	936

8. DEBT

Long-term debt (including finance lease obligations) as of June 30, 2019 and December 31, 2018 consisted of the following:

	June 30, 2019		December 31, 2018	
Secured Receivables Credit Facility (3.39% at December 31, 2018)	$	—	$	160
2.70% Senior Notes due April 2019		—		300
4.75% Senior Notes due January 2020		504		507
2.50% Senior Notes due March 2020		300		300
4.70% Senior Notes due April 2021		555		557
4.25% Senior Notes due April 2024		308		299
3.50% Senior Notes due March 2025		589		562
3.45% Senior Notes due June 2026		487		469
4.20% Senior Notes due June 2029		499		—
6.95% Senior Notes due July 2037		175		175
5.75% Senior Notes due January 2040		244		244
4.70% Senior Notes due March 2045		300		300
Other		35		37
Debt issuance costs		(20)		(17)
Total long-term debt		3,976		3,893
Less: Current portion of long-term debt		807		464
Total long-term debt, net of current portion	$	3,169	$	3,429

2019 Senior Notes Offering

In March 2019, the Company completed a senior unsecured notes offering (the “2019 Senior Notes”), consisting of $500 million aggregate principal amount of 4.20% senior notes due June 2029, which were issued at an original issue discount of $1 million. The 2019 Senior Notes are unsecured obligations of the Company that rank equally with the Company's other senior unsecured obligations. The 2019 Senior Notes do not have a sinking fund requirement. The Company incurred $5 million of debt issuance costs associated with the 2019 Senior Notes, which is included as a reduction to the carrying amount of long-term debt and is being amortized over the term of the related debt.

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – CONTINUED
(unaudited)
(in millions, except per share data)

The net proceeds from the 2019 Senior Notes were used to repay in full the outstanding indebtedness under the Company's Senior Notes due April 1, 2019, to repay outstanding indebtedness under the secured receivables credit facility and for general corporate purposes.

Secured Receivables Credit Facility

During the six months ended June 30, 2019, there were $985 million in cumulative borrowings under the secured receivables credit facility primarily associated with working capital requirements as well as the funding of the Company's 2019 business acquisition. During the six months ended June 30, 2019, there were $1,145 million in repayments under the secured receivables credit facility.

Maturities of Long-Term Debt

As of June 30, 2019, long-term debt matures as follows:

Year Ending December 31,		
Remainder of 2019	$	2
2020		803
2021		553
2022		3
2023		1
Thereafter		2,648
Total maturities of long-term debt		4,010
Unamortized discount		(9)
Debt issuance costs		(20)
Fair value basis adjustments attributable to hedged debt		(5)
Total long-term debt		3,976
Current portion of long-term debt		807
Total long-term debt, net of current portion	$	3,169

(in millions, except per share data)

9. LEASES

The Company determines if an arrangement is or contains a lease at contract inception. The Company leases office space, patient service centers, clinical laboratories, warehouses, logistic hubs and equipment primarily through operating leases with a limited number of finance leases. A right-of-use asset, representing the underlying asset during the lease term, and a lease liability, representing the payment obligation arising from the lease, are recognized on the balance sheet at lease commencement based on the present value of the payment obligation. For operating leases, expense is recognized on a straight-line basis over the lease term. For finance leases, interest expense on the lease liability is recognized using the effective interest method and amortization of the right-of-use asset is recognized on a straight-line basis over the shorter of the estimated useful life of the asset or the lease term. Short-term leases with an initial 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.

The Company primarily uses its incremental borrowing rate in determining the present value of lease payments as the Company's leases generally do not provide an implicit rate.

The Company has lease agreements with (i) right-of-use asset payments and (ii) non-lease components (i.e. payments related to maintenance fees, utilities, etc,) which have generally been combined and accounted for as a single lease component.

The Company's leases have remaining terms of less than 1 year to 15 years, some of which include options to extend the leases for up to 15 years. The Company's lease terms may include renewal options that are reasonably certain to be exercised and termination options that are reasonably certain not to be exercised. Certain leases also include options to purchase the leased property.

Certain of the Company's lease agreements include rental payments adjusted periodically for inflation or a market rate which are included in the lease liabilities.

Leases	Balance Sheet Classification	June 30, 2019
Assets		
Operating	Operating lease right-of-use assets	$ 511
Finance	Property, plant and equipment, net (a)	37
Total lease assets		$ 548
Liabilities		
Current:		
Operating	Current portion of long-term operating lease liabilities	$ 146
Finance	Current portion of long-term debt	3
Non-current:		
Operating	Long-term operating lease liabilities	413
Finance	Long-term debt	31
Total lease liabilities		$ 593

(a) Finance lease assets were recorded net of accumulated amortization of $25 million as of June 30, 2019.

(in millions, except per share data)

Components of lease cost for the three and six months ended June 30, 2019 were as follows:

Lease cost	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Operating lease cost (a)	$ 73	$ 146
Finance lease cost:		
Amortization of leased assets	2	4
Interest on lease liabilities	1	2
Net lease cost	$ 76	$ 152

(a) Includes short-term leases and variable lease costs (primarily maintenance fees and utilities related to real estate leases) of $29 million and $58 million for the three and six months ended June 30, 2019, respectively.

Rental expense for real estate, laboratory equipment and vehicles under operating leases amounted to $57 million and $112 million for the three and six months ended June 30, 2018, respectively.

The maturity of the Company's lease liabilities as of June 30, 2019 is as follows:

Maturity of lease liabilities	Operating leases	Finance leases	Total
Remainder of 2019	$ 80	$ 3	$ 83
2020	147	6	153
2021	110	5	115
2022	85	5	90
2023	67	3	70
Thereafter	128	34	162
Total lease payments	617	56	673
Less: Interest (a)	58	22	80
Present value of lease liabilities	$ 559	$ 34	$ 593

(a) Primarily calculated using the Company's incremental borrowing rate.

Minimum rental commitments under noncancelable operating leases, primarily real estate, in effect as of December 31, 2018 are as follows:

Year Ending December 31,	
2019	$ 181
2020	143
2021	106
2022	79
2023	60
Thereafter	122
Minimum lease payments	$ 691

(in millions, except per share data)

Lease term and discount rate as of June 30, 2019 were as follows:

Lease term and discount rate	
Weighted-average remaining lease term (years):	
Operating leases	5
Finance leases	12
Weighted-average discount rate:	
Operating leases	3.3%
Finance leases	8.6%

See Note 12 for cash flow information on cash paid for amounts included in the measurement of lease liabilities, leased assets obtained in exchange for new operating lease liabilities, and leased assets obtained in exchange for new finance lease liabilities for the three and six months ended June 30, 2019.

10. FINANCIAL INSTRUMENTS

The Company uses derivative financial instruments to manage its exposure to market risks for changes in interest rates and, from time to time, foreign currencies. This strategy includes the use of interest rate swap agreements, forward starting interest rate swap agreements, treasury lock agreements and foreign currency forward contracts to manage its exposure to movements in interest and currency rates. The Company has established policies and procedures for risk assessment and the approval, reporting and monitoring of derivative financial instrument activities. These policies prohibit holding or issuing derivative financial instruments for speculative purposes. The Company does not enter into derivative financial instruments that contain credit-risk-related contingent features or requirements to post collateral.

Interest Rate Risk

The Company is exposed to interest rate risk on its cash and cash equivalents and its debt obligations. Interest income earned on cash and cash equivalents may fluctuate as interest rates change; however, due to their relatively short maturities, the Company does not hedge these assets or their investment cash flows and the impact of interest rate risk is not material. The Company's debt obligations consist of fixed-rate and variable-rate debt instruments. The Company's primary objective is to achieve the lowest overall cost of funding while managing the variability in cash outflows within an acceptable range. In order to achieve this objective, the Company has entered into interest rate swaps. Interest rate swaps involve the periodic exchange of payments without the exchange of underlying principal or notional amounts. Net settlements between the counterparties are recognized as an adjustment to interest expense, net.

Interest Rate Derivatives – Cash Flow Hedges

From time to time, the Company has entered into various interest rate lock agreements and forward starting interest rate swap agreements to hedge part of the Company's interest rate exposure associated with the variability in future cash flows attributable to changes in interest rates.

In February 2019, the Company entered into interest rate lock agreements with several financial institutions for a total notional amount of $250 million, which were accounted for as cash flow hedges. These agreements were entered into to hedge a portion of the Company's interest rate exposure associated with variability in future cash flows attributable to changes in the ten-year treasury rates related to the expected issuance of the 2019 Senior Notes. In connection with the issuance of the 2019 Senior Notes in March 2019, these agreements were settled, and the Company paid $1 million. These losses are deferred in stockholders' equity, net of taxes, as a component of accumulated other comprehensive loss, and amortized as an adjustment to interest expense, net over the term of the 2019 Senior Notes.

The total net loss, net of taxes, recognized in accumulated other comprehensive loss, related to the Company's cash flow hedges was $8 million and $9 million as of June 30, 2019 and December 31, 2018, respectively. The net amount of deferred losses on cash flow hedges that is expected to be reclassified from accumulated other comprehensive loss into interest expense, net within the next twelve months is $2 million.

(in millions, except per share data)

Interest Rate Derivatives – Fair Value Hedges

The Company maintains various fixed-to-variable interest rate swaps to convert a portion of the Company's long-term debt into variable interest rate debt. A summary of the notional amounts of these interest rate swaps as of June 30, 2019 and December 31, 2018 was as follows:

Debt Instrument	Notional Amount June 30, 2019	Notional Amount December 31, 2018
4.25% Senior Notes due April 2024	$ 250	$ 250
3.50% Senior Notes due March 2025	600	600
3.45% Senior Notes due June 2026	350	350
	$ 1,200	$ 1,200

The fixed-to-variable interest rate swap agreements in the table above have variable interest rates ranging from one-month LIBOR plus 2.2% to one-month LIBOR plus 3.0%.

As of June 30, 2019 and December 31, 2018, the following amounts were recorded on the consolidated balance sheet related to cumulative basis adjustments for fair value hedges included in the carrying amount of long-term debt:

Balance Sheet Classification	Carrying Amount of Hedged Long-Term Debt June 30, 2019	Hedge Accounting Basis Adjustment (a) June 30, 2019	Carrying Amount of Hedged Long-Term Debt December 31, 2018	Hedge Accounting Basis Adjustment (a) December 31, 2018
Long-term debt	$ 1,179	$ (5)	$ 1,125	$ (53)

(a) The balance includes $32 million and $40 million of remaining unamortized hedging adjustment on a discontinued relationship as of June 30, 2019 and December 31, 2018, respectively.

The following table presents the effect of fair value hedge accounting on the statement of operations for the three and six months ended June 30, 2019 and 2018:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	Other income (expense), net	Other income (expense), net	Other income (expense), net	Other income (expense), net
Total for line item in which the effects of fair value hedges are recorded	$ 3	$ 1	$ 12	$ (1)
Gain (loss) on fair value hedging relationships:				
Hedged items (Long-term debt)	$ (40)	$ 7	$ (56)	$ 32
Derivatives designated as hedging instruments	$ 40	$ (7)	$ 56	$ (32)

A summary of the fair values of derivative instruments in the consolidated balance sheets was as follows:

	June 30, 2019		December 31, 2018	
Derivatives Designated as Hedging Instruments	Balance Sheet Classification	Fair Value	Balance Sheet Classification	Fair Value
Interest rate swaps	Other liabilities	$ 37	Other liabilities	$ 93

A detailed description regarding the Company's use of derivative financial instruments is contained in Note 15 to the consolidated financial statements in the Company's 2018 Annual Report on Form 10-K.

11. STOCKHOLDERS' EQUITY AND REDEEMABLE NONCONTROLLING INTEREST

Stockholders' Equity

Changes in Accumulated Other Comprehensive Income (Loss) by Component

Comprehensive income (loss) includes:

- Foreign currency translation adjustments;
- Net deferred loss on cash flow hedges, which represents deferred losses, net of tax on interest rate related derivative financial instruments designated as cash flow hedges, net of amounts reclassified to interest expense (see Note 10).

For the three and six months ended June 30, 2019 and 2018, the tax effects related to the deferred losses on cash flow hedges were not material. Foreign currency translation adjustments related to indefinite investments in non-U.S. subsidiaries are not adjusted for income taxes.

Dividend Program

During the first and second quarters of 2019, the Company's Board of Directors declared a quarterly cash dividend of $0.53 per common share. During each of the first three quarters of 2018, the Company's Board of Directors declared a quarterly cash dividend of $0.50 per common share. During the fourth quarter of 2018, the Company's Board of Directors declared a quarterly cash dividend of $0.53 per common share.

Share Repurchase Program

As of June 30, 2019, $492 million remained available under the Company's share repurchase authorizations. The share repurchase authorization has no set expiration or termination date.

Share Repurchases

For the six months ended June 30, 2019, the Company repurchased 1.1 million shares of its common stock for $100 million.

For the six months ended June 30, 2018, the Company repurchased 0.5 million shares of its common stock for $50 million.

Shares Reissued from Treasury Stock

For the six months ended June 30, 2019 and 2018, the Company reissued 1.2 million shares and 1.3 million shares, respectively, from treasury stock for shares issued under the Employee Stock Purchase Plan and stock option plans. For details regarding the Company's stock ownership and compensation plans, see Note 17 to the consolidated financial statements in the Company's 2018 Annual Report on Form 10-K.

Redeemable Noncontrolling Interest

In connection with the sale of an 18.9% noncontrolling interest in a subsidiary to UMass on July 1, 2015, the Company granted UMass the right to require the Company to purchase all of its interest in the subsidiary at fair value commencing July 1, 2020. The subsidiary performs diagnostic information services in a defined territory within the state of Massachusetts. Since the redemption of the noncontrolling interest is outside of the Company's control, it has been presented outside of stockholders' equity at the greater of its carrying amount or its fair value. The Company records changes in the fair value of the noncontrolling interest immediately as they occur. As of June 30, 2019, the redeemable noncontrolling interest was presented at its fair value. For further information regarding the fair value of the redeemable noncontrolling interest, see Note 6.

(in millions, except per share data)

12. SUPPLEMENTAL CASH FLOW AND OTHER DATA

Supplemental cash flow and other data for the three and six months ended June 30, 2019 and 2018 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Depreciation expense	$ 56	$ 55	$ 116	$ 107
Amortization expense	25	22	49	44
Depreciation and amortization expense	$ 81	$ 77	$ 165	$ 151
Interest expense	$ (46)	$ (43)	$ (91)	$ (84)
Interest income	1	1	2	1
Interest expense, net	$ (45)	$ (42)	$ (89)	$ (83)
Interest paid	$ 63	$ 37	$ 91	$ 86
Income taxes paid	$ 80	$ 39	$ 83	$ 41
Assets acquired under capital leases	$ —	$ 1	$ —	$ 1
Accounts payable associated with capital expenditures	$ 15	$ 13	$ 15	$ 13
Dividends payable	$ 72	$ 69	$ 72	$ 69
Businesses acquired:				
Fair value of assets acquired	$ —	$ 35	$ 61	$ 183
Fair value of liabilities assumed	—	—	—	(1)
Fair value of net assets acquired	—	35	61	182
Merger consideration paid (payable), net	—	—	(5)	(12)
Cash paid for business acquisitions	—	35	56	170
Less: Cash acquired	—	—	—	5
Business acquisitions, net of cash acquired	$ —	$ 35	$ 56	$ 165

	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Leases:		
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	$ 45	$ 90
Operating cash flows from finance leases	$ 1	$ 2
Financing cash flows from finance leases	$ 1	$ 2
Leased assets obtained in exchange for new operating lease liabilities	$ 53	$ 78

13. COMMITMENTS AND CONTINGENCIES

Letters of Credit

The Company can issue letters of credit totaling $100 million under its secured receivables credit facility and $150 million under its senior unsecured revolving credit facility. For further discussion regarding the Company's secured receivables credit facility and senior unsecured revolving credit facility, see Note 14 to the consolidated financial statements in the Company's 2018 Annual Report on Form 10-K and Note 8 to the interim unaudited consolidated financial statements.

In support of its risk management program, to ensure the Company's performance or payment to third parties, $71 million in letters of credit under the secured receivables credit facility were outstanding as of June 30, 2019. The letters of credit primarily represent collateral for current and future automobile liability and workers' compensation loss payments.

Contingent Lease Obligations

The Company remains subject to contingent obligations under certain real estate leases, including leases that were entered into by certain predecessor companies of a subsidiary prior to the Company's acquisition of the subsidiary. No liability has been recorded for any of these potential contingent obligations. For further details, see Note 18 to the consolidated financial statements in the Company's 2018 Annual Report on Form 10-K.

Legal Matters

AMCA Data Security Incident

On June 3, 2019, the Company reported that Retrieval-Masters Creditors Bureau, Inc./American Medical Collection Agency ("AMCA"), informed the Company and Optum360 LLC, which provides revenue management services to the Company, about a data security incident involving AMCA (the "AMCA Data Security Incident"). AMCA (which provided debt collection services for Optum360) informed the Company and Optum360 that AMCA had learned that an unauthorized user had access to AMCA's system between August 1, 2018 and March 30, 2019. AMCA first informed the Company of the AMCA Data Security Incident on May 14, 2019. AMCA's affected system included financial information (e.g., credit card numbers and bank account information), medical information and other personal information (e.g., social security numbers). Test results were not included. Neither Optum360's nor the Company's systems or databases were involved in the incident. AMCA has also informed us that information pertaining to other laboratories' customers was also affected.

To date, approximately 31 class action lawsuits related to the AMCA Data Security Incident have been filed against the Company, most of which name other defendants, in federal courts in a number of districts. The cases are putative class actions in which the plaintiffs, who purport to represent various classes of consumers, assert a variety of common law and statutory claims in connection with the AMCA Data Security Incident. Motions to consolidate and transfer these cases to a single U.S. District Court are pending before the U.S. Judicial Panel on Multidistrict Litigation.

In addition, certain federal and state governmental authorities are investigating, or otherwise seeking information and/or documents from the Company related to the AMCA Data Security Incident and related matters, including Attorneys General offices from numerous states and the District of Columbia and certain U.S. senators.

The Company has insurance coverage rights in place for certain potential costs and liabilities related to the AMCA Data Security Incident; this insurance coverage is limited in amount and subject to a deductible. While management believes it is reasonably possible that the Company may incur losses associated with these proceedings and investigations, it is not possible to estimate the amount of loss or range of loss, if any, that might result from adverse judgments, settlements, fines, penalties, or other resolution of these proceedings and investigations based on the stage of these proceedings and investigations, the absence of specific allegations as to alleged damages, the uncertainty as to the certification of a class or classes and the size of any certified class, if applicable, and/or the lack of resolution of significant factual and legal issues.

Other Legal Matters

In the normal course of business, the Company has been named, from time to time, as a defendant in various legal actions, including arbitrations, class actions and other litigation, arising in connection with the Company's activities as a provider of diagnostic testing, information and services. These actions could involve claims for substantial compensatory and/or punitive damages or claims for indeterminate amounts of damages, and could have an adverse impact on the Company's client base and reputation.

The Company is also involved, from time to time, in other reviews, investigations and proceedings by governmental agencies regarding the Company's business, including, among other matters, operational matters, which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. The number of these reviews, investigations and proceedings has increased in recent years with regard to many firms in the healthcare services industry, including the Company.

The federal or state governments may bring claims based on the Company's current practices, which it believes are lawful. In addition, certain federal and state statutes, including the *qui tam* provisions of the federal False Claims Act, allow private individuals to bring lawsuits against healthcare companies on behalf of government or private payers. The Company is aware of lawsuits, and from time to time has received subpoenas, related to billing practices based on the qui tam provisions of the Civil False Claims Act or other federal and state statutes, regulations or other laws. The Company understands that there may be other pending qui tam claims brought by former employees or other "whistle blowers" as to which the Company cannot determine the extent of any potential liability.

Management cannot predict the outcome of such matters. Although management does not anticipate that the ultimate outcome of such matters will have a material adverse effect on the Company's financial condition, given the high degree of judgment involved in establishing loss estimates related to these types of matters, the outcome of such matters may be material to the Company's results of operations or cash flows in the period in which the impact of such matters is determined or paid.

These matters are in different stages. Some of these matters are in their early stages. Matters may involve responding to and cooperating with various government investigations and related subpoenas. As of June 30, 2019, the Company does not believe that material losses related to legal matters are probable.

Reserves for legal matters totaled $1 million as of both June 30, 2019 and December 31, 2018.

Reserves for General and Professional Liability Claims

As a general matter, providers of clinical testing services may be subject to lawsuits alleging negligence or other similar legal claims. These suits could involve claims for substantial damages. Any professional liability litigation could also have an adverse impact on the Company's client base and reputation. The Company maintains various liability insurance coverages for, among other things, claims that could result from providing, or failing to provide, clinical testing services, including inaccurate testing results, and other exposures. The Company's insurance coverage limits its maximum exposure on individual claims; however, the Company is essentially self-insured for a significant portion of these claims. Reserves for such matters, including those associated with both asserted and incurred but not reported claims, are established on an undiscounted basis by considering actuarially determined losses based upon the Company's historical and projected loss experience. Such reserves totaled $129 million and $125 million as of June 30, 2019 and December 31, 2018, respectively. Management believes that established reserves and present insurance coverage are sufficient to cover currently estimated exposures.

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – CONTINUED
(unaudited)
(in millions, except per share data)

14. BUSINESS SEGMENT INFORMATION

The Company's DIS business is the only reportable segment based on the manner in which the Chief Executive Officer, who is the Company's chief operating decision maker ("CODM"), assesses performance and allocates resources across the organization. The DIS business provides diagnostic information services to a broad range of customers, including patients, clinicians, hospitals, IDNs, health plans, employers and ACOs. The Company is the world's leading provider of diagnostic information services, which includes providing information and insights based on the industry-leading menu of routine, non-routine and advanced clinical testing and anatomic pathology testing, and other diagnostic information services. The DIS business accounted for greater than 95% of net revenues in 2019 and 2018.

All other operating segments include the Company's DS businesses, which consist of its risk assessment services and healthcare information technology businesses. The Company's DS businesses are the leading provider of risk assessment services for the life insurance industry and offer healthcare organizations and clinicians robust information technology solutions.

As of June 30, 2019, substantially all of the Company’s services were provided within the United States, and substantially all of the Company’s assets were located within the United States.

The following table is a summary of segment information for the three and six months ended June 30, 2019 and 2018. Segment asset information is not presented since it is not used by the CODM at the operating segment level. Operating earnings (loss) of each segment represents net revenues less directly identifiable expenses to arrive at operating income (loss) for the segment. General corporate activities included in the table below are comprised of general management and administrative corporate expenses, amortization and impairment of intangibles assets and other operating income and expenses, net of certain general corporate activity costs that are allocated to the DIS and DS businesses. The accounting policies of the segments are the same as those of the Company as set forth in Note 2 to the consolidated financial statements contained in the Company’s 2018 Annual Report on Form 10-K and Note 2 to the interim unaudited consolidated financial statements.

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net revenues:				
DIS business	$ 1,872	$ 1,835	$ 3,684	$ 3,638
All other operating segments	81	84	160	165
Total net revenues	$ 1,953	$ 1,919	$ 3,844	$ 3,803
Operating earnings (loss):				
DIS business	$ 338	$ 341	$ 618	$ 649
All other operating segments	12	11	21	22
General corporate activities	(43)	(47)	(84)	(94)
Total operating income	307	305	555	577
Non-operating expenses, net	(42)	(41)	(77)	(84)
Income from continuing operations before income taxes and equity in earnings of equity method investees	265	264	478	493
Income tax expense	(63)	(42)	(113)	(94)
Equity in earnings of equity method investees, net of taxes	17	11	30	23
Income from continuing operations	219	233	395	422
Income from discontinued operations, net of taxes	20	—	20	—
Net income	239	233	415	422
Less: Net income attributable to noncontrolling interests	13	14	25	26
Net income attributable to Quest Diagnostics	$ 226	$ 219	$ 390	$ 396

15. RELATED PARTIES

The Company's equity method investees primarily consist of its clinical trials central laboratory services joint venture and its diagnostic information services joint ventures, which are accounted for under the equity method of accounting. During both the three months ended June 30, 2019 and 2018, the Company recognized net revenues of $9 million associated with diagnostic information services provided to its equity method investees. During both the six months ended June 30, 2019 and 2018, the Company recognized net revenues of $18 million associated with such services. As of June 30, 2019 and December 31, 2018, there was $4 million and $3 million, respectively, of accounts receivable from equity method investees related to such services. During the three and six months ended June 30, 2019, the Company recognized net revenues of $2 million and $5 million, respectively, associated with diagnostic information services provided to a noncontrolling interest partner in a joint venture. As of June 30, 2019, there was $2 million of accounts receivable from the noncontrolling interest partner related to such services.

During both the three months ended June 30, 2019 and 2018, the Company recognized income of $4 million associated with the performance of certain corporate services, including transition services, for its equity method investees, classified within selling, general and administrative expenses. During both the six months ended June 30, 2019 and 2018, the Company recognized income of $8 million associated with the performance of such services classified within selling, general and administrative expenses. As of both June 30, 2019 and December 31, 2018, there was $3 million of other receivables from equity method investees included in prepaid expenses and other current assets related to these service agreements and other transition related items. In addition, accounts payable and accrued expenses as of both June 30, 2019 and December 31, 2018 included $1 million due to equity method investees.

16. REVENUE RECOGITION

DIS

Net revenues in the Company’s DIS business accounted for over 95% of the Company’s total net revenues for the three and six months ended June 30, 2019 and 2018 and are primarily comprised of a high volume of relatively low-dollar transactions. The DIS business, which provides clinical testing services and other services, satisfies its performance obligations and recognizes revenues upon completion of the testing process, when results are reported, or when services have been rendered. The Company estimates the amount of consideration it expects to be entitled to receive from customer groups, by applying the portfolio approach, in exchange for providing services. These estimates include the impact of contractual allowances, including payer denials and price concessions. The portfolios determined using the portfolio approach consist of the following groups of customers: healthcare insurers, government payers, client payers and patients.

DS

The Company’s DS businesses primarily satisfy their performance obligations and recognize revenues when delivery has occurred or services have been rendered.

The approximate percentage of net revenue by type of customer was as follows:

QUEST DIAGNOSTICS INCORPORATED AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – CONTINUED
(unaudited)
(in millions, except per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	**2018**	**2019**	**2018**
Healthcare insurers:				
Fee-for-service	32%	32%	33%	32%
Capitated	3	4	3	4
Total healthcare insurers	35	36	36	36
Government payers	15	16	15	16
Client payers	32	31	32	31
Patients	14	13	13	13
Total DIS	96	96	96	96
DS	4	4	4	4
Net revenues	100%	100%	100%	100%

17. TAXES ON INCOME

For the three months ended June 30, 2019 and 2018, the effective income tax rate was 23.6% and 16.2%, respectively. The effective income tax rate for both the three months ended June 30, 2019 and 2018 benefited from $5 million of excess tax benefit associated with stock-based compensation arrangements. In addition, during the three months ended June 30, 2018 the Company recognized a $15 million income tax benefit associated with a change in a tax return accounting method that enabled the Company to accelerate the deduction of certain expenses on its 2017 tax return at the federal corporate statutory tax rate in effect during 2017.

For the six months ended June 30, 2019 and 2018, the effective income tax rate was 23.6% and 19.1%, respectively. The effective income tax rate for the six months ended June 30, 2019 and 2018 benefited from $8 million and $13 million, respectively, of excess tax benefit associated with stock-based compensation arrangements. In addition, during the six months ended June 30, 2018 the Company recognized a $15 million income tax benefit associated with a change in a tax return accounting method that enabled the Company to accelerate the deduction of certain expenses on its 2017 tax return at the federal corporate statutory tax rate in effect during 2017.

18. DISCONTINUED OPERATIONS

During the third quarter of 2006, the Company completed the wind down of Nichols Institute Diagnostics ("NID"), a test kit manufacturing subsidiary, which was reported as a discontinued operation for the three and six months ended June 30, 2019 and 2018. Discontinued operations, net of taxes, for the three and six months ended June 30, 2019 includes discrete tax benefits of $20 million associated with the favorable resolution of certain tax contingencies related to NID. In addition, net cash provided by operating activities in the consolidated statement of cash flows for the six months ended June 30, 2019 included a $28 million refund from the taxing authorities related to discontinued operations.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Our Company

Diagnostic Information Services

Quest Diagnostics empowers people to take action to improve health outcomes. We use our extensive database of clinical lab results to derive diagnostic insights that reveal new avenues to identify and treat disease, inspire healthy behaviors and improve healthcare management. Our diagnostic information services business ("DIS") provides information and insights based on the industry-leading menu of routine, non-routine and advanced clinical testing and anatomic pathology testing, and other diagnostic information services. We provide services to a broad range of customers, including patients, clinicians, hospitals, independent delivery networks ("IDNs"), health plans, employers and accountable care organizations ("ACOs"). We offer the broadest access in the United States to diagnostic information services through our nationwide network of laboratories, patient service centers and phlebotomists in physician offices and our connectivity resources, including call centers and mobile paramedics, nurses and other health and wellness professionals. We are the world's leading provider of diagnostic information services. We provide interpretive consultation with one of the largest medical and scientific staffs in the industry. Our DIS business makes up over 95% of our consolidated net revenues.

Diagnostic Solutions

In our Diagnostic Solutions ("DS") businesses, which represents the balance of our consolidated net revenues, we are the leading provider of risk assessment services for the life insurance industry and we offer healthcare organizations and clinicians robust information technology solutions.

Second Quarter Highlights

- Our total net revenues of $1.95 billion were up 1.8% from the prior year period.
- In DIS:
  - Revenues of $1.87 billion increased by 2.0% compared to the prior year period, driven by organic volume growth (growth excluding the impact of acquisitions) and the impact of recent acquisitions, partially offset by a decline in revenue per requisition.
  - Volume, measured by the number of requisitions, increased by 4.4% compared to the prior year period, with organic growth and acquisitions contributing approximately 2.9% and 1.5%, respectively.
  - Revenue per requisition decreased by 2.3% compared to the prior year period.
- DS revenues of $81 million decreased by 3.4% compared to the prior year period.
- Income from continuing operations attributable to Quest Diagnostics' stockholders was $206 million, or $1.51 per diluted share, in 2019, compared to $219 million, or $1.57 per diluted share, in the prior year period.
- For the six months ended June 30, 2019, net cash provided by operating activities was $596 million in 2019, compared to $503 million in the prior year period. The $93 million increase in net cash provided by operating activities was primarily a result of timing of movements in our working capital accounts; lower performance-based compensation payments in 2019 compared to 2018; and a $28 million refund from the taxing authorities associated with the favorable resolution of certain tax contingencies associated with a discontinued operation; partially offset by a $42 million increase in income tax payments; and lower operating income in 2019 compared to 2018.

In March 2019, we completed a senior notes offering (the "2019 Senior Notes"), consisting of $500 million aggregate principal amount of 4.20% senior notes due June 2029, which were issued at an original issue discount of $1 million. The net proceeds from the 2019 Senior Notes were used to repay in full the outstanding indebtedness under the Company's Senior Notes due April 1, 2019, to repay outstanding indebtedness under the secured receivables credit facility and for general corporate purposes. For further details regarding our debt, see Note 8 to the interim unaudited consolidated financial statements.

On June 3, 2019, the Company reported that Retrieval-Masters Creditors Bureau, Inc./American Medical Collection Agency (“AMCA”), informed the Company and Optum360 LLC, which provides revenue management services to the Company, about a data security incident involving AMCA (the “AMCA Data Security Incident”). AMCA (which provided debt collection services for Optum360) informed the Company and Optum360 that AMCA had learned that an unauthorized user had access to AMCA’s system between August 1, 2018 and March 30, 2019. AMCA first informed the Company of the AMCA Data Security Incident on May 14, 2019. AMCA’s affected system included financial information (e.g., credit card numbers and bank account information), medical information and other personal information (e.g., social security numbers). Test results were not included. Neither Optum360’s nor the Company’s systems or databases were involved in the incident. AMCA has also informed us that information pertaining to other laboratories’ customers was also affected. While the impact of this incident to the Company's results of operations and cash flows was not material for the three months ended June 30, 2019, our future financial results may be negatively impacted by costs associated with the incident and disruption of our accounts receivable collection processes.

Acquisition of the Clinical Laboratory Services Business of Boyce & Bynum Pathology Laboratories, P.C.

On February 11, 2019, we completed our acquisition of certain assets of the clinical laboratory services business of Boyce & Bynum Pathology Laboratories, P.C. ("Boyce & Bynum"), in an all cash transaction for $61 million, which consisted of cash consideration of $55 million and contingent consideration initially estimated at $6 million. The contingent consideration arrangement is dependent upon the achievement of certain testing volume benchmarks. The acquired business is included in our DIS business.

For further details regarding our acquisitions, see Note 5 to the interim unaudited consolidated financial statements and Note 6 to the consolidated financial statements in the Company's 2018 Annual Report on Form 10-K.

Invigorate Program

We are engaged in a multi-year program called Invigorate, which is designed to reduce our cost structure and improve our performance. We currently aim annually to save approximately 3% of our costs, and in 2018 we achieved that goal.

Invigorate has consisted of several flagship programs, with structured plans in each, to drive savings and improve performance across the customer value chain. These flagship programs include: organization excellence; information technology excellence; procurement excellence; field and customer service excellence; lab excellence; and revenue services excellence. In addition to these programs, we identified key themes to change how we operate including reducing denials and patient concessions; further digitizing our business; standardization and automation; and optimization initiatives in our lab network and patient service center network. We believe that our efforts to standardize our information technology systems, equipment and data also foster our efforts to strengthen our foundation for growth and support the value creation initiatives of our clinical franchises by enhancing our operational flexibility, empowering and enhancing the customer experience, facilitating the delivery of actionable insights and bolstering our large data platform.

For the six months ended June 30, 2019, we incurred $36 million of pre-tax charges under our Invigorate program primarily consisting of systems conversion and integration costs, all of which result in cash expenditures. Additional restructuring charges may be incurred in future periods as we identify additional opportunities to achieve further cost savings.

For further details of the Invigorate program and associated costs, see Note 4 to the interim unaudited consolidated financial statements.

Critical Accounting Policies

There have been no significant changes to our critical accounting policies from those disclosed in our 2018 Annual Report on Form 10-K.

Impact of New Accounting Standards

The adoption of new accounting standards, including the new standard related to accounting for leases, are discussed in Note 2 to the interim unaudited consolidated financial statements. For further details regarding our leases, refer to Note 9 to the interim unaudited consolidated financial statements.

The impacts of recent accounting pronouncements not yet effective on our consolidated financial statements are discussed in Note 2 to the interim unaudited consolidated financial statements.

Results of Operations

The following tables set forth certain results of operations data for the periods presented:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2019	2018	$ Change	% Change	2019	2018	$ Change	% Change
	(dollars in millions, except per share amounts)							
Net revenues:								
DIS business	$ 1,872	$ 1,835	$ 37	2.0 %	$ 3,684	$ 3,638	$ 46	1.3 %
DS businesses	81	84	(3)	(3.4)	160	165	(5)	(3.1)
Total net revenues	$ 1,953	$ 1,919	$ 34	1.8 %	$ 3,844	$ 3,803	$ 41	1.1 %
Operating costs and expenses and other operating income:								
Cost of services	$ 1,265	$ 1,243	$ 22	1.8 %	$ 2,509	$ 2,469	$ 40	1.6 %
Selling, general and administrative	362	351	11	3.4	746	714	32	4.6
Amortization of intangible assets	25	22	3	10.9	49	44	5	11.8
Other operating income, net	(6)	(2)	(4)	NM	(15)	(1)	(14)	NM
Total operating costs and expenses, net	$ 1,646	$ 1,614	$ 32	2.0 %	$ 3,289	$ 3,226	$ 63	2.0 %
Operating income	$ 307	$ 305	$ 2	0.4 %	$ 555	$ 577	$ (22)	(3.9)%
Other income (expense):								
Interest expense, net	$ (45)	$ (42)	$ (3)	8.0 %	$ (89)	$ (83)	$ (6)	8.0 %
Other income (expense), net	3	1	2	NM	12	(1)	13	NM
Total non-operating expenses, net	$ (42)	$ (41)	$ (1)	3.2 %	$ (77)	$ (84)	$ 7	(7.8)%
Income tax expense	$ (63)	$ (42)	$ (21)	45.4 %	$ (113)	$ (94)	$ (19)	19.5 %
Effective income tax rate	23.6%	16.2%	7.4%	NM	23.6%	19.1%	4.5%	NM
Equity in earnings of equity method investees, net of taxes	$ 17	$ 11	$ 6	48.0 %	$ 30	$ 23	$ 7	30.4 %
Amounts attributable to Quest Diagnostics' common stockholders:								
Income from continuing operations	$ 206	$ 219	$ (13)	(5.8)%	$ 370	$ 396	$ (26)	(6.5)%
Income from discontinued operations, net of taxes	$ 20	$ —	$ 20	NM	$ 20	$ —	$ 20	NM
Diluted earnings per common share from continuing operations attributable to Quest Diagnostics' common stockholders	$ 1.51	$ 1.57	$ (0.06)	(3.9)%	$ 2.71	$ 2.84	$ (0.13)	(4.6)%

NM - Not Meaningful

The following table sets forth certain results of operations data as a percentage of net revenues for the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net revenues:				
DIS business	95.9 %	95.6 %	95.8 %	95.7 %
DS businesses	4.1	4.4	4.2	4.3
Total net revenues	100.0 %	100.0 %	100.0 %	100.0 %
Operating costs and expenses and other operating income:				
Cost of services	64.8 %	64.8 %	65.3 %	64.9 %
Selling, general and administrative	18.6	18.3	19.4	18.8
Amortization of intangible assets	1.3	1.1	1.3	1.2
Other operating income, net	(0.4)	(0.1)	(0.4)	(0.1)
Total operating costs and expenses, net	84.3 %	84.1 %	85.6 %	84.8 %
Operating income	15.7 %	15.9 %	14.4 %	15.2 %

Operating Results

Results for the three months ended June 30, 2019 were affected by certain items that on a net basis reduced diluted earnings per share by $0.22 as follows:

- pre-tax amortization expense of $30 million ($25 million in amortization of intangible assets and $5 million in equity in earnings of equity method investees, net of taxes) or $0.16 per diluted share;
- pre-tax charges of $26 million ($11 million in cost of services and $15 million in selling, general and administrative expenses), or $0.14 per diluted share, primarily associated with systems conversions and integration incurred in connection with further restructuring and integrating our business;
- a net pre-tax gain of $6 million in other operating income, net, or $0.04 per diluted share, primarily due to a gain associated with the decrease in the fair value of the contingent consideration accrual associated with our ReproSource, Inc. acquisition, and
- excess tax benefit associated with stock-based compensation arrangements of $5 million, or $0.04 per diluted share, recorded in income tax expense.

Results for the six months ended June 30, 2019 were affected by certain items that on a net basis reduced diluted earnings per share by $0.42 as follows:

- pre-tax amortization expense of $59 million ($49 million in amortization of intangible assets and $10 million in equity in earnings of equity method investees, net of taxes) or $0.32 per diluted share;
- pre-tax charges of $48 million ($22 million in cost of services and $26 million in selling, general and administrative expenses), or $0.26 per diluted share, primarily associated with systems conversions and integration incurred in connection with further restructuring and integrating our business;
- a net pre-tax gain of $14 million (a $15 million gain in other operating income, net offset by a $1 million charge in selling, general and administrative expenses), or $0.10 per diluted share, primarily due to a gain associated with an insurance claim for hurricane related losses and a gain associated with the decrease in the fair value of the contingent consideration accrual associated with our ReproSource, Inc. acquisition partially offset by non-cash asset impairment charges, and
- excess tax benefit associated with stock-based compensation arrangements of $8 million, or $0.06 per diluted share, recorded in income tax expense.

Results for the three months ended June 30, 2018 were affected by certain items that on a net basis reduced diluted earnings per share by $0.18 as follows:

- pre-tax amortization expense of $26 million ($22 million in amortization of intangible assets and $4 million in equity in earnings of equity method investees, net of taxes), or $0.14 per diluted share;
- pre-tax charges of $25 million ($14 million in cost of services and $11 million in selling, general and administrative expenses), or $0.13 per diluted share, primarily associated with workforce reductions, systems conversions and integration incurred in connection with further restructuring and integrating our business;

- net pre-tax expense of $10 million ($11 million in cost of services offset by a $1 million benefit in other operating income, net), or $0.05 per diluted share, primarily associated with costs incurred related to certain legal matters partially offset by a gain associated with an insurance claim for hurricane related losses;
- an income tax benefit of $15 million, or $0.10 per diluted share, associated with a change in a tax return accounting method that enabled us to accelerate the deduction of certain expenses on our 2017 tax return at the federal corporate statutory tax rate in effect during 2017; and
- excess tax benefit associated with stock-based compensation arrangements of $5 million, or $0.04 per diluted share, recorded in income tax expense.

Results for the six months ended June 30, 2018 were affected by certain items that on a net basis reduced diluted earnings per share by $0.43 as follows:

- pre-tax charges of $56 million ($26 million in cost of services, $29 million in selling, general and administrative expenses, and $1 million in other operating income, net), or $0.30 per diluted share, primarily associated with workforce reductions, systems conversions and integration incurred in connection with further restructuring and integrating our business;
- pre-tax amortization expense of $52 million ($44 million in amortization of intangible assets and $8 million in equity in earnings of equity method investees, net of taxes), or $0.28 per diluted share;
- net pre-tax expense of $10 million ($11 million in cost of services offset by a $1 million benefit in other operating income, net), or $0.05 per diluted share, primarily associated with costs incurred related to certain legal matters partially offset by a gain associated with an insurance claim for hurricane related losses;
- an income tax benefit of $15 million, or $0.10 per diluted share, associated with a change in a tax return accounting method that enabled us to accelerate the deduction of certain expenses on our 2017 tax return at the federal corporate statutory tax rate in effect during 2017; and
- excess tax benefit associated with stock-based compensation arrangements of $13 million, or $0.10 per diluted share, recorded in income tax expense.

Net Revenues

Net revenues for the three months ended June 30, 2019 increased by 1.8% compared to the prior year period.

DIS revenues for the three months ended June 30, 2019 increased by 2.0% compared to the prior year period driven by organic volume growth (growth excluding the impact of acquisitions), and the impact of recent acquisitions, partially offset by a decline in revenue per requisition.

- Acquisitions contributed approximately 2.0% to DIS revenue growth with organic revenue growth flat.
- DIS volume increased by 4.4%, with organic growth and acquisitions contributing approximately 2.9% and 1.5%, respectively, to DIS volume growth. Organic volume growth benefited from expanded in-network access primarily as a result of becoming a participating provider to UnitedHealthcare and Horizon Blue Cross Blue Shield of New Jersey.
- Revenue per requisition decreased by 2.3% compared to the prior year period primarily due to reimbursement pressure, including unit price reductions associated with the Protecting Access to Medicare Act ("PAMA") and all other sources, of approximately 2.3%; increased denials; and higher patient concessions; partially offset by favorable test mix, driven in part by acquisitions.

Net revenues for the six months ended June 30, 2019 increased by 1.1% compared to the prior year period.

DIS revenues for the six months ended June 30, 2019 increased by 1.3% compared to the prior year period driven by organic volume growth (growth excluding the impact of acquisitions), and the impact of recent acquisitions, partially offset by a decline in revenue per requisition.

- Acquisitions contributed approximately 1.9% to DIS revenue growth with organic revenue down 0.6%.
- DIS volume increased by 4.0%, with organic growth and acquisitions contributing approximately 2.6% and 1.4%, respectively, to DIS volume growth. Organic volume growth benefited from expanded in-network access primarily as a result of becoming a participating provider to UnitedHealthcare and Horizon Blue Cross Blue Shield of New Jersey. In addition, there was one less business day compared to the prior year period, which we estimate negatively affected the year-over-year comparison by 0.7%, partially offset by the impact of weather in the prior year period which we estimate favorably affected the comparison by 0.3%.
- Revenue per requisition decreased by 2.6% compared to the prior year period primarily due to reimbursement pressure, including unit price reductions associated with PAMA and all other sources, of approximately 2.4%; increased denials; and higher patient concessions; partially offset by favorable test mix, driven in part by acquisitions.

Cost of Services

Cost of services consists principally of costs for obtaining, transporting and testing specimens as well as facility costs used for the delivery of our services.

For the three months ended June 30, 2019, cost of services increased by $22 million compared to the prior year period. The increase was primarily driven by additional operating costs associated with our acquisitions and incremental operating expenses associated with organic volume growth. These increases were partially offset by a decrease in costs associated with legal matters; incremental expense incurred in the prior year period associated with reinvestments in the business with savings from tax reform; and productivity gains, including our ability to leverage our fixed cost structure to support the increase in volume, as well as other cost reduction initiatives primarily under our Invigorate program.

For the six months ended June 30, 2019, cost of services increased by $40 million compared to the prior year period. The increase was primarily driven by additional operating costs associated with our acquisitions; incremental operating expenses associated with organic volume growth; and higher depreciation expense associated with increased capital expenditures. These increases were partially offset by a decrease in costs associated with legal matters; incremental expense incurred in the prior year period associated with reinvestments in the business with savings from tax reform; and productivity gains, including our ability to leverage our fixed cost structure to support the increase in volume, as well as other cost reduction initiatives primarily under our Invigorate program.

Selling, General and Administrative Expenses ("SG&A")

SG&A consist principally of the costs associated with our sales and marketing efforts, billing operations, bad debt expense and general management and administrative support as well as administrative facility costs.

SG&A increased by $11 million for the three months ended June 30, 2019, compared to the prior year period, primarily driven by additional operating costs associated with our acquisitions; and incremental operating expenses associated with organic volume growth; partially offset by a decrease in payroll-related expenses associated with a change in our policy for employee compensated absences; and our ability to leverage our fixed cost structure to support the increase in volume, as well as other cost reduction initiatives under our Invigorate program.

SG&A increased by $32 million for the six months ended June 30, 2019, compared to the prior year period, primarily driven by additional operating costs associated with our acquisitions; higher costs associated with an increase in the value of our deferred compensation obligations; and incremental operating expenses associated with organic volume growth. These increases were partially offset by lower restructuring costs associated with workforce reductions and our ability to leverage our fixed cost structure to support the increase in volume, as well as other cost reduction initiatives primarily under our Invigorate program.

The increase in the value of our deferred compensation obligations is largely offset by gains due to the increase in the value of the associated investments, which are recorded in other income (expense), net. For further details regarding the Company's deferred compensation plans, see Note 17 to the consolidated financial statements in our 2018 Annual Report on Form 10-K.

Amortization Expense

Amortization expense increased by $3 million for the three months ended June 30, 2019, compared to the prior year period as a result of recent acquisitions.

Amortization expense increased by $5 million for the six months ended June 30, 2019, compared to the prior year period as a result of recent acquisitions.

Other Operating Income, Net

Other operating income, net includes miscellaneous income and expense items and other charges related to operating activities.

For the three months ended June 30, 2019, other operating income, net primarily represents a gain associated with the decrease in the fair value of the contingent consideration accrual associated with our ReproSource, Inc. acquisition.

For the six months ended June 30, 2019, other operating income, net includes a $12 million gain associated with an insurance claim for hurricane related losses and a gain associated with the decrease in the fair value of the contingent consideration accrual associated with our ReproSource, Inc. acquisition partially offset by non-cash asset impairment charges of $2 million.

Interest Expense, Net

Interest expense, net increased for both the three and six months ended June 30, 2019 compared to the prior year period, primarily driven by higher interest rates associated with our indebtedness combined with higher average outstanding indebtedness.

Other Income (Expense), Net

Other income (expense), net represents miscellaneous income and expense items related to non-operating activities, such as gains and losses associated with investments and other non-operating assets.

Other income (expense), net for the six months ended June 30, 2019 increased by $13 million compared to the prior year period due to gains associated with investments in our deferred compensation plans.

Income Tax Expense

Income tax expense for the three months ended June 30, 2019 and 2018 was $63 million and $42 million, respectively. The increase in income tax expense was primarily driven by a $15 million income tax benefit recognized in the prior year period associated with a change in a tax return accounting method that enabled us to accelerate the deduction of certain expenses on our 2017 tax return at the federal corporate statutory tax rate in effect during 2017. During both the three months ended June 30, 2019 and 2018, we recognized $5 million of excess tax benefit associated with stock-based compensation arrangements.

Income tax expense for the six months ended June 30, 2019 and 2018 was $113 million and $94 million, respectively. The increase in income tax expense was primarily driven by a $15 million income tax benefit recognized in the prior year period associated with a change in a tax return accounting method that enabled us to accelerate the deduction of certain expenses on our 2017 tax return at the federal corporate statutory tax rate in effect during 2017, and a decrease in excess tax benefit associated with stock-based compensation arrangements. During the six months ended June 30, 2019 and 2018, we recognized $8 million and $13 million, respectively, of excess tax benefit associated with stock-based compensation arrangements.

Equity in Earnings of Equity Method Investees, Net of Taxes

Equity in earnings of equity method investees, net of taxes increased for the three months ended June 30, 2019 by $6 million compared to the prior year period primarily associated with our investment in the Q^2 Solutions joint venture.

Equity in earnings of equity method investees, net of taxes increased for the six months ended June 30, 2019 by $7 million compared to the prior year period primarily associated with our investment in the Q^2 Solutions joint venture.

Discontinued Operations

During the third quarter of 2006, we completed the wind down of Nichols Institute Diagnostics ("NID"), a test kit manufacturing subsidiary, which has been classified as discontinued operations for all periods presented. Discontinued operations, net of taxes, for the three and six months ended June 30, 2019 includes discrete tax benefits of $20 million associated with the favorable resolution of certain tax contingencies related to NID.

Quantitative and Qualitative Disclosures About Market Risk

We address our exposure to market risks, principally the risk of changes in interest rates, through a controlled program of risk management that includes the use of derivative financial instruments. We do not hold or issue derivative financial instruments for speculative purposes. We seek to mitigate the variability in cash outflows that result from changes in interest rates by maintaining a balanced mix of fixed-rate and variable-rate debt obligations. In order to achieve this objective, we have entered into interest rate swaps. Interest rate swaps involve the periodic exchange of payments without the exchange of underlying principal or notional amounts. Net settlements are recognized as an adjustment to interest expense. We believe that our exposures to foreign exchange impacts and changes in commodity prices are not material to our consolidated financial condition or results of operations.

As of June 30, 2019 and December 31, 2018, the fair value of our debt was estimated at approximately $4.2 billion and $4.0 billion, respectively, using quoted prices in active markets and yields for the same or similar types of borrowings, taking into account the underlying terms of the debt instruments. As of June 30, 2019 and December 31, 2018, the estimated fair value exceeded the carrying value of the debt by $251 million and $85 million, respectively. A hypothetical 10% increase in interest rates (representing 30 basis points as of June 30, 2019 and 39 basis points as of December 31, 2018) would potentially reduce the estimated fair value of our debt by approximately $87 million and $88 million as of June 30, 2019 and December 31, 2018, respectively.

Borrowings under our secured receivables credit facility and our senior unsecured revolving credit facility are subject to variable interest rates. Interest on our secured receivables credit facility is based on either a rate that is intended to approximate commercial paper rates for highly rated issuers, or LIBOR, plus a spread. Interest on our senior unsecured revolving credit facility is subject to a pricing schedule that can fluctuate based on changes in our credit ratings. As such, our borrowing cost under this credit arrangement will be subject to both fluctuations in interest rates and changes in our credit ratings. As of June 30, 2019, the borrowing rates under these debt instruments were: for our secured receivables credit facility, commercial paper rates for highly rated issuers, or LIBOR, plus a spread of 0.70% to 0.725%; and for our senior unsecured revolving credit facility, LIBOR plus 1.125%. As of June 30, 2019, there were no borrowings outstanding under either our $600 million secured receivables credit facility or our $750 million senior unsecured revolving credit facility.

The notional amount of fixed-to-variable interest rate swaps outstanding as of both June 30, 2019 and December 31, 2018 was $1.2 billion. The aggregate fair value of the fixed-to-variable interest rate swaps was $37 million, in a liability position, as of June 30, 2019.

In February 2019, we entered into interest rate lock agreements with several financial institutions for a total notional amount of $250 million to hedge a portion of our interest rate exposure associated with variability in future cash flows attributable to changes in the ten-year treasury rates related to the planned issuance of the 2019 Senior Notes. In connection with the issuance of the 2019 Senior Notes, these agreements were settled, and we paid $1 million. These losses are deferred in stockholders' equity, net of taxes, as a component of accumulated other comprehensive loss, and amortized as an adjustment to interest expense, net over the term of the 2019 Senior Notes.

Based on our net exposure to interest rate changes, a hypothetical 10% change to the variable rate component of our variable rate indebtedness (representing 25 basis points) would potentially change annual interest expense by $3 million. A hypothetical 10% change in the forward one-month LIBOR curve (representing a 17 basis point change in the weighted average yield) would potentially change the fair value of our derivative liabilities by $12 million.

For further details regarding our outstanding debt, see Note 8 to the interim unaudited consolidated financial statements and Note 14 to the consolidated financial statements included in our 2018 Annual Report on Form 10-K. For details regarding our financial instruments and hedging activities, see Note 10 to the interim unaudited consolidated financial statements and Note 15 to the consolidated financial statements included in our 2018 Annual Report on Form 10-K.

Risk Associated with Investment Portfolio

Our investment portfolio includes equity investments comprised primarily of strategic equity holdings in privately and publicly held companies. These securities are exposed to price fluctuations and are generally concentrated in the life sciences industry. Equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) with readily determinable fair values are measured at fair value with changes in fair value recognized in net income. Equity investments that do not have readily determinable fair values are measured at cost minus impairment, if any, plus or minus changes resulting from observable price changes; we regularly evaluate these equity investments to determine if there are any indicators that the investment is impaired. The carrying value of our equity investments that do not have readily determinable fair values was $25 million as of June 30, 2019.

We do not hedge our equity price risk. The impact of an adverse movement in equity prices on our holdings in privately held companies cannot be easily quantified, as our ability to realize returns on investments depends on, among other things, the enterprises’ ability to raise additional capital or derive cash inflows from continuing operations or through liquidity events such as initial public offerings, mergers or private sales.

Liquidity and Capital Resources

	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018	Change
	(dollars in millions)		
Net cash provided by operating activities	$ 596	$ 503	$ 93
Net cash used in investing activities	(202)	(330)	128
Net cash used in financing activities	(256)	(178)	(78)
Net change in cash and cash equivalents and restricted cash	$ 138	$ (5)	$ 143

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and highly liquid short-term investments. Cash and cash equivalents as of June 30, 2019 totaled $273 million, compared to $135 million as of December 31, 2018.

As of June 30, 2019, approximately 12% of our $273 million of consolidated cash and cash equivalents were held outside of the United States. Our current liquidity position does not require repatriation of these funds in order to fund operations in the United States. However, as a result of changes introduced by the Tax Cuts and Jobs Act, we may repatriate back to the United States the portion of these foreign funds not expected to be used to maintain or expand operations (including through acquisitions) outside of the United States.

Cash Flows from Operating Activities

Net cash provided by operating activities for the six months ended June 30, 2019 and 2018 was $596 million and $503 million, respectively. The $93 million increase in net cash provided by operating activities was primarily a result of:

- timing of movements in our working capital accounts;
- lower performance-based compensation payments in 2019 compared to 2018; and
- a $28 million refund from the taxing authorities associated with the favorable resolution of certain tax contingencies related to a discontinued operation; partially offset by
- a $42 million increase in income tax payments, and
- lower operating income in 2019 compared to 2018.

Days sales outstanding, a measure of billing and collection efficiency, was 51 days as of June 30, 2019, 54 days as of December 31, 2018 and 50 days as of June 30, 2018.

Cash Flows from Investing Activities

Net cash used in investing activities for the six months ended June 30, 2019 and 2018 was $202 million and $330 million, respectively. This $128 million decrease in cash used in investing activities was primarily a result of:

- a $109 million decrease in net cash paid for business acquisitions; and
- a $19 million decrease in capital expenditures.

Cash Flows from Financing Activities

Net cash used in financing activities for the six months ended June 30, 2019 and 2018 was $256 million and $178 million, respectively. This $78 million increase in cash used in financing activities was primarily a result of:

- a $76 million decrease in bank overdrafts, which are generally settled in cash the following business day;
- a $53 million increase in purchases of treasury stock; and
- a $14 million increase in dividends paid; partially offset by
- $36 million of net borrowings (proceeds from borrowing less repayments of debt) in 2019, compared to $33 million of net debt repayments in 2018.

During the six months ended June 30, 2019, we completed the issuance of the 2019 Senior Notes and repaid in full our $300 million Senior Notes due April 1, 2019 at maturity. In addition, there were $985 million in cumulative borrowings under the secured receivables credit facility primarily associated with working capital requirements as well as the funding of our 2019 acquisition and $1,145 million in repayments under our secured receivables credit facility. During the six months ended June 30, 2019, there were no borrowings under our senior unsecured revolving credit facility.

During the six months ended June 30, 2018, there were $1,520 million in cumulative borrowings under the secured receivable credit facility primarily associated with working capital requirements as well as the funding of the acquisitions of Mobile Medical Examination Services, LLC in February 2018 and the outreach laboratory service business of Cape Cod Healthcare, Inc. in June 2018. During the six months ended June 30, 2018, there were $1,550 million in repayments under our secured receivables credit facility. During the six months ended June 30, 2018, there were no borrowings under our senior unsecured revolving credit facility.

Dividend Program

During the first and second quarters of 2019, our Board of Directors declared a quarterly cash dividend of $0.53 per common share. During each of the first three quarters of 2018, our Board of Directors declared a quarterly cash dividend of $0.50 per common share. During the fourth quarter of 2018, our Board of Directors declared a quarterly cash dividend of $0.53 per common share.

Share Repurchase Program

As of June 30, 2019, $492 million remained available under our share repurchase authorizations. The share repurchase authorization has no set expiration or termination date.

Share Repurchases

For the six months ended June 30, 2019, we repurchased 1.1 million shares of our common stock for $100 million.

For the six months ended June 30, 2018, we repurchased 0.5 million shares of our common stock for $50 million.

Contractual Obligations and Commitments

The following table summarizes certain of our contractual obligations as of June 30, 2019:

	Payments due by period				
Contractual Obligations	**Total**	**Remainder of 2019**	**1-3 years**	**4-5 years**	**After 5 years**
			(dollars in millions)		
Outstanding debt	$ 3,976	$ —	$ 1,350	$ —	$ 2,626
Finance lease obligations	34	2	6	4	22
Interest payments on outstanding debt	1,605	93	313	258	941
Operating leases	744	111	307	179	147
Purchase obligations	1,700	150	561	443	546
Merger consideration obligations	13	13	—	—	—
Total contractual obligations	$ 8,072	$ 369	$ 2,537	$ 884	$ 4,282

A description of the terms of our indebtedness and related debt service requirements and future payments of our outstanding debt is contained in Note 8 to the interim unaudited consolidated financial statements and Note 14 to the consolidated financial statements in our 2018 Annual Report on Form 10-K.

Interest payments on our outstanding debt includes interest associated with finance lease obligations and has been calculated after giving effect to our interest rate swap agreements, using the interest rates as of June 30, 2019 applied to the June 30, 2019 balances, which are assumed to remain outstanding through their maturity dates.

Operating lease obligations include variable charges (primarily maintenance fees and utilities associated with our real estate leases) in effect as of June 30, 2019. A discussion and analysis regarding our operating lease obligations is contained in Note 9 to the interim unaudited consolidated financial statements.

Purchase obligations include our noncancelable commitments to purchase products or services as described in Note 18 to the consolidated financial statements in our 2018 Annual Report on Form 10-K.

Merger consideration obligations include consideration owed on our business acquisitions. For details regarding our acquisitions, see Note 5 to the interim unaudited consolidated financial statements and Note 6 to the consolidated financial statements in our 2018 Annual Report on Form 10-K.

As of June 30, 2019, our total liabilities associated with unrecognized tax benefits were approximately $74 million, which were excluded from the table above. We expect that these liabilities may decrease by less than $10 million within the next twelve months, primarily as a result of payments, settlements, expiration of statutes of limitations and/or the conclusion of tax examinations on certain tax positions. For the remainder, we cannot make reasonably reliable estimates of the timing of the future payments of these liabilities. See Note 9 to the consolidated financial statements in our 2018 Annual Report on Form 10-K for information regarding our contingent tax liability reserves.

In connection with the sale of an 18.9% noncontrolling interest in a subsidiary to UMass Memorial Medical Center ("UMass"), we granted UMass the right to require us to purchase all of its interest in the subsidiary at fair value commencing July 1, 2020. As of June 30, 2019, the fair value of the redeemable noncontrolling interest on the interim unaudited consolidated balance sheet was $76 million, which was excluded from the table above. Since the redemption of the noncontrolling interest is outside of our control, we cannot make a reasonably reliable estimate of the timing of the future payment, if any, of the redeemable noncontrolling interest. For further details regarding the redeemable noncontrolling interest, see Note 11 to the interim unaudited consolidated financial statements and Note 16 to the consolidated financial statements in our 2018 Annual Report on Form 10-K.

Our credit agreements contain various covenants and conditions, including the maintenance of certain financial ratios, that could impact our ability to, among other things, incur additional indebtedness. As of June 30, 2019, we were in compliance with the various financial covenants included in our credit agreements and we do not expect these covenants to adversely impact our ability to execute our growth strategy or conduct normal business operations.

Equity Method Investees

Our equity method investees primarily consist of our clinical trials central laboratory services joint venture and our diagnostic information services joint ventures, which are accounted for under the equity method of accounting. Our investment in equity method investees is less than 5% of our consolidated total assets. Our proportionate share of income before income taxes associated with our equity method investees is less than 10% of our consolidated income from continuing operations before income taxes and equity in earnings of equity method investees. We have no material unconditional obligations or guarantees to, or in support of, our equity method investees and their operations.

For further details regarding related party transactions with our equity method investees, see Note 15 to the interim unaudited consolidated financial statements and Note 20 to the consolidated financial statements in our 2018 Annual Report on Form 10-K.

Requirements and Capital Resources

We estimate that we will invest approximately $350 million to $400 million during 2019 for capital expenditures, to support and grow our existing operations, principally related to investments in information technology, laboratory equipment and facilities, including our new multi-year laboratory construction in Clifton, New Jersey, and additional investments in our advanced and consumer growth strategies.

As of June 30, 2019, $1.3 billion of borrowing capacity was available under our existing credit facilities consisting of $529 million available under our secured receivables credit facility and $750 million available under our senior unsecured revolving credit facility. The secured receivables credit facility includes a $250 million loan commitment which matures October 2019, and a $250 million loan commitment and a $100 million letter of credit facility which mature October 2020. The senior unsecured revolving credit facility matures in March 2023. For further details regarding the credit facilities, see Note 14 to the consolidated financial statements in our 2018 Annual Report on Form 10-K and Note 8 to the interim unaudited consolidated financial statements.

We believe the borrowing capacity under the credit facilities described above continues to be available to us. Should one or several banks no longer participate in either of our credit facilities, we would not expect it to impact our ability to fund operations. We expect that we will be able to replace our existing credit facilities with alternative arrangements prior to their expiration.

We believe that our cash and cash equivalents and cash from operations, together with our borrowing capacity under our credit facilities, will provide sufficient financial flexibility to fund seasonal and other working capital requirements, capital expenditures, debt service requirements and other obligations, cash dividends on common shares, share repurchases and additional growth opportunities for the foreseeable future. We believe that our credit profile should provide us with access to additional financing to refinance upcoming debt maturities including the 4.75% Senior Notes due January 2020 and 2.50% Senior Notes due March 2020 and, if necessary, to fund growth opportunities that cannot be funded from existing sources.

Forward-Looking Statements

Some statements and disclosures in this document are forward-looking statements. Forward-looking statements include all statements that do not relate solely to historical or current facts and can be identified by the use of words such as “may,” “believe,” “will,” “expect,” “project,” “estimate,” “anticipate,” “plan” or “continue.” These forward-looking statements are based on our current plans and expectations and are subject to a number of risks and uncertainties that could cause our plans and expectations, including actual results, to differ materially from the forward-looking statements. Risks and uncertainties that may affect our future results include, but are not limited to, adverse results from pending or future government investigations, lawsuits or private actions, the competitive environment, the complexity of billing, reimbursement and revenue recognition for clinical laboratory testing, changes in government regulations, changing relationships with customers, payers, suppliers and strategic partners and other factors discussed in our most recently filed Annual Report on Form 10-K and subsequently filed Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, including those discussed in the “Business,” “Risk Factors,” “Cautionary Factors that May Affect Future Results” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of those reports.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

See Item 2. "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Item 4. Controls and Procedures

Management, including our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined under Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended). Based upon that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this quarterly report.

During the second quarter of 2019, there were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended) that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

See Note 13 to the interim unaudited consolidated financial statements for information regarding the status of legal proceedings involving the Company.

Item 1A. Risk Factors

The IT systems that we rely on may be subject to unauthorized tampering, cyberattack or other security breach.

Our IT systems are also subject to potential cyberattacks or other security breaches. These attacks, if successful, could result in shutdowns or significant disruptions of our IT systems and/or in unauthorized persons misappropriating intellectual property and other confidential information, including patient data that we obtain, transmit and store on and through our IT systems.

External actors may develop and deploy viruses and other malicious software programs, including those that target our employees, designed to attack our IT systems or otherwise exploit security vulnerabilities, such as electronic spamming, phishing, spear phishing or similar tactics. As a result of the difficulty in detecting many of these attacks, intrusions and breaches, failures or losses may be repeated or compounded before they are discovered or rectified, which could further increase these costs and consequences. In December 2016, we reported that an internet application on our IT network had been the target of an external cyberattack, resulting in the theft of certain patient data. The accessed data did not include Social Security numbers, credit card information, or insurance and other financial information, and there is no indication that patient data has been misused in any way. When the intrusion was discovered, we immediately took steps to stop any further unauthorized activity.

From time to time, our IT systems have experienced other attacks, viruses, attempted intrusions or similar problems, but each was mitigated. None materially disrupted, interrupted, damaged or shutdown the company's IT systems, materially disrupted the Company's performance of its business or, to the Company's knowledge, resulted in material unauthorized access to data.

In addition, certain third parties to whom we outsource certain of our services or functions, or with whom we interface, store our confidential, patient data or other confidential information, as well as those third parties' providers, are also subject to the risks outlined above. A breach or attack affecting these third parties could also harm our business, results of operations and reputation and subject us to liability.

On June 3, 2019, the Company reported that Retrieval-Masters Creditors Bureau, Inc./American Medical Collection Agency ("AMCA"), informed the Company and Optum360 LLC, which provides revenue management services to the Company, about a data security incident involving AMCA (the "AMCA Data Security Incident"). AMCA (which provided debt collection services for Optum360) informed the Company and Optum360 that AMCA had learned that an unauthorized user had access to AMCA's system between August 1, 2018 and March 30, 2019. AMCA first informed the Company of the AMCA Data Security Incident on May 14, 2019. AMCA's affected system included financial information (e.g., credit card numbers and bank account information), medical information and other personal information (e.g., social security numbers). Test results were not included. Neither Optum360's nor the Company's systems or databases were involved in the incident. AMCA has also informed us that information pertaining to other laboratories' customers was also affected.

Although the Company has robust security measures implemented, which are monitored and routinely tested both by internal resources and external parties, cyber threats against us or our third party providers continue to evolve and are often not recognized until such attacks are launched against a potential target. There can be no assurance that the Company or its third-party providers can anticipate all such evolving future attacks, viruses or intrusions, implement adequate preventative measures, nor remediate any security vulnerabilities. Such breaches could expose our or our third party providers' IT systems to attack, which could result in major disruption of our business, and compromise our customer's confidential information, result in litigation and potential liability for the Company, government investigation, significant damage to our reputation or otherwise adversely affect our business. Any mitigation or remediation efforts that we undertake may require expenditures of significant resources and the diversion of the attention of management.

We have taken, and continue to take, precautionary measures to reduce the risk of, and detect and respond to, future cyber threats, and prevent or minimize vulnerabilities in our IT systems, including the loss or theft of intellectual property, patient data or other confidential information that we obtain and store on our systems. We also have taken, and will continue to take, measures to assess the cybersecurity protections used by our third-party providers. In addition, we collaborate with government agencies regarding potential cyber threats and have worked with a leading cyber security firm to evaluate and strengthen our systems. There can be no assurances that our precautionary measures or measures used by our third-party providers will prevent, contain or successfully defend against cyber or information security threats that could have a significant impact on our business, results of operations and reputation and subject us to liability.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The table below sets forth the information with respect to purchases made by or on behalf of the Company of its common stock during the second quarter of 2019.

ISSUER PURCHASES OF EQUITY SECURITIES

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 May Yet Be Purchased Under the Plans or Programs (in thousands)
April 1, 2019 – April 30, 2019				
Share Repurchase Program (A)	91,928	$ 95.18	91,928	$ 533,379
Employee Transactions (B)	512	$ 89.03	N/A	N/A
May 1, 2019 – May 31, 2019				
Share Repurchase Program (A)	232,501	$ 97.66	232,501	$ 510,673
Employee Transactions (B)	2,406	$ 96.94	N/A	N/A
June 1, 2019 – June 30, 2019				
Share Repurchase Program (A)	185,610	$ 99.91	185,610	$ 492,129
Employee Transactions (B)	—	$ —	N/A	N/A
Total				
Share Repurchase Program (A)	510,039	$ 98.03	510,039	$ 492,129
Employee Transactions (B)	2,918	$ 95.55	N/A	N/A

(A) Since the share repurchase program's inception in May 2003, our Board of Directors has authorized $8 billion of share repurchases of our common stock through June 30, 2019. The share repurchase authorization has no set expiration or termination date.

(B) Includes: (1) shares delivered or attested to in satisfaction of the exercise price and/or tax withholding obligations by holders of stock options (granted under the Company's Amended and Restated Employee Long-Term Incentive Plan) who exercised options; and (2) shares withheld (under the terms of grants under the Amended and Restated Employee Long-Term Incentive Plan) to offset tax withholding obligations that occur upon the delivery of outstanding common shares underlying restricted stock units and performance share units.

Item 6. Exhibits

Exhibits:

10.1	Amended and Restated Quest Diagnostics Incorporated Employee Long-Term Incentive Plan
10.2	Assignment And Amendment No. 1 To Aircraft Time Sharing Agreement
31.1	Rule 13a-14(a) Certification of Chief Executive Officer
31.2	Rule 13a-14(a) Certification of Chief Financial Officer
32.1	Section 1350 Certification of Chief Executive Officer
32.2	Section 1350 Certification of Chief Financial Officer
101.INS	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
101.SCH	dgx-20190630.xsd
101.CAL	dgx-20190630_cal.xml
101.DEF	dgx-20190630_def.xml
101.LAB	dgx-20190630_lab.xml
101.PRE	dgx-20190630_pre.xml

Signatures

Pursuant to the requirements 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.

July 24, 2019
Quest Diagnostics Incorporated

By /s/ Stephen H. Rusckowski

Stephen H. Rusckowski
Chairman, Chief Executive Officer
and President

By /s/ Mark J. Guinan

Mark J. Guinan
Executive Vice President and
Chief Financial Officer

Exhibit 10.1

Amended and Restated Quest Diagnostics Incorporated Employee Long-Term Incentive Plan
(As amended May 14, 2019)

1. THE PLAN

(a) *Purpose.* This Amended and Restated Quest Diagnostics Incorporated Employee Long-Term Incentive Plan (the "***Plan***") is intended to benefit the stockholders of Quest Diagnostics Incorporated (the "***Company***") by providing a means to attract, retain and reward individuals who can and do contribute to the longer term financial success of the Company. Further, the recipients of stock-based awards under the Plan should identify their success with that of the Company's stockholders and therefore will be encouraged to increase their proprietary interest in the Company.

(b) *Effective Date.* The original version of the Plan became effective upon its approval by the holders of stock entitled to vote at the Company's 2005 Annual Meeting of Stockholders (the "***Effective Date***").

2. ADMINISTRATION

(a) *General.* The Plan shall be administered by an administrator (the "***Administrator***") which shall be: (i) in the case of employees that are not executive officers, either the Board of Directors of the Company (the "***Board***") or a committee appointed by the Board; or (ii) in the case of employees that are executive officers, a committee appointed by the Board consisting of no less than two of its members, none of whom shall be (or formerly have been) an employee of the Company; provided, however, that, in the case of employees that are not executive officers, notwithstanding any such appointment, from time to time the Board may assume, at its sole discretion, full or partial responsibility for administration of the Plan. In addition, the Board may delegate to a committee consisting of one or more of its members (including any member who is a current or former officer or other employee of the Company) authority concurrent with that of the Administrator to take the actions described in Section 2(b) (any such committee being referred to, collectively with the Administrator, as the "***Committee***"). Except with regard to awards to employees subject to Section 16 of the Securities Exchange Act of 1934, the Administrator may delegate such responsibilities and powers as it specifies to one or more of its members or to any officer or officers selected by it. Any action undertaken by any such delegee in accordance with the Administrator's delegation of authority shall have the same force and effect as if undertaken directly by the Administrator. Any such delegation may be revoked by the Administrator at any time.

(b) *Award granting authority.* The Committee shall have power and authority to:

(i) select individuals (other than executive officers) to receive awards from among those persons eligible to receive awards pursuant to Section 2(d);

(ii) determine the types and terms and conditions of all awards granted, including performance and other earnout and/or vesting conditions and the consequences of termination of employment;

(iii) amend any outstanding award to the extent provided in Section 6(a); and

(iii) determine the extent to which awards may be transferred to eligible third parties to the extent provided in Section 8(a).

(c) *Administrative authority.* In addition to the powers and authorities described in Section 2(b), the Administrator's power and authority shall include, but not be limited to, interpreting the provisions of the Plan and awards under the Plan and administering the Plan in a manner that is consistent with its purpose. The Administrator's determinations under the Plan need not be uniform and may be made by it selectively among persons who receive, or are eligible to receive, awards under the Plan (whether or not such persons are similarly situated). The Administrator's decision in carrying out the Plan and its interpretation and construction of any provisions of the Plan or any award granted or agreement or other instrument executed under it shall be final and binding upon all persons. No members of the Board, the Committee, the Administrator or any individual to whom the Administrator has delegated any responsibilities or powers in accordance with Section 2(a) shall be liable for any action, omission or determination made in good faith in administering the Plan or in making, or refraining from making, awards hereunder.

(d) *Eligible Persons.* Awards may be granted to any employee of the Company or of (i) any corporation (or a partnership or other enterprise) in which the Company owns or controls, directly or indirectly, 50% or more of the outstanding shares of stock normally entitled to vote for the election of directors (or comparable equity participation and voting power) or (ii) any other corporation (or partnership or other enterprise) in which the Company, directly or indirectly, has at least a 20% equity or similar interest and whose employees the Administrator designates as eligible to receive awards under the Plan. An individual's status as an administrator of the Plan pursuant to authority delegated under Section 2(a) will not affect his or her eligibility to receive awards under the Plan.

(e) *Award Prices.* Except for awards made in connection with the assumption of, or in substitution for, outstanding awards previously granted by an acquired entity ("***Substitute Awards***"), all awards denominated or made in Shares shall use as the per Share price an amount equal to or greater than the Fair Market Value (as defined herein) of the Shares on the date of grant. For purposes of the Plan, "***Fair Market Value***" means, unless the Administrator determines otherwise, the mean of the high and low selling prices of a share of the Common Stock of the Company ("***Share***") on the New York Stock Exchange Composite list (or such other stock exchange as shall be the principal public trading market for the Shares) on the date the award is granted, or if Shares are not traded on such date, the mean of the high and low selling prices on the New York Stock Exchange Composite list (or such other stock exchange as shall be the principal public trading market for the Shares) on the next preceding day on which such Shares were traded. With respect to Substitute Awards, the per Share price, if less than the Fair Market Value of the Shares on the date of the award, shall be determined so that the excess of the aggregate intrinsic value of the Substitute Award, determined immediately after the transaction giving rise to the substitution or assumption of the predecessor award, does not exceed the aggregate intrinsic value of such predecessor award, determined immediately before such transaction, and such substitution complies with applicable laws and regulations, including the listing requirements of the New York Stock Exchange or other principal stock exchange on which the Shares are then listed and Section 409A or Section 424 of the Internal Revenue Code (the "Code"), as applicable.

(f) *No Repricing.* Except as provided for in Section 3(f), the per Share exercise price of any stock option or stock appreciation right may not be decreased after the grant of the award, and a stock option or stock appreciation right may not be surrendered as consideration in exchange for cash, the grant of a new stock option or stock appreciation right with a lower per Share exercise price or the grant of a stock award, without stockholder approval.

(g) *Minimum Vesting Requirement.* Except in the case of a Substitute Award made in replacement of an award that is already vested or scheduled to vest in less than one year from the date of grant of such Substitute Award, no more than 5% of the shares of Common Stock authorized for issuance under the Plan pursuant to Section 3(a) (as it may be adjusted pursuant to Section 3(f)) may be granted pursuant to awards that vest in less than one year following the date of grant.

3. SHARES SUBJECT TO THE PLAN AND ADJUSTMENTS

(a) *Maximum Shares Available for Delivery.* Subject to adjustments under Section 3(f), the maximum number of Shares that may be delivered to participants and their beneficiaries in respect of awards made under the Plan after February 20, 2019 shall be equal to 11,117,884 Shares. For awards made on or after the date of the Company's 2012 annual meeting of stockholders, any Shares covered by awards granted pursuant to Section 4(b) or Section 4(c) shall be counted against the foregoing limit on the basis of one Share for every Share subject to the award, and any Shares covered by awards granted pursuant to Section 4(d) shall be counted against such limit on the basis of 2.65 Shares for every Share subject to the award.

(b) Any Shares delivered under the Plan which are forfeited back to the Company because of the failure to meet an award contingency or condition shall again be available for delivery pursuant to new awards granted under the Plan. Any Shares covered by an award (or portion of an award) granted under the Plan which are forfeited or canceled, expire or are settled in cash, shall be deemed not to have been delivered for purposes of determining the maximum number of Shares available for delivery under the Plan. Any Shares that become available for delivery under the Plan pursuant to the two preceding sentences and that were subject to awards made on or after the date of the Company's 2012 annual meeting of stockholders shall be added back as one Share if such Shares were subject to an award granted pursuant to Section 4(b) or Section 4(c), and as 2.65 Shares if such Shares were subject to an award granted pursuant to Section 4(d). For purposes of determining the number of shares that remain available for issuance under the Plan, (i) any Shares that are tendered by a participant or withheld by the Company to pay the exercise price of an award or to satisfy the participant's tax withholding obligations in connection with the exercise or settlement of an award and (ii) all of the Shares covered by a net share-settled stock option or a stock-settled stock appreciation right to the extent exercised, shall be deemed delivered pursuant to the Plan and shall not be available for delivery pursuant to new awards under the Plan. In addition, Shares repurchased on the open market with the proceeds of the exercise price of an award shall not be added to the number of Shares available for delivery pursuant to new awards under the Plan. The Shares delivered under the Plan may be authorized and unissued shares or shares held in the treasury of the Company, including shares purchased by the Company (at such time or times and in such manner as it may determine).

(c) *Substitute Awards.* Shares issued under the Plan through the settlement, assumption or substitution of Substitute Awards or, to the extent permitted by the rules of the New York Stock Exchange (or other stock exchange as shall be the principal public trading market for the Shares), awards granted over Shares available as a result of the Company's assumption of an acquired entity's plans in corporate acquisitions and mergers shall not reduce the maximum number of Shares available for delivery under the Plan or the maximum number of Shares that may be delivered in conjunction with awards granted pursuant to Section 4(d).

(d) *Other Plan Limits.* Subject to adjustment under Section 3(f), the following additional maximums are imposed under the Plan. The maximum aggregate number of Shares that may be covered by awards granted to any one individual during any fiscal year of the Company pursuant to Sections 4(b) and 4(c) shall not exceed 2,000,000 Shares. The maximum aggregate number of Shares that may be covered by awards granted to any one individual during any fiscal year of the Company pursuant to Section 4(d) shall not exceed 1,000,000 Shares. The full number of Shares available for delivery under the Plan may be delivered pursuant to incentive stock options under Section 422 or any other similar provision of the Code, except that in calculating the number of Shares that remain available for awards of incentive stock options, the rules set forth in Section 3(a) shall not apply to the extent not permitted by Section 422 of the Code.

(e) *Payment Shares.* Subject to the overall limitation on the number of Shares that may be delivered under the Plan, available Shares may be used as the form of payment for compensation, grants or rights earned or due under any other compensation plans or arrangements of the Company.

(f) *Adjustments for Corporate Transactions.* In the event of any stock split, reverse stock split, stock dividend, recapitalization, reorganization, merger, demerger, consolidation, split-up, spin-off, combination or exchange of shares, or any similar change affecting the Shares, or in the event the Company pays an extraordinary cash dividend, (i) the number and kind of shares which may be delivered under the Plan pursuant to Sections 3(a) and 3(d); (ii) the number and kind of shares subject to outstanding awards; and (iii) the exercise price of outstanding stock options and stock appreciation rights shall be appropriately adjusted consistent with such change in such manner as the Administrator may deem equitable to prevent substantial dilution or enlargement of the right granted to, or available for, participants in the Plan; provided, however, that no such adjustment shall be required if the Administrator determines that such action could cause a stock option or stock appreciation right to fail to satisfy the conditions of an applicable exception from the requirements of Section 409A of the Code ("***Section 409A***") or otherwise could subject a participant to any interest or additional tax imposed under Section 409A in respect of an outstanding award. Similar adjustments may be made in situations where the Company assumes or substitutes for outstanding awards held by employees and other persons of an entity acquired by the Company.

4. TYPES OF AWARDS

(a) *General.* An award may be granted singularly, in combination with another award(s) or in tandem whereby exercise or vesting of one award held by a participant cancels another award held by the participant. Subject to the limitations of Section 2(f), an award may be granted as an alternative or successor to or replacement of an existing award under the Plan or under any other compensation plan or arrangement of the Company, including the plan of any entity acquired by the Company. The types of awards that may be granted under the Plan include:

(b) *Stock Option.* A stock option represents a right to purchase a specified number of Shares during a specified period at a price per Share which is no less than one hundred percent (100%) of the Fair Market Value of a Share on the date of the award. A stock option may be intended to qualify as an incentive stock option under Section 422 or any other similar provision of the Code or may be intended not to so qualify. Each stock option granted on or after the Effective Date shall expire on the applicable date designated by the Committee but in no event may such date be more than ten years from the date the stock option is granted. The Shares covered by a stock option may be purchased by means of a cash payment or such other means as the Administrator may from time-to-time permit, including (i) tendering (either actually or by attestation) Shares valued using the market price on the date of exercise, (ii) authorizing a third party to sell Shares (or a sufficient portion thereof) acquired upon exercise of a stock option and to remit to the Company a sufficient portion of the sale proceeds to pay for all the Shares acquired through such exercise and any tax withholding obligations resulting from such exercise; (iii) a net share settlement procedure or through the withholding of Shares subject to the stock option valued using the market price on the date of exercise; or (iv) any combination of the above.

(c) *Stock Appreciation Right.* A stock appreciation right is a right to receive a payment in cash, Shares or a combination thereof, equal to the excess of the aggregate market price on the date of exercise of a specified number of Shares over the aggregate exercise price of the stock appreciation right being exercised. The longest period during which a stock appreciation right granted on or after the Effective Date may be outstanding shall be ten years from the date the stock appreciation right is granted. The exercise price of a stock appreciation right shall be no less than one hundred percent (100%) of the Fair Market Value of a Share on the date of the award.

(d) *Stock Award.* A stock award is a grant of Shares or of a right to receive Shares (or their cash equivalent or a combination of both) in the future. Each stock award shall be earned and vest over such period and shall be governed by such conditions, restrictions and contingencies as the Committee shall determine. These may include continuous service and/or the achievement of performance goals. The performance goals that may be used by the Committee for stock awards may include, without limitation, one or more of the following: operating profits (including EBITDA), net profits, earnings per share, profit returns and margins, revenues, cost/expense management, shareholder return and/or value, stock price, return on invested capital, cash flow, customer attrition, productivity, workforce diversity, employee satisfaction, individual executive performance, customer service and quality metrics. Performance goals may be measured solely on a corporate, subsidiary or business unit basis, or a combination thereof. Further, performance criteria may reflect absolute entity performance or a relative comparison of entity performance to the performance of a peer group of entities or other external measure of the selected performance criteria. Profit, earnings and revenues used for any performance goal measurement may exclude, without limitation,: gains or losses on operating asset sales or dispositions; asset write-downs; litigation or claim judgments or settlements; accruals for historic environmental obligations; effect of changes in tax law or rate on deferred tax assets and liabilities; accruals for reorganization and restructuring programs; uninsured catastrophic property losses; the effect of changes in accounting standards; the cumulative effect of changes in accounting principles; the effect of dispositions of companies or businesses; charges related to the acquisition and integration of companies or businesses; and any items excluded from the calculation of ordinary income (or loss) determined in accordance with generally accepted accounting principles (which may include, without limitation, extraordinary items or significant unusual or infrequently occurring items) and/or described in management's discussion and analysis of financial performance appearing in the Company's annual report to stockholders for the applicable year.

5. AWARD SETTLEMENTS AND PAYMENTS

(a) *Dividends and Dividend Equivalents.* Awards of stock options and stock appreciation rights shall not include any right to receive dividends or dividend equivalent payments in respect of Shares underlying the award; provided, however, that Shares delivered upon exercise of stock options and stock appreciation rights shall, from the date of delivery, have the same dividend rights as other outstanding Shares. A stock award pursuant to Section 4(d) may include the right to receive dividends or dividend equivalent payments which may be paid either currently or credited to a participant's account. Any such crediting of dividends or dividend equivalents may be subject to such conditions, restrictions and contingencies as the Committee shall establish, including vesting conditions and the reinvestment of such credited amounts in Share equivalents, and, in the case of any award subject to the achievement of performance goals, such dividends or dividend equivalents shall be paid only if, and to the extent that, such performance goals are satisfied.

(b) *Payments.* Awards may be settled through cash payments, the delivery of Shares, the granting of awards or combination thereof as the Committee shall determine. Any award settlement, including payment deferrals, may be subject to such conditions, restrictions and contingencies as the Committee shall determine. The Committee may permit or require the deferral of any award payment, subject to such rules and procedures as it may establish, which may include provisions for the payment or crediting of interest, or dividend equivalents, including converting such credits into deferred Share equivalents. It is intended that any such settlement or deferral shall be implemented in a manner and this Plan shall be interpreted and administered so as to comply with Section 409A and any applicable guidance issued thereunder in order to avoid the imposition of any interest or additional tax on an employee under Section 409A in respect of any award.

(c) *Effect of Termination of Employment.* The applicable award agreement shall provide for the extent to which a participant shall vest in or forfeit an award following the participant's termination of employment and, with respect to stock options and stock appreciation rights, the extent to which a participant shall have the right to exercise the stock option or stock appreciation right following termination of employment. Such provisions shall be determined by the Administrator in its sole discretion, need not be uniform among all award agreements, and may reflect distinctions based on the reasons for termination.

6. PLAN AMENDMENT AND TERMINATION

(a) *Amendments.* The Board may amend this Plan and the Committee may amend any outstanding award in such manner as it deems necessary and appropriate to better achieve the Plan's purpose; provided, however, that (i) except as provided in Section 3(f), (a) the Share and other award limitations set forth in Sections 3(a) and 3(d) cannot be increased and (b) the minimum stock option and stock appreciation right exercise prices set forth in Sections 2(e), 4(b) and 4(c) cannot be changed unless such a plan amendment is properly approved by the Company's stockholders, and (ii) no such amendment shall, without a participant's consent, materially adversely affect a participant's rights with respect to any outstanding award. Notwithstanding the foregoing, no action taken by the Committee (x) to settle or adjust an outstanding award pursuant to Section 3(f) or (y) to modify an outstanding award to avoid, in the reasonable, good faith judgment of the Company, the imposition on any participant of any tax, interest or penalty under Section 409A, shall require the consent of any participant.

(b) *Plan Suspension and Termination.* The Board may suspend or terminate this Plan at any time. However, in no event may any awards be granted under the Plan after the date of the 2027 Annual Meeting of Stockholders. Any such suspension or termination shall not of itself impair any outstanding award granted under the Plan or the applicable participant's rights regarding such award.

7. CHANGE IN CONTROL

(a) *Administrator Determinations.* Notwithstanding any provisions of this Plan to the contrary, the Administrator may, in its sole discretion, at the time an award is made hereunder or at any time prior to, coincident with or after the time of a Change in Control (as hereinafter defined):

(i) provide for the adjustment of any performance conditions as the Administrator deems necessary or appropriate to reflect the Change in Control;

(ii) provide that upon termination of a participant's employment as a result of the Change in Control, any time periods or other conditions relating to the vesting, exercise, payment or distribution of an award will be accelerated or waived;

(iii) provide for the purchase of any awards from a participant whose employment has been terminated as a result of a Change in Control for an amount of cash equal to the amount that could have been obtained upon the exercise, payment or distribution of such rights had such award been currently exercisable or payable; or

(iv) cause the awards outstanding at the time of a Change in Control to be assumed, or new rights substituted therefore, by the surviving entity or acquiring entity in the transaction (or the surviving or acquiring entity's parent company) or, if the Company is not the surviving entity following the Change in Control and the surviving or acquiring entity (or its parent company) does not agree to assume the Company's obligations with respect to any awards under the Plan or to replace those awards with new rights of substantially equivalent value (as determined by the Administrator), to cause such awards to vest immediately prior to the Change in Control in such a manner that will enable the participant to participate in the Change in Control with respect to the shares issuable upon vesting, exercise, payment or distribution of such awards on the same basis as other holders of the Company's outstanding Common Stock.

For purposes of sub-paragraphs (ii) or (iii) above, any participant whose employment is terminated by the Company (including any surviving entity or successor to the Company following a Change in Control) other than for "cause," or by the participant for "good reason" (each as defined in the applicable award agreement), upon or within two years following a Change in Control shall be deemed to have been terminated as a result of the Change in Control. Except as provided in this Section 7(a), and notwithstanding any other provisions of the Plan or an award agreement to the contrary, the vesting, payment, purchase or distribution of an award may not be accelerated by reason of a Change of Control for any participant unless the Participant's employment terminates as a result of the Change of Control.

(b) *Definition.* A "***Change in Control***" shall be deemed to occur if and when:

(i) Any person (as such term is used in Sections 13(d) and 14(d)(2) of the Securities Exchange Act of 1934) is or becomes the beneficial owner, directly or indirectly, of securities of the Company representing 40% or more of the combined voting power of the Company's then outstanding securities; or

(ii) The individuals who, as of the date of grant, constituted the Board (the "***Incumbent Board***") cease for any reason to constitute at least a majority of the Board; provided, however, that any individual (other than any individual whose initial assumption of office is in connection with an actual or threatened election contest (as such term is used in Rule 14a-11 of Regulation 14A promulgated under the Securities Exchange Act of 1934)) becoming a director subsequent to the date of grant of an award, whose election, or nomination for election by the stockholders of the Company, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board, shall be considered as though such individual was a member of the Incumbent Board; or

(iii) The Company consummates any of the following transactions that are required to be approved by shareholders: (a) a transaction in which the Company ceases to be an independent publicly owned corporation, or (b) the sale or other disposition of all or substantially all of the Company's assets, or (c) a plan of partial or complete liquidation of the Company.

8. MISCELLANEOUS

(a) *Assignability.* No Award granted under the Plan shall be transferable, whether voluntarily or involuntarily, other than by will or by the laws of descent and distribution; provided, however, that the Committee may permit transfers as gifts to family members or to trusts or other entities for the benefit of one or more family members on such terms and conditions as it shall determine; and, provided, further, that unless permitted by applicable regulations under the Code or other Internal Revenue Service guidance, the Committee may not permit any such transfers of incentive stock options. During the lifetime of a participant to whom incentive stock options were awarded, such incentive stock options shall be exercisable only by the participant.

(b) *No Individual Rights.* The Plan does not confer on any person any claim or right to be granted an award under the Plan. Neither the Plan nor any action taken hereunder shall be construed as giving any employee or other person any right to continue to be employed by or to perform services for the Company, any subsidiary or related entity. The right to terminate the employment of or performance of services by any Plan participant at any time and for any reason is specifically reserved to the employing entity.

(c) *Unfunded Plan.* The Plan shall be unfunded and shall not create (or be construed to create) a trust or a separate fund or funds. The Plan shall not establish any fiduciary relationship between the Company and any participant or beneficiary of a participant. To the extent any person holds any obligation of the Company by virtue of an award granted under the Plan, such obligation shall merely constitute a general unsecured liability of the Company and accordingly shall not confer upon such person any right, title or interest in any assets of the Company.

(d) *Use of Proceeds.* Any proceeds from the sale of shares under the Plan shall constitute general funds of the Company.

(e) *Other Benefit and Compensation Plans.* Unless otherwise specifically determined by the Administrator, settlements of awards received by participants under the Plan shall not be deemed a part of a participant's regular, recurring compensation for purposes of calculating payments or benefits from any Company benefit plan or severance Plan. Further, the Company may adopt any other compensation plans or arrangements as it deems appropriate.

(f) *No Fractional Shares.* Unless otherwise determined by the Administrator, no fractional Shares shall be issued or delivered pursuant to the Plan or any award, and the Administrator shall determine whether any fractional Share shall be rounded up or rounded down to the nearest whole Share, whether cash shall be paid or transferred in lieu of any fractional Shares, or whether such fractional Shares or any rights thereto shall be cancelled.

(g) *Governing Law.* The validity, construction and effect of the Plan and, except as otherwise determined by the Administrator, any award, agreement or other instrument issued under the Plan, shall be determined in accordance with the laws of the State of New Jersey applicable to contracts entered into and performed entirely within the State of New Jersey (without reference to its principles of conflicts of law).

<u>ASSIGNMENT AND AMENDMENT NO. 1</u>
<u>TO</u>
<u>AIRCRAFT TIME SHARING AGREEMENT</u>

Dated as of the 29th day of May, 2019,

Among

QUEST DIAGNOSTICS CLINICAL LABORATORIES, INC.,
as Time Share Lessor

QUEST DIAGNOSTICS INCORPORATED,
as Assignor

and
STEPHEN H. RUSCKOWSKI,
as Time Share Lessee,

concerning the aircraft listed in
Exhibit B hereto

* * *

INSTRUCTIONS FOR COMPLIANCE WITH
"TRUTH IN LEASING" REQUIREMENTS UNDER FAR § 91.23

Within 24 hours after execution of this Agreement:
mail a copy of the executed document to the
following address via certified mail return receipt requested:

Federal Aviation Administration
Aircraft Registration Branch
ATTN: Technical Section
P.O. Box 25724
Oklahoma City, Oklahoma 73125

At least 48 hours prior to the first flight of any aircraft subject to this Agreement:
provide notice, using the FSDO Notification Letter in <u>Exhibit A</u>,
of the departure airport and the proposed time of departure of the
first flight, by facsimile, to the Flight Standards
District Office located nearest the departure airport.

Carry a copy of this Agreement in the aircraft at all times.

* * *

This **ASSIGNMENT AND AMENDMENT NO. 1 TO AIRCRAFT TIME SHARING AGREEMENT** ("Amendment No. 1") is made and effective as of the 29th day of May, 2019 (the "Effective Date") by and among **QUEST DIAGNOSTICS INCORPORATED**, a Delaware corporation ("Assignor"), **QUEST DIAGNOSTICS CLINICAL LABORATORIES, INC.**, a Delaware corporation ("Time Share Lessor") and **STEPHEN H. RUSCKOWSKI** ("Time Share Lessee").

W I T N E S S E T H:

WHEREAS, Assignor and Time Share Lessee have previously entered into that certain Aircraft Time Sharing Agreement (the "Agreement") dated as of December 17, 2013, relating to the lease from Assignor to Time Share Lessee of a Dassault Falcon 2002 aircraft bearing U.S. registration number N455DX and manufacturer's serial number 146 (the "Aircraft N455DX");

WHEREAS, Assignor terminated its interest in Aircraft N455DX on April 23, 2019;

WHEREAS, Time Share Lessor has entered into that certain Aircraft Lease (S/N 216) dated as of December 27, 2018 (the "Lease") with PNC Equipment Finance, LLC ("PNC") relating to the lease by PNC to Time Share Lessor of a Dassault Falcon 2000EX aircraft bearing manufacturer's serial number 216;

WHEREAS, the parties hereto have agreed to assign and amend the Agreement by (i) assigning the rights and obligations of Assignor thereunder to Time Share Lessor and (ii) replacing Aircraft N455DX with the aircraft listed in Exhibit B hereto as the "Aircraft" for the purposes of the Agreement.

NOW, THEREFORE, in consideration of the mutual promises herein contained and other good and valid consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. **Definitions.** Except as otherwise defined herein, capitalized terms used in this Amendment without definition will have the respective meanings ascribed thereto in the Agreement.

2. **Assignment and Assumption.**

2.1 **Assignment.** Assignor does hereby convey, assign, transfer and set over to Time Share Lessor, as of the date hereof, free and clear of any and all liens and encumbrances, all of Assignor's right, title and interest in the Agreement together with all other documents and instruments evidencing any of such right, title and interest and all documents, instruments, notices and reports delivered to Assignor in connection with the Agreement. Assignor does hereby transfer and delegate to Time Share Lessor all duties, liabilities and obligations of "Time Share Lessor" arising under the Agreement and to be performed on or after the date hereof.

2.2 **Assumption.** Time Share Lessor hereby (i) accepts the assignment, conveyance, transfer and delegation set forth in Section 2.1 hereof, (ii) assumes and undertakes all of the liabilities and obligations of "Time Share Lessor" arising under the Agreement and to be performed on or after the date hereof, and (iii) confirms that it shall be deemed the "Time Share Lessor" for all purposes under the Agreement and shall be bound by all of the terms of the Agreement on and after the date hereof.

2.3 **Release of Assignor.** Time Share Lessor and Time Share Lessee agree that, from and after the date hereof, Assignor shall be released from all of its duties, obligations and liabilities under the Agreement.

3. **Amendments.** The parties hereto agree that the Agreement is hereby amended with effect from the date hereof as follows:

3.1 **The Aircraft.** In each place that it appears in the Agreement, including but not limited to in the definition of "Airframe", the description of the aircraft as a "Dassault Falcon 2000 aircraft bearing U.S. registration number N455DX, and manufacturer's serial number 146" is deleted in its entirety and shall be replaced with "the aircraft listed in Exhibit B hereto".

3.2 The **Engines.** The definition of "Engines" is deleted in its entirety and replaced with the following:

""**Engines**" means any engine which may be, from time to time, attached to an aircraft listed in Exhibit B hereto."

3.3 Flight **Charges.** Section 6.2.10 is amended by deleting "6.1" and inserting in lieu thereof "6.2.1".

3.4 **Title and Registration.** Section 10 is deleted in its entirety.

3.5 Assignment**.** Section 19 is amended by inserting the following wording at the end thereof: "without the consent of the parties hereto."

3.6 Exhibit **A.** Exhibit A is deleted in its entirety and a substitute Exhibit A as attached hereto shall be inserted in lieu thereof.

3.7 **Exhibit B.** A new Exhibit B as attached hereto shall be inserted in the Agreement following Exhibit A.

4. **Continued Effect.** Except as expressly amended hereby, the Agreement remains in full force and effect, and each of the parties hereto hereby expressly affirms its respective obligations thereunder notwithstanding this Amendment.

5. **Governing Law.** This Amendment has been negotiated and delivered in the State of New Jersey and shall in all respects be governed by, and construed in accordance with, the laws of the State of New Jersey, including all matters of construction, validity and performance, without giving effect to its conflict of laws provisions.

6. **Counterparts.** This Amendment may be executed by the parties hereto in two (2) or more separate counterparts, each and all of which when so executed shall be an original, and all of which shall together constitute but one and the same instrument.

7. **Truth in Leasing.**

TIME SHARE LESSOR HEREBY CERTIFIES THAT, DURING THE TWELVE (12) MONTH PERIOD PRECEDING THE DATE OF THIS AGREEMENT, THE AIRCRAFT HAS BEEN INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF FAR 91.409.

THE PARTIES HERETO CERTIFY THAT DURING THE TERM OF THIS AGREEMENT AND FOR OPERATIONS CONDUCTED HEREUNDER, THE AIRCRAFT WILL BE MAINTAINED AND INSPECTED IN ACCORDANCE WITH THE PROVISIONS OF FAR 91.409.

TIME SHARE LESSOR ACKNOWLEDGES THAT WHEN IT OPERATES THE AIRCRAFT ON BEHALF OF TIME SHARE LESSEE UNDER THIS AGREEMENT, TIME SHARE LESSOR SHALL BE KNOWN AS CONSIDERED, AND IN FACT WILL BE THE OPERATOR OF THE AIRCRAFT AND SOLELY RESPONSIBLE FOR OPERATIONAL CONTROL OF THE AIRCRAFT. EACH PARTY HERETO CERTIFIES THAT IT UNDERSTANDS THE EXTENT OF ITS RESPONSIBILITIES, SET FORTH HEREIN, FOR COMPLIANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

AN EXPLANATION OF FACTORS BEARING ON OPERATIONAL CONTROL AND PERTINENT FEDERAL AVIATION REGULATIONS CAN BE OBTAINED FROM THE NEAREST FEDERAL AVIATION ADMINISTRATION FLIGHT STANDARDS DISTRICT OFFICE.

THE PARTIES HERETO CERTIFY THAT A TRUE COPY OF THIS AGREEMENT SHALL BE CARRIED ON THE AIRCRAFT AT ALL TIMES, AND SHALL BE MADE AVAILABLE FOR INSPECTION UPON REQUEST BY AN APPROPRIATELY CONSTITUTED AND IDENTIFIED REPRESENTATIVE OF THE ADMINISTRATOR OF THE FAA.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date and year first above written.

ASSIGNOR:

QUEST DIAGNOSTICS INCORPORATED

By: ________________________________
Name: Cecilia K. McKenney
Title: Senior Vice President

TIME SHARE LESSOR:

QUEST DIAGNOSTICS CLINICAL LABORATORIES, INC.

By: ________________________________
Name: Cecilia K. McKinney
Title: Senior Vice President

TIME SHARE LESSEE:

By: ________________________________
Name: Stephen H. Rusckowski

EXHIBIT A

FSDO Notification Letter

Date: _________________

Via Facsimile
Fax: __________________

Federal Aviation Administration

____
____
____

RE: FAR Section 91.23 FSDO Notification
First Flight Under Time Sharing Agreement

To whom it may concern:

Pursuant to the requirements of Federal Aviation Regulation Section 91.23(c)(3), please accept this letter as notification that the first flight of the aircraft under a Time Sharing Agreement will depart from ____________ Airport on [date], at approximately ____ [am/pm] local time.

Should you require any additional information, please contact our pilot, [name], at telephone: _________________.

Sincerely,

QUEST DIAGNOSTICS CLINICAL LABORATORIES, INC.

By: _________________________________

Print: _______________________________

Title: _______________________________

EXHIBIT B

The aircraft subject to this agreement are as follows:

Aircraft #1:Dassault Falcon 2000EX
U.S. Registration Number: N197DX
Manufacturer's Serial Number: 216

Aircraft #2: Pilatus PC-12
U.S. Registration Number N432CV
Manufacturer's Serial Number 119

Aircraft #3: Pilatus PC-12
U.S. Registration Number N120QD
Manufacturer's Serial Number 120

Aircraft #4: Pilatus PC-12
U.S. Registration Number N74AX
Manufacturer's Serial Number 149

Aircraft #5: Pilatus PC-12
U.S. Registration Number N338QD
Manufacturer's Serial Number 338

Aircraft #6: Pilatus PC-12
U.S. Registration Number N465PC
Manufacturer's Serial Number 465

Aircraft #7: Pilatus PC-12
U.S. Registration Number N26VW
Manufacturer's Serial Number 478

Aircraft #8: Pilatus PC-12
U.S. Registration Number N567FH
Manufacturer's Serial Number 567

Aircraft #9: Pilatus PC-12
U.S. Registration Number N589AC
Manufacturer's Serial Number 589

Aircraft #10: Pilatus PC-12
U.S. Registration Number N687QD
Manufacturer's Serial Number 687

Aircraft #11: Embraer Phenom 100
U.S. Registration Number N208DX
Manufacturer's Serial Number 50000097

Aircraft #12: Embraer Phenom 100
U.S. Registration Number N288DX
Manufacturer's Serial Number 500000166

Aircraft #13:	Embraer Phenom 100 U.S. Registration Number N648DX Manufacturer’s Serial Number 500000176
Aircraft #14:	Embraer Phenom 100 U.S. Registration Number N649DX Manufacturer’s Serial Number 500000194
Aircraft #15:	Embraer Phenom 100 U.S. Registration Number N899DX Manufacturer’s Serial Number 500000216

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Stephen H. Rusckowski, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Quest Diagnostics Incorporated;

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 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 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.

July 24, 2019

By /s/ Stephen H. Rusckowski

Stephen H. Rusckowski
Chairman, Chief Executive Officer and
President

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Mark J. Guinan, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Quest Diagnostics Incorporated;
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 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 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.

July 24, 2019

By /s/ Mark J. Guinan

Mark J. Guinan
Executive Vice President and
Chief Financial Officer

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. § 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. § 1350, the undersigned certifies that, to the best of my knowledge, the Quarterly Report on Form 10-Q for the period ended June 30, 2019 of Quest Diagnostics Incorporated, as being filed with the Securities and Exchange Commission concurrently herewith, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. § 78m or 78o(d)) and that the information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of Quest Diagnostics Incorporated.

Dated: July 24, 2019

/s/ Stephen H. Rusckowski

Stephen H. Rusckowski
Chairman, Chief Executive Officer and
President

Exhibit 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. § 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. § 1350, the undersigned certifies that, to the best of my knowledge, the Quarterly Report on Form 10-Q for the period ended June 30, 2019 of Quest Diagnostics Incorporated, as being filed with the Securities and Exchange Commission concurrently herewith, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. § 78m or 78o(d)) and that the information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of Quest Diagnostics Incorporated.

Dated: July 24, 2019

/s/ Mark J. Guinan

Mark J. Guinan
Executive Vice President and
Chief Financial Officer