PRA Health Sciences, Inc. Form 10-Q October 26, 2017 Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 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 September 30, 2017

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: 001-36732

PRA Health Sciences, Inc.

(Exact name of registrant as specified in its charter)

Delaware 46-3640387 (State or other jurisdiction of incorporation or organization) Identification No.)

4130 ParkLake Avenue, Suite 400, Raleigh, NC 27612 (Address of principal executive offices) (Zip Code)

(919) 786-8200

(Registrant's telephone number, including area code)

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 T No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes T No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer Smaller reporting company

(Do not check if a 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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class Number of Shares Outstanding

Common Stock \$0.01 par value 63,369,729 shares outstanding as of October 23, 2017

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements PRA HEALTH SCIENCES, INC. AND SUBSIDIARIES CONSOLIDATED CONDENSED BALANCE SHEETS (UNAUDITED)

(in thousands, except share amounts)

	September 30, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$193,581	\$144,623
Restricted cash	697	4,715
Accounts receivable and unbilled services, net	628,029	439,053
Other current assets	70,361	36,346
Total current assets	892,668	624,737
Fixed assets, net	131,432	87,577
Goodwill	1,535,057	971,980
Intangible assets, net	711,727	473,976
Other assets	38,749	32,121
Total assets	\$3,309,633	\$2,190,391
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	\$56,719	\$31,250
Accounts payable	60,438	51,335
Accrued expenses and other current liabilities	277,495	149,113
Advanced billings	493,368	332,501
Total current liabilities	888,020	564,199
Long-term debt, net	1,293,498	797,052
Deferred tax liabilities	128,366	73,703
Other long-term liabilities	63,452	26,185
Total liabilities	2,373,336	1,461,139
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Preferred stock, \$0.01 par value, 100,000,000 shares authorized; 0 shares issued and		
outstanding at September 30, 2017 and December 31, 2016, respectively		
Common stock, \$0.01 par value, 1,000,000,000 authorized shares at September 30, 2017		
and December 31, 2016; 63,329,298 and 61,597,705 issued and outstanding at September	633	616
30, 2017 and December 31, 2016, respectively		
Additional paid-in capital	898,862	879,067
Accumulated other comprehensive loss	(146,291)	(224,686)
Retained earnings	177,230	74,255
Equity attributable to PRA Health Sciences, Inc. stockholders	930,434	729,252
Noncontrolling interest	5,863	_
Total stockholders' equity	936,297	729,252
Total liabilities and stockholders' equity	\$3,309,633	\$2,190,391

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

PRA HEALTH SCIENCES, INC. AND SUBSIDIARIES CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS (UNAUDITED)

(in thousands, except per share amounts)

	Three Months Ended September 30,		Nine Mont September	30,
D.	2017	2016	2017	2016
Revenue:	Φ 40.4 550	Ф200 041	1 270 572	Φ1 1 <i>CC</i> 410
Service revenue	\$494,550	\$399,841	1,379,572	
Reimbursement revenue	87,459	53,414	223,921	172,915
Total revenue	582,009	453,255	1,603,493	1,339,325
Operating expenses:	22606	2.50.010	04.4.000	
Direct costs	326,865	259,910	914,988	758,333
Reimbursable out-of-pocket costs	87,459	53,414	223,921	172,915
Selling, general and administrative	79,307	67,190	229,770	199,648
Transaction-related costs	12,740		12,740	31,785
Depreciation and amortization	18,853	17,708	50,146	52,246
Loss on disposal of fixed assets, net	8	219	240	290
Income from operations	56,777	54,814	171,688	124,108
Interest expense, net	(11,557)	(13,779)	(31,088)	(42,525)
Loss on modification or extinguishment of debt	(3,089)	· —	(3,089)	(21,485)
Foreign currency (losses) gains, net	(12,794)	1,182	(35,004)	9,264
Other income (expense), net	1,004	20	724	(85)
Income before income taxes and equity in income of unconsolidated	30,341	42,237	103,231	60.277
joint ventures	30,341	42,237	103,231	69,277
(Benefit from) provision for income taxes	(18,241)	10,821	(165)	17,869
Income before equity in income of unconsolidated joint ventures	48,582	31,416	103,396	51,408
Equity in income of unconsolidated joint ventures, net of tax	24	33	92	2,742
Net income	48,606	31,449	103,488	54,150
Net income attributable to noncontrolling interest	(401)		(513)	_
Net income attributable to PRA Health Sciences, Inc.	\$48,205	\$31,449	\$102,975	\$54,150
Net income per share attributable to common stockholders:		•		
Basic	\$0.77	\$0.52	\$1.66	\$0.89
Diluted	\$0.73	\$0.49	\$1.57	\$0.84
Weighted average common shares outstanding:	•	•	•	•
Basic	62,730	60,937	62,185	60,579
Diluted	65,872	64,521	65,683	64,268

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

PRA HEALTH SCIENCES, INC. AND SUBSIDIARIES CONSOLIDATED CONDENSED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED) (in thousands)

	Three Months Ended September 30,		Ended September Nine Month September 3			
	2017	2016	2017	2016		
Net income	\$48,606	\$31,449	\$103,488	\$54,150		
Other comprehensive income (loss):						
Foreign currency translation adjustments	26,863	(11,211)	75,076	(55,548)		
Unrealized income (loss) on derivative instruments, net of income tax of \$(11), \$0, \$(11) and \$0	46	127	(21	(2,546)		
Reclassification adjustments:						
(Gain) loss on derivatives included in net income, net of income taxes of \$1,926, \$0, \$1,926 and \$0	(167)	1,617	3,249	4,242		
Comprehensive income	75,348	21,982	181,792	298		
Comprehensive income attributable to noncontrolling interest	(373)		(423			
Comprehensive income attributable to PRA Health Sciences, Inc.	\$74,975	\$21,982	\$181,369	\$298		

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

PRA HEALTH SCIENCES, INC. AND SUBSIDIARIES CONSOLIDATED CONDENSED STATEMENTS OF CASH FLOWS (UNAUDITED)

(in thousands)

(in thousands)			
	Nine Mon	ths Ended	
	September	: 30,	
	2017	2016	
Cash flows from operating activities:			
Net income	\$103,488	\$54,150	
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	50,146	52,246	
Amortization of debt issuance costs and discount	1,480	3,514	
Amortization of terminated interest rate swaps	4,931	3,334	
Stock-based compensation	7,686	4,940	
Non-cash transaction-related costs	5,294	29,421	
Unrealized foreign currency losses (gains)	35,406	(9,380)
Loss on modification or extinguishment of debt	3,089	21,485	
Deferred income taxes	(27,340)
Equity in income of unconsolidated joint ventures)
Other reconciling items	190	41	
Changes in operating assets and liabilities:			
Accounts receivable, unbilled services, and advanced billings	(51,883	(52,290)
Other operating assets and liabilities		(29,935	
Net cash provided by operating activities	117,828	66,708	
Cash flows from investing activities:			
Purchase of fixed assets	(39,287	(25,657)
Cash paid for interest on interest rate swap)
Proceeds from the sale of WuXiPRA		3,700	
Proceeds from the sale of fixed assets	55	_	
Acquisition of Symphony Health Solutions Corporation, net of cash acquired	(522,581)) —	
Acquisition of Parallel 6, Inc., net of cash acquired	(39,561		
Acquisition of Takeda PRA Development Center KK, net of cash acquired	2,680	_	
Acquisition of Takeda Pharmaceutical Data Services, Ltd., net of cash acquired	(142) —	
Acquisition of Nextrials, Inc., net of cash acquired		(4,268)
Net cash used in investing activities	(599,599)	(27,138)
Cash flows from financing activities:			
Borrowings on accounts receivable financing agreement	20,000	120,000	
Repayments on accounts receivable financing agreement	(20,000) —	
Proceeds from issuance of long-term debt	550,000	_	
Repayments of long-term debt	(26,875	(133,559)
Borrowings on line of credit	30,000	110,000	
Repayments on line of credit	(30,000	(110,000)
Payments for debt issuance costs	(5,512) —	
Payment of debt prepayment and debt extinguishment costs		(17,824)
Proceeds from stock option exercises	6,457	638	
Payment of acquisition-related contingent consideration	(400) —	
Net cash provided by (used in) financing activities	523,670	(30,745)
Effects of foreign exchange changes on cash, cash equivalents, and restricted cash	3,041	628	
Change in cash, cash equivalents, and restricted cash	44,940	9,453	

Cash, cash equivalents, and restricted cash, beginning of period 149,338 126,125 Cash, cash equivalents, and restricted cash, end of period \$194,278 \$135,578

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

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PRA HEALTH SCIENCES, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS
(UNAUDITED)

(1) Basis of Presentation

The Company

PRA Health Sciences, Inc. and its subsidiaries, or the Company, is a full-service global contract research organization providing a broad range of product development and data solution services to pharmaceutical and biotechnology companies around the world. The Company's integrated services include data management, statistical analysis, clinical trial management, and regulatory and drug development consulting.

Unaudited Interim Financial Information

The interim consolidated condensed financial statements include the accounts of the Company and variable interest entities where the Company is the primary beneficiary. These financial statements are prepared in conformity with U.S. generally accepted accounting principles, or GAAP, and are unaudited. In the opinion of the Company's management, all adjustments of a normal recurring nature necessary for a fair presentation have been reflected. Certain financial information that is normally included in annual financial statements prepared in accordance with GAAP, but that is not required for interim reporting purposes, has been omitted. The accompanying interim consolidated condensed financial statements and related notes should be read in conjunction with the Company's consolidated financial statements and related notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

The preparation of the interim consolidated condensed 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 interim consolidated condensed financial statements and the reported amounts of revenues and claims and expenses during the reporting period. Actual results could differ from those estimates.

Variable Interest Entities

A variable interest entity ("VIE") is an entity in which a controlling financial interest may be achieved through arrangements that do not involve voting interests. A VIE is required to be consolidated by its primary beneficiary, which is the entity that possesses the power to direct the activities of the VIE that most significantly impact the VIEs economic performance and has the obligation to absorb losses or the right to receive benefits from the VIE that are significant to the entity. The Company consolidates VIEs when it is the primary beneficiary of the VIE, including joint ventures determined to be VIEs.

For consolidated VIEs in which the Company owns less than 100% of the ownership interest or is exposed to less than 100% of the VIE's economic performance, the outside stockholders' interests are shown as noncontrolling interests.

Recently Implemented Accounting Pronouncements

In March 2016, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2016-09, "Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting." This update includes provisions intended to simplify various aspects of accounting for share-based compensation. In addition, ASU No. 2016-09 went into effect for public companies for annual periods beginning after

December 15, 2016.

The Company adopted this ASU beginning with the first quarter of 2017. The adoption of this ASU had the following effects on the consolidated condensed financial statements:

Income taxes - The standard requires excess tax benefits and tax deficiencies to be recorded as income tax benefit or expense in the statement of operations. The Company applied the modified retrospective adoption approach beginning in 2017 and recorded a cumulative-effect adjustment to retained earnings and reduced its deferred tax liabilities by \$12.7 million with an offsetting increase to the valuation allowance of \$12.7 million. As such, the net impact to retained earnings was zero. The Company continuously evaluates its need for a valuation allowance on its net deferred tax assets based upon the weight of available evidence. If the Company is able to support the recognition of certain net deferred tax assets in the future, it is noted that an additional tax benefit from the release of this additional valuation could occur at that time. This adjustment relates to tax assets that had previously arisen from tax deductions for equity compensation expenses that were greater than the compensation recognized for financial reporting.

Forfeitures – The standard provides an accounting policy election to account for forfeitures as they occur. The Company made this accounting policy election and the modified retrospective adoption for this component of the standard did not have a material impact on its financial statements.

Statements of Cash Flows - Cash flows related to excess tax benefits are no longer separately classified as a financing activity apart from other income tax cash flows. The Company adopted this component of the standard on a prospective basis.

Earnings Per Share - The Company uses the treasury stock method to compute diluted earnings per share, unless the effect would be anti-dilutive. Under this method, the Company is no longer required to estimate the tax rate and apply it to the dilutive share calculation for determining the dilutive earnings per share. The Company adopted this component of the standard on a prospective basis.

In August 2016, the FASB issued ASU No. 2016-15, "Statement of Cash Flows Classification of Certain Cash Receipts and Cash Payments," which clarifies existing guidance related to accounting for cash receipts and cash payments and classification on the statement of cash flows. In November 2016, the FASB issued ASU No. 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash," which requires restricted cash be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, with early adoption permitted. The guidance for both standards requires application using a retrospective transition method.

The Company early adopted both ASUs during the fourth quarter of 2016. As a result of the retrospective application of ASU No. 2016-15, \$17.8 million of payments of debt prepayment and debt extinguishment costs originally recorded as operating cash outflows were reclassified to financing outflows in the consolidated condensed statement of cash flows for the nine months ended September 30, 2016. The retrospective application of ASU No. 2016-18 resulted in restricted cash being reclassified as a component of cash, cash equivalents, and restricted cash in the consolidated condensed statement of cash flows for all periods presented.

Recently Issued Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers." The new revenue standard establishes a single revenue recognition model for recognizing contracts from customers. Under the new standard, revenue is recognized when a customer obtains control of promised goods or services and is recognized in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The FASB has issued several amendments to the standard, including clarification on principal versus agent considerations, identifying performance obligations, and accounting for licenses of intellectual property. The new standard is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. The standard permits the use of either the retrospective or modified retrospective (cumulative effect) transition method.

The Company plans to adopt the new revenue standard effective January 1, 2018 using the modified retrospective approach and continues to evaluate the potential impact to its consolidated financial statements. The Company's implementation team consists of both internal resources and external advisors to assist with the adoption of the new standard. The Company completed a review of a representative sample of contracts from its contract portfolio and is continuing to evaluate key qualitative judgments associated with the adoption of the new revenue standard. The Company expects its long-term contracts currently accounted for using the proportional performance method may include additional contract value and costs used in the measure of progress as compared to its current accounting

policies. The accounting for short-term contracts within the Clinical Research segment is expected to remain materially consistent with the current accounting treatment. The Company will complete its evaluation of the new standard in the fourth quarter, finalize its assessment of potential differences from its current accounting policies, and implement the necessary business processes, systems and controls required to support recognition and disclosure under the new standard.

In February 2016, the FASB issued ASU No. 2016-02, "Leases," which revises the accounting related to lessee accounting. Under the new guidance, lessees will be required to recognize a lease liability and a right-of-use asset for all leases with terms greater than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the statement of operations. The provisions of ASU No. 2016-02 are effective for fiscal years beginning after December 15, 2018 and should be applied through a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. Early

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adoption is permitted. The Company is currently assessing the potential impact of ASU No. 2016-02 on the Company's consolidated condensed financial statements.

In January 2017, the FASB issued ASU No. 2017-01, "Business Combinations: Clarifying the Definition of a business," which clarifies that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or group of similar identifiable assets, it should be treated as an acquisition or disposal of an asset. The amendments to ASU No. 2017-01 are effective for fiscal years beginning after December 15, 2017, with early adoption permitted. The adoption of ASU No. 2017-01 is not expected to have a material impact on the Company's consolidated condensed financial statements.

In January 2017, the FASB issued ASU No. 2017-04, "Intangibles-Goodwill and Other: Simplifying the Test for Goodwill Impairment," in order to simplify the subsequent measurement of goodwill by eliminating the Step 2 goodwill impairment test. Under the amendments in this ASU, an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity will then recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The amendments to ASU No. 2017-04 are effective for fiscal years beginning after December 15, 2019, with early adoption permitted. The adoption of ASU No. 2017-04 is not expected to have a material impact on the Company's consolidated condensed financial statements.

In May 2017, the FASB issued ASU No. 2017-09, "Compensation-Stock Compensation: Scope of Modification Accounting," which provides guidance about what changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in ASC Topic 718, "Stock Compensation." The amendments to ASU No. 2017-09 are effective for reporting periods beginning after December 15, 2017, with early adoption permitted. The adoption of ASU No. 2017-09 is not expected to have a material impact on the Company's consolidated condensed financial statements.

In August 2017, the FASB issued ASU No. 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities," in order to simplify certain aspects of hedge accounting and improve disclosures of hedging arrangements. ASU No. 2017-12 eliminates the need to separately measure and report hedge ineffectiveness and generally requires the entire change in fair value of a hedging instrument to be presented in the same income statement line as the hedged item. Entities must apply the amendments to cash flow and net investment hedge relationships that exist on the date of adoption using a modified retrospective approach. The presentation and disclosure requirements must be applied prospectively. The amendments to ASU No. 2017-12 are effective for fiscal years beginning after December 15, 2018, with early adoption permitted. The adoption of ASU No. 2017-12 is not expected to have a material impact on the Company's consolidated condensed financial statements.

Restricted cash

The Company receives cash advances from its customers to be used for the payment of investigator fees and other pass-through expenses. The terms of certain customer contracts require that such advances be maintained in separate escrow accounts; these accounts are not commingled with the Company's cash and cash equivalents and are presented separately in the consolidated condensed balance sheets as restricted cash.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the consolidated condensed balance sheets that sum to the total of the same amounts shown in the consolidated condensed statements of cash flows:

September 30, December 31,

	2017	2016	2016	2015
Cash and cash equivalents	\$193,581	\$130,343	\$144,623	\$121,065
Restricted cash	697	5,235	4,715	5,060
Total cash, cash equivalents, and restricted cash	\$194,278	\$135,578	\$149,338	\$126,125

Secondary Offerings

In August 2017, KKR PRA Investors L.P., or KKR, and certain executive officers of the Company sold 10,000,000 shares of the Company's common stock as part of a secondary offering, or the Secondary Offering. The Company incurred expenses in connection with the Secondary Offering of \$1.0 million during the nine months ended September 30, 2017. The

expenses are included in transaction-related costs in the accompanying consolidated condensed statement of operations. As of September 30, 2017, KKR owned 20.8% of the Company's outstanding common stock.

(2) Business Combinations

Symphony Health Solutions, Inc.

On September 6, 2017, the Company acquired all of the outstanding equity interest of Symphony Health Solutions Corporation, or Symphony Health, a provider of data and analytics to help professionals understand the full market lifecycle of products offered for sale by companies in the pharmaceutical industry, for \$540.8 million in cash and contingent consideration, which is not capped, in the form of potential earn-out payments based on a multiple of future earnings for the twelve month periods ending December 2017 and December 2018. The Company recognized a liability of approximately \$108.8 million representing the estimated fair value of the earn-out on the acquisition date, \$90.4 million is included in accrued expenses and other current liabilities and \$18.4 million is included in other long-term liabilities in the consolidated condensed balance sheet as of September 30, 2017. The fair value was based on significant inputs not observed in the market and thus represents a Level 3 measurement. Any change in the fair value of the contingent consideration subsequent to the acquisition date, excluding adjustments that qualify as measurement period adjustments, will be recognized in earnings in the period of any such change. With this acquisition, the Company expects to enhance its ability to serve customers throughout the clinical research process with technologies that provide data and analytics.

The acquisition of Symphony Health was accounted for as a business combination and, accordingly, the assets acquired and the liabilities assumed have been recorded at their respective fair values as of the acquisition date. In connection with the acquisition, the Company recorded approximately \$500.5 million of goodwill, which was assigned to the Data Solutions segment and is not deductible for income tax purposes. The goodwill is attributable to the workforce of the acquired business and expected synergies with the Company's existing operations. The Company incurred \$6.4 million in acquisition related costs that are included in transaction-related costs in the consolidated condensed statement of operations.

Due to the timing of the acquisition, the valuation of net assets acquired has not been finalized and is expected to be completed by the end of December 2017, and in any case, no later than one year from the acquisition date in accordance with GAAP.

The Company's preliminary estimate of the purchase price allocation is as follows (in thousands):

	Purchase	
	Price	Weighted Amortization Period
	Allocation	
Cash and cash equivalents	\$26,297	
Accounts receivable	39,056	
Other current assets	24,048	
Fixed assets	12,340	
Software and other intangibles	13,000	5 years
Database	64,600	9 years
Customer relationships	161,000	12 years
Accounts payable and accrued expenses	(42,700)	
Deferred revenue	(65,511)	
Deferred tax liabilities	(75,056)	
Other long-term liabilities	(7,940)	

Estimated fair value of net assets acquired 149,134
Purchase price, including contingent consideration 649,609
Total goodwill \$500,475

The results of operations for Symphony Health are included in the consolidated condensed financial statements of the Company from the date of acquisition. During this period, Symphony Health's service revenues and net income totaled \$19.0 million and \$1.1 million, respectively.

The following unaudited pro-forma information assumes the acquisition of Symphony Health occurred as of the beginning of 2016. This pro-forma financial information is not necessarily indicative of operating results if the acquisition had been completed at the date indicated, nor is it necessarily an indication of future operating results.

	Nine Months Ended	
	September 30,	
(in thousands, except per share amounts)	2017	2016
Total revenue	\$1,752,514	\$1,484,013
Net income attributable to PRA Health Sciences, Inc.	126,092	35,830
Net income per share:		
Basic	\$2.03	\$0.59
Diluted	\$1.92	\$0.56

The unaudited pro-forma financial information for the nine months ended September 30, 2016 includes the following non-recurring adjustments:

- a \$6.4 million increase to transaction-related costs incurred by the Company during the nine months ended September 30, 2017 attributable to the transaction, with a corresponding \$2.5 million increase to the benefit from income taxes.
- a \$3.1 million increase to loss on the modification or extinguishment of long-term debt incurred by the Company during the nine months ended September 30, 2017 attributable to the above transaction, with a corresponding \$1.2 million increase to the benefit from income taxes.

Takeda Transactions

On June 1, 2017, the Company acquired all of the outstanding shares of Takeda Pharmaceutical Data Services, Ltd., or TDS, from Takeda Pharmaceutical Company Ltd., or Takeda, for \$0.7 million in cash. The Company recorded approximately \$1.0 million of goodwill, which is assigned to the Clinical Research segment and is not deductible for income tax purposes. pro-forma results of operations and a complete purchase price allocation have not been presented because the results of this acquisition did not have a material effect on the Company's consolidated condensed financial statements.

On June 1, 2017, the Company and Takeda also closed on a joint venture transaction that enables the Company to provide clinical trial delivery and pharmacovigilance services as a strategic partner of Takeda in Japan. The joint venture transaction was effected through the creation of a new legal entity, Takeda PRA Development Center KK, or TDC joint venture. The Company paid \$5.4 million for a 50% equity interest in the TDC joint venture, which represents 50% of the fair value of the net assets and workforce that Takeda contributed to the joint venture. The joint venture provides services including clinical trial monitoring, project management, regulatory strategy and submissions, data management, biostatistics, drug safety reporting, and medical monitoring. The Company is required to buy-out Takeda's 50% interest in the TDC joint venture in two years. The Company also has an early buy-out option of Takeda's 50% interest in December 2018 if both parties agree.

The Company determined that the TDC joint venture is a VIE in which the Company is the primary beneficiary. Accordingly, the Company accounted for the \$5.4 million contribution to the TDC joint venture as a business combination and consolidated the VIE in its financial statements with a noncontrolling interest for the 50% portion owned by Takeda. The assets acquired and the liabilities assumed have been recorded at their respective estimated fair values as of June 1, 2017. The Company recorded approximately \$2.7 million of goodwill, which is assigned to the Clinical Research segment and is not deductible for income tax purposes. The goodwill is primarily attributable to assembled workforce. The Company incurred \$0.6 million in acquisition related costs that are included in selling,

general and administrative expenses in the consolidated condensed statement of operations.

Due to the timing of the transaction, the valuation of net assets acquired has not been finalized and is expected to be completed by the end of December 2017, and in any case, no later than one year from the transaction closing date in accordance with GAAP.

The Company's preliminary estimate of the fair value of the net assets acquired as part of the TDC joint venture transaction at the closing date of the business combination is as follows (in thousands):

	Purcha	se Price Alloc	cation
Cash and cash	\$	8,120	
equivalents	Ψ	0,120	
Other current assets	1,671		
Other non-current assets	1,742		
Accounts payable			
and accrued	(2,380)
expenses			
Other long-term	(943)
liabilities	(943		,
Estimated fair value			
of net assets	8,210		
acquired			
PRA purchase price	5,440		
Fair value of			
Takeda's	5,440		
noncontrolling	3,440		
interest			
Total goodwill	\$	2,670	

The Company has not disclosed post-acquisition or pro-forma revenue and earnings attributable to the TDC joint venture as they did not have a material effect on the Company's consolidated condensed financial statements.

Parallel 6, Inc.

On May 10, 2017, the Company acquired all of the outstanding equity interest of Parallel 6, Inc., or Parallel 6, a developer of technologies for improving patient enrollment, engagement, and management of clinical trials, for \$39.7 million in cash and contingent consideration in the form of a potential earn-out payment of up to \$10.0 million. The earn-out payment is contingent upon the achievement of certain external software sales targets during the 18-month period following closing. The Company recognized a liability of approximately \$8.4 million representing the estimated fair value of the earn-out on the acquisition date, which is included in other long-term liabilities in the consolidated condensed balance sheet as of September 30, 2017. The fair value was based on significant inputs not observed in the market and thus represented a Level 3 measurement. Any change in the fair value of the contingent consideration subsequent to the acquisition date, excluding adjustments that qualify as measurement period adjustments, will be recognized in earnings in the period of any such change. With this acquisition, the Company expects to enhance its ability to serve customers throughout the clinical research process with technologies that provide improved efficiencies by reducing study durations and costs through integrated operational management.

The acquisition of Parallel 6 was accounted for as a business combination and, accordingly, the assets acquired and the liabilities assumed have been recorded at their respective fair values as of the acquisition date. In connection with the acquisition, the Company recorded approximately \$33.1 million of goodwill, which was assigned to the Clinical Research segment and is not deductible for income tax purposes. The goodwill is attributable to the workforce of the acquired business and expected synergies with the Company's existing information technology operations. The Company incurred \$1.3 million in acquisition related costs that are included in selling, general and administrative

expenses in the consolidated condensed statement of operations.

Due to the timing of the acquisition, the valuation of net assets acquired has not been finalized and is expected to be completed by the end of December 2017, and in any case, no later than one year from the acquisition date in accordance with GAAP.

The Company's preliminary estimate of the purchase price allocation is as follows (in thousands):

	Purchase		
	Price		Weighted Amortization Period
	Allocation	1	
Cash and cash equivalents	\$ 132		
Accounts receivable	1,231		
Other current assets	26		
Software intangible	15,500		5 years
Other intangibles	920		5 years
Accounts payable and accrued expenses	(885)	
Deferred revenue	(994)	
Other long-term liabilities	(2,414)	
Estimated fair value of net assets acquired	13,516		
Purchase price, including contingent consideration	46,652		
Total goodwill	\$33,136		

The Company has not disclosed post-acquisition or pro-forma revenue and earnings attributable to Parallel 6 as they did not have a material effect on the Company's consolidated condensed financial statements.

Nextrials

On March 18, 2016, the Company acquired all of the outstanding shares of Nextrials, Inc., or Nextrials, a developer of web-based software which integrates electronic health records with clinical trials, for \$4.8 million in cash and contingent consideration in the form of potential earn-out payments of up to \$3.0 million. Earn-out payments totaling \$2.0 million and \$1.0 million are contingent upon the achievement of project milestones and certain external software sales targets, respectively, during the 30-month period following closing. The Company recognized a liability of approximately \$2.3 million as the estimated acquisition date fair value of the earn-out; the fair value was based on significant inputs not observed in the market and thus represented a Level 3 measurement. Changes in the fair value of the contingent consideration subsequent to the acquisition date are recognized in earnings in the period of the change. The fair value of the contingent consideration increased by \$0.1 million for the nine months ended September 30, 2017. The Company made a payment of \$0.4 million on the contingent consideration during the nine months ended September 30, 2017. As of September 30, 2017, the earn-out liability totaled \$1.4 million; which is included in accrued expenses and other current liabilities in the consolidated condensed balance sheet. With this acquisition, the Company expects to enhance its ability to serve customers throughout the clinical research process with technologies that include improved efficiencies by reducing study durations and costs through integrated operational management.

The acquisition of Nextrials was accounted for as a business combination and, accordingly, the assets acquired and the liabilities assumed have been recorded at their respective fair values as of the acquisition date. In connection with the acquisition, the Company recorded approximately \$4.3 million of goodwill, which is assigned to the Clinical Research segment and is not deductible for income tax purposes. The goodwill is attributable to the workforce of the acquired business and expected synergies with the Company's existing information technology operations.

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The Company's purchase price allocation is as follows (in thousands):

	Purchase Price Allocation	Weighted Amortization Period
Cash and cash equivalents	\$ 94	
Accounts receivable	211	
Other current assets	96	
Property, plant and equipment	111	
Software intangible	5,574	5 years
Accounts payable and accrued expenses	(1,585)	
Other long-term liabilities	(1,663)	
Estimated fair value of net assets acquired	2,838	
Purchase price, including contingent consideration and net of working capital settlement	7,145	
Total goodwill	\$ 4,307	

The Company has not disclosed fiscal year 2016 or pro-forma revenue and earnings attributable to Nextrials as they did not have a material effect on the Company's consolidated condensed financial statements.

(3) Fair Value Measurements

The Company records certain assets and liabilities at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. A three-level fair value hierarchy that prioritizes the inputs used to measure fair value is described below. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs.

The three levels of inputs used to measure fair value are as follows:

Level 1 — Quoted prices in active markets for identical assets or liabilities.

Level 2 — Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3 — Unobservable inputs that are supported by little or no market activity. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

The carrying amount of financial instruments, including cash and cash equivalents, accounts receivable, unbilled services, accounts payable and advanced billings, approximate fair value due to the short maturities of these instruments.

Recurring Fair Value Measurements

The following table summarizes the fair value of the Company's financial assets and liabilities that are measured on a recurring basis as of September 30, 2017 (in thousands):

Assets:

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Interest rate swap	\$	\$ 73	\$	\$73
Marketable securities	366	_	_	366
Total	\$366	\$ 73	\$ —	\$439

Liabilities:

Contingent consideration \$— \$— \$118,564 \$118,564 Total \$— \$— \$118,564 \$118,564

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The Company's marketable securities are included in other current assets in the consolidated condensed balance sheet. These marketable securities are recorded at fair value using quoted prices in an active market.

The interest rate swap is measured at fair value using a market approach valuation technique. The valuation is based on an estimate of net present value of the expected cash flows using relevant mid-market observable data inputs and based on the assumption of no unusual market conditions or forced liquidation.

The Company values contingent consideration, related to business combinations, using a weighted probability of potential payment scenarios discounted at rates reflective of the weighted average cost of capital for the businesses acquired. Key assumptions used to estimate the fair value of contingent consideration include operational milestones and the probability of achieving the specific milestones

The following table summarizes the changes in Level 3 financial liabilities measured on a recurring basis for the nine months ended September 30, 2017 (in thousands):

	Contingent Consideration - Accrued expenses and other liabilities	Contingent Consideration - Other long-term liabilities
Balance at December 31, 2016	\$ 1,735	\$ 1,019
Initial estimate of Symphony Health contingent consideration	90,394	18,390
Initial estimate of Parallel 6 contingent consideration		8,350
Payments on Nextrials contingent consideration	(400)	_
Reclassification adjustment	1,019	(1,019)
Change in fair value recognized in other (income) expense, net	(924)	_
Balance at September 30, 2017	\$ 91,824	\$ 26,740

During the nine months ended September 30, 2017, the Company released the remaining \$1.0 million contingent consideration liability associated with the acquisition of Value Health Solutions, Inc. as the earn-out targets were not met.

Non-recurring Fair Value Measurements

Certain assets and liabilities are carried on the accompanying consolidated condensed balance sheets at cost and are not remeasured to fair value on a recurring basis. These assets include finite-lived intangible assets which are tested when a triggering event occurs and goodwill and identifiable indefinite-lived intangible assets which are tested for impairment annually on October 1 or when a triggering event occurs.

As of September 30, 2017, assets carried on the balance sheet and not remeasured to fair value on a recurring basis totaling approximately \$2,246.8 million were identified as Level 3. These assets are comprised of goodwill of \$1,535.1 million and identifiable intangible assets, net of \$711.7 million.

Refer to Note 7, Long-Term Debt, for additional information regarding the fair value of long-term debt balances.

(4) Concentration of Credit Risk

Financial instruments that potentially subject the Company to credit risk consist of cash and cash equivalents, accounts receivable, and unbilled services. As of September 30, 2017, substantially all of the Company's cash and cash equivalents were held in or invested with large financial institutions. Accounts receivable include amounts due from pharmaceutical and biotechnology companies. The Company establishes an allowance for potentially uncollectible receivables. In management's opinion, there is no additional material credit risk beyond amounts provided for such losses.

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Service revenue from individual customers greater than 10% of consolidated service revenue in the respective periods was as follows:

	Three Months		Nine Months		
	Ended		Ended		
	September 30,		Septem	September 30,	
	2017	2016	2017	2016	
Customer A	10.1%	11.7%	10.6%	10.8%	
Customer B	_	10.4%	_	10.7%	
Customer C	_	10.2%	_	_	

Accounts receivable and unbilled receivables from individual customers that were equal to or greater than 10% of consolidated accounts receivable and unbilled receivables at the respective dates were as follows:

	September December			
	30,		31,	
	2017		2016	
Customer A	10.7	%	12.0	%

(5) Accounts Receivable and Unbilled Services

Accounts receivable and unbilled services include service revenue, reimbursement revenue, and amounts associated with work performed by investigators. Accounts receivable and unbilled services were as follows (in thousands):

	September December	
	30,	31,
	2017	2016
Accounts receivable	\$457,306	\$284,647
Unbilled services	172,152	155,609
	629,458	440,256
Less allowance for doubtful accounts	(1,429)	(1,203)
Total accounts receivable and unbilled services, net	\$628,029	\$439,053

(6) Goodwill and Intangible Assets

Goodwill

The changes in the carrying amount of goodwill by reportable segment are as follows (in thousands):

	Clinical Research	Data Solutions	Consolidated
		Solutions	
Balance at December 31, 2016	\$971,980	\$ —	\$ 971,980
Acquisition of Symphony Health		500,475	500,475
Acquisition of Parallel 6	33,136		33,136
Acquisition of TDC joint venture	2,670		2,670
Acquisition of TDS	966		966
Currency translation	25,830	_	25,830
Balance at September 30, 2017	\$1,034,582	\$500,475	\$ 1,535,057

There are no accumulated impairment charges as of September 30, 2017 and December 31, 2016.

Intangible Assets

Intangible assets consist of the following (in thousands):

	September	December
	30,	31,
	2017	2016
Customer relationships	\$535,135	\$360,328
Customer backlog	123,358	119,223
Trade names (definite-lived)	28,457	25,740
Patient list, software and other intangibles	55,574	28,974
Database	64,600	_
Non-competition agreements	2,767	2,737
Total finite-lived intangible assets, gross	809,891	537,002
Accumulated amortization	(216,174)	(181,036)
Total finite-lived intangible assets, net	593,717	355,966
Trade names (indefinite-lived)	118,010	118,010
Total intangible assets, net	\$711,727	\$473,976

Amortization expense was \$11.3 million and \$29.5 million for the three and nine months ended September 30, 2017, respectively, and \$11.3 million and \$34.3 million for the three and nine months ended September 30, 2016, respectively.

The estimated future amortization expense of finite-lived intangible assets is expected to be as follows (in thousands):

2017 (remaining)	\$16,368
2018	60,075
2019	54,375
2020	52,462
2021	50,331
2022 and thereafter	360,106
Total	\$593,717

The estimated fair value of the Early Development Services, or EDS, reporting unit closely approximated its carrying value when the Company performed its annual goodwill impairment test during the fourth quarter of 2014. The Company made operational improvements during 2015 and 2016 in order to improve the profitability of the EDS reporting unit. As a result of these changes, EDS saw growth in both backlog and new business awards that contributed to its improved financial performance during both years and led the Company to update its forecast for future periods. The Company considered all of these factors when it performed its most recent goodwill impairment test during the fourth quarter of 2016 and it was concluded that the estimated fair value of the EDS reporting unit exceeded its carrying value by approximately \$70.0 million, or 33%. Any negative changes in assumptions on revenue, new business awards, cancellations, or the Company's ability to improve operations while maintaining a competitive cost structure could adversely affect the fair value of EDS and result in significant goodwill impairment charges in 2017 or later.

(7) Long-Term Debt

Long-term debt consists of the following (in thousands):

	September	December
	30,	31,
	2017	2016
Term loans, first lien	\$1,148,125	\$625,000
Senior notes	91,441	91,441
Accounts receivable financing agreement	120,000	120,000
	1,359,566	836,441
Less debt issuance costs and discount	(9,349)	(8,139)
	1,350,217	828,302
Less current portion	(56,719)	(31,250)
Total long-term debt, net	\$1,293,498	\$797,052

Principal payments on long-term debt are due as follows (in thousands):

2017 (remaining)	\$11,250
2018	60,625
2019	180,625
2020	76,250
2021	939,375
2022 and thereafter	91,441
Total	\$1,359,566

2016 Credit Facilities

As collateral for borrowings under the senior secured credit facilities, or 2016 Credit Facilities, the Company granted a pledge on primarily all of its assets, and the stock of wholly-owned U.S. restricted subsidiaries. The Company is subject to certain financial covenants, which require the Company to maintain certain debt-to-EBITDA and interest expense-to-EBITDA ratios. The 2016 Credit Facilities also contain covenants that, among other things, restrict the Company's ability to create any liens, make investments and acquisitions, incur or guarantee additional indebtedness, enter into mergers or consolidations and other fundamental changes, conduct sales and other dispositions of property or assets, enter into sale-leaseback transactions or hedge agreements, prepay subordinated debt, pay dividends or make other payments in respect of capital stock, change the line of business, enter into transactions with affiliates, enter into burdensome agreements with negative pledge clauses and clauses restriction, and make subsidiary distributions. After giving effect to the applicable restrictions on the payment of dividends under the 2016 Credit Facilities, subject to compliance with applicable law, as of September 30, 2017 and December 31, 2016, all amounts in retained earnings were free of restriction and were available for the payment of dividends. The Company does not expect to pay dividends in the foreseeable future. The Company does not expect these covenants to restrict its liquidity, financial condition or access to capital resources in the foreseeable future. The 2016 Credit Facilities also contains customary representations, warranties, affirmative covenants, and events of default.

On September 6, 2017, the Company borrowed \$550.0 million under the 2016 Credit Facilities, or the Incremental Borrowing. The proceeds were primarily used to fund the acquisition of Symphony Health. In accordance with the guidance in FASB's Accounting Standards Codification, or ASC, 470-50, "Debt - Modifications and Extinguishments," the Incremental Borrowing was accounted for as a debt modification. The Incremental Borrowing resulted in a \$3.1 million loss on modification of debt, which consists of fees associated with the transaction for the

nine months ended September 30, 2017.

The 2016 Credit Facilities' first lien term loan's scheduled, fixed quarterly principal payments, including the Incremental Borrowing, are as follows:

\$11.3 million per quarter, to be made commencing September 30, 2017 and made on or prior to December 31, 2017; \$15.2 million per quarter, to be made on or after March 31, 2018, but on or prior to December 31, 2019;

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\$19.1 million per quarter, to be made on or after March 31, 2020, but on or prior to December 31, 2020; \$23.0 million per quarter, to be made on or after March 31, 2021, but prior to September 30, 2021; and the remaining principal amount of the term loan on December 6, 2021.

The variable interest rate on the Incremental Borrowing is a rate equal to the London Interbank Offered Rate, or LIBOR, or the adjusted base rate, or ABR rate, at the election of the Company, plus a margin based on the ratio of total indebtedness to EBITDA and ranges from 1.00% to 2.00%, in the case of LIBOR rate loans, and 0.00% to 1.00%, in the case of ABR rate loans. There were no other changes to the 2016 Credit Facilities as a result of the Incremental Borrowing. For the nine months ended September 30, 2017, the weighted average interest rate on the first lien term loan was 3.45%.

Revolving Credit Facilities

The Company's revolving credit facilities provide for \$125.0 million of potential borrowings and expire on December 6, 2021. The interest rate on the revolving credit facilities is based on the LIBOR with a 0% LIBOR floor or ABR rate, at the election of the Company, plus an applicable margin, based on the leverage ratio of the Company. The Company, at its discretion, may elect interest periods of 1, 2, 3 or 6 months. The Company is required to pay to the lenders a commitment fee ranging from 0.2% to 0.4% based on the Company's debt-to-EBITDA ratio. At September 30, 2017 and December 31, 2016, the Company had no outstanding borrowings under the revolving credit facilities. In addition, at September 30, 2017 and December 31, 2016, the Company had \$4.5 million and \$7.0 million, respectively, in letters of credit outstanding, which are secured by the revolving credit facilities.

Senior Notes

On March 17, 2016, the Company repaid \$133.6 million aggregate principal amount of its 9.5% senior notes due 2023, or Senior Notes, as part of a cash tender offer. In accordance with the guidance in the ASC 470-50, "Debt—Modifications and Extinguishments," the debt repayment was accounted for as a partial debt extinguishment. The repayment resulted in a \$21.5 million loss on extinguishment of debt, which consists of a \$17.4 million early tender premium, a \$3.7 million write-off of unamortized debt issuance costs and \$0.4 million of fees associated with the transaction for the nine months ended September 30, 2016.

The Senior Notes agreement contains certain provisions that restrict the payment of dividends from the Company's subsidiaries to the parent company. As a result, there are no material balances present within the parent company that are available for the payment of dividends as the parent company did not have any net income during 2016 or the nine months ended September 30, 2017, that was free of restrictions. The Company does not expect to pay dividends in the foreseeable future.

Accounts Receivable Financing Agreement

In March 2016, the Company entered into a \$140.0 million accounts receivable financing agreement, of which \$120.0 million was outstanding as of September 30, 2017 and December 31, 2016. The borrowings were used to repay amounts outstanding on the Company's revolving credit facility that were used to fund the cash tender offer for the Senior Notes.

Loans under the accounts receivable financing agreement accrue interest at either a reserve-adjusted LIBOR or a base rate, plus 1.6%. The Company may prepay loans upon one business day prior notice and may terminate the accounts receivable financing agreement with 15 days' prior notice. For the nine months ended September 30, 2017, the weighted average interest rate on the accounts receivable financing agreement was 2.91%.

The accounts receivable financing agreement contains various customary representations and warranties and covenants, and default provisions which provide for the termination and acceleration of the commitments and loans under the agreement in circumstances including, but not limited to, failure to make payments when due, breach of representations, warranties or covenants, certain insolvency events or failure to maintain the security interest in the trade receivables, and defaults under other material indebtedness.

The accounts receivable financing agreement terminates on March 22, 2019, unless terminated earlier pursuant to its terms. At September 30, 2017 and December 31, 2016, there was \$20.0 million of remaining capacity available under the accounts receivable financing agreement.

Fair Value of Debt

The estimated fair value of the Company's debt was \$1,368.8 million and \$844.2 million at September 30, 2017 and December 31, 2016, respectively. The fair value of the Senior Notes, which totaled \$100.7 million and \$99.2 million at September 30, 2017 and December 31, 2016, respectively, was determined based on Level 2 inputs using the market approach, which is primarily based on rates at which the debt is traded among financial institutions. The fair value of the term loans, borrowings under credit facilities, and accounts receivable financing agreement which totaled \$1,268.1 million and \$745.0 million at September 30, 2017 and December 31, 2016, respectively, was determined based on Level 3 inputs, which is primarily based on rates at which the debt is traded among financial institutions adjusted for the Company's credit standing.

(8) Stockholders' Equity

Authorized Shares

The Company is authorized to issue up to one billion shares of common stock, with a par value of \$0.01. The Company is authorized to issue up to one hundred million shares of preferred stock, with a par value of \$0.01.

Noncontrolling Interest

Below is a summary of noncontrolling interest for the nine months ended September 30 (in thousands):

	2017	201	6
Balance as of January 1,	\$—	\$	
Investment by noncontrolling interest	5,440	_	
Comprehensive income (loss)			
Net income	513	_	
Foreign currency adjustments, net of income tax	(90) —	
Balance as of September 30,	\$5,863	\$	

(9) Stock-Based Compensation

The Company granted 1,831,000 service-based options and 131,044 restricted stock awards and units, or RSAs/RSUs, with a total grant date fair value of \$46.0 million and \$8.3 million, respectively, during the nine months ended September 30, 2017.

Aggregated information regarding the Company's option plans is summarized below:

	Options	Wtd. Average Exercise Price	Wtd. Average Remaining Contractual Life (in years)	Intrinsic Value (millions)
Outstanding at December 31, 2016	5,507,347	\$ 15.38	6.7	\$ 218.9
Granted	1,831,000	74.93		
Exercised	(1,758,846)	9.47		
Expired or forfeited	(73,072)	26.94		
Outstanding at September 30, 2017	5,506,429	\$ 36.91	7.7	\$ 216.2
	2,557,710	\$ 13.70	6.3	\$ 159.8

Exercisable at September 30, 2017

The Company's RSAs/RSUs activity in 2017 is as follows:

	Awards	Wtd. Average Grant-Date Fair Value	rinsic Value illions)
Unvested at December 31, 2016	188,590	\$ 32.63	\$ 10.4
Granted	131,044	63.05	
Forfeited	(2,000)	58.95	
Vested	(5,805)	38.81	
Unvested at September 30, 2017	311,829	\$ 45.14	\$ 23.8

Stock-based compensation expense related to employee stock options and RSAs/RSUs is summarized below (in thousands):

	Three Months Ended September 30,		Nine Months Ended September	
			30,	
	2017	2016	2017	2016
Direct costs	\$956	\$438	\$2,208	\$1,319
Selling, general and administrative	2,493	1,228	5,478	3,621
Transaction-related costs	5,294	_	5,294	29,421
Total stock-based compensation expense	\$8,743	\$1,666	\$12,980	\$34,361

All stock options granted under the 2013 Stock Incentive Plan for Key Employees of PRA Health Sciences, Inc. and its Subsidiaries, or the Plan, are subject to transfer restrictions of the stock option's underlying shares once vested and exercised. This lack of marketability was included as a discount when calculating the grant date value of these options. In conjunction with secondary offerings, the transfer restrictions on a portion of such shares issuable upon exercise of vested options granted under the Plan were released. The release of the transfer restrictions is considered a modification under ASC Topic 718, "Stock Compensation." As a result of these modifications, the Company incurred approximately \$5.3 million and \$4.9 million of incremental compensation expense associated with service-based options during the nine months ended September 30, 2017 and September 30, 2016, respectively, which is included in transaction-related costs in the accompanying consolidated condensed statement of operations.

In December 2013, the Company granted certain employees market-based options under the Plan that vest only upon the achievement of a specified internal rate of return from a liquidity event ("2.0x Options"). At the time of grant, no compensation expense was recorded as the 2.0x Options vest upon a liquidity event, which is not considered probable until the date it occurs. On January 20, 2016, the Compensation Committee of the Board of Directors adopted a resolution to adjust the vesting criteria for all 2.0x Options granted and still outstanding on such date. Under the revised vesting criteria, the 2.0x Options vest upon the announcement of a secondary offering. This modification resulted in Type IV Improbable-to-Improbable modification. Since the secondary offering was deemed improbable due to the fact that it is outside of the Company's control and cannot be considered probable until the date it occurs, no compensation expense was recognized on the January 20, 2016 modification date. On March 2, 2016, the Company announced a secondary offering of shares by KKR and certain management stockholders, and it became probable that the 2.0x Options would vest. In total, 835,551 2.0x Options held by current employees were modified. As a result of this modification, and the modification associated with the transfer restrictions releases noted above, the Company incurred approximately \$24.5 million of incremental compensation expense associated with the 2.0x Options during the nine months ended September 30, 2016, which is included in transaction-related costs in the accompanying consolidated condensed statement of operations.

Employee Stock Purchase Plan

In April 2017, the Board of Directors approved the PRA Health Sciences, Inc. 2017 Employee Stock Purchase Plan ("ESPP") which was approved by the Company's shareholders on June 1, 2017. The ESPP allows eligible employees to authorize payroll deductions of up to 10% of their base salary or wages to be applied toward the purchase of shares of the Company's common stock on the last trading day of the offering period. Participating employees will purchase shares of the Company's common stock at a discount of up to 15% on the lesser of the closing price of the Company's common stock on the NASDAQ Global Select Market (i) on the first trading day of the offering period or (ii) the last day of any offering period.

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Offering periods under the ESPP will generally be in six month increments, commencing on January 1 and July 1 of each calendar year with the compensation committee having the right to establish different offering periods.

(10) Income Taxes

The Company's effective income tax rate was (0.2)% and 25.8% for the nine months ended September 30, 2017 and 2016, respectively. The variation between the Company's effective income tax rate and the U.S. statutory rate of 35% for the nine months ended September 30, 2017 is primarily due to (i) the benefit realized from the tax deduction of stock awards in excess of the amount recognized in the financial statements per the guidance under ASU No. 2016-09, and (ii) the release of the valuation allowance against the Company's federal net deferred tax assets as a result of the acquisition of Symphony Health.

GAAP requires a two-step approach when evaluating uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence demonstrates that it is more likely than not that the position will be sustained upon audit, including resolution of any related appeals or litigation processes. The second step is to quantify the amount of tax benefit to recognize as the amount that is cumulatively more than 50% likely to be realized upon ultimate settlement with the taxing authorities.

As of September 30, 2017, the Company's liability for unrecognized tax benefits was \$13.0 million. If any portion of this \$13.0 million is recognized that impacts the effective tax rate, the Company will then include that portion in the computation of its effective tax rate. Although the ultimate timing of the resolution of audits is highly uncertain, the Company believes it is reasonably possible that approximately \$4.5 million of gross unrecognized tax benefits will change in the next 12 months as a result of pending audit settlements or statute of limitations expirations.

The Company files federal, state, and foreign tax returns. For federal purposes, the Company is generally no longer subject to tax examinations for years ended December 31, 2013 and prior. For state tax returns, the Company is generally no longer subject to tax examinations for years prior to 2012. For foreign purposes, the Company is generally no longer subject to examination for tax periods 2009 and prior. Certain carryforward tax attributes generated in prior years remain subject to examination and adjustment.

(11) Commitments and Contingencies

Legal Proceedings

The Company is involved in legal proceedings from time to time in the ordinary course of its business, including employment claims and claims related to other business transactions. Although the outcome of such claims is uncertain, management believes that these legal proceedings will not have a material adverse effect on the financial condition or results of future operations of the Company.

The Company is currently a party to litigation with the City of Sao Paulo, Brazil. The dispute relates to whether the export of services provided by the Company is subject to a local tax on services. The Company has not recorded a liability associated with the claim, which totaled \$5.4 million at September 30, 2017, given that it is not deemed probable the Company will incur a loss related to this case. However, a deposit totaling \$5.4 million has been made to the Brazilian court in order to annul the potential tax obligation and to avoid the accrual of additional interest and penalties. This balance is recorded in other assets on the consolidated condensed balance sheet. In June 2015, the Judiciary Court of Justice of the State of Sao Paulo ruled in the favor of the Company, however, the judgment was appealed by the City of Sao Paulo. The Company expects to recover the full amount of the deposit when the case is settled. In September 2017, a judge from the Superior Court of Justice of Brazil denied relief to the City of Sao Paulo's appeal and upheld the lower court's ruling in the favor of the Company for the years 2011, 2012, and in the period

from January to October 2013. The judge from the Superior Court of Justice of Brazil also ruled that the Company must appeal the lower court's verdict for the period November 2013 through September 2017 as the Judiciary Court of Justice of the State of Sao Paulo only reviewed the facts that pertained to the period before November 2013.

(12) Derivatives

The Company is exposed to certain risks relating to its ongoing business operations. The primary risk that the Company seeks to manage by using derivative instruments is interest rate risk. Accordingly, the Company has instituted interest rate hedging programs that are accounted for in accordance with ASC 815, "Derivatives and Hedging." The interest rate hedging program is a cash flow hedge program designed to minimize interest rate volatility. The Company swaps the difference between fixed and variable interest amounts calculated by reference to an agreed-upon notional principal amount, at specified intervals. The Company's interest rate contracts are designated as hedging instruments.

The following table presents the notional amounts and fair values (determined using Level 2 inputs) of the Company's derivatives as of September 30, 2017 and December 31, 2016 (in thousands):

		September	r 30, 2017	December	31, 2016
	Balance Sheet Classification	Notional	Asset/	Notional	Asset/
	Balance Sheet Classification	amount	(Liability	amount	(Liability)
Derivatives in an asset position:					
Interest rate swap	Other assets	\$250,000	\$ 73	\$ —	\$ —
Derivatives in a liability position:					
Interest rate swap	Other long-term liabilities	\$ —	\$ —	\$250,000	\$ (590)

The Company records the effective portion of any change in the fair value of derivatives designated as hedging instruments under ASC 815 to other accumulated comprehensive loss in the Company's consolidated condensed balance sheet, net of deferred taxes, and will later reclassify into earnings when the hedged item affects earnings or is no longer expected to occur. Gains and losses from the ineffective portion of any hedge are recognized in earnings immediately. For other derivative contracts that do not qualify or no longer qualify for hedge accounting, changes in the fair value of the derivatives are recognized in earnings each period.

The table below presents the effect of the Company's derivatives on the consolidated condensed statements of operations and comprehensive income (loss) for the three and nine months ended September 30, 2017 and 2016 (in thousands):

There

	Inree	
	Months	Nine Months
	Ended	Ended
	September	September 30,
	30,	_
Derivatives in Cash Flow Hedging Relationships (Interest Rate Contracts)	2017 2016	2017 2016
Amount of pre-tax gain (loss) recognized in other comprehensive income (loss) on derivatives	\$35 \$127	\$(32) \$(2,546)
Amount of loss recognized in other income (expense), net on derivatives (ineffective portion)		
Amount of loss reclassified from accumulated other comprehensive loss into interest expense, net on derivatives	(1,7 5 8(1,617	(5,17)5 (4,242)

The Company expects that \$6.6 million of unrealized losses will be reclassified out of accumulated other comprehensive loss and into interest expense, net over the next 12 months.

(13) Accumulated Other Comprehensive Loss

Below is a summary of the components of accumulated other comprehensive loss (in thousands):

	Foreign	Derivative	
	Currency	Instruments,	Total
	Translation	Net of Tax	
Balance at December 31, 2016	\$(201,091)	\$ (23,595)	\$(224,686)
Other comprehensive income before reclassifications	75,167	(21)	75,146
Reclassification adjustments	_	3,249	3,249

Balance at September 30, 2017

\$(125,924) \$(20,367) \$(146,291)

The change in the Company's foreign currency translation adjustment was due primarily to the movements in the British pound and Euro exchange rates against the U.S. dollar. The U.S. dollar weakened by 8.6% and 12.0% versus the British pound and Euro, respectively, between December 31, 2016 and September 30, 2017. The movement in the British pound and Euro represented \$42.1 million and \$26.8 million, respectively, out of the \$75.2 million foreign currency translation adjustment during the nine months ended September 30, 2017. The remaining foreign currency translation adjustment is primarily attributable to the U.S. dollar's depreciation against other major world-wide currencies, including the Canadian dollar and the Russian ruble.

(14) Net Income Per Share

Basic net income per share is calculated by dividing net income by the weighted average number of common shares outstanding for the applicable period. Diluted net income per share is calculated after adjusting the denominator of the basic net income per share calculation for the effect of all potentially dilutive common shares, which, in the Company's case, includes shares issuable under the stock option and incentive award plan.

The following table reconciles the basic to diluted weighted average shares outstanding (in thousands):

	Three I	Months	Nine M	lonths
	Ended		Ended	
	Septem	ber 30,	Septem	ber 30,
	2017	2016	2017	2016
Basic weighted average common shares outstanding	62,730	60,937	62,185	60,579
Effect of dilutive stock options and RSAs/RSUs	3,142	3,584	3,498	3,689
Diluted weighted average common shares outstanding	65,872	64,521	65,683	64,268
Anti-dilutive shares	733	359	381	314

The anti-dilutive shares disclosed above were calculated using the treasury stock method. The treasury stock method calculates dilution assuming the exercise of all in-the-money options and vesting of RSAs/RSUs, reduced by the repurchase of shares with the proceeds from the assumed exercises, and unrecognized compensation expense for outstanding awards.

(15) Segments

In conjunction with the acquisition of Symphony Health on September 6, 2017, the Company expanded its reporting segments. The Company is now managed through two reportable segments, Clinical Research and Data Solutions. Clinical Research, which primarily serves biopharmaceutical clients, provides outsourced clinical research and clinical trial related services. Data Solutions provides mission critical information, technology solutions and real-world insights and services to the Company's life science clients. Reimbursement revenue and reimbursable out-of-pocket costs are not presented, as this measure is not used by the chief operating decision maker to assess the Company's performance. The Company's reportable segment information is presented below (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30,		September 3	
	2017	2016	2017	2016
Service revenue:				
Clinical Research	\$475,588	\$399,841	\$1,360,610	\$1,166,410
Data Solutions	18,962		18,962	_
Total service revenue	494,550	399,841	1,379,572	1,166,410
Direct Costs:				
Clinical Research	314,904	259,910	903,027	758,333
Data Solutions	11,961		11,961	
Total direct costs	326,865	259,910	914,988	758,333
Gross Profit:				
Clinical Research	160,684	139,931	457,583	408,077
Data Solutions	7,001	_	7,001	_
Total gross profit	\$167,685	\$139,931	\$464,584	\$408,077
Less expenses not allocated to segments:				
Selling, general and administrative	79,307	67,190	229,770	199,648
Transaction-related costs	12,740		12,740	31,785
Depreciation and amortization	18,853	17,708	50,146	52,246
Loss on disposal of fixed assets, net	8	219	240	290
Consolidated income from operations	56,777	54,814	171,688	124,108
Interest expense, net	(11,557)	(13,779)	(31,088)	(42,525)
Loss on modification or extinguishment of debt	(3,089)	_	(3,089)	(21,485)
Foreign currency (losses) gains, net	(12,794)	1,182	(35,004)	9,264
Other income (expense), net	1,004	20	724	(85)
Consolidated income before income taxes and equity in income of unconsolidated joint ventures	\$30,341	\$42,237	\$103,231	\$69,277

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

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated condensed financial statements and the notes thereto included elsewhere in this Quarterly Report on Form 10-Q, with our audited consolidated financial statements and the notes thereto included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and with the information under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

We use the terms "we," "us," "our," or the "Company" in this report to refer to PRA Health Sciences, Inc. and its subsidiaries.

Overview

We are one of the world's leading global contract research organizations, or CROs, by revenue, providing outsourced clinical research and development services and data solutions to the biotechnology and pharmaceutical industries. We believe we are one of a select group of CROs with the expertise and capability to conduct clinical trials across major therapeutic areas on a global basis. Our therapeutic expertise includes areas that are among the largest in pharmaceutical development, and we focus in particular on oncology, central nervous system, inflammation, respiratory, cardiometabolic and infectious diseases. We believe that we further differentiate ourselves from our competitors through our investments in data, medical informatics and clinical technologies designed to enhance efficiencies, improve study predictability and provide better transparency for our clients throughout their clinical development processes.

In September 2017, we completed the acquisition of Symphony Health Solutions Corporation, or Symphony Health, to better serve our clients across their entire product lifecycle by (i) improving clinical trial design, recruitment, and execution; (ii) creating real-world data solutions based on the use of medicines by actual patients in normal situations; and (iii) increasing the efficiency of healthcare companies commercial organizations through enhanced analytics and outsourcing services. The acquisition of Symphony Health was accounted for as a business combination and the acquired results of operations are included in our consolidated financial information since the date of the acquisition. See Note 2 to our consolidated condensed financial statements included elsewhere in this Form 10-Q for additional details regarding our business combinations.

Historically, we reported one segment focused on providing outsourced clinical research and clinical trial related services. These operations are now being reported as the Clinical Research segment. The acquisition of Symphony Health resulted in a new segment, referred to as the Data Solutions segment, which is focused on providing mission critical information, technology solutions and real-world insights and services to the Company's life sciences clients.

Contracts define the relationships with our clients and establish the way we earn revenue. Three types of relationships are most common: a fixed-fee contract, a time and materials contract and fee-for-service arrangements. In cases where the contracts are fixed price, we may bear the cost of overruns for the contracted scope, or we may benefit if the costs are lower than we anticipated for the contracted scope. In cases where our contracts are fee-for-service, the contracts contain an overall budget for contracted resources. If actual resources used are lower than anticipated, the client generally keeps the savings and we may be responsible for covering the cost of the unused resource if we are unable to redeploy the resource. For time and material contracts, we bill the client only for the actual hours we spend to complete the contracted scope based upon stated hourly rates by position. The duration of our contracts range from a few months to several years. Revenue for services is recognized only after persuasive evidence of an arrangement exists, the sales price is determinable, services have been rendered, and collectability is reasonably assured. Once these criteria have been met, we recognize revenue for the services provided on fixed-fee contracts in our Clinical Research segment based on the proportional performance methodology, which determines the proportion of outputs or

performance obligations, which have been completed or delivered compared to the total contractual outputs for performance obligations. To measure performance, we compare the contract costs incurred to estimated total contract costs through completion. As part of the client proposal and contract negotiation process, we develop a detailed project budget for the direct costs based on the scope of the work, the complexity of the study, the geographical locations involved and our historical experience. We then establish the individual contract pricing based on our internal pricing guidelines, discount agreements, if any, and negotiations with the client. The estimated total contract costs are reviewed and revised periodically throughout the lives of the contracts, with adjustments to revenue resulting from such revisions being recorded on a cumulative basis in the period in which the revisions are first identified. Our costs consist of expenses necessary to carry out the clinical development project undertaken by us on behalf of the client. These costs primarily include the expense of obtaining appropriately qualified labor to administer the project, which we refer to as direct cost headcount. Other costs we incur are attributable to the expense of operating our business generally, such as leases and maintenance of information technology and equipment. We recognize revenue for services provided on fixed-fee contracts in our Data Solutions segment

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either ratably as earned over the contract period (for subscription-based services) or upon delivery (for one-time delivery of data solutions or reports). Revenue from time and materials contracts is recognized as hours are incurred. Revenues and the related costs of fee-for-service contracts are recognized in the period in which services are performed.

How We Assess the Performance of Our Business

In addition to our U.S. generally accepted accounting principles, or GAAP, financial measures, we review various financial and operational metrics, including new business awards, cancellations, and backlog. Many of our current contracts include clinical trials covering multiple geographic locations. We utilize the same management systems and reporting tools to monitor and manage these activities on the same basis worldwide.

Our gross new business awards for our Clinical Research segment for the nine months ended September 30, 2017 and 2016 were \$1,999.9 million and \$1,686.4 million, respectively. New business awards arise when a client selects us to execute its trial and is documented by written or electronic correspondence, or for our Strategic Solutions offering when the amount of revenue expected to be recognized is measurable. The number of new business awards can vary significantly from year to year, and awards can have terms ranging from several months to several years. For our Strategic Solutions offering, the value of a new business award is the anticipated service revenue to be recognized in the corresponding quarter of the next fiscal year. For the remainder of our business, the value of a new award is the anticipated service revenue over the life of the contract, which does not include reimbursement activity or investigator fees.

In the normal course of business, we experience contract cancellations, which are reflected as cancellations when the client provides us with written or electronic correspondence that the work should cease. During the nine months ended September 30, 2017 and 2016 we had \$233.4 million and \$197.2 million, respectively, of cancellations for which we received correspondence from the client for our Clinical Research segment. The number of cancellations can vary significantly from year to year. The value of the cancellation is the remaining amount of unrecognized service revenue, less the estimated effort to transition the work back to the client.

Our backlog consists of anticipated service revenue from new business awards that either have not started or are in process but have not been completed for our Clinical Research segment. Backlog varies from period to period depending upon new business awards and contract modifications, cancellations, and the amount of service revenue recognized under existing contracts. Our backlog at September 30, 2017 and 2016 was \$3.4 billion and \$2.8 billion, respectively.

Sources of Revenue

Total revenues are comprised of service revenue and reimbursement revenue, each of which is described below.

Service Revenue

We generally enter into contracts with customers to provide services with payments based on either fixed-fee, time and materials, or fee-for-service arrangements. Revenue for services is recognized only after persuasive evidence of an arrangement exists, the sales price is determinable, services have been rendered, and collectability is reasonably assured.

Once these criteria have been met, we recognize revenue for the services provided on fixed-fee contracts in our Clinical Research segment based on the proportional performance methodology, which determines the proportion of outputs or performance obligations which have been completed or delivered compared to the total contractual outputs

for performance obligations. To measure performance, we compare the contract costs incurred to estimated total contract costs through completion. As part of the client proposal and contract negotiation process, we develop a detailed project budget for the direct costs based on the scope of the work, the complexity of the study, the geographical location involved and our historical experience. We then establish the individual contract pricing based on our internal pricing guidelines, discount agreements, if any, and negotiations with the client. The estimated total contract costs are reviewed and revised periodically throughout the lives of the contracts, with adjustments to revenue resulting from such revisions being recorded on a cumulative basis in the period in which the revisions are first identified. We recognize revenue for services provided on fixed-fee contracts in our Data Solutions segment either ratably as earned over the contract period (for subscription-based services) or upon delivery (for one-time delivery of data solutions or reports). Revenue from time and materials contracts is recognized as hours are incurred. Billable hours typically fluctuate during the terms of individual contracts, as services we provide generally increase at the beginning of a study and decrease toward the end of a study. Revenues and the related costs of fee-for-service contracts are recognized in the period in which services are performed.

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A majority of our contracts undergo modifications over the contract period and our contracts provide for these modifications. During the modification process, we recognize revenue to the extent we incur costs, provided client acceptance and payment is deemed reasonably assured.

We often offer volume discounts to our large customers based on annual volume thresholds. We record an estimate of the annual volume rebate as a reduction of revenue throughout the period based on the estimated total rebate to be earned for the period.

Most of our contracts can be terminated by the client either immediately or after a specified period, typically 30 to 60 days, following notice. In the case of early termination, these contracts typically require payment to us of fees earned to date, and in some cases, a termination fee or some portion of the fees or profit that we could have earned under the contract if it had not been terminated early. Based on ethical, regulatory, and health considerations, this wind-down activity may continue for several quarters or years. Therefore, revenue recognized prior to cancellation generally does not require a significant adjustment upon cancellation.

Increases in the estimated total direct costs to complete a contract without a corresponding proportional increase to the total contract price result in a cumulative adjustment to the amount of revenue recognized in the period the change in estimate is determined.

Our service revenue was \$1,379.6 million and \$1,166.4 million during the nine months ended September 30, 2017 and 2016, respectively. Changes in service revenue from period to period are driven primarily by changes in backlog at the beginning of a period, as well as new business awards during such period. Additionally, service revenue and billable hours will generally be impacted by the mix of studies that are active during a period, as different studies have different staffing requirements, as well as the life cycles of projects that are active during a period.

Reimbursement Revenue and Reimbursable Out-of-Pocket Costs

We incur out-of-pocket costs, which are reimbursable by our customers. We include these out-of-pocket costs as reimbursement revenue and reimbursable out-of-pocket expenses in our consolidated condensed statement of operations.

As is customary in our industry, we also routinely enter into separate agreements on behalf of our clients with independent physician investigators in connection with clinical trials. We also receive funds from our clients for investigator fees, which are netted against the related costs, since such fees are the obligation of our clients, without risk or reward to us. We are not obligated either to perform the service or to pay the investigator in the event of default by the client. In addition, we do not pay the independent physician investigator until funds are received from the client. Accordingly, unlike reimbursable out-of-pocket costs, we do not recognize these investigator fees in revenue.

Reimbursement costs and investigator fees are not included in our backlog because they are pass-through costs to our clients.

We believe that the fluctuations in reimbursement costs and reimbursement revenue from period to period are not meaningful to our underlying performance.

Costs and Expenses

Our costs and expenses are comprised primarily of our direct costs, selling, general and administrative costs, depreciation and amortization and income taxes. In addition, we incur reimbursable out-of-pocket expenses; however, as noted above, our reimbursable out-of-pocket expenses are directly offset by our reimbursement revenue. Since

reimbursement revenue is offset by our out-of-pocket reimbursable expenses, we monitor and measure costs as a percentage of service revenue rather than total revenue as we believe this is a more meaningful comparison and better reflects the operations of our business.

Direct Costs

Our direct costs consist primarily of labor-related charges. They include elements such as salaries, benefits and incentive compensation for our employees. In addition, we utilize staffing agencies to procure primarily part time individuals to perform work on our contracts. For the nine months ended September 30, 2017 and 2016, the labor-related charges were 95.5% and 96.6% of our total direct costs, respectively. The cost of labor procured through staffing agencies is included in these percentages and represented 5.6% and 5.0% of total direct costs for the nine months ended September 30, 2017 and 2016, respectively. Our remaining direct costs are items such as travel, meals, postage and freight, patient costs, medical waste and

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supplies. The total of all these items was 4.5% and 3.4% of total direct costs for the nine months ended September 30, 2017 and 2016, respectively.

Historically, direct costs have increased with an increase in service revenues. The future relationship between direct costs and service revenues may vary from historical relationships. Several factors will cause direct costs to decrease as a percentage of service revenues. Deployment of our billable staff in an optimally efficient manner has the greatest impact on our ratio of direct cost to service revenue. The most effective deployment of our staff is when they are fully engaged in billable work and are accomplishing contract related activities at a rate that meets or exceeds budgeted targets. We also seek to optimize our efficiency by performing work using the employee with the lowest cost. Generally, the following factors may cause direct costs to increase as a percentage of service revenues: our staff are not fully deployed, as is the case when there are unforeseen cancellations or delays, or when our staff are accomplishing tasks at levels of effort that exceed budget, such as rework, as well as pricing pressure from increased competition.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist of administration payroll and benefits, marketing expenditures, and overhead costs such as information technology and facilities costs. These expenses also include central overhead costs that are not directly attributable to our operating business and include certain costs related to insurance, professional fees and property.

Loss on Modification or Extinguishment of Debt

Loss on modification of debt for the nine months ended September 30, 2017 consists of fees associated with the incremental borrowing under the 2016 Credit Facilities, or Incremental Borrowing. Loss on extinguishment of debt for the nine months ended September 30, 2016 consists of an early tender premium, the write-off of unamortized debt issuance costs and miscellaneous costs incurred as a result of our repayment of \$133.6 million of our 9.5% senior notes due 2023, or Senior Notes.

Transaction-Related Costs

Transaction-related costs for the nine months ended September 30, 2017 consists of expenses incurred with our secondary offering, acquisition of Symphony Health Solutions Corporation, or Symphony Health, and stock-based compensation expense related to the release of a portion of the transfer restrictions on vested options. Transaction-related costs for the nine months ended September 30, 2016 consists of expenses incurred with our secondary offerings, transaction-related stock-based compensation awards and the closing of our accounts receivable financing agreement.

Depreciation and Amortization

Depreciation represents the depreciation charged on our fixed assets. The charge is recorded on a straight-line method, based on estimated useful lives of three to seven years for computer hardware and software and five to seven years for furniture and equipment. Leasehold improvements are depreciated over the lesser of the life of the lease term or the useful life of the improvements.

Amortization expense consists of amortization recorded on acquisition-related intangible assets. Customer relationships, backlog and finite-lived trade names are amortized on an accelerated basis, which coincides with the period of economic benefit we expect to receive. All other finite-lived intangibles are amortized on a straight-line basis. In accordance with GAAP, we do not amortize goodwill and indefinite-lived intangible assets.

Income Taxes

Because we conduct operations on a global basis, our effective tax rate has and will continue to depend upon the geographic distribution of our pre-tax earnings among several different taxing jurisdictions. Our effective tax rate can also vary based on changes in the tax rates of the different jurisdictions. Our effective tax rate is also impacted by tax credits and the establishment or release of deferred tax asset valuation allowances and tax reserves, as well as significant non-deductible items such as portions of transaction-related costs.

Foreign subsidiaries are taxed separately in their respective jurisdictions. We have foreign net operating loss carryforwards in some jurisdictions. The carryforward periods for these losses vary from five years to an indefinite carryforward period depending on the jurisdiction. Our ability to offset future taxable income with the net operating loss carryforwards may be limited in certain instances, including changes in ownership.

Exchange Rate Fluctuations

The majority of our foreign operations transact in the Euro, or EUR, or British pound, or GBP. As a result, our revenue and expenses are subject to exchange rate fluctuations with respect to these currencies. We have translated these currencies into U.S. dollars using the following average exchange rates:

Three Nine Months
Ended Ended
September September 30, 30, 2017 2016 2017 2016

1.17 1.12 1.11 1.12

U.S. dollars per:

Euro 1.17 1.12 1.11 1.12 British pound 1.31 1.31 1.27 1.39

Results of Operations

Consolidated Results of Operations for the Three Months Ended September 30, 2017 Compared to the Three Months Ended September 30, 2016

	Three Months Ended September 30,	
	2017	2016
(in thousands)		
Revenue		
Service revenue	\$494,550	\$399,841
Reimbursement revenue	87,459	53,414
Total revenue	582,009	453,255
Operating expenses		
Direct costs	326,865	259,910
Reimbursable out-of-pocket costs	87,459	53,414
Selling, general and administrative	79,307	67,190
Transaction-related costs	12,740	
Depreciation and amortization	18,853	17,708
Loss on disposal of fixed assets	8	219
Income from operations	56,777	54,814
Interest expense, net	(11,557)	(13,779)
Loss on modification of debt	(3,089)	
Foreign currency (losses) gains, net	(12,794)	1,182
Other expense, net	1,004	20
Income before income taxes and equity in income of unconsolidated joint ventures	30,341	42,237
(Benefit from) provision for income taxes	(18,241)	10,821
Income before equity in income of unconsolidated joint ventures	48,582	31,416
Equity in income of unconsolidated joint ventures, net of tax	24	33
Net income	48,606	31,449
Net income attributable to noncontrolling interest	(401)	
Net income attributable to PRA Health Sciences, Inc.	\$48,205	\$31,449

Service revenue increased by \$94.7 million, or 23.7%, from \$399.8 million during the three months ended September 30, 2016 to \$494.6 million during the three months ended September 30, 2017. Service revenue for the three months ended September 30, 2017 benefited from an increase in billable hours, an increase in the effective rate of hours billed on our studies, a favorable impact of \$2.9 million from foreign currency exchange rate fluctuations, and an increase of \$19.0 million due to the acquisition of Symphony Health which was completed on September 6, 2017. The growth in service revenue and the increase in billable hours were due largely to the increase in our backlog as we entered the year, the type of services we are providing on our active studies, which was driven by the life cycles of projects that were active during the period, the growth in

new business awards as a result of higher demand for our services across the industries we serve, and more effective sales efforts and the growth in the overall CRO market. New business awards arise when a client selects us to execute its trial. The number of awards can vary significantly from period to period and our studies have terms ranging from several months to several years. The increase in our effective rate of the hours billed on our studies is attributable to the contract pricing terms on our current mix of active studies and the mix of clients and services that we provide to those clients.

Direct costs increased by \$67.0 million, or 25.8%, from \$259.9 million during the three months ended September 30, 2016 to \$326.9 million during the three months ended September 30, 2017. Direct costs as a percentage of service revenue increased from 65.0% during the three months ended September 30, 2016 to 66.1% during the three months ended September 30, 2017. The increase in direct costs as a percentage of service revenue is primarily due to an increase in salaries and related benefits of \$51.3 million, as we continue to hire billable staff to ensure appropriate staffing levels for our current studies and our future growth, an increase by \$12.0 million due to the acquisition of Symphony Health, and an unfavorable impact of \$3.7 million from foreign currency exchange rate fluctuations.

Selling, general and administrative expenses increased by \$12.1 million, or 18.0%, from \$67.2 million during the three months ended September 30, 2016 to \$79.3 million during the three months ended September 30, 2017. The increase in selling, general and administrative expenses is primarily due to an increase in salaries and related benefits as we continue to hire staff to support our growing business and increased facility costs related to additional office space needed for our growth. Selling, general and administrative expenses as a percentage of service revenue decreased from 16.8% during the three months ended September 30, 2016 to 16.0% during the three months ended September 30, 2017. The decrease in selling, general and administrative expenses as a percentage of service revenue is primarily related to our continued efforts to effectively leverage our selling and administrative functions.

For the three months ended September 30, 2017, we incurred transaction-related costs of \$12.7 million. These costs consist of \$6.4 million of fees incurred in connection with the acquisition of Symphony Health, \$5.3 million of stock-based compensation expense related to the release of a portion of the transfer restrictions on vested options, and \$1.0 million of expenses incurred in connection with our August 2017 secondary offering. No transaction-related expenses were incurred for the three months ended September 30, 2016.

Depreciation and amortization expense increased by \$1.1 million, or 6.5%, from \$17.7 million during the three months ended September 30, 2016 to \$18.9 million during the three months ended September 30, 2017. Depreciation and amortization expense as a percentage of service revenue was 4.4% during the three months ended September 30, 2016 and 3.8% during the three months ended September 30, 2017. The decrease in depreciation and amortization expense as a percentage of service revenue is primarily due to the continued amortization of our acquired intangibles which are amortized on an accelerated basis.

Interest expense, net, decreased by \$2.2 million, or 16.1%, from \$13.8 million during the three months ended September 30, 2016 to \$11.6 million during the three months ended September 30, 2017. The refinancing of our variable rate first lien term loans in December 2016 contributed to a 1.0% decrease in the weighted average interest rate on our outstanding debt as compared to the three months ended September 30, 2016; this decrease in weighted average interest rate resulted in a \$1.6 million reduction in interest expense, which was partially offset by a \$1.3 million increase in interest expense due to the Incremental Borrowing during the three months ended September 30, 2017. Additionally, interest expense decreased by \$0.7 million due to lower amortization of debt issuance costs, which was offset by an increase of \$0.1 million related to the amortization of our terminated interest rate swaps and interest expense on our current interest rate swap.

Loss on modification of debt was \$3.1 million during the three months ended September 30, 2017 and there were no losses on modification of debt during the three months ended September 30, 2016. The loss on modification of debt

incurred during the three months ended September 30, 2017 was associated with the Incremental Borrowing to fund the acquisition of Symphony Health. The \$3.1 million loss consists of fees associated with the transaction for the three months ended September 30, 2017.

Foreign currency (losses) gains, net, changed by \$14.0 million from gains of \$1.2 million during the three months ended September 30, 2016 to losses of \$12.8 million during the three months ended September 30, 2017. Foreign exchange gains and losses are due to fluctuations in the U.S. dollar, gains or losses that arise in connection with the revaluation of short-term inter-company balances between our domestic and international subsidiaries, and gains or losses from foreign currency transactions, such as those resulting from the settlement of third-party accounts receivables and payables denominated in a currency other than the local currency of the entity making the payment. During the three months ended September 30, 2017, foreign currency losses were primarily due to the U.S. dollar weakening against the GBP, EUR, Canadian dollar, or CAD, and Russian ruble, or RUB, by 3.1%, 3.3%, 4.2%, and 2.5%, respectively. During the three months ended September 30, 2016,

foreign currency gains were primarily due the strengthening of the U.S. dollar against the GBP by 3.0%, partially offset by a weakening against the EUR by 1.3%,

Provision for income taxes decreased by \$29.1 million from a provision of \$10.8 million during the three months ended September 30, 2016 to a benefit of \$18.2 million during the three months ended September 30, 2017. Our effective tax rate was 25.6% and (60.1)% during the three months ended September 30, 2016 and 2017, respectively. The decrease in the effective tax rate of 85.7% was primarily attributable to (i) the benefit realized from the tax deduction of stock awards in excess of the amount recognized in the financial statements per the guidance under ASU No. 2016-09, "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting" and (ii) the release of the valuation allowance against the federal net deferred tax assets as a result of the acquisition of Symphony Health.

Consolidated Results of Operations for the Nine Months Ended September 30, 2017 Compared to the Nine Months Ended September 30, 2016

Zhaed September 30, 2010	Nine Month		
	September 3		
	2017	2016	
(in thousands)			
Revenue			
Service revenue	\$1,379,572	\$1,166,410	
Reimbursement revenue	223,921	172,915	
Total revenue	1,603,493	1,339,325	
Operating expenses			
Direct costs	914,988	758,333	
Reimbursable out-of-pocket costs	223,921	172,915	
Selling, general and administrative	229,770	199,648	
Transaction-related costs	12,740	31,785	
Depreciation and amortization	50,146	52,246	
Loss on disposal of fixed assets	240	290	
Income from operations	171,688	124,108	
Interest expense, net	(31,088	(42,525))
Loss on modification or extinguishment of debt	(3,089	(21,485))
Foreign currency (losses) gains, net	(35,004	9,264	
Other income (expense), net	724	(85))
Income before income taxes and equity in income of unconsolidated joint ventures	103,231	69,277	
(Benefit from) provision for income taxes	(165	17,869	
Income before equity in income of unconsolidated joint ventures	103,396	51,408	
Equity in income of unconsolidated joint ventures, net of tax	92	2,742	
Net income	103,488	54,150	
Net income attributable to noncontrolling interests	(513) —	
Net income attributable to PRA Health Sciences, Inc.	\$102,975	\$54,150	

Service revenue increased by \$213.2 million, or 18.3%, from \$1,166.4 million during the nine months ended September 30, 2016 to \$1,379.6 million during the nine months ended September 30, 2017. Service revenue for the nine months ended September 30, 2017 benefited from an increase in billable hours, an increase in the effective rate of hours billed on our studies, a favorable impact of \$0.2 million from foreign currency exchange fluctuations, and an increase of \$19.0 million due to the acquisition of Symphony Health which was completed on September 6, 2017. The growth in service revenue was due largely to the increase in our backlog as we entered the year, the type of services we are providing on our active studies, which was driven by the life cycles of projects that were active during the

period, the growth in new business awards as a result of higher demand for our services across the industries we serve, and more effective sales efforts and the growth in the overall CRO market. New business awards arise when a client selects us to execute its trial. The number of awards can vary significantly from period to period and our studies have terms ranging from several months to several years. The increase in our effective rate of the hours billed on our studies is attributable to the contract pricing terms on our current mix of active studies and the mix of clients and services that we provide to those clients.

Direct costs increased by \$156.7 million, or 20.7%, from \$758.3 million during the nine months ended September 30, 2016 to \$915.0 million during the nine months ended September 30, 2017. Direct costs as a percentage of service revenue increased from 65.0% during the nine months ended September 30, 2016 to 66.3% during the nine months ended September 30, 2017. The increase in direct costs as a percentage of revenue is primarily due to an increase in salaries and related benefits of \$140.0 million, as we continue to hire billable staff to ensure appropriate staffing levels for our current studies and our future growth, an increase of \$12.0 million due to the acquisition of Symphony Health, partially offset by a favorable impact of \$1.5 million from foreign currency exchange rate fluctuations.

Selling, general and administrative expenses increased by \$30.1 million, or 15.1%, from \$199.6 million during the nine months ended September 30, 2016 to \$229.8 million during the nine months ended September 30, 2017. The increase in selling, general and administrative expenses is primarily due to an increase in salaries and related benefits as we continue to hire staff to support our growing business and increased facility costs related to additional office space needed for our growth. Selling, general and administrative expenses as a percentage of service revenue decreased from 17.1% during the nine months ended September 30, 2016 to 16.7% during the nine months ended September 30, 2017. The decrease in selling, general and administrative expenses as a percentage of service revenue is primarily related to our continued efforts to effectively leverage our selling and administrative functions as we continue to grow revenue.

For the nine months ended September 30, 2017, we incurred transaction-related costs of \$12.7 million. These costs consist of \$6.4 million of fees incurred in connection with the acquisition of Symphony Health, \$5.3 million of stock-based compensation expense related to the release of a portion of the transfer restrictions on vested options, and \$1.0 million of third-party costs incurred in connection with our August 2017 secondary offering. During the nine months ended September 30, 2016, we incurred transaction-related expenses of \$31.8 million. These costs consist of \$4.9 million of stock-based compensation expense associated with the release of the transfer restrictions on a portion of shares issuable upon exercise of vested service-based options in connection with the announcement of our March and May 2016 secondary offerings. These costs also include \$24.5 million of stock-based compensation expense related to the vesting and release of the transfer restrictions of certain performance-based stock options. In addition, we incurred \$2.4 million of third-party fees associated with the secondary offering and the closing of our accounts receivable financing agreement.

Depreciation and amortization expense decreased by \$2.1 million, or 4.0%, from \$52.2 million during the nine months ended September 30, 2016 to \$50.1 million during the nine months ended September 30, 2017. Depreciation and amortization expense as a percentage of service revenue was 4.5% during the nine months ended September 30, 2016 and 3.6% during the nine months ended September 30, 2017. The decrease in depreciation and amortization expense as a percentage of service revenue is primarily due to the continued amortization of our acquired intangibles which are amortized on an accelerated basis.

Interest expense, net, decreased by \$11.4 million, or 26.9%, from \$42.5 million during the nine months ended September 30, 2016 to \$31.1 million during the nine months ended September 30, 2017. The cash tender of our Senior Notes and refinancing of our variable rate first lien term loans contributed to a 1.4% decrease in the weighted average interest rate on our outstanding debt as compared to the nine months ended September 30, 2016; this decrease in weighted average interest rate resulted in a \$10.3 million reduction in interest expense. The Incremental Borrowing during the nine months ended September 30, 2017 contributed to a \$1.3 million increase in interest expense. Additionally, interest expense decreased by \$2.0 million due to lower amortization of debt issuance costs, which was partially offset by an increase of \$0.9 million related to the amortization of our terminated interest rate swaps and interest expense on our current interest rate swap.

Loss on modification or extinguishment of debt was \$3.1 million during the nine months ended September 30, 2017 compared to \$21.5 million during the nine months ended September 30, 2016. The loss on modification of debt

during the nine months ended September 30, 2017 consists of \$3.1 million in fees associated with the Incremental Borrowing under the 2016 Credit Facilities to fund the acquisition of Symphony Health. The loss on extinguishment of debt during the nine months ended September 30, 2016 was associated with our cash tender offer on our Senior Notes. The loss consists of the \$17.4 million early tender premium, the write-off of \$3.7 million of unamortized debt issuance costs, and \$0.4 million of other costs associated with the transaction.

Foreign currency (losses) gains, net, changed by \$44.3 million from gains of \$9.3 million during the nine months ended September 30, 2016 to losses of \$35.0 million during the nine months ended September 30, 2017. Foreign exchange gains and losses are due to fluctuations in the U.S. dollar, gains or losses that arise in connection with the revaluation of short-term inter-company balances between our domestic and international subsidiaries, and gains or losses from foreign currency transactions, such as those resulting from the settlement of third-party accounts receivables and payables denominated in a currency other than the local currency of the entity making the payment. During the nine months ended September 30, 2017, foreign currency losses were primarily due to the U.S. dollar weakening against the GBP, EUR, CAD, and RUB, by 8.6%, 12.0%, 7.9% and 6.0%, respectively. During the nine months ended September 30, 2016, foreign currency gains were primarily

due to the weakening of the GBP against foreign currencies, including the U.S dollar, following Brexit. The U.S. dollar strengthened against the GBP by 12.3%, partially offset by a weakening against the EUR, CAD, and RUB, by 2.8%, 5.8%, and 15.8%, respectively.

Provision for income taxes decreased by \$18.0 million from a provision of \$17.9 million during the nine months ended September 30, 2016 to a benefit of \$0.2 million during the nine months ended September 30, 2017. Our effective tax rate was 25.8% and (0.2)% during the nine months ended September 30, 2016 and 2017, respectively. The decrease in the effective tax rate of 26.0% was primarily attributable to (i) the benefit realized from the tax deduction of stock awards in excess of the amount recognized in the financial statements per the guidance under ASU No. 2016-09, "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting" and (ii) the release of the valuation allowance against the federal net deferred tax assets as a result of the acquisition of Symphony Health.

Segment Results of Operations for the Three Months Ended September 30, 2017 Compared to the Three Months Ended September 30, 2016

Clinical Research

	Three Mor	ths Ended		
	September	30,		
	2017	2016	Increase/(Decrease)	% Change
(in thousands)				
Service Revenue	475,588	399,841	75,747	18.9 %
Gross profit	160,684	139,931	20,753	14.8 %
Gross profit %	33.8 %	35.0 %	(1.2)%	

Service revenue increased by \$75.7 million, or 18.9%, from \$399.8 million during the three months ended September 30, 2016 to \$475.6 million during the three months ended September 30, 2017. Service revenue for the three months ended September 30, 2017 benefited from an increase in billable hours and an increase in the effective rate of hours billed on our studies. The growth in revenue and the increase in billable hours were due largely to the increase in our backlog as we entered the year, the type of services we are providing on our active studies, which was driven by the life cycles of projects that were active during the period, the growth in new business awards as a result of higher demand for our services across the industries we serve, and more effective sales efforts and the growth in the overall CRO market. New business awards arise when a client selects us to execute its trial. The number of awards can vary significantly from period to period and our studies have terms ranging from several months to several years. The increase in our effective rate of the hours billed on our studies is attributable to the contract pricing terms on our current mix of active studies and the mix of clients and services that we provide to those clients.

Gross profit increased by \$20.8 million, or 14.8%, from \$139.9 million during the three months ended September 30, 2016 to \$160.7 million during the three months ended September 30, 2017 primarily due to an increase in revenue. Gross profit as a percentage of revenue decreased from 35.0% during the three months ended September 30, 2016 to 33.8% for the same period in 2017. Gross profit decreased primarily due to an increase in salaries and related benefits of \$51.3 million, as we continue to hire billable staff to ensure appropriate staffing levels for our current studies and our future growth.

Data Solutions

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Three Months

Ended

September 30,

2017 2016 Increase/(Decrease) % Change

(in thousands)

Service Revenue 18,962 — 18,962 n/a Gross profit 7,001 — 7,001 n/a

Gross profit % 36.9 % — n/a

The Company acquired Symphony Health on September 6, 2017. The Company recognized \$19.0 million of revenue and \$12.0 million in direct costs during the period between September 6, 2017 and September 30, 2017. See Note 2 to our consolidated condensed financial statements for information about the acquisition.

Segment Results of Operations for the Nine Months Ended September 30, 2017 Compared to the Nine Months Ended September 30, 2016

Clinical Research

	Nine Month September 3			
	2017	2016	Increase/(Decrease)	% Change
(in thousands)				& .
Service Revenue	1,360,610	1,166,410	194,200	16.6 %
Gross profit	457,583	408,077	49,506	12.1 %
Gross profit %	33.6 %	35.0 %	(1.4)%	

Service Revenue increased by \$194.2 million, or 16.6%, from \$1,166.4 million during the nine months ended September 30, 2016 to \$1,360.6 million during the three months ended September 30, 2017. Service revenue for the nine months ended September 30, 2017 benefited from an increase in billable hours and an increase in the effective rate of hours billed on our studies. The growth in revenue and the increase in billable hours were due largely to the increase in our backlog as we entered the year, the type of services we are providing on our active studies, which was driven by the life cycles of projects that were active during the period, the growth in new business awards as a result of higher demand for our services across the industries we serve, and more effective sales efforts and the growth in the overall CRO market. New business awards arise when a client selects us to execute its trial. The number of awards can vary significantly from period to period and our studies have terms ranging from several months to several years. The increase in our effective rate of the hours billed on our studies is attributable to the contract pricing terms on our current mix of active studies and the mix of clients and services that we provide to those clients.

Gross profit increased by \$49.5 million, or 12.1%, from \$408.1 million during the nine months ended September 30, 2016 to \$457.6 million during the nine months ended September 30, 2017 primarily due to an increase in revenue. Gross profit as a percentage of revenue decreased from 35.0% during the nine months ended September 30, 2016 to 33.6% for the same period in 2017. Gross profit decreased primarily due to an increase in salaries and related benefits of \$140.0 million, as we continue to hire billable staff to ensure appropriate staffing levels for our current studies and our future growth.

Data Solutions

	Nine Mor Ended Septembe			
	2017	2016	Increase/(Decrease)	% Change
(in thousands)				_
Service Revenue	18,962		18,962	n/a
Gross profit	7,001		7,001	n/a
Gross profit %	36.9 %	_	n/a	

The Company acquired Symphony Health on September 6, 2017. The Company recognized \$19.0 million of revenue and \$12.0 million in direct costs during the period between September 6, 2017 and September 30, 2017. See Note 2 to our consolidated condensed financial statements for information about the acquisition.

Seasonality

Although our business is not generally seasonal, we typically experience a slight decrease in our revenue growth rate during the fourth quarter due to holiday vacations and a similar decrease in new business awards in the first quarter due to our clients' budgetary cycles and vacations during the year-end holiday period.

Liquidity and Capital Resources

We assess our liquidity in terms of our ability to generate cash to fund our operating, investing and financing activities. Our principal source of liquidity is operating cash flows. As of September 30, 2017, we had approximately \$193.6

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million of cash and cash equivalents of which \$54.8 million was held by our foreign subsidiaries. Our expected primary cash needs on both a short and long-term basis are for capital expenditures, expansion of services, geographic expansion, debt repayments, acquisitions and other strategic transactions, and other general corporate purposes. We have historically funded our operations and growth, including acquisitions, with cash flow from operations, borrowings, and issuances of equity securities. We expect to continue expanding our operations through internal growth and strategic acquisitions and investments. We expect these activities will be funded from existing cash, cash flow from operations and, if necessary or appropriate, borrowings under our existing or future credit facilities. Our sources of liquidity could be affected by our dependence on a small number of industries and clients, compliance with regulations, international risks, and personal injury, environmental or other material litigation claims.

Cash Collections

Cash collections from accounts receivable were \$1,780.9 million during the nine months ended September 30, 2017, including \$186.4 million of funds received from customers to pay independent physician investigators, or investigators, as compared to \$1,513.6 million during the nine months ended September 30, 2016, including \$188.1 million of funds received from customers to pay investigators. The increase in cash collections during the nine months ended September 30, 2017 is related to our increase in revenue, driven by an increase in new business awards and an increase in our backlog.

Discussion of Cash Flows

Cash Flow from Operating Activities

During the nine months ended September 30, 2017, net cash provided by operations was \$117.8 million, compared to \$66.7 million for the same period of 2016. Cash provided by operating activities increased over the prior year primarily due to increased cash flows from our operating performance, as well as a decrease in cash outflows from working capital.

Cash Flow from Investing Activities

Net cash used in investing activities was \$599.6 million during the nine months ended September 30, 2017, compared to \$27.1 million for the same period of 2016. The net cash outflows from acquisitions increased from \$4.3 million during the nine months ended September 30, 2016 to \$559.6 million during the same period in 2017. Additionally, capital expenditures increased by \$13.6 million compared to the prior year, which is partially offset by \$3.7 million received from the sale of our ownership stake in the WuXiPRA joint venture during the nine months ended September 30, 2016.

Cash Flow from Financing Activities

Net cash provided by financing activities was \$523.7 million during the nine months ended September 30, 2017 compared to net cash used by financing activities of \$30.7 million for the same period of 2016. We borrowed \$20.0 million under our accounts receivable financing agreement and \$550.0 million in Incremental Borrowings under our 2016 Term Loan during the nine months ended September 30, 2017 compared to \$120.0 million in borrowings under our accounts receivable financing agreement during the same period in the prior year. During the nine months ended September 30, 2017, we repaid \$26.9 million principal amount of our term loan, \$20.0 million principal on our accounts receivable financing agreement, and \$5.5 million in debt issuance costs compared to \$133.6 million aggregate principal amount of our Senior Notes and \$17.8 million related to debt prepayment and debt extinguishment costs that were paid as part of the cash tender offer in the prior year. During the nine months ended September 30, 2017, we received \$6.5 million in proceeds from stock option exercises compared to \$0.6 million for the same period

of 2016.

Indebtedness

As of September 30, 2017, we had \$1,359.6 million of total indebtedness. Additionally, our senior secured credit agreement provides for a \$125.0 million revolving credit facilities. There were no amounts drawn on this revolving credit facilities as of September 30, 2017. In addition, at September 30, 2017, we had \$4.5 million in letters of credit outstanding, which are secured by the revolving credit facilities. Our long-term debt arrangements contain usual and customary restrictive covenants, and, as of September 30, 2017, we were in compliance with these covenants.

Incremental Borrowings under the 2016 Credit Facilities

On September 6, 2017, we borrowed \$550.0 million under the 2016 Credit Facilities. The proceeds were primarily used to fund the acquisition of Symphony Health. As of September 30, 2017, the weighted average interest rate on the first lien term loan was 3.45%.

The variable interest rate on the Incremental Borrowing is a rate equal to the London Interbank Offered Rate, or LIBOR, or the adjusted base rate, or ABR rate, at the election of the Company, plus a margin based on the ratio of total indebtedness to EBITDA and ranges from 1.00% to 2.00%, in the case of LIBOR rate loans, and 0.00% to 1.00%, in the case of ABR rate loans. There were no other changes to the 2016 Credit Facilities as a result of the Incremental Borrowing.

See Note 7 to our consolidated condensed financial statements included in this report, and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources" and Note 9 to our audited consolidated financial statements, each included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, for additional details regarding our credit arrangements.

Contractual Obligations and Commercial Commitments

In September 2017, the Company borrowed an additional \$550.0 million under the 2016 Credit Facilities, or the Incremental Borrowing. See Note 7 to our consolidated condensed financial statements for information about the Incremental Borrowing. As a result of these changes, our long-term debt obligations as of September 30, 2017 are updated below. As part of the Symphony Health acquisition, the Company recognized a contingent consideration for the earn-out. As a result of this change an update of our contingent consideration as of September 30, 2017 is included below.

	Payment	s Due by P	eriod		
	Remainin	ng 2018 to	2020 to		
	2017 (3	2010	2021	Thereafter	Total
	Months)	2017	2021		
Principal payments on long-term debt (1)	\$11,250	\$241,250	\$1,015,625	\$91,441	\$1,359,566
Interest payments on long-term debt (1)	11,113	104,283	92,720	15,203	223,319
Contingent consideration on acquisition (2)	67,789	50,775		_	118,564
Total	\$90,152	\$396,308	\$1,108,345	\$106,644	\$1,701,449

- (1) Principal payments are based on the terms contained in our agreements. Interest payments are based on the interest rate in effect on September 30, 2017.
- (2) Represents contingent payments associated with our acquisitions. These amounts are remeasured at fair value every reporting period with the change in fair value recorded in Other income (expense), net (see Note 2 to our consolidated condensed financial statements). The actual amounts ultimately paid out may be different depending on the level of achievement of certain earnings milestones.

Other than the items included above, there have been no material changes, outside of the ordinary course of business, to our contractual obligations as previously disclosed in our Annual Report on Form 10-K for fiscal year ended December 31, 2016.

Critical Accounting Policies and Estimates

There have been no material changes to our critical accounting policies as previously disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

Disclosure Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In addition to historical consolidated condensed financial information, this Quarterly Report on Form 10-Q contains forward-looking statements that reflect, among other things, our current expectations and anticipated results of operations, all of which are subject to known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements, market trends, or industry results to differ materially from those expressed or implied by such forward-looking statements. For this purpose, any statements contained herein that are not statements of historical fact may constitute forward-looking statements. Without limiting the foregoing, words such as "anticipates,"

"believes," "estimates," "expects," "intends," "may," "plans," "projects," "should," "targets," "will" and the negative thereof a words and expressions are intended to identify forward-looking statements. Unless legally required, we assume no obligation to update any such forward-looking information to reflect actual results or changes in the factors affecting such forward-looking information.

We caution you that actual results may differ materially from our expectations due to a number of factors, including, that most of our contracts may be terminated on short notice, and we may be unable to maintain large customer contracts or to enter into new contracts; the historical indications of the relationship of our backlog to revenues may not be indicative of their future relationship; the market for our services may not grow as we expect; we may underprice our contracts, overrun our cost estimates or fail to receive approval or experience delays in documenting change orders; if we are unable to achieve operating efficiencies or grow revenues faster than expenses, operating margins will be adversely affected; we may be unable to maintain information systems or effectively update them; customer or therapeutic concentration could harm our business; our business is subject to risks associated with international operations, including economic, political and other risks, such as compliance with a myriad of laws and regulations, complications from conducting clinical trials in multiple countries simultaneously and changes in exchange rates; we are subject to a number of additional risks associated with doing business outside of the United States, including foreign currency exchange fluctuations and restrictive regulations, as well as the risks and uncertainties associated with the United Kingdom's expected withdrawal from the European Union; government regulators or customers may limit the scope of prescription or withdraw products from the market, and government regulators may impose new regulations affecting the biopharmaceutical industry and our business; we may be unable to successfully develop and market new services or enter new markets; our failure to perform services in accordance with contractual requirements, regulatory standards and ethical considerations may subject us to significant costs or liability, damage our reputation and cause us to lose existing business or not receive new business; our services are related to treatment of human patients, and we could face liability if a patient is harmed; we may be unable to successfully identify, acquire and integrate businesses, services and technologies; the Company's reliance on third parties for data, products, services and intellectual property licenses; we have substantial indebtedness and may incur additional indebtedness in the future, which could adversely affect our financial condition; and other factors that are set forth in our filings with the Securities and Exchange Commission, including our most recent Annual Report on Form 10-K filed on February 23, 2017 and this Quarterly Report on Form 10-Q.

Website and Social Media Disclosure

We use our website (www.prahs.com) and our corporate Twitter account (@PRAHSciences) as channels of distribution of company information. The information we post through these channels may be deemed material. Accordingly, investors should monitor these channels, in addition to following our press releases, Securities and Exchange Commission, or SEC, filings and public conference calls and webcasts. The contents of our website and social media channels are not, however, a part of this report.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes to our quantitative and qualitative disclosures about market risk as compared to the quantitative and qualitative disclosures about market risk described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

Item 4. Controls and Procedures

As of September 30, 2017, we carried out an evaluation under the supervision and with the participation of our management, including the principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Regulations under the Exchange Act require public

companies, including us, to maintain "disclosure controls and procedures," which are defined in Rule 13a-15(e) and Rule 15d-15(e) of the Exchange Act to mean a company's controls and other procedures that are designed to ensure that information required to be disclosed in reports that it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to management, including our principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required or necessary disclosures. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. In accordance with the SEC's published guidance, the internal control over financial reporting of Symphony Health Solutions Corporation, or Symphony Health, which was acquired on September 6, 2017 and the Takeda PRA Development Center KK joint venture, or the TDC joint venture, formed between us and Takeda Pharmaceutical Company Ltd. on June 1, 2017, were excluded from our evaluation of the effectiveness of our disclosure controls and

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procedures as of September 30, 2017. Symphony Health and the TDC joint venture represented 25% and 1%, respectively, of our consolidated total assets, 4% and 1%, respectively, of our consolidated service revenue and 2% and 1%, respectively, of our consolidated net income as of and for the quarter ended September 30, 2017. Based upon our evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective to accomplish their objective at a reasonable assurance level.

There were no changes in our internal control over financial reporting (as that term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended September 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We are in the process of reviewing the internal control structure of Symphony Health and the TDC joint venture, if necessary, will make appropriate changes as we integrate Symphony Health and the TDC joint venture into our overall internal control over financial reporting process.

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PART II—OTHER INFORMATION

Item 1. Legal Proceedings

The information required with respect to this item can be found under "Commitments and Contingencies" in Note 11 to our consolidated condensed financial statements included elsewhere in this Form 10-Q and is incorporated by reference into this Item 1.

Item 1A. Risk Factors

For a discussion of our potential risks and uncertainties, see the information under the heading "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, or Annual Report. There have been no significant changes from the risk factors previously disclosed in our Annual Report, except as noted below.

We rely on third parties to provide certain data and other information to us. Our suppliers or providers might increase our cost to obtain, restrict our use of or refuse to license data, which could lead to our inability to access certain data or provide certain services and, as a result, materially and adversely affect our operating results and financial condition.

Our services are derived from, or include, the use of data we collect from third parties. We have several data suppliers that provide us a broad and diverse scope of information that we collect, use in our business and sell.

We generally enter into long-term contractual arrangements with many of our data suppliers. At the time we enter into a new data supply contract or renew an existing contract, suppliers may increase our cost to obtain and use the data provided by such supplier, increase restrictions on our ability to use or sell such data, or altogether refuse to license the data to us. Also, our data suppliers may fail to meet or adhere to our quality control standards or fail to deliver the data to us. Although no single supplier is material to our business, if suppliers that collectively provide a significant amount of the data we receive or use were to increase our costs to obtain or use such data, further restrict our access to or use of such data, fail to meet or adhere to our quality control standards, refuse to provide or fail to deliver data to us, our ability to provide data-dependent services to our clients may be adversely impacted, which could have a material adverse effect on our business, results of operations, financial condition or cash flow.

We rely on third parties for important products, services and licenses to certain technology and intellectual property rights and we might not be able to continue to obtain such products, services and licenses.

We depend on certain third parties to provide us with products and services critical to our business. Such services include, among others, suppliers of drugs for patients participating in trials, suppliers of kits for use in our laboratories, suppliers of reagents for use in our testing equipment and providers of maintenance services for our equipment. The failure of any of these third parties to adequately provide the required products or services, or to do so in compliance with applicable regulatory requirements, could have a material adverse effect on our business.

Some of our services rely on intellectual property, technology and other similar property owned and/or controlled by third parties. Our licenses to this property and technology could terminate or expire and we might not be able to replace these licenses in a timely manner. Also, we might not be able to renew these licenses on similar terms and conditions. Failure to renew these licenses, or renewals of these licenses on less advantageous terms, could have a material adverse effect on our business, results of operations, financial condition or cash flow.

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

On July 5, 2017, we issued an aggregate of 4,998 common shares at a price of \$75.04 per share as remaining held back consideration for the purchase of the assets of Value Health Solutions Inc. The offer and sale of the common shares was made in reliance upon the exemption from registration under the Securities Act of 1933, as amended, afforded by Section 4(a)(2) thereof, on the basis that it did not involve any public offering.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. M	ine Safety Disclosures
Not applie	cable.
Item 5. Ot	ther Information
Not applie	cable.
Item 6. Ex	khibits
Exhibit Number	Description of Exhibit
<u>2.1</u>	Agreement and Plan of Merger, dated as of August 3, 2017, by and among Pharmaceutical Research Associates, Inc., Symphony Health Solutions Corporation, Skyhook Merger Sub, Inc., and STG III, L.P. (Incorporated by reference to the Form 8-K filed with the SEC on August 7, 2017).
10.1	Joinder Agreement, dated as September 6, 2017, by and among of Pharmaceutical Research Associates, Inc., PRA Health Sciences, Inc., each of the subsidiaries from time to time party thereto, Wells Fargo Bank, National Association, as administrative agent and collateral agent and other agents and lenders party thereto. (Incorporated by reference to the Form 8-K filed with the SEC on September 11, 2017).
10.2	Supplement No. 1 to the Guarantee, by and among Symphony Health Solutions Corporation, Source Healthcare Analytics, LLC, and Parallel 6, Inc., in favor of Wells Fargo Bank, National Association, as collateral agent. (Incorporated by reference to the Form 8-K filed with the SEC on September 11, 2017).
10.3	Supplement No. 1 to the Security Agreement, by and among Symphony Health Solutions Corporation, Source Healthcare Analytics, LLC, and Parallel 6, Inc., in favor of Wells Fargo Bank, National Association, as collateral agent. (Incorporated by reference to the Form 8-K filed with the SEC on September 11, 2017).
<u>10.4</u>	Form of Option Grant Notice under the PRA Health Sciences, Inc. 2014 Omnibus Incentive Plan (Incorporated by reference to the Form 8-K filed with the SEC on September 5, 2017).
31.1*	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
<u>32.2*</u>	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following financial information from PRA Health Sciences, Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 formatted in XBRL: (i) Consolidated Condensed Balance Sheets as of September 30, 2017 and December 31, 2016, (ii) Consolidated Condensed Statements of Operations for

the three and nine months ended September 30, 2017 and 2016, (iii) Consolidated Condensed Statements of Comprehensive Income for the three and nine months ended September 30, 2017 and 2016, (iv) Consolidated Condensed Statements of Cash Flows for the nine months ended September 30, 2017 and 2016, and (v) Notes to Consolidated Condensed Financial Statements.

* Filed herewith

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.

PRA HEALTH SCIENCES, INC.

/s/ Linda Baddour Linda Baddour Executive Vice President and Chief Financial Officer (Authorized Signatory)

Date: October 26, 2017