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

Form 10-Q

[X] 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 001-37888

Tabula Rasa HealthCare, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**45-5726437**
(State of incorporation)	(I.R.S. Employer Identification No.)
228 Strawbridge Drive, Suite 100 **Moorestown, NJ 08057**	**(866) 648 - 2767**
(Address of Principal Executive Offices, including Zip Code)	(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 ☒ 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 during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

Large accelerated filer ☐	Accelerated filer ☐	Non-accelerated filer ☒ (Do not check if a smaller reporting company)	Smaller reporting company ☐
			Emerging growth company ☒

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

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

As of October 31, 2017, the Registrant had 17,848,999 shares of Common Stock outstanding.

TABULA RASA HEALTHCARE, INC.
QUARTERLY REPORT ON FORM 10-Q
For the period ended September 30, 2017

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

TABULA RASA HEALTHCARE, INC.
UNAUDITED CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share amounts)

	September 30, 2017	December 31, 2016
Assets	(unaudited)	
Current assets:		
Cash	$ 5,939	$ 4,345
Accounts receivable, net	16,631	6,646
Inventories	2,781	2,911
Rebates receivable	342	312
Prepaid expenses	2,278	869
Other current assets	315	581
Total current assets	28,286	15,664
Property and equipment, net	8,872	6,409
Software development costs, net	4,264	3,350
Goodwill	63,125	21,686
Intangible assets, net	63,347	25,297
Other assets	647	333
Total assets	$ 168,541	$ 72,739
Liabilities and stockholders' equity		
Current liabilities:		
Current portion of long-term debt	$ 927	$ 674
Acquisition-related consideration payable	50	568
Acquisition-related contingent consideration	15,224	1,493
Accounts payable	14,366	6,115
Accrued expenses and other liabilities	8,101	2,159
Total current liabilities	38,668	11,009
Line of credit	35,000	—
Long-term debt	1,019	1,072
Long-term acquisition-related contingent consideration	13,652	1,515
Deferred income tax liability	1,592	832
Other long-term liabilities	2,637	2,205
Total liabilities	92,568	16,633
Commitments and contingencies (Note 16)		
Stockholders' equity:		
Preferred stock, $0.0001 par value; 10,000,000 shares authorized; no shares issued and outstanding at September 30, 2017 and December 31, 2016	—	—
Common stock, $0.0001 par value; 100,000,000 shares authorized, 17,905,402 and 16,628,476 shares issued and 17,831,936 and 16,628,476 shares outstanding at September 30, 2017 and December 31, 2016, respectively	2	2
Additional paid-in capital	108,503	91,027
Treasury stock, at cost; 73,466 and no shares at September 30, 2017 and December 31, 2016, respectively	(959)	—
Accumulated deficit	(31,573)	(34,923)
Total stockholders' equity	75,973	56,106
Total liabilities and stockholders' equity	$ 168,541	$ 72,739

See accompanying notes to unaudited consolidated financial statements.

TABULA RASA HEALTHCARE, INC.
UNAUDITED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except share and per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Revenue:				
Product revenue	$ 24,621	$ 20,731	$ 71,391	$ 58,732
Service revenue	8,647	3,443	19,222	8,017
Total revenue	33,268	24,174	90,613	66,749
Cost of revenue, exclusive of depreciation and amortization shown below:				
Product cost	18,979	15,951	54,847	44,103
Service cost	4,486	1,232	9,241	3,135
Total cost of revenue	23,465	17,183	64,088	47,238
Gross profit	9,803	6,991	26,525	19,511
Operating expenses:				
Research and development	1,527	1,028	4,037	2,878
Sales and marketing	1,325	881	3,869	2,511
General and administrative	4,098	2,053	16,097	5,762
Change in fair value of acquisition-related contingent consideration expense	923	47	960	146
Depreciation and amortization	2,166	1,276	5,730	3,415
Total operating expenses	10,039	5,285	30,693	14,712
Income (loss) from operations	(236)	1,706	(4,168)	4,799
Other (income) expense:				
Change in fair value of warrant liability	—	(626)	—	(639)
Interest expense	174	1,242	327	4,250
Loss on extinguishment of debt	—	1,396	—	1,396
Total other expense	174	2,012	327	5,007
Income (loss) before income taxes	(410)	(306)	(4,495)	(208)
Income tax (benefit) expense	(8,105)	(164)	(7,845)	11
Net income (loss)	$ 7,695	$ (142)	$ 3,350	$ (219)
Net income (loss) attributable to common stockholders:				
Basic	$ 7,695	$ 1,228	$ 3,350	$ 1,080
Diluted	$ 7,695	$ (803)	$ 3,350	$ (894)
Net income (loss) per share attributable to common stockholders:				
Basic	$ 0.46	$ 0.25	$ 0.20	$ 0.22
Diluted	$ 0.41	$ (0.08)	$ 0.18	$ (0.09)
Weighted average common shares outstanding:				
Basic	16,699,102	4,918,885	16,483,169	4,817,285
Diluted	18,646,031	10,333,723	18,411,800	10,232,050

See accompanying notes to unaudited consolidated financial statements.

TABULA RASA HEALTHCARE, INC.
UNAUDITED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands, except share amounts)

	Stockholders' Equity								
	Preferred Stock		Common Stock		Treasury Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance, January 1, 2017	—	$ —	16,628,476	$ 2	—	$ —	$ 91,027	$ (34,923)	$ 56,106
Issuance of common stock in connection with acquisition	—	—	520,821	—	—	—	11,541	—	11,541
Issuance of restricted stock	—	—	35,596	—	—	—	—	—	—
Shares surrendered by stockholder	—	—	(246)	—	—	—	—	—	—
Shares repurchased	—	—	—	—	(73,466)	(959)	—	—	(959)
Net exercise of stock warrants	—	—	28,431	—	—	—	—	—	—
Net exercise of stock options	—	—	593,887	—	—	—	(2,035)	—	(2,035)
Exercise of stock options	—	—	98,437	—	—	—	194	—	194
Stock-based compensation expense	—	—	—	—	—	—	7,776	—	7,776
Net income	—	—	—	—	—	—	—	3,350	3,350
Balance, September 30, 2017	—	$ —	17,905,402	$ 2	(73,466)	$ (959)	$ 108,503	$ (31,573)	$ 75,973

See accompanying notes to unaudited consolidated financial statements.

TABULA RASA HEALTHCARE, INC.
UNAUDITED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Nine Months Ended September 30,	
	2017	**2016**
Cash flows from operating activities:		
Net income (loss)	$ 3,350	$ (219)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization	5,730	3,415
Amortization of deferred financing costs and debt discount	72	1,255
Payment of imputed interest on debt	—	(3,893)
Deferred taxes	(8,137)	(27)
Stock-based compensation	7,776	481
Change in fair value of warrant liability	—	(639)
Change in fair value of acquisition-related contingent consideration	960	146
Other noncash items	17	—
Loss on extinguishment of debt	—	1,396
Changes in operating assets and liabilities, net of effect from acquisition:		
Accounts receivable, net	(1,676)	(1,729)
Inventories	130	(305)
Rebates receivable	(30)	759
Prepaid expenses and other current assets	(169)	(114)
Other assets	(58)	(171)
Accounts payable	29	(191)
Accrued expenses and other liabilities	3,274	340
Other long-term liabilities	432	1,973
Net cash provided by operating activities	11,700	2,477
Cash flows from investing activities:		
Purchases of property and equipment	(2,618)	(2,947)
Software development costs	(2,223)	(1,201)
Purchases of intangible assets	—	(29)
Change in restricted cash	—	200
Purchase of businesses, net of cash acquired	(34,452)	(1,000)
Net cash used in investing activities	(39,293)	(4,977)
Cash flows from financing activities:		
Payments for repurchase of common stock	(959)	—
Proceeds from exercise of stock options	194	—
Payments for employee taxes for shares withheld	(2,123)	—
Payments for debt financing costs	(220)	(1,521)
Borrowings on line of credit	35,342	6,000
Repayments of line of credit	(342)	—
Payments of acquisition-related consideration	(550)	(180)
Repayment of note payable related to acquisition	—	(14,337)
Payments of initial public offering costs	(132)	(2,191)
Payments of contingent consideration	(1,498)	(1,895)
Proceeds from long-term debt	—	30,000
Repayments of long-term debt	(525)	(13,609)
Net cash provided by financing activities	29,187	2,267
Net increase (decrease) in cash	1,594	(233)
Cash, beginning of period	4,345	2,026
Cash, end of period	$ 5,939	$ 1,793
Supplemental disclosure of cash flow information:		
Acquisition of equipment under capital leases	$ 50	$ 1,470
Additions to property, equipment, and software development purchases included in accounts payable	$ 46	$ 238
Deferred offering costs included in accounts payable	$ —	$ 1,006
Cash paid for interest	$ 156	$ 7,901
Decretion of redeemable convertible preferred stock to redemption value	$ —	$ (2,439)
Stock issued in connection with acquisition	$ 11,541	$ —

See accompanying notes to unaudited consolidated financial statements.

TABULA RASA HEALTHCARE, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data)

1. Nature of Business

Tabula Rasa HealthCare, Inc. (the "Company") provides patient-specific, data-driven technology and solutions that enable healthcare organizations to optimize medication regimens to improve patient outcomes, reduce hospitalizations, lower healthcare costs and manage risk. The Company delivers its solutions through a comprehensive suite of technology-enabled products and services for medication risk management and risk adjustment. The Company serves healthcare organizations that focus on populations with complex healthcare needs and extensive medication requirements. The Company's suite of cloud-based software solutions provides prescribers, pharmacists and healthcare organizations with sophisticated and innovative tools to better manage the medication-related needs of patients.

On October 4, 2016, the Company closed its initial public offering (the "IPO") in which the Company issued and sold 4,300,000 shares of common stock, plus the exercise of the underwriters' option to purchase an additional 645,000 shares of common stock, at an issuance price of $12.00 per share. The Company received net proceeds of $55,186 after deducting underwriting discounts and commissions of $4,154 but before deducting other offering expenses. In addition, upon the closing of the IPO, all of the Company's then outstanding Class A Non-Voting common stock and Class B Voting common stock, totaling 5,583,405 shares, were automatically redesignated into shares of common stock, and all of the Company's then outstanding convertible preferred stock converted into an aggregate of 5,089,436 shares of common stock. In addition, 202,061 shares of common stock were issued upon the automatic net exercise of outstanding warrants to purchase common stock that would have otherwise terminated immediately prior to the closing of the IPO. Additionally, in connection with the closing of the IPO, outstanding warrants to purchase shares of preferred stock converted into warrants to purchase an aggregate of 463,589 shares of common stock.

2. Summary of Significant Accounting Policies

The Company's significant accounting policies are disclosed in the Company's audited consolidated financial statements for the year ended December 31, 2016, which are included in the Company's annual report filed on Form 10-K on March 14, 2017. Since the date of those audited consolidated financial statements, there have been no changes to the Company's significant accounting policies, including the status of recent accounting pronouncements, other than those detailed below.

(a) Basis of Presentation

The accompanying unaudited consolidated financial statements of the Company have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and applicable rules and regulations of the Securities and Exchange Commission (the "SEC") regarding interim financial reporting. The unaudited interim consolidated financial statements have been prepared on the same basis as the annual audited consolidated financial statements and, in the opinion of management, reflect all adjustments (consisting of normal recurring accruals and adjustments), necessary for the fair statement of the Company's interim consolidated financial position for the periods indicated. The interim results for the three and nine months ended September 30, 2017 are not necessarily indicative of results to be expected for the year ending December 31, 2017, any other interim periods, or any future year or period. As such, the information included in this quarterly report on Form 10-Q should be read in conjunction with the consolidated financial statements and accompanying notes included in the Company's annual report as filed on Form 10-K.

(b) Liquidity

The Company's unaudited consolidated financial statements have been prepared on the basis of continuity of operations, realization of assets and the satisfaction of liabilities in the ordinary course of business. Management believes that the Company's cash on hand of $5,939 as of September 30, 2017, cash flows from operations and borrowing availability under the Amended and Restated 2015 Revolving Line are sufficient to fund the Company's planned operations through at least December 31, 2018. See Note 10 for additional information.

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NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data)

(c) Use of Estimates

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

(d) Revenue Recognition

The Company recognizes revenue from product sales or services rendered when (i) persuasive evidence of an arrangement exists, (ii) services have been rendered, (iii) the price to its client is fixed or determinable and (iv) collectability is reasonably assured.

When the Company enters into arrangements with multiple deliverables, it applies the accounting guidance for revenue arrangements with multiple deliverables and evaluates each deliverable to determine whether it represents a separate unit of accounting based on the following criteria: (i) whether the delivered item has value to the customer on a standalone basis, and (ii) if the contract includes a general right of return relative to the delivered item, delivery or performance of the undelivered item(s) is considered probable and substantially in the control of the Company. Revenue is allocated to each element in an arrangement based on a selling price hierarchy. The selling price for a deliverable is based on estimated selling prices ("ESP") as vendor specific objective evidence or third party evidence is not available. The Company establishes ESP for the elements of its arrangements based upon its pricing practices and class of customers. The stated prices for the various deliverables of the Company's contracts are consistent across classes of customers.

Product Revenue

The Company enters into multiple-element arrangements with healthcare organizations to provide software enabled medication risk management solutions. Under these contracts, revenue is generated through the components listed below.

Prescription medication revenue

The Company sells prescription medications directly to healthcare organizations through its prescription fulfillment pharmacies. Prescription medication fees are based upon the prices stated in customer contracts for the prescription and include a dispensing fee. Prescription medication revenue, including dispensing fees, is recognized when the product is shipped to the customer. Prescription medications are considered a separate unit of accounting.

Per member per month fees — medication risk management services

The Company receives a fixed monthly administrative fee for each member in the program contracted for medication risk management services. This fee, which is included in product revenue in the consolidated statement of operations, is recognized on a monthly basis as medication risk management services are provided. The services associated with the per member per month fees are considered a separate unit of accounting.

Service Revenue

The Company provides medication risk management services utilizing the Medication Risk Mitigation Matrix (“MRM Matrix”) technology alone, without the related fulfillment services, which are referred to as MRM Service Contracts. The Company began entering into these MRM Service Contracts in the third quarter of 2016. The Company’s MRM Service Contracts also include services provided by the SinfoníaRx business, which was acquired on September 6, 2017. The SinfoníaRx business provides Medication Therapy Management (“MTM”) technology and services for

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NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data)

Medicare, Medicaid, and commercial health plans, which are referred to as MTM Contracts. See Note 4 for additional information about the acquisition of the SinfoníaRx business.

The Company also enters into contracts with healthcare organizations to provide (i) risk adjustment and (ii) pharmacy cost management services, which include training client staff and providers about documentation and diagnosis coding, analyzing clients' data collection and submission processes, and delivering meaningful analytics for understanding reimbursement complexities.

Under the MRM Service Contracts, MTM Contracts and risk adjustment contracts, there are generally three revenue generating components:

Set up fees:

The Company's contracts for Medication Risk Mitigation ("MRM") and risk adjustment services often require customers to pay non-refundable set up fees, which are deferred and recognized over the estimated term of the contract. These fees are charged at the beginning of the customer relationship as compensation for the Company's efforts to prepare the customer and configure its system for the data collection process. The set up activities do not represent a separate unit of accounting as they do not have value apart from the broader MRM Service Contracts, MTM Contracts and risk adjustment contracts. Incremental direct costs associated with such set up activities are also deferred and amortized over the shorter of the estimated customer life or stated contract period.

Per member per month fees

The Company receives a fixed monthly fee for each member in the respective programs. These services represent a separate unit of accounting and are offered independently from any other services. Revenue for these services is recognized each month as the services are performed.

Hourly consulting fees or transactional based fees

The Company sometimes contracts with customers to perform various other services. Such services are billed on a time and materials basis, at agreed hourly rates, or on a per transaction basis. Consulting services represent a separate unit of accounting and are offered independently from any other services. Revenue for these services is recognized as time is incurred on the project.

The Company's pharmacy cost management services include subscription revenue from customers and revenues from drug manufacturers for the sale of drug utilization data. Subscription revenue is recognized monthly as either a flat fee or as a percentage of monthly transactions incurred. Data and statistics fees from drug manufacturers are recognized as revenue when received due to the unpredictable nature of the payments and because fees are not fixed and determinable until received.

(e) Cost of Product Revenue

Cost of product revenue includes all costs directly related to the medication risk management offering, including costs relating to the Company's pharmacists' collaboration on a patient's medication management, clinical analysis of the results and, when necessary, offering guidance to the prescriber based upon the review of the medication risk mitigation matrix and the individual patient's medical history, as well as the fulfillment and distribution of prescription drugs. Costs consist primarily of the purchase price of the prescription drugs the Company dispenses, expenses to package, dispense and distribute prescription drugs, expenses associated with the Company's medication care plan support centers and prescription fulfillment centers, including employment costs and stock-based compensation, and expenses related to the hosting of the Company's technology platform. Such costs also include direct overhead expenses, as well as allocated miscellaneous overhead costs. The Company allocates miscellaneous overhead costs among functions based on employee headcount.

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(f) Cost of Service Revenue

Cost of service revenue includes all labor costs, including stock-based compensation expense, directly related to the risk adjustment and pharmacy cost management services and expenses for claims processing, technology services and overhead costs. In addition, service costs include all costs directly related to servicing the Company's MRM Service Contracts and MTM Contracts, which primarily consist of labor costs, consultant fees, technology services and overhead costs.

(g) Recent Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09") and has subsequently issued a number of amendments to ASU 2014-09. ASU 2014-09, as amended, represents a comprehensive new revenue recognition model that requires a company to recognize revenue to depict the transfer of promised goods or services to clients in an amount that reflects the consideration to which the Company expects to be entitled to receive in exchange for those goods or services. ASU 2014-09 sets forth a new five-step revenue recognition model which replaces the prior revenue recognition guidance in its entirety and is intended to eliminate numerous industry-specific pieces of revenue recognition guidance that have historically existed. For public companies, ASU 2014-09 is effective for annual reporting periods beginning after December 15, 2017 and interim reporting periods within that reporting period. Early adoption is permitted for annual reporting periods beginning after December 15, 2016; however, the Company does not intend to early adopt the new standard. Companies may use either a full retrospective or a modified retrospective approach to adopt ASU 2014-09.

The Company intends to adopt the new standard effective January 1, 2018 but has not yet determined which transition method will be used. The Company is currently analyzing significant contracts with customers to determine the impact of the adoption of ASU 2014-09 on the Company's consolidated financial statements and disclosures. The Company will continue to assess all potential impacts of the standard on existing and new customer contracts during 2017 and on the Company's processes and internal controls over financial reporting. A final evaluation of the impact of the adoption of the new standard is expected to be completed by the end of 2017.

In July 2015, the FASB issued ASU 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory* ("ASU 2015-11"), which simplifies the subsequent measurement of inventories by replacing the current lower of cost or market test with a lower of cost and net realizable value test. ASU 2015-11 is effective for public business entities for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Early adoption is permitted. The Company has adopted ASU 2015-11 effective January 1, 2017. The adoption of this standard did not have any impact on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* ("ASU 2016-02"). The new standard establishes a right-of-use ("ROU") model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. ASU 2016-02 is effective for annual periods beginning after December 15, 2018, including interim periods within those annual periods, with early adoption permitted. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The Company is currently evaluating the potential impact of the adoption of this standard and anticipates that this standard will have a material impact on the Company's consolidated financial statements, as all long-term leases will be capitalized on the consolidated balance sheet.

In March 2016, the FASB issued ASU 2016-09, *Compensation — Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"). The amendments in this update simplify certain aspects related to how share-based payments are accounted for and presented in the financial statements. The new guidance requires excess tax benefits and tax deficiencies be recorded as an income tax benefit or expense in the statement of operations when the awards vest or are settled and as operating cash flows when realized. The excess

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tax benefits are recognized regardless of whether the benefit reduces income taxes payable in the current period. It also allows an employer to repurchase more of an employee's shares than it can today for tax withholding purposes without triggering liability accounting and to make a policy election to account for forfeitures as they occur. ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. The Company adopted ASU 2016-09 effective January 1, 2017. The Company elected to record forfeitures as they occur. There was no impact of this election because prior to the adoption the Company's historical forfeitures were de minimus. The adoption of this new standard resulted in the recognition of a tax benefit in the amount of $2,830 in the consolidated statement of operations related to tax windfall benefits generated during the nine months ended September 30, 2017.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). ASU 2016-15 provides new guidance to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. ASU 2016-15 is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company is currently evaluating the potential impact of the adoption of ASU 2016-15 on the Company's consolidated financial statements.

In January 2017, the FASB issued Accounting Standards Update No. 2017-01, *Business Combinations* ("ASU 2017-01"). ASU 2017-01 provides guidance for evaluating whether a set of transferred assets and activities (the "set") should be accounted for as an acquisition of a business or group of assets. The guidance provides a screen to determine when a set does not qualify to be a business. When substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in an identifiable asset or a group of similar assets, the set is not a business. Also to be considered a business, the set would have to include an input and a substantive process that together significantly contribute to the ability to create outputs. ASU 2017-01 is effective for financial statements issued for fiscal years beginning after December 15, 2017. The Company is currently evaluating the potential impact of the adoption of ASU 2017-01 on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"). ASU 2017-04 simplifies the accounting for goodwill impairment by eliminating the requirement to calculate the implied fair value of goodwill to measure an impairment charge. Instead, entities will be required to record an impairment charge based on the excess of a reporting unit's carrying value over its fair value. ASU 2017-04 is effective for financial statements issued for fiscal years beginning after December 15, 2019. The Company is currently evaluating the potential impact of the adoption of ASU 2017-04 on the Company's consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting* ("ASU 2017-09"). ASU 2017-09 amends the scope of modification accounting for share-based payment arrangements. The guidance requires modification accounting only if the fair value, vesting conditions, or the classification of the award (as equity or liability) changes as a result of a change in terms or conditions. ASU 2017-09 is effective for financial statements issued for fiscal years beginning after December 15, 2017. The Company is currently evaluating the potential impact of the adoption of ASU 2017-09 on the Company's consolidated financial statements.

3. Net Income (Loss) per Share

Basic net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted average number of shares of common stock of the Company outstanding during the period. The Company computed net income (loss) per share of common stock using the treasury stock method for the three and nine months ended September 30, 2017, and using the two-class method required for participating securities for the three and nine months ended September 30, 2016. The Company considered its redeemable convertible preferred stock to be participating securities as the holders of the preferred stock were entitled to receive a dividend in the event that a dividend was paid on common stock. Diluted net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted average number of shares of common stock during the period plus

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NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except share and per share data)

the impact of dilutive securities, to the extent that they are not anti-dilutive. The following table presents the calculation of basic and diluted net income (loss) per share for the Company's common stock:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Numerator:				
Net income (loss)	$ 7,695	$ (142)	$ 3,350	$ (219)
Decretion of redeemable convertible preferred stock	—	2,641	—	2,439
Undistributed income attributable to redeemable convertible preferred stockholders	—	(1,271)	—	(1,140)
Net income (loss) attributable to common stockholders, basic	$ 7,695	$ 1,228	$ 3,350	$ 1,080
Decretion of redeemable convertible preferred stock	—	(2,641)	—	(2,439)
Revaluation of warrant liability, net of tax	—	(661)	—	(675)
Adjustment to undistributed income attributable to redeemable convertible preferred stockholders	—	1,271	—	1,140
Net income (loss) attributable to common stockholders, diluted	$ 7,695	$ (803)	$ 3,350	$ (894)
Denominator (basic):				
Weighted average shares of common stock outstanding, basic	16,699,102	4,918,885	16,483,169	4,817,285
Denominator (diluted):				
Weighted average shares of common stock outstanding	16,699,102	4,918,885	16,483,169	4,817,285
Effect of potential dilutive securities:				
Weighted average dilutive effect of stock options	1,235,883	—	1,308,202	—
Weighted average dilutive effect of restricted shares	711,046		607,988	—
Weighted average dilutive effect of common shares from warrants	—	—	12,441	—
Dilutive effect from preferred stock and preferred stock warrants assuming conversion	—	5,414,838	—	5,414,765
Weighted average shares of common stock outstanding, diluted	18,646,031	10,333,723	18,411,800	10,232,050
Net income per share attributable to common stockholders, basic	$ 0.46	$ 0.25	$ 0.20	$ 0.22
Net income (loss) per share attributable to common stockholders, diluted	$ 0.41	$ (0.08)	$ 0.18	$ (0.09)

The following potential common shares, presented based on amounts outstanding at each period end, were excluded from the calculation of diluted net income (loss) per share attributable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Stock options to purchase common stock	—	2,723,193	—	2,723,193
Restricted stock	—	722,646	—	722,646
Common stock warrants	—	213,806	—	213,806
	—	3,659,645	—	3,659,645

On October 4, 2016, the Company closed its IPO in which the Company issued and sold 4,300,000 shares of common stock, plus the exercise of the underwriters' option to purchase an additional 645,000 shares, at an issuance price of $12.00 per share. See Notes 1 and 13 for additional information.

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4. Acquisitions

SinfoníaRx

On September 6, 2017, the Company, TRCRD, Inc., a Delaware corporation and wholly-owned subsidiary of the Company ("Merger Sub I"), and TRSHC Holdings, LLC, a Delaware limited liability company and a wholly-owned subsidiary of the Company ("Merger Sub II," and together with Merger Sub I, the "Merger Subs"), entered into, and consummated the transactions contemplated by, an Agreement and Plan of Merger (the "Merger Agreement"), by and among the Company, the Merger Subs, Sinfonía HealthCare Corporation, a Delaware corporation ("Sinfonía"), Michael Deitch, Fletcher McCusker and Mr. Deitch in his capacity as the Stockholders' Representative. Under the terms of the Merger Agreement, the Company acquired the SinfoníaRx business ("SRx") as a result of Merger Sub I merging with and into Sinfonía, with Sinfonía surviving as a wholly-owned subsidiary of the Company (the "First Merger"), and, immediately following the First Merger, Sinfonía merging with and into Merger Sub II, with Merger Sub II surviving as a wholly-owned subsidiary of the Company. The SRx business provides MTM technology and services for Medicare, Medicaid, and commercial health plans.

The consideration for the acquisition of SRx was comprised of (i) cash consideration of $35,000 paid upon closing, subject to certain customary post-closing adjustments, in each case upon the terms and subject to the conditions contained in the Merger Agreement; (ii) common stock consideration issued upon closing valued at $11,541; and (iii) contingent purchase price consideration with a preliminary estimated fair value of $26,406 to be paid 50% in cash and 50% in the Company's common stock, subject to adjustments as set forth in the Merger Agreement, based on the achievement of certain performance goals for each of the twelve-month periods ended December 31, 2017 and December 31, 2018. In addition, the Company is not obligated to pay more than $35,000 in cash and the Company's common stock for the first contingent payment, or more than $130,000 for the aggregate overall closing consideration (not taking into account certain adjustments set forth in the Merger Agreement) and contingent payments. A portion of the cash merger consideration is being held in escrow to secure potential claims by the Company for indemnification under the Merger Agreement and in respect of adjustments to the acquisition consideration.

The Company issued 520,821 shares of the Company's common stock valued at $19.20 per share in satisfaction of the stock consideration issued at closing. The value for the stock consideration issued was calculated based on the arithmetic average of the daily volume-weighted average trading price per share of the Company's common stock for the 20 trading days ended on and including the trading day prior to the date of the Merger Agreement, using trading prices reported on the NASDAQ Global Market. The stock consideration issued at the closing of the acquisition had an acquisition-date fair value of $11,541.

In connection with the acquisition of SRx, the Company incurred direct acquisition costs of $949, which are recorded in general and administrative expenses in the consolidated statements of operations.

The Company, with the assistance of a third-party appraiser, utilized a Monte Carlo simulation to determine the estimated acquisition-date fair value of the acquisition-related contingent consideration of $26,406. The fair value measurement was based on significant inputs not observable in the market and thus represents a Level 3 measurement within the fair value hierarchy.

The following table summarizes the purchase price consideration based on the estimated acquisition-date fair value of the acquisition consideration:

Cash consideration at closing, net of post-closing adjustments	$	34,670
Stock consideration at closing		11,541
Estimated fair value of contingent consideration		26,406
Total fair value of acquisition consideration	$	72,617

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The following table summarizes the preliminary allocation of the purchase price based on the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition:

Cash	$ 218
Accounts receivable	8,309
Prepaid expenses and other current assets	1,001
Property and equipment	1,419
Other assets	94
Trade name	4,429
Developed technology	12,640
Client relationships	19,579
Non-competition agreement	4,497
Goodwill	41,439
Total assets acquired	$ 93,625
Accrued expenses and other liabilities	(2,667)
Trade accounts payable	(8,769)
Debt assumed	(675)
Deferred income tax liability	(8,897)
Total purchase price, including contingent consideration of $26,406	$ 72,617

The purchase price was allocated to the tangible assets and identifiable intangible assets acquired and liabilities assumed based on their acquisition-date estimated fair values. The identifiable intangible assets principally included a trade name, developed technology, client relationships, and a non-competition agreement, each of which are subject to amortization on a straight-line basis being amortized over a weighted average of 10, 8, 7.56 and 5 years, respectively. The weighted average amortization period for acquired intangible assets as of the date of acquisition is 7.68 years.

The Company, with the assistance of a third-party appraiser, assessed the fair value of the assets of SRx. The fair values of the trademarks and technology were estimated using the relief from royalty method. The Company, with the assistance of a third party appraiser, derived the hypothetical royalty income from the projected revenues of SRx. The fair value of client relationships was estimated using a multi period excess earnings method. To calculate fair value, the Company, with the assistance of a third party appraiser, used cash flows discounted at a rate considered appropriate given the inherent risks associated with each client grouping. The fair value of the non-competition agreement was estimated using the differential approach which involves valuing the business under two different scenarios. The first valuation assumes the non-compete agreement is in place and the second valuation assumes that it is not. The difference in the value of the business under each approach is attributed to the non-compete agreement.

The useful lives of the intangible assets were estimated based on the expected future economic benefit of the assets and is being amortized over the estimated useful life in proportion to the economic benefits consumed using the straight-line method.

The amortization of intangible assets is not deductible for income tax purposes.

The Company believes the goodwill related to the acquisition was a result of providing the Company exposure to a larger customer base that will enable the Company to leverage its technology in the broader market, as well as offering cross-selling market exposure opportunities. The goodwill is not deductible for income tax purposes.

Revenue from SRx is recorded primarily based on a fixed monthly fee for each eligible member, or per member per month, in the respective programs. Revenue from SRx is also comprised of transactional fees based on a fixed fee per comprehensive medication review. Revenue for these services and the related costs are recognized each month as the services are performed and costs are incurred, and are included in service revenue and cost of revenue – service cost, respectively, in the consolidated statements of operations. For the three and nine months ended September 30, 2017,

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service revenue of $2,638 and net income of $285 from SRx were included in the Company's consolidated statements of operations since the acquisition date.

The fair value of the assets and liabilities related to the acquisition of SRx are based on a preliminary valuation report. The Company continues to evaluate the fair value of certain assets and liabilities related to the acquisition, including the measurement technique used to value the contingent consideration. Additional information, which existed as of the acquisition date but was at that time unknown to the Company, may become known during the remainder of the measurement period. Changes to amounts recorded as a result of the final valuation may result in a corresponding adjustment to these assets and liabilities, including goodwill. The determination of the estimated fair values of all assets acquired is expected to be completed within one year from the date of acquisition.

IntermedRx

On September 15, 2016, the Company acquired certain assets, consisting primarily of intellectual property and software assets of 9176-1916 Quebec Inc. (an entity indirectly controlled by our Chief Scientific Officer, Jacques Turgeon). The intellectual property and software assets were previously licensed by us and are integrated into the Company's Medication Risk Mitigation Matrix. The purchase price consisted of cash consideration of $6,000, consisting of $1,000 which was paid upon closing, $4,400 paid during the fourth quarter of 2016, $550 paid on September 15, 2017, and $50 paid during the fourth quarter of 2017. In addition to the cash consideration, the purchase price included an aggregate of $5,000 worth of common stock, which amounted to the issuance of 395,407 shares of common stock during the fourth quarter of 2016.

The deferred acquisition cash consideration of $5,000 was recorded at its acquisition-date fair value of $4,955, using an assumed cost of debt of 7.8%. The $45 discount was amortized to interest expense using the effective interest method through the consideration payment date. The Company amortized $10 and $2 of the discount to interest expense for the three months ended September 30, 2017 and 2016, respectively. The Company amortized $32 and $2 of the discount to interest expense for the nine months ended September 30, 2017 and 2016, respectively. These amounts are included in acquisition-related consideration payable in the consolidated balance sheets as of September 30, 2017. As of September 30, 2017, the acquisition-related consideration payable balance was $50.

Proforma

The unaudited pro forma results presented below include the results of the SRx acquisition and the 9176-1916 Quebec Inc. acquisition as if they had been consummated as of January 1, 2016. The unaudited pro forma results include the amortization associated with acquired intangible assets, interest expense on the debt incurred to fund these acquisitions, insurance expense for additional required business insurance coverage, stock compensation expense related to options granted to the employees of SRx at the closing of the acquisition, and the estimated tax effect of adjustments to income before income taxes. Material nonrecurring charges directly attributable to the transactions are excluded, and consisted of direct acquisition costs of $855 and $949 for the three and nine months ended September 30, 2017, respectively. In addition, the unaudited pro forma results do not include any expected benefits of the acquisitions. Accordingly, the unaudited pro forma results are not necessarily indicative of either future results of operations or results that might have been achieved had the acquisitions been consummated as of January 1, 2016.

	Three Months Ended September 30, 2017	Three Months Ended September 30, 2016	Nine Months Ended September 30, 2017	Nine Months Ended September 30, 2016
Revenue	$ 39,420	$ 31,266	$ 112,079	$ 85,336
Net loss	(727)	(1,332)	(5,098)	(4,259)
Net income (loss) per share attributable to common stockholders, basic	(0.04)	0.12	(0.30)	(0.32)
Net loss per share attributable to common stockholders, diluted	(0.04)	(0.17)	(0.30)	(0.44)

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5. Property and Equipment

Depreciation and amortization expense on property and equipment for the three months ended September 30, 2017 and 2016 was $542 and $359, respectively. Depreciation and amortization expense on property and equipment for the nine months ended September 30, 2017 and 2016 was $1,396 and $889, respectively.

6. Software Development Costs

The Company capitalizes certain costs incurred in connection with obtaining or developing internal-use software, including external direct costs of material and services and payroll costs for employees directly involved with the software development. As of September 30, 2017 and December 31, 2016, capitalized software costs consisted of the following:

	September 30, 2017	December 31, 2016
Software development costs	$ 8,652	$ 6,501
Less: accumulated amortization	(4,388)	(3,151)
Software development costs, net	$ 4,264	$ 3,350
Capitalized software costs not yet subject to amortization	$ 2,421	$ 911

Amortization expense for the three months ended September 30, 2017 and 2016 was $426 and $302, respectively. Amortization expense for the nine months ended September 30, 2017 and 2016 was $1,237 and $757, respectively.

7. Goodwill and Intangible Assets

The Company's goodwill and related changes during the nine months ended September 30, 2017 are as follows:

Balance at January 1, 2017	$ 21,686
Goodwill from 2017 acquisition	41,439
Balance at September 30, 2017	$ 63,125

Goodwill is not amortized, but instead tested for impairment annually. The Company conducted its annual impairment test as of October 1, 2016 and determined that there were no indicators of impairment during 2016. The next annual impairment test will be conducted as of October 1, 2017, unless the Company identifies a triggering event in the interim. Management has not identified any triggering events during the nine months ended September 30, 2017.

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Intangible assets consisted of the following as of September 30, 2017 and December 31, 2016:

	Weighted Average Amortization Period (in years)	Gross Value	Accumulated Amortization	Intangible Assets, net
September 30, 2017				
Trade names	8.48	$ 6,369	$ (1,102)	$ 5,267
Client relationships	8.56	34,263	(4,528)	29,735
Non-competition agreements	4.95	5,149	(465)	4,684
Developed technology	7.87	26,140	(2,504)	23,636
Domain name	10.00	29	(4)	25
Total intangible assets		$ 71,950	$ (8,603)	$ 63,347

	Weighted Average Amortization Period (in years)	Gross Value	Accumulated Amortization	Intangible Assets, net
December 31, 2016				
Trade names	5.00	$ 1,940	$ (791)	$ 1,149
Client relationships	10.02	14,684	(3,289)	11,395
Non-competition agreements	4.64	652	(326)	326
Developed technology	7.76	13,500	(1,101)	12,399
Domain name	10.00	29	(1)	28
Total intangible assets		$ 30,805	$ (5,508)	$ 25,297

Amortization expense for intangible assets for the three months ended September 30, 2017 and 2016 was $1,198 and $614, respectively. Amortization expense for intangible assets for the nine months ended September 30, 2017 and 2016 was $3,095 and $1,767, respectively.

The estimated amortization expense for each of the next five years and thereafter is as follows:

Years Ending December 31,	
2017 (October 1 - December 31)	$ 2,398
2018	9,557
2019	9,115
2020	8,776
2021	8,763
Thereafter	24,738
Total estimated amortization expense	$ 63,347

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8. Accrued Expenses and Other Liabilities

At September 30, 2017 and December 31, 2016, accrued expenses and other liabilities consisted of the following:

	September 30, 2017	December 31, 2016
Employee related expenses	$ 4,634	$ 1,174
Deferred revenue	1,526	851
Contract labor	733	—
Interest	115	16
Deferred rent	150	13
Professional fees	169	—
Income taxes payable	281	27
Other expenses	493	78
Total accrued expenses and other liabilities	$ 8,101	$ 2,159

9. Notes Payable Related to Acquisition

In December 2014, the Company acquired all of the authorized, issued and outstanding equity interests of Medliance LLC ("Medliance"), which provides pharmacy cost management services through data analytics. As part of the acquisition-related consideration of the Medliance acquisition, the Company issued multiple subordinated convertible promissory notes (the "Medliance Notes") to the owners of Medliance for aggregate borrowings of $16,385. Interest was 8% and compounded annually. On July 1, 2016, the Company repaid the Medliance Notes with the proceeds from a long-term credit facility. Interest expense was $706 for the nine months ended September 30, 2016. No interest expense was recorded for the three months ended September 30, 2016.

The Company recorded the Medliance Notes at their aggregate acquisition date fair values of $14,347 and the notes were accreted up to their face values of $16,385 over the 18 month term using the effective-interest method. For the nine months ended September 30, 2016, the Company amortized $755 of the discount to interest expense. No expense was recorded for the three months ended September 30, 2016.

10. Lines of Credit and Long-Term Debt

(a) Lines of Credit

On July 1, 2016, the Company entered into a Loan and Security Modification Agreement (the "Amended 2015 Revolving Line") with Western Alliance Bank, successor in interest to Bridge Bank, National Association (“Bridge Bank”), whereby the Company’s revolving line of credit, entered into with Bridge Bank in 2015, was amended to increase the Company's borrowing availability to up to $25,000 and extend the maturity date to July 1, 2018. The Company's ability to borrow under the Amended 2015 Revolving Line was based upon a specified borrowing base equal to the Company's trailing four months of monthly recurring revenue, as defined, from eligible recurring revenue contracts, as defined, through March 31, 2017 and based upon the Company's trailing three months of monthly recurring revenue, as defined, from eligible recurring revenue contracts, as defined, thereafter. Interest on the Amended 2015 Revolving Line was also amended to be calculated at a variable rate based upon Western Alliance Bank's prime rate plus 0.5%, with Western Alliance Bank's prime rate having a floor of 3.5%. Financial covenants under the Amended 2015 Revolving Line required that the Company (i) maintain an unrestricted cash and unused availability balance under the Amended 2015 Revolving Line of at least $3,000 at all times (the liquidity covenant), (ii) maintain a minimum EBITDA, as defined, of $2,500 for the quarter ending December 31, 2016 and thereafter, and (iii) maintain a minimum monthly recurring revenue retention rate of at least 90%, measured quarterly.

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On September 6, 2017, in connection with the acquisition of SRx, the Company entered into an Amended and Restated Loan and Security Agreement (the "Amended and Restated 2015 Revolving Line") whereby the Amended 2015 Revolving Line was amended to extend the maturity date to September 6, 2020, and increase the Company's borrowing availability to up to $40,000 with a $1,000 sublimit for cash management services and letters of credit and foreign exchange transactions. The Company may also request an increase in the Amended and Restated 2015 Revolving Line of up to $10,000 upon the successful syndication of such additional amounts.

Interest on the Amended and Restated 2015 Revolving Line was also amended to be calculated at a variable rate based upon Western Alliance Bank's prime rate plus an applicable margin which will range from (0.25%) to 0.25% depending on the Company's leverage ratio, with Western Alliance Bank's prime rate having a floor of 3.5%. Financial covenants under the Amended and Restated 2015 Revolving Line require that the Company (i) maintain an unrestricted cash and unused availability balance under the Amended and Restated 2015 Revolving Line of at least $3,000 at all times (the liquidity covenant), (ii) maintain a leverage ratio of less than 2.50:1.00, on a trailing twelve-month basis starting with the twelve-month period ending December 31, 2017, measured quarterly, and (iii) maintain a minimum quarterly EBITDA starting with the quarter ending December 31, 2017 and each quarter thereafter, of at least 75% of the plan approved by the Company's Board of Directors (the "Board"). In addition, the Company may not contract to make capital expenditures, excluding capitalized software development costs and tenant leasehold improvements, greater than $5,000 in any fiscal year without the consent of Western Alliance Bank. As of September 30, 2017, the Company was in compliance with all of the financial covenants related to the Amended and Restated 2015 Revolving Line, and management expects that the Company will be able to maintain compliance with the financial covenants.

In September 2015, the Company arranged for Bridge Bank to issue a $500 letter of credit on its behalf in connection with the Company's lease agreement for the office space in Moorestown, NJ. The letter of credit was issued under the Amended and Restated 2015 Revolving Line. The letter of credit renews annually and expires in September 2027 and reduces amounts available on the line of credit. See Note 16 for additional information.

As of September 30, 2017, there was $35,000 outstanding under the Amended and Restated 2015 Revolving Line, and amounts available for borrowings under the Amended and Restated 2015 Revolving Line was $4,500.

As of September 30, 2017, the interest rate on the Amended and Restated 2015 Revolving Line was 4.31% and interest expense was $100 for the three and nine months ended September 30, 2017. As of September 30, 2016, the interest rate on the Amended and Restated 2015 Revolving Line was 4.56% and interest expense was $169 and $449 for the three and nine months ended September 30, 2016, respectively. In connection with the Amended and Restated 2015 Revolving Line (and all predecessor agreements prior to the amendment or the amendment and restatement thereof), the Company recorded deferred financing costs of $413. The Company is amortizing the deferred financing costs to interest expense using the effective-interest method over the term of the Amended and Restated 2015 Revolving Line and amortized $16 and $9 to interest expense for the three months ended September 30, 2017 and 2016, respectively, and $40 and $36 to interest expense for the nine months ended September 30, 2017 and 2016, respectively.

(b) Capital Lease Obligations

The following table represents the total capital lease obligations of the Company at September 30, 2017 and December 31, 2016:

	September 30, 2017	December 31, 2016
Capital leases	$ 1,946	$ 1,746
Less current portion, net	(927)	(674)
Total capital leases, less current portion, net	$ 1,019	$ 1,072

The Company has entered into leases for certain equipment and software, which are recorded as capital lease obligations. These leases have annual interest rates ranging from 6% to 19%. Interest expense related to the capital leases was $49 and $56 for the three months ended September 30, 2017 and 2016, respectively. Interest expense related

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to the capital leases was $158 and $148 for the nine months ended September 30, 2017 and 2016, respectively.

Amortization of assets held under capital leases is included in depreciation and amortization expense. The net book value of equipment and software acquired under capital lease was $2,213 and $2,364 as of September 30, 2017 and December 31, 2016, respectively, and are reflected in property and equipment on the consolidated balance sheets.

(c) Long-Term Debt Maturities

As of September 30, 2017, the Company's long-term debt consisted of capital lease obligations and is payable as follows:

	Total long-term debt
Remainder of 2017	$ 293
2018	1,065
2019	725
2020	116
2021	5
	2,204
Less amount representing interest	(258)
Present value of payments	1,946
Less current portion	(927)
Total long-term debt, net of current portion	$ 1,019

(d) Other Financing

In May 2016, the Company signed a prime vendor agreement with AmerisourceBergen Drug Corporation, which was effective March 2016 and requires a monthly minimum purchase obligation of approximately $1,750. The Company fully expects to meet this requirement. This agreement was subsequently amended and restated effective May 1, 2016 with a three-year term expiring April 2019. As of September 30, 2017 and December 31, 2016, the Company had $3,839 and $3,327, respectively, due to AmerisourceBergen Drug Corporation as a result of prescription drug purchases. Pursuant to the terms of a security agreement entered into in connection with the prime vendor agreement, AmerisourceBergen also holds a subordinated security interest in all of the Company’s assets.

11. Income Taxes

For the nine months ended September 30, 2017, the Company recorded an income tax benefit of $7,845. During the third quarter of 2017, in conjunction with the acquisition of SRx, the Company recognized a net deferred tax liability of $8,897 primarily related to intangible assets other than goodwill. The Company determined that the deferred tax liabilities related to the acquisition provide sufficient sources of recoverability to realize the Company’s deferred tax assets associated with those jurisdictions that file consolidated returns. As a result, the Company released $6,590 of its deferred tax asset valuation allowance and recognized an additional benefit of $2,830 related to tax windfall benefits generated in the nine months ended September 30, 2017. These tax benefits were partially offset by tax expense of $1,463 recorded based on the estimated annual effective tax rate expected for the full year.

For the nine months ended September 30, 2016, the Company recognized tax expense of $11, which resulted in an effective tax rate of (5.3)%. For the nine months ended September 30, 2016, the Company recorded the tax provision based on the estimated annual effective tax rate expected for the full year which included current Federal alternative minimum tax, current state taxes and deferred tax expense associated with indefinite-lived deferred tax liabilities for goodwill amortization, in addition to a change in the valuation allowance related to deferred tax assets for income generated in the current period.

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12. Other Long-term Liabilities

Other long term liabilities as of September 30, 2017 and December 31, 2016 consisted of $2,637 and $2,205, respectively, which represents the long-term portion of deferred rent primarily related to the Company's operating leases for office space in Moorestown, NJ and a new space in South Carolina dedicated to software development, which the Company began to occupy in June 2017.

13. Stockholders' Equity

(a) Capitalization and Initial Public Offering

On October 4, 2016, the Company closed its IPO in which the Company issued and sold 4,300,000 shares of common stock, plus the exercise of the underwriters' option to purchase an additional 645,000 shares of common stock, at an issuance price of $12.00 per share. The Company received net proceeds of $55,186 after deducting underwriting discounts and commissions of $4,154 but before deducting other offering expenses. In addition, upon the closing of the IPO, all of the Company's then outstanding Class A Non-Voting common stock and Class B Voting common stock, totaling 5,583,405 shares, were automatically redesignated into shares of common stock, and all of the Company's then outstanding convertible preferred stock converted into an aggregate of 5,089,436 shares of common stock.

Upon completion of the IPO on October 4, 2016, the Company filed an amended and restated certificate of incorporation to, among other things, state that the aggregate number of shares of stock that the Company is authorized to issue is 100,000,000 shares of common stock, par value $.0001 per share, and 10,000,000 shares of undesignated preferred stock, par value $.0001 per share.

(b) Common Stock Warrants

During the nine months ended September 30, 2017, 28,431 shares of common stock were issued upon the net exercise of 32,216 warrants to purchase common stock at an exercise price of $1.55 per share. As of September 30, 2017, no warrants to purchase shares of common stock were outstanding. During the nine months ended September 30, 2016, the Company issued 210,817 shares of common stock upon the net exercise of warrants to purchase 232,787 shares of common stock.

(c) Common Stock Repurchase

On April 25, 2017 the Board authorized the Company to repurchase up to $5,000 of its common stock at prevailing market prices, from time to time, through open market, block and privately-negotiated transactions, at such times and in such amounts as management deems appropriate. The Company funds repurchases of its common stock through a combination of cash on hand, cash generated by operations or borrowings under the Amended and Restated 2015 Revolving Line. During the nine months ended September 30, 2017, the Company repurchased 73,466 shares at an average price of $13.05 per share for a total of $959. As of September 30, 2017, $4,041 of common stock remained available for repurchase.

14. Stock-Based Compensation

In September 2016, the Company adopted the 2016 Equity Compensation Plan (the "2016 Plan") and merged the 2014 Equity Compensation Plan (the "2014 Plan") into the 2016 Plan on September 28, 2016. No additional grants were made thereafter under the 2014 Plan. Outstanding grants under the 2014 Plan will continue in effect according to their terms as in effect before the merger with the 2016 Plan, and the shares with respect to outstanding grants under the 2014 Equity Plan will be issued or transferred under the 2016 Plan. The 2016 Plan authorizes the issuance or transfer of up to the sum of the following: (1) 800,000 new shares, plus (2) the number of shares of common stock subject to outstanding grants under the 2014 Equity Plan as of the effective date of the 2016 Plan; provided, however, that the

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aggregate number of shares of the Company's common stock that may be issued or transferred under the 2016 Plan pursuant to incentive stock options may not exceed 800,000. During the term of the 2016 Plan, the share reserve will automatically increase on the first trading day in January of each calendar year, beginning in calendar year 2017, by an amount equal to the lesser of 5% of the total number of outstanding shares of common stock on the last trading day in December of the prior calendar year or such other number set by the Board. During 2017, the Board approved an increase of 831,423 shares to the share reserve. As of September 30, 2017, 459,368 shares were available for future grants under the 2016 Plan.

The option price per share cannot be less than the fair market value of a share on the date the option was granted, and in the case of incentive stock options granted to an employee owning more than 10% of the total combined voting power of all classes of stock of the Company, the option price shall not be less than 110% of the fair market value of Company stock on the date of grant. Stock option grants under the Plan generally expire 10 years from the date of grant, other than incentive stock option grants to 10% shareholders, which have a 5 year term, 90 days after termination, or one year after the date of death or termination due to disability. Stock options generally vest over a period of four years, with 25% of the options becoming exercisable on the one-year anniversary of the commencement date and the remaining shares vesting monthly thereafter for 36 months in equal installments of 2.08% per month.

Employee Restricted Common Stock

On September 28, 2016, the Board granted 700,386 shares of restricted common stock to certain Company employees, including executive officers, under the 2014 Plan, prior to merging it with the 2016 Plan, pursuant to a special equity award pool previously approved by the Board which was made immediately prior to the effectiveness of the Company's registration statement filed in connection with the Company's IPO. The value of the grants is based on the IPO price of $12.00 per share and the related non-cash compensation expense was being recognized ratably over the vesting period from the date of grant through May 31, 2017, when the shares underlying the grant were scheduled to fully vest. For the nine months ended September 30, 2017, $5,159 of expense was recognized related to this grant. No expense was recognized for the three months ended September 30, 2017. For the three and nine months ended September 30, 2016, $102 of expense was recognized related to this grant. As of September 30, 2017, there was no unrecognized compensation expense related to this grant. On June 12, 2017, the Company entered into an amendment with each recipient of this grant to amend the vesting date from May 31, 2017 to May 31, 2018.

On August 3, 2017, the Board granted 20,000 shares of restricted common stock to a non-executive employee of the Company, pursuant to the 2016 Plan, which will vest in four substantially equal annual installments over the four years following the grant date. The value of the grant is based on the grant date fair value of the Company's common stock of $14.56 per share. For the three and nine months ended September 30, 2017, $12 of expense was recognized related to this grant. As of September 30, 2017, there was unrecognized compensation expense of $279 related to this grant.

Non-Employee Director Restricted Common Stock

On September 28, 2016, the Company granted 22,260 shares of restricted common stock under the 2016 Plan to its non-employee directors, which represents both the initial and annual grants to such directors. The initial grant ("Initial Grant") will vest in three substantially equal annual installments over three years following the grant date and the annual grant ("2016 Annual Grant") will vest in full on the earlier of the next annual shareholder meeting or the one year anniversary of the grant date. The value of the grants is based on the IPO price of $12.00 per share.

On March 8, 2017, the Company granted 5,212 shares of restricted common stock under the 2016 Plan to a newly appointed non-employee director, which represents such director's initial grant and will vest in three substantially equal annual installments over three years following the grant date. The value of the grant is based on the grant date fair value of the Company's common stock of $13.68 per share.

On June 16, 2017, the Company granted 10,384 shares of restricted common stock ("2017 Annual Grant") to its non-employee directors, which will vest in full on the earlier of the next annual shareholder meeting or the one year

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anniversary of the grant date. The value of the grant is based on the grant date fair value of the Company's common stock of $13.54 per share.

On June 16, 2017, the date of the Company's annual shareholder meeting, the 2016 Annual Grant, which in the aggregate equaled 7,420 shares, fully vested and were no longer subject to forfeiture. In addition, on September 28, 2017, 4,944 shares of the Initial Grant vested and were no longer subject to forfeiture.

For the three and nine months ended September 30, 2017, $56 and $165 of expense was recognized related to these non-employee director grants, respectively. For the three and nine months ended September 30, 2016, $1 of expense was recognized related to these grants. As of September 30, 2017, there was unrecognized compensation expense of $276 related to these grants.

Stock Options

The Company recorded $871 and $120 of stock-based compensation expense related to the vesting of employee and non-employee stock options for the three months ended September 30, 2017 and 2016, respectively. The Company recorded $2,440 and $378 of stock-based compensation expense related to the vesting of employee and non-employee stock options for the nine months ended September 30, 2017 and 2016, respectively.

The estimated fair value of options granted was calculated using a Black-Scholes option-pricing model. The computation of expected life for employees was determined based on the simplified method. The risk-free rate is based on the U.S. Treasury security with terms equal to the expected time of exercise as of the grant date. The Company's common stock had not been publicly traded until the IPO commenced on September 29, 2016; therefore, expected volatility is based on the historical volatilities of selected public companies whose services are comparable to that of the Company. The table below sets forth the weighted average assumptions for employee grants during the nine months ended September 30, 2017 and 2016:

	Nine Months Ended September 30,	
Valuation assumptions:	2017	2016
Expected volatility	61.00 %	59.00 %
Expected term (years)	6.03	6.08
Risk-free interest rate	2.21 %	1.49 %
Dividend yield	—	—

The weighted average grant date fair value of employee options granted during the nine months ended September 30, 2017 and 2016 was $8.13 and $7.29 per share, respectively.

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The following table summarizes stock option activity under the 2016 Plan for the nine months ended September 30, 2017:

	Number of shares	Weighted average exercise price	Weighted average remaining contractual term	Aggregate intrinsic value
Outstanding at December 31, 2016	3,059,690	$ 5.14		
Granted	1,044,556	14.43		
Exercised	(1,054,764)	3.21		
Forfeited	(49,629)	10.52		
Outstanding at September 30, 2017	2,999,853	$ 8.97	7.3	$ 53,340
Options vested and expected to vest at September 30, 2017	2,999,853	$ 8.97	7.3	$ 53,340
Exercisable at September 30, 2017	1,393,742	$ 3.37	5.3	$ 32,572

Included within the above table are 150,212 non-employee options outstanding as of September 30, 2017, of which 345 are unvested as of September 30, 2017 and therefore subject to remeasurement.

The aggregate intrinsic value of stock options is calculated as the difference between the exercise price of the stock options and the Company's closing stock price or estimated fair value on the last trading day of the fiscal quarter for those stock options that had exercise prices lower than the fair value of the Company's common stock. This amount changes based on the fair market value of the Company's stock. The total intrinsic value of options exercised during the nine months ended September 30, 2017 and 2016 was $11,665 and $832, respectively.

As of September 30, 2017, there was $10,022 of total unrecognized compensation cost related to nonvested stock options granted under the 2016 Plan, which is expected to be recognized over a weighted average period of 2.9 years.

Cash received from option exercises for the nine months ended September 30, 2017 was $194. During the nine months ended September 30, 2017, 362,440 shares of common stock were delivered by option holders as payment for the exercise price and employee payroll taxes owed for the exercise of 956,327 stock options with a gross exercise value of $3,187. During the nine months ended September 30, 2016, 7,930 shares of common stock were delivered by option holders as payment for the exercise of 71,150 stock options with a gross exercise value of $104. No cash was received from the exercise of stock options for the nine months ended September 30, 2016.

The Company recorded total stock-based compensation expense for the three and nine months ended September 30, 2017 and 2016 in the following expense categories of its consolidated statement of operations:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Cost of revenue - product	$ 138	$ 27	$ 359	$ 85
Cost of revenue - service	91	7	203	21
Research and development	195	9	515	30
Sales and marketing	158	21	440	65
General and administrative	357	159	6,259	280
	$ 939	$ 223	$ 7,776	$ 481

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15. Fair Value Measurements

The Company's financial instruments consist of accounts receivable, accounts payable, accrued expenses, acquisition-related consideration payable, acquisition-related contingent consideration, and long-term debt. The carrying values of accounts receivable, accounts payable and accrued expenses are representative of their fair value due to the relatively short-term nature of those instruments. The carrying value of the Company's long-term debt approximates fair value based on the terms of the debt.

The Company has classified liabilities measured at fair value on a recurring basis at September 30, 2017 and December 31, 2016 as follows:

	Fair Value Measurement at Reporting Date Using			
	Level 1	Level 2	Level 3	Balance as of September 30, 2017
Liabilities				
Acquisition-related contingent consideration - short-term	—	—	15,224	15,224
Acquisition-related contingent consideration - long-term	—	—	13,652	13,652
	$ —	$ —	$28,876	$ 28,876

	Fair Value Measurement at Reporting Date Using			
	Level 1	Level 2	Level 3	Balance as of December 31, 2016
Liabilities				
Acquisition-related contingent consideration - short-term	$ —	$ —	$ 1,493	$ 1,493
Acquisition-related contingent consideration - long-term	—	—	1,515	1,515
	$ —	$ —	$ 3,008	$ 3,008

Acquisition-related contingent consideration is measured at fair value on a recurring basis using unobservable inputs, hence these instruments represent Level 3 measurements within the fair value hierarchy. The acquisition-related contingent consideration liability represents the estimated fair value of the additional cash and equity consideration payable that is contingent upon the achievement of certain financial and performance milestones.

The SRx acquisition-related contingent consideration was recorded at the estimated fair value at the acquisition date of September 6, 2017. The Company, with the assistance of a third-party appraiser, utilized a Monte Carlo simulation to derive at preliminary estimates of the contingent consideration payments. The fair value of the SRx acquisition-related contingent consideration was calculated to be $27,313 as of September 30, 2017. The fair value of the Medliance contingent consideration was calculated to be $1,563 as of September 30, 2017.

The changes in fair value of the Company's acquisition-related contingent consideration for the nine months ended September 30, 2017 was as follows:

Balance at December 31, 2016	3,008
Acquisition date fair value of SinfoníaRx contingent consideration	26,406
Fair value of cash consideration paid	(1,498)
Adjustments to fair value measurement	960
Balance at September 30, 2017	$ 28,876

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16. Commitments and Contingencies

The Company is not currently involved in any significant claims or legal actions that, in the opinion of management, will have a material adverse impact on the Company.

As of September 30, 2017 and December 31, 2016, the Company was contingently liable for $500 under an outstanding letter of credit related to the Company's lease agreement for the office space in Moorestown, NJ. See Note 10 for additional information.

17. Retirement Plan

The Company has established a 401(k) plan that qualifies as a defined contribution plan under Section 401 of the Internal Revenue Code. The Company's contributions to this plan are based on a percentage of eligible employees' plan year earnings, as defined. The Company made contributions to participants' accounts totaling $194 and $128 during the three months ended September 30, 2017 and 2016, respectively. The Company made contributions to participants' accounts totaling $478 and $230 during the nine months ended September 30, 2017 and 2016, respectively.

18. Employment Agreements and Incentive Arrangements

On April 25, 2017, the Company entered into employment agreements with each of the Company's named executive officers. The employment agreements provide for, among other things, salary, incentive compensation, payments in the event of termination of the executives upon the occurrence of a change in control, and restrictive covenants pursuant to which the executives have agreed to refrain from competing with the Company or soliciting the Company's employees or customers for a period following the executive's termination of employment. Each employment agreement is effective as of April 1, 2017, has an initial three year term and will automatically renew each anniversary thereafter.

On April 25, 2017, the Company's Board also adopted the Annual Incentive Plan, effective as of January 1, 2017, which formalizes the Company's annual short-term incentive program and does not represent a new compensation program for the named executive officers. The Annual Incentive Plan provides pay for performance incentive compensation to the Company's employees, including its named executive officers, rewarding them for their contributions to the Company with cash incentive compensation based on attainment of pre-determined corporate and individual performance goals, as applicable.

19. Related-Party Transactions

During 2016, the Company engaged Tunstall Consulting, a corporate financial planning company, to provide professional services related to obtaining a prior credit facility. Tunstall Consulting is owned and operated by a member of the Board. Costs incurred by the Company for professional services provided by the related party were $104 and were recorded as deferred financing costs during 2016, which were subsequently fully amortized when the facility was repaid in full during the third quarter of 2016.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read together with our unaudited consolidated financial statements and related notes and other financial information included in Part 1, Item 1 of this Quarterly Report on Form 10-Q and with our audited consolidated financial statements and related notes thereto for the year ended December 31, 2016, included in our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the Securities and Exchange Commission on March 14, 2017.

Forward-Looking Statements

This discussion contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements are identified by words such as "believe," "will," "may," "estimate," "continue," "anticipate," "intend," "should," "plan," "expect," "predict," "could," "potentially" or the negative of these terms or similar expressions. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition, or state other "forward-looking" information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed elsewhere in this report, as well as in our Annual Report on Form 10-K for the year ended December 31, 2016. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to our management. These statements, like all statements in this report, speak only as of their date, and we undertake no obligation to update or revise these statements in light of future developments. We caution investors that our business and financial performance are subject to substantial risks and uncertainties.

Overview

We are a healthcare technology company disrupting the field of medication safety. For over thirty years, traditional pharmacy software systems have offered clinicians a binary view of drug-to-drug interactions, presenting an assessment of one single drug against one single drug. These legacy systems may be adequate to assess the safety of a medication regimen consisting of only one or two medications. However, the elderly, the chronically ill and those with behavioral health challenges, who are more often times more likely to be subject to a medication profile of more than two medications, are typically at high risk of an adverse drug effect, or ADE. In these cases, the average patient often takes over 10 different medications a day and the current technologies are inadequate to optimize safety and minimize risk. Our novel and proprietary Medication Risk Mitigation Matrix, or MRM Matrix, delivers a simultaneous, multi-drug review which identifies medication-related risks across a variety of safety factors and presents meaningful opportunities to mitigate such risks. We partner with health plans and provider groups in comprehensive medication management and care transitions programs to identify and substantially mitigate the risks associated with ADEs and to promote adherence to personalized medication regimens. By working with us, health plans and provider groups have reduced their pharmacy spend and admissions rates.

We are a leader in providing patient-specific, data-driven technology and solutions that enable healthcare organizations to optimize medication regimens to improve patient outcomes, reduce hospitalizations, lower healthcare costs and manage risk. We deliver our solutions through a comprehensive suite of technology-enabled products and services for medication risk management, which includes bundled prescription fulfillment and reminder packaging services for client populations with complex prescription needs. We also provide risk adjustment services and pharmacy cost management services, which help our clients to properly characterize a patient's acuity, or severity of health condition, and optimize the associated payments for care.

Our suite of cloud-based software solutions provides prescribers, pharmacists and healthcare organizations with sophisticated and innovative tools to better manage the medication-related needs of their patients. We believe we offer the first prospective clinical approach to medication risk management, which is designed to increase patient safety and promote adherence to a patient's personalized medication regimen. Furthermore, our medication risk management technology helps healthcare organizations lower costs by reducing ADEs, enhancing quality of care and avoiding preventable hospital admissions. Our products and services are built around our novel and proprietary MRM Matrix, which enables optimization of a patient's medication regimen, involving personalizing medication selection, dosage

levels, time-of-day administration and reducing the total medication burden by eliminating unnecessary prescriptions. The MRM Matrix analyzes a combination of clinical and pharmacology data, population-based algorithms and extensive patient-specific data, including medical history, lab results, medication lists and individual genomic data, to deliver "precision medicine." We provide software-enabled solutions that can be bundled with prescription fulfillment and reminder packaging services, which are informed by a patient's personalized MRM Matrix to increase adherence to a patient's optimized regimen, through our three prescription fulfillment pharmacies. Our prescription fulfillment pharmacies are strategically located to efficiently distribute medications nationwide for our clients and medications are packaged to promote adherence to their patients' personalized regimens and dosing schedules. Our team of clinical pharmacists, located in five call centers throughout the US, is available to support prescribers at the point of care through our proprietary technology platform, including real-time secure messaging, with more than 154,000 messages exchanged during September 2017, and support health plan members and prescribers with telephonic outreach and interventions based on drug therapy problems identified through the review of historical claims data.

Our technology-driven approach to medication risk management represents an evolution from prevailing non-personalized approaches that primarily rely on single drug-to-drug interaction analysis. At the end of 2016 we were serving 133 healthcare organizations and, as of September 30, 2017, this number has grown to 165 healthcare organizations that focus on populations with complex healthcare needs and extensive medication requirements.

Our total revenue for the three and nine months ended September 30, 2017 was $33.3 million and $90.6 million, respectively, compared to $24.2 million and $66.8 million for the three and nine months ended September 30, 2016, respectively. We earned net income of $7.7 million and $3.4 million for the three and nine months ended September 30, 2017, respectively, and incurred a net loss of $0.1 million and $0.2 million for the three and nine months ended September 30, 2016, respectively. Our adjusted EBITDA for the three and nine months ended September 30, 2017 was $4.6 million and $11.2 million, respectively, compared to $3.3 million and $8.8 million for the three and nine months ended September 30, 2016, respectively. See "Non-GAAP Financial Measures — Adjusted EBITDA" for our definition of Adjusted EBITDA, why we present Adjusted EBITDA and a reconciliation of net loss to Adjusted EBITDA.

We face a variety of challenges and risks, which we will need to address and manage as we pursue our growth strategy. In particular, we will need to continue to innovate in the face of a rapidly changing healthcare landscape if we are to remain competitive. We will also need to effectively manage our growth, especially related to our expansion beyond the PACE and post-acute markets to other at-risk providers and payors. Our senior management continuously focuses on these and other challenges, and we believe that our culture of innovation and our history of growth and expansion will contribute to the success of our business. We cannot, however, assure you that we will be successful in addressing and managing the many challenges and risks that we face.

We manage our operations and allocate resources as a single reportable segment. All of our revenue is recognized in the United States and all of our assets are located in the United States.

Unless the context requires otherwise, the terms the “Company,” “Tabula Rasa HealthCare, Inc.,” “we,” “us” and “our” mean Tabula Rasa HealthCare, Inc., a Delaware Corporation, and its consolidated subsidiaries.

Key Business Metrics

We regularly review a number of metrics, including the following key metrics, to evaluate and manage our business and that are useful in evaluating our operating performance compared to that of other companies in our industry.

	Three Months Ended September 30,		Change	
	2017	2016	$	%
	(Dollars in thousands)			
Revenues	$ 33,268	$ 24,174	$ 9,094	38 %
Net income (loss)	7,695	(142)	7,837	nm
Adjusted EBITDA	4,647	3,252	1,395	43

	Nine Months Ended September 30,		Change	
	2017	2016	$	%
	(Dollars in thousands)			
Revenues	$ 90,613	$ 66,749	$ 23,864	36 %
Net income (loss)	3,350	(219)	3,569	nm
Adjusted EBITDA	11,248	8,841	2,407	27

nm = not meaningful

We monitor the key metrics set forth in the preceding table to help us evaluate trends, establish budgets, measure the effectiveness and efficiency of our operations and gauge our cash generation. We discuss Adjusted EBITDA in more detail in "Non-GAAP Financial Measures — Adjusted EBITDA." We also monitor revenue retention rate and client retention rate described as follows.

Revenue retention rate

We believe that our ability to retain revenue associated with new or existing client relationships is an indicator of the stability of our revenue base and the long-term value we provide to our clients. We assess our performance in this area using a metric we refer to as our revenue retention rate. We calculate our revenue retention rate at the end of each calendar year by dividing total revenue in the year from client contracts that have not renewed or have been terminated during the year by our total revenue for that year, and subtracting this quotient from 100%. Our annual revenue retention rate was 98% for 2016.

Client retention rate

We monitor our client retention rate as a measure for our overall business performance. We believe that our ability to retain clients is an indicator of the stability of our revenue base and the long-term value of our client relationships. We assess our performance in this area using a metric we refer to as our client retention rate. We calculate this rate by dividing the number of client terminations and client non-renewals during a calendar year by the total number of clients serviced during that year, and subtracting this quotient from 100%. Our annual client retention rate was 93% for 2016.

Factors Affecting our Future Performance

We believe that our future success will be dependent on many factors, including our ability to maintain and grow our relationships with existing clients, expand our client base, continue to enter new markets and expand our offerings to meet evolving market needs. While these areas present significant opportunity, they also present risks that we must manage to ensure successful results. See the section entitled "Risk Factors" for a discussion of certain risks and uncertainties that may impact our future success.

Recent Developments

Initial Public Offering

On October 4, 2016, we completed our initial public offering, or IPO, of our common stock pursuant to which we issued 4,300,000 shares of our common stock, plus the exercise of the underwriters' option to purchase an additional 645,000 shares of common stock, at an issuance price of $12.00 per share. We received net proceeds of $55.2 million after deducting underwriting discounts and commissions of $4.2 million, but before deducting other offering expenses. Immediately prior to the completion of the IPO, all of the Company's then outstanding Class A Non-Voting common stock and Class B Voting common stock, totaling 5,583,405 shares, were redesignated into shares of common stock, par value $0.0001 per share, and all of the Company's then outstanding convertible preferred stock converted into an aggregate of 5,089,436 shares of common stock, par value $0.0001 per share. Our common stock is listed on the NASDAQ Global Market under the symbol "TRHC."

Acquisitions

On September 6, 2017, we entered into an Agreement and Plan of Merger with Sinfonía HealthCare Corporation, pursuant to which we acquired the SinfoníaRx business, which we refer to as SRx. SRx is a provider of Medication Therapy Management, or MTM, technology and services for Medicare, Medicaid, and commercial health plans. The consideration for the acquisition was comprised of (i) cash consideration of $35.0 million paid upon closing, subject to certain customary post-closing adjustments; (ii) the issuance of $10.0 million worth of our common stock, or 520,821 shares, calculated based on the arithmetic average of the day volume-weighted average (rounded to two decimal places) trading price per share of our common stock for the 20 trading days ended on and including the trading day prior to the closing of the acquisition, using trading prices reported on the NASDAQ Global Market; and (iii) contingent purchase price consideration with a preliminary estimated acquisition date fair value of $26.4 million to be paid 50% in cash and 50% in our common stock based on the achievement of certain performance goals for each of the twelve-month periods ended December 31, 2017 and December 31, 2018. The stock consideration issued upon closing had a value of $11.5 million. In addition, we are not obligated to pay more than $35.0 million in cash and our common stock for the first contingent payment, or more than $130.0 million for the aggregate overall closing consideration and contingent payments.

In September 2016, we acquired certain assets, consisting primarily of intellectual property and software assets of 9176-1916 Quebec Inc. (an entity indirectly controlled by our Chief Scientific Officer, Jacques Turgeon). The intellectual property and software assets were previously licensed by us and are integrated into the MRM Matrix. The acquisition consideration consisted of cash consideration of $6.0 million, consisting of $1.0 million which was paid upon closing, $4.4 million paid during the fourth quarter of 2016, $550 thousand paid on September 15, 2017, and $50 thousand paid during the fourth quarter of 2017. In addition to the cash consideration, the purchase price included $5.0 million worth of common stock which amounted to the issuance of 395,407 shares of common stock during the fourth quarter of 2016. The stock consideration issued in 2016 was calculated based on the arithmetic average of the daily volume-weighted average price of the Company's common stock for the 30 business days ending on, and including, the 30th and 60th business day, respectively, following the completion of the IPO.

We account for acquisitions using the purchase method of accounting. We allocated the purchase price to the assets and liabilities acquired, including intangible assets and liabilities assumed, based on estimated fair values at the date of the acquisition. The results of operations from the acquisition are included in our consolidated financial statements from the acquisition date.

Financing

On September 6, 2017, we entered into an Amended and Restated Loan and Security Agreement, or the Amended and Restated 2015 Line of Credit, whereby we amended and restated our revolving line of credit, which was originally entered into on April 29, 2015 and amended on July 1, 2016. The Amended and Restated 2015 Line of Credit provides for borrowings in an aggregate amount up to $40.0 million to be used for general corporate purposes, with a $1.0 million sublimit for cash management services and letters of credit and foreign exchange transactions. We may also request an increase in the size of the Amended and Restated 2015 Line of Credit by up to $10.0 million upon the successful syndication of such additional amounts. As of September 30, 2017, there was $35.0 million outstanding under the Amended and Restated 2015 Line of Credit. See "Liquidity and Capital Resources — Revolving Credit Facility"

below for additional information with respect to the Amended and Restated 2015 Line of Credit.

Enhanced Medication Therapy Management Program

On January 1, 2017, we launched our Enhanced Medication Therapy Management, or EMTM, program, with a large, regional Medicare Part D Prescription Drug Plan, or Regional PDP. The Part D Enhanced Medication Therapy Management Model created by the Centers for Medicare & Medicaid Services, or CMS, is designed to test strategies to improve medication use among Medicare beneficiaries enrolled in Part D and to assess whether providing selected Regional PDPs with additional incentives and increased flexibility to design and implement innovative programs will better achieve the overall goals for EMTM programs.

To execute this EMTM program, we are using our MRM Matrix and certain other services to perform medication risk stratification and reviews and safety assessments of complex medication regimens, providing an innovative, alternative approach to pharmacotherapy to the 240,000 members of this Regional PDP, representing less than one percent of the entire eligible Part D market. We believe if we are successful in developing and delivering an EMTM program to the Regional PDP, we will be able to expand into a greater portion of the Part D market. There can be no assurances that our EMTM program will be successful or we will actually be able to expand this program as currently contemplated.

Components of Our Results of Operations

Revenue

Our revenue is derived from our product sales and service activities. For the three months ended September 30, 2017 and 2016, product sales represented 74% and 86% of our total revenue, respectively, and service revenue represented 26% and 14% of our total revenue, respectively. For the nine months ended September 30, 2017 and 2016, product sales represented 79% and 88% of our total revenue, respectively, and service revenue represented 21% and 12% of our total revenue, respectively.

Product Revenue

Our product revenue is primarily generated through our medication risk management contracts with healthcare organizations. Under these contracts, we provide a group of services including the use of our MRM Matrix technology that enables our pharmacists to prospectively optimize personalized medication regimens for each patient, prescription fulfillment, and reminder packing services. Historically, substantially all of our medication risk management clients have contracted for a bundled offering of our software-enabled solutions, prescription fulfillment and reminder packaging services. In the third quarter of 2016, we began providing medication risk management services utilizing our MRM Matrix technology alone, without the related fulfillment services, which we refer to as MRM Service Contracts. Revenue generated from MRM Service Contracts without prescription fulfillment and reminder packaging services is included as a component of our service revenue.

Under our bundled medication risk management contracts, revenue is generated through the following components:

Prescription medication revenue. We sell prescription medications directly to healthcare organizations through our prescription fulfillment pharmacies. Prescription medication fees are based upon the prices stated in client contracts for the prescription and include a dispensing fee. For the periods presented, substantially all of our product revenue has consisted of prescription medication revenue.

Per member per month, or PMPM, fees. We also receive a fixed monthly administrative fee for each member in the program contracted for medication risk management services.

Our revenue from prescription medication sales varies based on the number and mix of medications dispensed; however, based on our historical experience, patient populations at our clients do not generally decline over time, the number of medications per patient have been consistent following an initial onboarding period and the overall mix of medications dispensed is generally predictable. In addition, our dispensing fees vary directly with the volume of prescription medication sales each period. Our PMPM fees vary directly with the number of members serviced by our

clients each month. Although revenue is generated from various sources, pricing and other key contractual terms are negotiated on a bundled basis.

Service Revenue

On January 1, 2017, we launched our EMTM program to perform medication risk stratification and reviews and safety assessments of complex medication regimens and, as a result, we began generating PMPM fees under our MRM Service Contracts. PMPM fees earned with respect to our MRM Service Contracts are included in service revenue. As noted above, PMPM fees associated with our bundled medication risk management services are currently included in product revenue. Service revenue also consists of medication therapy management services, which we refer to as MTM Contracts, provided by SRx, which was acquired on September 6, 2017. Revenue from MTM Contracts is primarily generated from PMPM fees or transactional based fixed fees per medication therapy review.

Our service revenue is also generated by the risk adjustment and pharmacy cost management services that we provide to healthcare organizations. Our client contracts for these services generally include a PMPM fee for selected services, monthly subscription fees, initial set up fees and hourly consulting charges. PMPM fees vary directly with the number of members serviced by our clients each month under our risk adjustment contracts. Additionally, service revenue includes data and statistics fees we receive from medication manufacturers for the sale of medication utilization data we collect through our pharmacy cost management engagements, which is recognized when we receive such amounts due to the variable nature of payment amounts.

Cost of Revenue

Product Cost

Cost of product revenue includes all costs directly related to the bundled medication risk management offering, including costs relating to our pharmacists' collaboration on a patient's medication management, medication risk analysis and offering guidance to the prescriber based upon the assessment of the MRM Matrix and the individual patient's medical history, as well as the fulfillment and distribution of prescription medications. Costs consist primarily of the purchase price of the prescription medications we dispense. For the three months ended September 30, 2017 and 2016, prescription medication costs represented 76% and 77% of our total product costs, respectively. For the nine months ended September 30, 2017 and 2016, prescription medication costs represented 76% of our total product costs. In addition to costs incurred for the prescription medications we dispense, other costs include expenses to package, dispense and distribute prescription medications, expenses associated with our clinical pharmacist support centers and prescription fulfillment centers, including employment costs and stock-based compensation, and expenses related to the hosting of our technology platform. Such costs also include direct overhead expenses, as well as allocated miscellaneous overhead costs. We allocate miscellaneous overhead costs among functions based on employee headcount.

Service Cost

Cost of service revenue includes all costs directly related to servicing our MRM Service Contracts and MTM Contracts which primarily consist of labor costs, consultant fees, and expenses related to supporting our technology platform. In addition, cost of service revenues includes all labor costs, including stock-based compensation expense, directly related to the risk adjustment and pharmacy cost management services and expenses for claims processing, technology services and overhead costs. Cost of service revenue also includes direct overhead expenses, as well as allocated miscellaneous overhead costs. We allocate miscellaneous overhead costs among functions based on employee headcount.

Research and Development Expenses

Our research and development expenses consist primarily of salaries and related costs, including stock-based compensation expense, for personnel in our research and development functions, which include software developers, project managers and other employees engaged in scientific education and research, and the development and enhancement of our service offerings. Research and development expenses also include costs for design and development of new software and technology and new service offerings, as well as enhancement of existing software and technology and service offerings, including fees paid to third-party consultants, costs related to quality assurance and testing, and other allocated facility-related overhead and expenses.

We continue to focus our research and development efforts on adding new features and applications, increasing the functionality and enhancing the ease of use of our existing suite of software solutions.

We capitalize certain costs incurred in connection with obtaining or developing internal-use software, including external direct costs of material and services and payroll costs for employees directly involved with the software development. Capitalized software costs are amortized beginning when the software project is substantially complete and the asset is ready for its intended use. Costs incurred during the preliminary project stage and post-implementation stage, as well as maintenance and training costs, are expensed as incurred as part of research and development expenses.

We expect our research and development expenses will increase in absolute dollars as we increase our research and development headcount to further strengthen and enhance our software solutions and service offerings, but will decrease as a percentage of revenue in the long term as we expect our revenue to increase at a greater rate than such expenses.

Sales and Marketing Expenses

Sales and marketing expenses consist principally of salaries, commissions, bonuses, stock-based compensation and employee benefits for sales and marketing personnel, as well as travel costs related to sales, marketing and client service activities. Marketing costs also include costs of communication and branding materials, trade shows and public relations, as well as allocated overhead.

We expect our sales and marketing expenses to increase in absolute dollars as we strategically invest to grow our marketing operations and expand into new products and markets, but decrease as a percentage of revenue in the long term. We expect to hire additional sales personnel and related account management and sales support personnel as we continue to grow.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for executives, administrative personnel and consultants, including stock-based compensation and travel expenses. Other general and administrative expenses include professional fees for legal, consulting and accounting services. General and administrative expenses are expensed when incurred.

We expect that our general and administrative expenses will increase as we expand our infrastructure and transition to a public company. These increases include increased costs for director and officer liability insurance, costs related to the hiring of additional personnel and increased fees for directors, outside consultants, lawyers and investor relations. We also expect to incur significant costs to comply with corporate governance, internal controls and similar requirements applicable to public companies.

Remeasurement of Acquisition-related Contingent Consideration

We classify our acquisition-related contingent consideration as a liability. Acquisition-related contingent consideration is subject to remeasurement at each balance sheet date. Any change in the fair value of such acquisition-related contingent consideration is reflected in our consolidated statements of operations as a change in fair value of the liability. We will continue to adjust the carrying value of the acquisition-related contingent consideration until the contingency is finally determined.

Depreciation and Amortization Expenses

Depreciation and amortization expenses are primarily attributable to our capital investment in equipment and our capitalized software and acquisition-related intangibles.

Change in Fair Value of Warrant Liability

Historically, warrants to purchase shares of our preferred stock were classified as warrant liabilities and recorded at fair value. This warrant liability was subject to remeasurement at each balance sheet date and we recognized any change in fair value in our consolidated statements of operations as a change in fair value of the warrant liability. Upon the completion of the IPO in October 2016, these warrants automatically converted into warrants to purchase shares of our common stock. At that time, the liabilities were reclassified to additional paid-in capital, a component of stockholders' equity.

Interest Expense

Interest expense is primarily attributable to interest expense associated with our revolving credit facility, capital lease obligations and acquisition-related consideration payable. It also includes the amortization of discounts on debt and amortization of deferred financing costs related to these various debt arrangements.

Accretion (Decretion) of Redeemable Convertible Preferred Stock

Historically, the carrying values of Series A and Series A-1 redeemable convertible preferred stock were being accreted to their respective redemption values at each reporting period, from the date of issuance to the earliest date the holders can demand redemption. The carrying value of Series B redeemable convertible preferred stock was being accreted (decreted) to redemption value at each reporting period at the greater of (i) the original issuance price plus unpaid accrued dividends or (ii) the fair value of the redeemable convertible preferred stock. Upon the completion of the IPO in October 2016, our preferred stock automatically converted into shares of our common stock.

Results of Operations

The following table summarizes our results of operations for the three and nine months ended September 30, 2017 and 2016:

	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2017	2016	$	%	2017	2016	$	%
	(Dollars in thousands)				(Dollars in thousands)			
Revenue:								
Product revenue	$24,621	$20,731	$ 3,890	19 %	$71,391	$58,732	$ 12,659	22 %
Service revenue	8,647	3,443	5,204	151	19,222	8,017	11,205	140
Total revenue	33,268	24,174	9,094	38	90,613	66,749	23,864	36
Cost of revenue, exclusive of depreciation and amortization shown below:								
Product cost	18,979	15,951	3,028	19	54,847	44,103	10,744	24
Service cost	4,486	1,232	3,254	264	9,241	3,135	6,106	195
Total cost of revenue	23,465	17,183	6,282	37	64,088	47,238	16,850	36
Gross profit	9,803	6,991	2,812	40	26,525	19,511	7,014	36
Operating expenses:								
Research and development	1,527	1,028	499	49	4,037	2,878	1,159	40
Sales and marketing	1,325	881	444	50	3,869	2,511	1,358	54
General and administrative	4,098	2,053	2,045	100	16,097	5,762	10,335	179
Change in fair value of acquisition-related contingent consideration expense	923	47	876	nm	960	146	814	nm
Depreciation and amortization	2,166	1,276	890	70	5,730	3,415	2,315	68
Total operating expenses	10,039	5,285	4,754	90	30,693	14,712	15,981	109
Income (loss) from operations	(236)	1,706	(1,942)	(114)	(4,168)	4,799	(8,967)	nm
Other (income) expense:								
Change in fair value of warrant liability	—	(626)	626	(100)	—	(639)	639	(100)
Interest expense	174	1,242	(1,068)	(86)	327	4,250	(3,923)	(92)
Loss on extinguishment of debt	—	1,396	(1,396)	(100)	—	1,396	(1,396)	(100)
Total other expense	174	2,012	(1,838)	(91)	327	5,007	(4,680)	(93)
Income (loss) before income taxes	(410)	(306)	(104)	nm	(4,495)	(208)	(4,287)	nm
Income tax (benefit) expense	(8,105)	(164)	(7,941)	nm	(7,845)	11	(7,856)	nm
Net income (loss)	$ 7,695	$ (142)	$ 7,837	nm	$ 3,350	$ (219)	$ 3,569	nm

nm = not meaningful

Comparison of the Three Months Ended September 30, 2017 and 2016

Product Revenue

Product revenue increased $3.9 million, or 19%, from $20.7 million for the three months ended September 30, 2016 to $24.6 million for the comparable period in 2017. The increase was primarily driven by organic growth in medication risk management, which represented approximately $4.3 million of the increase. Of that $4.3 million increase, approximately $1.7 million was attributable to new customers acquired period over period, while the remaining $2.6 million was attributable to increased prescription fulfillment volume from existing customers. These increases were partially offset by a $360 thousand decrease in product revenue primarily due to change in medication mix of prescriptions filled and payor mix.

Service Revenue

Service revenue increased $5.2 million, or 151%, from $3.4 million for the three months ended September 30, 2016 to $8.6 million for the three months ended September 30, 2017. Service fees generated under MTM Contracts from the SRx acquisition contributed approximately $2.6 million to the increase in service revenue since the acquisition date of September 6, 2017. The increase in service revenue was also due to the launch of our EMTM program on January 1, 2017, which resulted in a $2.0 million increase in revenue primarily related to PMPM fees that we began generating under our MRM Service Contracts with our EMTM partner. In addition, there was a $577 thousand increase in revenue related to our risk adjustment services, of which, $221 thousand was related to revenue generated from new risk adjustment clients and $356 thousand was attributable to organic growth with existing clients.

For the three months ended September 30, 2017, $6.8 million of service revenue related to PMPM fees generated under our MRM Service Contracts and risk adjustment contracts, PMPM and transactional based fees generated under our MTM Contracts from the SRx acquisition, and subscription revenue related to our pharmacy cost management contracts. The remaining $1.8 million primarily represented hourly consulting charges, setup fees and data and statistics revenue from our pharmacy cost management and risk adjustment services. For the three months ended September 30, 2016, $1.2 million related to PMPM fees and subscription revenue, and $1.5 million represented hourly consulting charges, setup fees and data and statistics revenue generated from our pharmacy cost management and risk adjustment services. The remaining $685 thousand was the portion of our fixed fee arrangement in 2016 we recognized under our MRM Service Contract with our EMTM partner.

Cost of Product Revenue

Cost of product revenue increased $3.0 million, or 19%, from $16.0 million for the three months ended September 30, 2016 to $19.0 million for the comparable period in 2017. This increase was largely driven by increased volume, which contributed approximately $2.5 million to the change. Manufacturer price decreases and medication mix of prescriptions filled for our clients' patients resulted in a decrease of $337 thousand. In addition, labor costs increased $546 thousand, which was primarily due to added pharmacy headcount, including additional pharmacists, technicians and support staff, to support our growth. Distribution charges also increased $222 thousand related to higher shipping volume for the medications we fulfilled for our clients' patients.

Cost of Service Revenue

Cost of service revenue increased $3.3 million, or 264%, from $1.2 million for the three months ended September 30, 2016 to $4.5 million for the three months ended September 30, 2017. The increase in service costs was due to the acquisition of SRx, which contributed approximately $1.6 million to such increase and primarily included contract labor costs and employee compensation costs to support the MTM Contracts. The remaining increase in service costs was primarily attributable to $1.3 million of additional labor costs as a result of increased headcount as well as standard increases in salary and benefits to existing employees. The increase in labor costs was primarily due to $870 thousand related to added headcount to support our MRM Service Contracts, a $230 thousand increase in risk adjustment personnel costs, and a $40 thousand increase in pharmacy cost management personnel costs. Other costs of service revenue also increased by $392 thousand primarily due to added professional services, information technology costs, and rent and utilities expense to support our MRM Service Contracts.

Research and Development Expenses

Research and development expenses increased $499 thousand, or 49%, from $1.0 million for the three months ended September 30, 2016 to $1.5 million for the comparable period in 2017. The increase was primarily due to a $309 thousand increase in payroll and payroll-related costs for additional headcount as well as increases in salary and benefits for existing employees related to market adjustments and performance based increases. In addition, rent and utilities expenses increased as a result of our new office space in South Carolina dedicated to software development, and increased professional services to support scientific education research and development activities. The acquisition of SRx contributed $113 thousand to the increase, which primarily included employee salaries.

Sales and Marketing Expenses

Sales and marketing expenses increased $444 thousand, or 50%, from $881 thousand for the three months ended September 30, 2016 to $1.3 million for the comparable period in 2017. The increase in sales and marketing expense was primarily due to a $465 thousand increase in personnel costs related to added headcount to support our operational growth, and increases in salaries and benefits related to market adjustments and performance-based increases for our existing employees. This increase was partially offset by a decrease of $75 thousand in conference and other marketing related expenses. The acquisition of SRx contributed $54 thousand to the increase which primarily included employee salaries.

General and Administrative Expenses

General and administrative expenses increased $2.0 million, or 100%, from $2.1 million for the three months ended September 30, 2016 to $4.1 million for the comparable period in 2017. In connection with the SRx acquisition, we incurred direct acquisition costs of $855 thousand, which primarily included legal expenses, due diligence fees, and other professional services. The increase in general and administrative expenses was also due to a $649 thousand increase in personnel costs related to added headcount and increases in salaries and benefits related to market adjustments and performance-based increases for our existing employees. In addition, we incurred approximately $281 thousand of incremental general and administrative expenses related to supporting our operations as a public company. These incremental expenses primarily related to legal expenses, increased directors' and officers' liability insurance, professional services for investor relations, and fees for directors. The SRx acquisition also contributed an additional $277 thousand of general and administrative expenses, which primarily included employee salaries and information technology costs.

Acquisition-related Contingent Consideration Expense

During the three months ended September 30, 2017 and 2016, there was a $923 thousand and a $47 thousand charge incurred, respectively. Of the total charge in the three months ended September 30, 2017, $907 thousand related to the remeasurement as of September 30, 2017 of the fair value of the contingent consideration associated with our acquisition of SRx and $16 thousand related to the accretion of the contingent consideration associated with our acquisition of Medliance. The charge in the three months ended September 30, 2016 related to the accretion of the contingent consideration associated with our Medliance acquisition.

Depreciation and Amortization Expenses

Depreciation and amortization expenses increased $890 thousand, or 70%, from $1.3 million for the three months ended September 30, 2016 to $2.2 million for the comparable period in 2017. This increase was primarily due to a $708 thousand increase in amortization expense, which included a $584 thousand increase in amortization expense of intangible assets primarily related to intangible assets acquired from SRx in September 2017 and intangible assets acquired from 9176-1916 Quebec Inc. in September 2016. The increase in amortization expense was also due to a $124 thousand increase in amortization of capitalized software related to new software functionality placed into service after September 30, 2016. An additional $182 thousand increase in depreciation and amortization expense was attributable to purchases of property and equipment and leasehold improvements primarily related to our new office location for our headquarters, our new office space in South Carolina dedicated to software development, which we began to occupy in July 2017, and our new space in South San Francisco dedicated to pharmacy dispensing, which we began to occupy in February 2017.

Change in Fair Value of Warrant Liability

During the three months ended September 30, 2016, we recognized a $626 thousand gain for the change in fair value of warrant liability due to a slight decrease in the estimated fair value of our Series A-1 and Series B redeemable convertible preferred stock. Upon the completion of the IPO in October 2016, these warrants automatically converted into warrants to purchase shares of our common stock and the warrant liabilities were reclassified to additional paid-in capital, a component of stockholders' equity.

Interest Expense

Interest expense decreased $1.1 million, or 86%, from $1.2 million for the three months ended September 30, 2016 to $174 thousand for the three months ended September 30, 2017. The decrease in interest expense was primarily due to the repayment of our term loan credit facility with ABC Funding, LLC, or the ABC Credit Facility, during the fourth quarter of 2016. The ABC Credit Facility was entered into during the third quarter of 2016 and the proceeds thereof were used to repay all outstanding principal and interest under the Medliance Notes, as well as loans entered into with Eastward Capital Partners V, L.P. and its affiliates in April 2014 and December 2014, or the Eastward Loans. The ABC Credit Facility was subsequently repaid during the fourth quarter of 2016 with the proceeds received from the IPO.

Loss on extinguishment of debt

During 2016, we recognized a $1.4 million loss on extinguishment of debt as a result of a prepayment premium and the recognition of the remaining unamortized discounts and finance costs on the Eastward Loans in connection with the repayment of all outstanding principal and interest with the proceeds of the ABC Credit Facility, entered into on July 1, 2016. The ABC Credit Facility was subsequently repaid during the fourth quarter of 2016 with the proceeds received from the IPO.

Income Taxes

For the three months ended September 30, 2017, we recorded an income tax benefit of $8.1 million. During the third quarter of 2017, in conjunction with the acquisition of SRx, we recognized a net deferred tax liability of $8.9 million primarily related to intangible assets other than goodwill. We determined that the deferred tax liabilities related to the acquisition provide sufficient sources of recoverability to realize the deferred tax assets associated with those jurisdictions that file consolidated returns. As a result, we released $6.6 million of the deferred tax asset valuation allowance and recognized an additional benefit of $2.8 million related to tax windfall benefits generated in the nine months ended September 30, 2017. These tax benefits were partially offset by tax expense in the amount of $1.2 million recorded based on the estimated annual effective tax rate.

For the three months ended September 30, 2016, we recorded a tax benefit of $164 thousand which resulted in an effective tax rate of 53.6%. The benefit in 2016 was primarily related to a reduction in the overall effective rate for the full fiscal year due to an increase in expected pre-tax loss for the year as a result of the losses on debt extinguishments. We recorded the tax provision based on the estimated annual effective tax rate expected for the full year which included Federal alternative minimum tax, current state taxes and deferred tax expense associated with indefinite-lived deferred tax liabilities for goodwill amortization, in addition to a change in the valuation allowance related to deferred tax assets for income generated in the current period.

Comparison of the Nine Months Ended September 30, 2017 and 2016

Product Revenue

Product revenue increased $12.7 million, or 22%, from $58.7 million for the nine months ended September 30, 2016 to $71.4 million for the comparable period in 2017. The increase was primarily driven by organic growth in medication risk management, which represented approximately $12.0 million of the increase. Of that $12.0 million increase, approximately $3.9 million was attributable to new customers acquired period over period, while the remaining $8.1 million was attributable to increased prescription fulfillment volume from existing customers. Medication mix of prescriptions filled and payor mix contributed to an additional $623 thousand of the overall increase in product revenue.

Service Revenue

Service revenue increased $11.2 million, or 140%, from $8.0 million for the nine months ended September 30, 2016 to $19.2 million for the nine months ended September 30, 2017. The increase was primarily the result of the launch of our EMTM program on January 1, 2017, which resulted in a $6.7 million increase in service revenue primarily related to PMPM fees that we began generating under our MRM Service Contracts with our EMTM partner. Service fees generated under MTM Contracts from the SRx acquisition contributed approximately $2.6 million to the increase in service revenue since the acquisition date of September 6, 2017. In addition, there was a $1.2 million increase in revenue related to our risk adjustment services, of which, $390 thousand was related to revenue generated from new risk adjustment clients and $848 thousand was attributable to organic growth with existing clients. Increases in our pharmacy cost management services of $449 thousand were primarily due to an increase in manufacturer fees related to the sale of medication utilization data.

For the nine months ended September 30, 2017, $14.5 million of service revenue related to PMPM fees generated under our MRM Service Contracts and risk adjustment contracts, PMPM and transactional based fees generated under our MTM Contracts from the SRx acquisition, and subscription revenue related to our pharmacy cost management contracts. The remaining $4.7 million of service revenue represented hourly consulting charges, setup fees and data and statistics revenue from our pharmacy cost management and risk adjustment services, and other services. For the nine months ended September 30, 2016, service revenue generated from our PMPM fees and subscription revenue was $3.5 million and $3.8 million represented hourly consulting charges, setup fees and data and statistics revenue generated from our pharmacy cost management and risk adjustment services. The remaining $685 thousand was the portion of our fixed fee arrangement in 2016 we recognized under our MRM Service Contract with our EMTM partner.

Cost of Product Revenue

Cost of product revenue increased $10.7 million, or 24%, from $44.1 million for the nine months ended September 30, 2016 to $54.8 million for the comparable period in 2017. This increase was largely driven by increased volume of revenue, which contributed approximately $6.9 million to the change. In addition, labor costs increased $1.8 million, which was primarily due to added pharmacy headcount, including additional pharmacists, technicians and support staff, to support our growth. Manufacturer price increases and medication mix of prescriptions filled for our clients' patients contributed an additional $884 thousand to the overall increase in the cost of product revenue. Distribution charges also increased $728 thousand related to higher shipping volume for the medications we fulfilled for our clients' patients. The remaining increase was primarily due to increased information technology, rent and utilities, and other allocated overhead expenses a result of the new location for our headquarters and pharmacy and continued operational growth.

Cost of Service Revenue

Cost of service revenue increased $6.1 million, or 195%, from $3.1 million for the nine months ended September 30, 2016 to $9.2 million for the nine months ended September 30, 2017. The increase was primarily attributable to $3.2 million of additional labor costs as a result of increased headcount as well as standard increases in salary and benefits to existing employees. Of the $3.2 million increase in labor costs, $2.3 million related to added headcount to support our MRM Service Contracts, $473 thousand related to added headcount to support risk adjustment contracts and $159 thousand related to increases in pharmacy cost management personnel costs. Other costs of service revenue increased $1.3 million primarily due to added professional services, information technology costs, and rent and utilities expense to support our MRM Service Contracts. The acquisition of SRx also contributed $1.6 million to the increase cost of service revenue and primarily included contract labor costs and employee compensation costs to support the MTM Contracts.

Research and Development Expenses

Research and development expenses increased $1.2 million, or 40%, from $2.9 million for the nine months ended September 30, 2016 to $4.0 million for the comparable period in 2017. The increase was primarily due to a $952 thousand increase in payroll and payroll-related costs for additional headcount as well as increases in salary and benefits for existing employees related to market adjustments and performance based increases. In addition, rent and utilities expenses increased as a result of our new office space in South Carolina dedicated to software development. The acquisition of SRx contributed $113 thousand to the increase, which primarily included employee salaries.

Sales and Marketing Expenses

Sales and marketing expenses increased $1.4 million, or 54%, from $2.5 million for the nine months ended September 30, 2016 to $3.9 million for the comparable period in 2017. The increase in sales and marketing expense was primarily due to a $1.4 million increase in personnel costs related to added headcount to support our operational growth, and increases in salaries and benefits related to market adjustments and performance-based increases for our existing employees. This increase was partially offset by a decrease in conference and other marketing related expenses. The acquisition of SRx contributed $54 thousand to the increase, which primarily included employee salaries.

General and Administrative Expenses

General and administrative expenses increased $10.3 million, or 179%, from $5.8 million for the nine months ended September 30, 2016 to $16.1 million for the comparable period in 2017. The increase was primarily attributable to a $6.1 million increase in stock-based compensation costs primarily related to shares of restricted stock that were granted to certain employees in September 2016, and an increase in stock option expense as a result of stock options granted to employees during the fourth quarter of 2016 and through the third quarter of 2017. Personnel costs, including salaries and benefits, also increased by $1.5 million primarily due to an increase in headcount to support the overall growth of our operations. In addition, we incurred approximately $1.0 million of incremental general and administrative expenses related to supporting our operations as a public company. These incremental expenses primarily related to legal expenses, increased directors' and officers' liability insurance, professional services for investor relations, and fees for directors. In connection with the SRx acquisition, the Company incurred direct acquisition costs of $949 thousand which primarily included legal expenses, due diligence fees, and other professional services. The SRx acquisition also contributed an additional $277 thousand of general and administrative expenses, which primarily included employee salaries and information technology costs.

Acquisition-related Contingent Consideration Expense

During the nine months ended September 30, 2017 and 2016, there was a $960 thousand and a $146 thousand charge incurred, respectively. Of the total charge in the nine months ended September 30, 2017, $907 thousand related to the remeasurement as of September 30, 2017 as of the fair value of the contingent consideration associated with our acquisition of SRx and $53 thousand related to the accretion of the contingent consideration associated with our acquisition of Medliance. The charge in the nine months ended September 30, 2016 related to the accretion of the contingent consideration associated with our Medliance acquisition.

Depreciation and Amortization Expenses

Depreciation and amortization expenses increased $2.3 million, or 68%, from $3.4 million for the nine months ended September 30, 2016 to $5.7 million for the comparable period in 2017. This increase was due to a $1.8 million increase in amortization expense, which included a $1.3 million increase in amortization expense of intangible assets, primarily related to intangible assets acquired from SRx in September 2017 and intangible assets acquired from 9176-1916 Quebec Inc. in September 2016. The increase in amortization expense was also due to a $480 thousand increase in amortization of capitalized software related to new software functionality placed into service after September 30, 2016. An additional $507 thousand increase in depreciation and amortization expense was attributable to purchases of property and equipment and leasehold improvements primarily related to our new office locations for our headquarters, our new office space in South Carolina dedicated to software development, and our new space in South San Francisco dedicated to pharmacy dispensing.

Change in Fair Value of Warrant Liability

During the nine months ended September 30, 2016, we recognized a $639 thousand gain for the change in fair value of warrant liability due to a slight decrease in the estimated fair value of our Series A-1 and Series B redeemable convertible preferred stock. Upon the completion of the IPO in October 2016, these warrants automatically converted into warrants to purchase shares of our common stock and the warrant liabilities were reclassified to additional paid-in capital, a component of stockholders' equity.

Interest Expense

Interest expense decreased $4.0 million, or 92%, from $4.3 million for the nine months ended September 30, 2016 to $327 thousand for the nine months ended September 30, 2017. The decrease in interest expense was primarily due to the repayment of the Medliance Notes and the Eastward Loans with the proceeds from the ABC Credit Facility in July 2016. The decrease in interest expense was also due to the repayment of the ABC Credit Facility during the fourth quarter of 2016 with the proceeds received from the IPO. In addition, there was one month of borrowings outstanding on the 2015 Line of Credit during 2017 compared to nine months of borrowings outstanding on the 2015 Line of Credit during 2016.

Loss on extinguishment of debt

During 2016, we recognized a $1.4 million loss on extinguishment of debt as a result of a prepayment premium and the recognition of the remaining unamortized discounts and finance costs on the Eastward Loans in connection with the repayment of all outstanding principal and interest with the proceeds of the ABC Credit Facility, entered into on July 1, 2016. The ABC Credit Facility was subsequently repaid during the fourth quarter of 2016 with the proceeds received from the IPO.

Income Taxes

For the nine months ended September 30, 2017, we recorded an income tax benefit of $7.8 million. During the third quarter of 2017, in conjunction with the acquisition of SRx, we recognized a net deferred tax liability of $8.9 million primarily related to intangible assets other than goodwill. We determined that the deferred tax liabilities related to the acquisition provide sufficient sources of recoverability to realize the deferred tax assets associated with those jurisdictions that file consolidated returns. As a result, we released $6.6 million of the deferred tax asset valuation allowance and recognized an additional benefit of $2.8 million related to tax windfall benefits generated in the nine months ended September 30, 2017. These tax benefits were partially offset by tax expense in the amount of $1.5 million recorded based on the estimated annual effective tax rate.

For the nine months ended September 30, 2016, we recognized tax expense of $11 thousand, which resulted in an effective tax rate of (5.3%). We recorded the tax provision based on the estimated annual effective tax rate expected for the full year which included Federal alternative minimum tax, current state taxes and deferred tax expense associated with indefinite-lived deferred tax liabilities for goodwill amortization, in addition to a change in the valuation allowance related to deferred tax assets for income generated in the current period.

NON-GAAP FINANCIAL MEASURES

Adjusted EBITDA

To provide investors with additional information about our financial results, we disclose Adjusted EBITDA, a non-GAAP financial measure. Adjusted EBITDA consists of net income (loss) plus certain other expenses, which includes interest expense, provision (benefit) for income tax, depreciation and amortization, loss on extinguishment of debt, change in fair value of acquisition-related contingent consideration (income) expense, change in fair value of warrant liability, acquisition-related expense, payroll tax expense related to stock option exercises, and stock-based compensation expense. We present Adjusted EBITDA because it is one of the measures used by our management and board of directors to understand and evaluate our core operating performance, and we consider it an important supplemental measure of performance. We believe this metric is commonly used by the financial community, and we present it to enhance investors' understanding of our operating performance and cash flows. We believe Adjusted EBITDA provides investors and other users of our financial information consistency and comparability with our past financial performance and facilitates period-to-period comparisons of operations.

Our management uses Adjusted EBITDA:

- as a measure of operating performance to assist in comparing performance from period to period on a consistent basis;
- to prepare and approve our annual budget; and
- to develop short- and long-term operational plans

Adjusted EBITDA is not in accordance with, or an alternative to, measures prepared in accordance with GAAP. In addition, this non-GAAP measure is not based on any comprehensive set of accounting rules or principles. As a non-GAAP measure, Adjusted EBITDA has limitations in that it does not reflect all of the amounts associated with our results of operations as determined in accordance with GAAP. In particular:

- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and Adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements;
- Adjusted EBITDA does not reflect cash interest income or expense;
- Adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- Adjusted EBITDA does not reflect the potentially dilutive impact of stock-based compensation;
- Adjusted EBITDA does not reflect tax payments that may represent a reduction in cash available to us; and
- other companies, including companies in our industry, may calculate Adjusted EBITDA or similarly titled measures differently, which reduces its usefulness as a comparative measure.

Because of these and other limitations, you should consider Adjusted EBITDA alongside other GAAP-based financial performance measures, including various cash flow metrics, net income (loss) and our other GAAP financial results and not in isolation from, or as a substitute for, financial information prepared in accordance with GAAP. You should be aware that in the future we may incur expenses that are the same as or similar to some of the adjustments in the presentation, and we do not intend to imply that our future results will be unaffected by unusual or non-recurring items.

The following is a reconciliation of Adjusted EBITDA to our net income (loss) for the periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Reconciliation of net income (loss) to Adjusted EBITDA				
Net income (loss)	$ 7,695	$ (142)	$ 3,350	$ (219)
Add:				
Change in fair value of warrant liability	—	(626)	—	(639)
Interest expense	174	1,242	327	4,250
Loss on extinguishment of debt	—	1,396	—	1,396
Income tax (benefit) expense	(8,105)	(164)	(7,845)	11
Depreciation and amortization	2,166	1,276	5,730	3,415
Change in fair value of acquisition-related contingent consideration expense	923	47	960	146
Acquisition-related expense	855	—	855	—
Payroll tax expense related to stock option exercises	—	—	95	—
Stock-based compensation expense	939	223	7,776	481
Adjusted EBITDA	$ 4,647	$ 3,252	$ 11,248	$ 8,841

Adjusted Diluted Net Income Per Share Attributable to Common Stockholders, or Adjusted Diluted EPS

Adjusted Diluted EPS excludes the impact of certain items and, therefore, has not been calculated in accordance with GAAP. We believe the exclusion of these items assists in providing a more complete understanding of our underlying operations results and trends and allows for comparability with our peer company index and industry and to be more consistent with our expected capital structure on a going forward basis. Our management uses this measure along with corresponding GAAP financial measures to manage our business and to evaluate our performance compared to prior periods and the marketplace. We define Adjusted Diluted EPS as net income attributable to common stockholders before accretion of redeemable convertible preferred stock, fair value adjustments related to the remeasurement of warrant liabilities, loss on extinguishment of debt, fair value adjustments for acquisition-related contingent consideration, acquisition related expense, payroll tax expense related to stock option exercises, stock-based compensation expense, and the tax impact of those items as well as adjustments for tax benefits related to the partial release of our valuation allowance and recognition of tax windfall benefits expressed on a per share basis using weighted average diluted shares outstanding.

Adjusted Diluted EPS is a non-GAAP financial measure and should not be considered in isolation or as a substitute for financial information provided in accordance with GAAP. This non-GAAP financial measure may not be computed in the same manner as similarly titled measures used by other companies. In the future, we may incur expenses that are the same as or similar to some of the adjustments in the presentation, and we do not intend to imply that our future results will be unaffected by unusual or non-recurring items.

The following table reconciles net loss per share attributable to common stockholders on a diluted basis, the most directly comparable GAAP measure, to Adjusted Diluted EPS:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2017		2016		2017		2016	
	(In thousands except per share amounts)				(In thousands except per share amounts)			
Reconciliation of diluted net income (loss) per share attributable to common shareholders to Adjusted Diluted EPS								
Net income (loss)	$ 7,695		$ (142)		$ 3,350		$ (219)	
Decretion of redeemable convertible preferred stock	—		2,641		—		2,439	
Undistributed income attributable to redeemable convertible preferred stockholders	—		(1,271)		—		(1,140)	
Net income attributable to common stockholders, basic, and net income per share attributable to common stockholders, basic	$ 7,695	$ 0.46	$ 1,228	$ 0.25	$ 3,350	$ 0.20	$ 1,080	$ 0.22
Decretion of redeemable convertible preferred stock	—		(2,641)		—		(2,439)	
Revaluation of warrant liability, net of tax [1]	—		(661)		—		(675)	
Adjustment to undistributed income attributable to redeemable convertible preferred stockholders	—		1,271		—		1,140	
GAAP net income (loss) attributable to common stockholders, diluted, and net income (loss) per share attributable to common stockholders, diluted	$ 7,695	$ 0.41	$ (803)	$ (0.08)	$ 3,350	$ 0.18	$ (894)	$ (0.09)
Adjustments:								
Loss on extinguishment of debt	—		1,396		—		1,396	
Change in fair value of acquisition-related contingent consideration expense	923		47		960		146	
Acquisition-related expense	855		—		855		—	
Payroll tax expense on stock option exercises	—		—		95		—	
Stock-based compensation expense	939		223		7,776		481	
Impact to income taxes [1]	(8,963)		(404)		(9,803)		(394)	
Adjusted net income attributable to common stockholders and Adjusted Diluted EPS	$ 1,449	$ 0.08	$ 459	$ 0.04	$ 3,233	$ 0.18	$ 735	$ 0.06

(1) The impact to taxes was calculated using a normalized statutory tax rate applied to pre-tax income (loss) adjusted for the respective items above and then subtracting the tax provision as determined for GAAP purposes.

The following table reconciles the diluted weighted average shares of common stock outstanding used to calculate net loss per share attributable to common stockholders on a diluted basis for GAAP purposes to the diluted weighted average shares of common stock outstanding used to calculate Adjusted Diluted EPS:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Reconciliation of weighted average shares of common stock outstanding, diluted, to weighted average shares of common stock outstanding, diluted for Adjusted Diluted EPS				
Weighted average shares of common stock outstanding	16,699,102	4,918,885	16,483,169	4,817,285
Effect of potential dilutive securities:				
Weighted average dilutive effect of stock options	1,235,883	—	1,308,202	—
Weighted average dilutive effect of restricted shares	711,046	—	607,988	—
Weighted average dilutive effect of common shares from warrants	—	—	12,441	—
Dilutive effect from preferred stock and preferred stock warrants assuming conversion at beginning of the year	—	5,414,838	—	5,414,765
Weighted average shares of common stock outstanding, basic and diluted for GAAP	18,646,031	10,333,723	18,411,800	10,232,050
Adjustments:				
Weighted average dilutive effect of stock options	—	1,994,389	—	1,983,298
Weighted average dilutive effect of common shares from stock warrants	—	203,486	—	266,501
Weighted average dilutive effect of restricted stock	—	3,221	—	1,081
Weighted average shares of common stock outstanding, diluted for Adjusted Diluted EPS	18,646,031	12,534,819	18,411,800	12,482,930

Liquidity and Capital Resources

We earned net income of $3.4 million and incurred a net loss of $0.2 million for the nine months ended September 30, 2017 and 2016, respectively. Our primary liquidity and capital requirements are for research and development, sales and marketing, general and administrative expenses, debt service obligations and strategic business acquisitions. We have funded our operations, working capital needs and investments with cash generated through operations, issuance of stock and borrowings under our credit facilities. At September 30, 2017, we had cash of $5.9 million.

Summary of Cash Flows

The following table shows a summary of our cash flows for the nine months ended September 30, 2017 and 2016.

	Nine Months Ended September 30,	
	2017	2016
Net cash provided by operating activities	$ 11,700	$ 2,477
Net cash used in investing activities	(39,293)	(4,977)
Net cash provided by financing activities	29,187	2,267
Net increase (decrease) in cash	$ 1,594	$ (233)

Operating Activities

Net cash provided by operating activities was $11.7 million for the nine months ended September 30, 2017 and consisted primarily of our net income of $3.4 million and the addition of noncash items of $6.4 million and by changes in our operating assets and liabilities totaling $1.9 million. The noncash items primarily included $7.8 million of stock-based compensation expense, which was primarily related to shares of restricted common stock that were granted to certain employees in 2016 and stock options granted to employees, and $5.7 million of depreciation and amortization expenses related to leasehold improvements, capital equipment, capitalized internal-use software development costs, and acquisition related intangibles. The addition of noncash items was partially offset by an $8.1 million change in deferred taxes primarily due to the release of a significant portion of the deferred tax asset valuation allowance and recognition of an additional benefit related to tax windfall benefits generated in the nine months ended September 30, 2017. These tax benefits were offset by tax expense calculated based on the estimated annual effective tax rate. See Note 11 for additional information. The significant factors that contributed to the change in operating assets and liabilities included an increase in accrued expenses and other liabilities as a result of higher employee compensation and benefits accruals as of September 30, 2017, and an increase in other long-term liabilities due to cash allowances we received for leasehold improvements related to our new space in South Carolina dedicated to software development, which we began to occupy in June 2017. The increase in accrued expenses and other long-term liabilities was partially offset by an increase in accounts receivable primarily due to new revenues generated from our MRM Service Contracts during 2017.

Net cash provided by operating activities was $2.5 million for the nine months ended September 30, 2016 and consisted primarily of our net loss of $219 thousand, offset by the addition of noncash items of $6.0 million and changes in our operating assets and liabilities totaling $562 thousand, partially offset by cash payments of $3.9 million for imputed interest on debt. The noncash items primarily included depreciation and amortization expenses related to leasehold improvements, capital equipment, capitalized internal-use software development costs, and acquisition related intangibles of $3.4 million, amortization of deferred financing fees and debt discounts of $1.3 million, loss on extinguishment of debt of $1.4 million, stock-based compensation expense of $481 thousand, and an expense of $146 thousand for the revaluation of acquisition contingent consideration, which were partially offset a decrease in the fair value of warrant liabilities of $639 thousand. The significant factors that contributed to the change in operating assets and liabilities primarily included a net increase in accrued expenses and other long-term liabilities for deferred rent expense related to our new office location for our headquarters. Cash provided by operating activities was also impacted by a decrease in rebates receivable due to a new rebate program from our inventory vendors in 2016, which was partially offset by an increase in accounts receivable due to an increased customer base and higher sales volumes.

Investing Activities

Net cash used in investing activities was $39.3 million for the nine months ended September 30, 2017 and $5.0 million for the nine months ended September 30, 2016. Net cash used in investing activities for the nine months ended September 30, 2017 reflected $34.5 million, net of cash acquired, paid in connection with the acquisition of SRx. In addition, net cash used in investing activities included $2.6 million in purchases of property, equipment and leasehold improvements, primarily related to our office space and headquarters in Moorestown, NJ, our new space in South Carolina dedicated to software development, and new space in South San Francisco dedicated to pharmacy dispensing, which we began to occupy in February 2017. Net cash used in investing activities also consisted of $2.2 million in software development costs.

Investing activities for the nine months ended September 30, 2016 reflects $2.9 million in purchases of property, equipment and leasehold improvements primarily related to our new office location for our headquarters, $1.2 million in software development costs, and $1 million payment related to the acquisition of certain assets of 9176-1916 Quebec Inc., which were partially offset by a decrease of $200 thousand in restricted cash from the release of funds for the final acquisition consideration payment related to the acquisition of St. Mary Prescription Pharmacy, or SMPP, in 2014.

Financing Activities

Net cash provided by financing activities was $29.2 million for the nine months ended September 30, 2017 compared to cash provided by financing activities of $2.3 million for the nine months ended September 30, 2016. Financing activities for the nine months ended September 30, 2017 primarily reflected net borrowings of $35 million from the Amended and Restated 2015 Line of Credit and $194 thousand of proceeds from the exercise of stock options, offset by $2.1 million in payments for payroll taxes remitted to taxing authorities on behalf of employees from shares withheld from the net exercise of stock options during 2017. Net cash used in financing activities also included a $1.5 million payment of contingent purchase price consideration related to our Medliance acquisition and $550 thousand of payments related to our acquisition related consideration for 9176-1916 Quebec Inc., $959 thousand in payments for the repurchase of common stock, $525 thousand in payments of long-term debt, $220 thousand in payments for debt financing costs, and $132 thousand in payments for deferred offering costs.

Net cash provided by financing activities for the nine months ended September 30, 2016 primarily reflect the repayment of $14.3 million of notes payable related to the Medliance acquisition, $13.6 million in payments of long-term debt, $2.2 million in payments for costs associated with the IPO, $2.1 million in payments of deferred and contingent purchase price consideration related to our SMPP and Medliance acquisitions, and $1.5 million in payments for debt financing costs. Net cash used in financing activities was offset by net borrowings of $30 million from the ABC Credit Facility and net borrowings of $6 million from the Amended and Restated 2015 Line of Credit.

Funding Requirements

We had an accumulated deficit of $31.6 million as of September 30, 2017. As a result of the IPO, which closed on October 4, 2016, we are a publicly traded company and will incur significant legal, accounting and other expenses that we were not required to incur as a private company. In addition, the Sarbanes-Oxley Act, as well as rules adopted by the SEC and NASDAQ Stock Market, require public companies to implement specified corporate governance practices that were not applicable to us as a private company. We expect these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly.

We believe that our cash of $5.9 million as of September 30, 2017, borrowing capacity under our Amended and Restated 2015 Line of Credit and cash flows from continuing operations will be sufficient to fund our planned operations through at least December 31, 2018. Our ability to maintain successful operations will depend on, among other things, new business, the retention of clients and the effectiveness of sales and marketing initiatives.

We may seek additional funding through public or private debt or equity financings. We may not be able to obtain financing on acceptable terms, or at all. The terms of any financing may adversely affect our stockholders. If we are unable to obtain funding, we could be forced to delay, reduce or eliminate our research and development programs, product portfolio expansion or commercialization efforts, which could adversely affect our business prospects. There is

no assurance that we will be successful in obtaining sufficient funding on terms acceptable to us to fund continuing operations, if at all.

Revolving Credit Facility

On September 6, 2017, we entered into an Amended and Restated 2015 Line of Credit whereby we amended our amended revolving line of credit, which was entered into on April 29, 2015 and amended on July 1, 2016. The Amended and Restated 2015 Line of Credit provides for borrowings in an aggregate amount up to $40.0 million to be used for general corporate purposes, with a $1.0 million sublimit for cash management services and letters of credit and foreign exchange transactions. We may also request an increase in the size of the Amended and Restated 2015 Line of Credit by up to $10.0 million upon the successful syndication of such additional amounts. Amounts outstanding under the Amended and Restated 2015 Line of Credit bear interest at a variable rate based upon Western Alliance Bank's prime rate plus an applicable margin which will range from (0.25%) to 0.25%, with Western Alliance Bank's prime rate having a floor of 3.5%. The Amended and Restated 2015 Line of Credit has a maturity date of September 6, 2020, and is secured by all of our personal property, whether presently existing or created or acquired in the future, as well as our intellectual property. As of September 30, 2017, there was $35.0 million outstanding under the Amended and Restated 2015 Line of Credit.

The Amended and Restated 2015 Line of Credit contains financial covenants, including covenants requiring us to maintain a minimum unrestricted cash and unused availability balance under the Amended and Restated 2015 Line of Credit, maintain a maximum leverage ratio on a trailing twelve-month basis measured quarterly, and a minimum EBITDA, measured quarterly. The Amended and Restated 2015 Line of Credit also contains operating covenants, including covenants restricting our ability to effect a sale of any part of our business, merge with or acquire another company, incur additional indebtedness, encumber or assign any right to or interest in our property, pay dividends or other distributions, make certain investments, transact with affiliates outside of the ordinary course of business and incur annual capital expenditures, excluding capitalized software development costs and tenant leasehold improvements, in excess of $5.0 million. The Amended and Restated 2015 Line of Credit contains customary events of default, including upon the occurrence of a payment default, a covenant default, a material adverse change, our insolvency and judgments against us in excess of $500 thousand that remain unsatisfied for 30 days or longer. The Amended and Restated 2015 Line of Credit provides for a ten-day cure period for a covenant breach, which may be extended to up to 30 days in certain circumstances. As of September 30, 2017, we were in compliance with all of the financial covenants related to the Amended and Restated 2015 Line of Credit and expect to remain in compliance with such covenants.

Contractual Obligations and Commitments

During the three and nine months ended September 30, 2017, there were no material changes to our contractual obligations and commitments as compared to those described under "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Contractual Obligations and Commitments"* in our Annual Report on Form 10-K for the year ended December 31, 2016.

Off-Balance Sheet Arrangements

During the periods presented, we did not have any off-balance sheet arrangements, as defined by applicable SEC rules and regulations.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as the reported revenue generated and expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

There have been no material changes in our critical accounting policies during the three and nine months ended September 30, 2017, as compared to those disclosed in the *"Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Significant Judgments and Estimates"* in our Annual Report on Form 10-K for the year ended December 31, 2016.

Recent Accounting Pronouncements

See Note 2 in this Quarterly Report on Form 10-Q and Note 2 in the Annual Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2016 for a description of new accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosure about Market Risk

We are exposed to market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risks are principally limited to interest rate fluctuations.

As of September 30, 2017, we had $35.0 million outstanding under our Amended and Restated 2015 Line of Credit. We entered into the Amended and Restated 2015 Line of Credit to refinance outstanding indebtedness and to fund acquisition-related activities. Interest on the loan is based on the lender's prime rate plus an applicable margin, with the lender's prime rate having a floor of 3.5%, which exposes us to market risk due to changes in interest rates. This means that a change in the prevailing interest rates may cause our periodic interest payment obligations to fluctuate. We believe that a one percentage point increase in interest rates would result in an approximate $24 thousand increase to our interest expense for the nine months ended September 30, 2017

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) and Rule 15d-15(b) of the Exchange Act, our management, including our principal executive officer and our principal financial officer, conducted an evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q of the effectiveness of the design and operation of our disclosure controls and procedures. Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures are effective at the reasonable assurance level in ensuring that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports we file under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Inherent Limitations on Effectiveness of Controls and Procedures

Internal control over financial reporting may not prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Also, projections of any evaluation of effectiveness of internal control to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met.

Changes in Internal Control Over Financial Reporting

There have not been any changes in our internal control over financial reporting during the quarter ended September 30, 2017 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently party to any material legal proceedings. From time to time, however, we may be a party to litigation and subject to claims in the ordinary course of business. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Item 1A. Risk Factors

In addition to the other information set forth in this report, stockholders and potential investors in our securities should carefully consider the risk factors set forth in Part I, "Item 1A. Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2016, which was filed with the Securities and Exchange Commission on March 14, 2017. We have identified these risk factors as important factors that could cause our actual results to differ materially from those contained in any written or oral forward-looking statements made by us or on our behalf. Other than as set forth below, there have been no material changes to such risk factors previously disclosed in our Annual Report.

We face additional risks as a result of the Acquisition of SRx and may be unable to integrate our businesses successfully and realize the anticipated synergies and related benefits of the Acquisition or do so within the anticipated timeframe.

On September 6, 2017, we completed our acquisition of SRx. The acquisition involved a combination of two companies that previously operated as independent companies, and, as a result of the acquisition, the combined company faces various additional risks, including, among others, the following:

- our inability to successfully evaluate and utilize SRx's products, services, technology or personnel;
- disruption to SRx's business and operations and relationships with service providers, customers, employees and other partners;
- negative effects on our products, product pipeline and services from the changes and potential disruption that may follow the acquisition;
- diversion of our management's attention from other strategic activities;
- our inability to successfully combine the businesses in a manner that permits the combined company to achieve the cost savings anticipated to result from the acquisition;
- diversion of significant resources from the ongoing development of our existing products, services and operations; and
- greater than anticipated costs related to the integration of SRx's business and operations into ours.

Our ability to execute all such plans will depend on various factors, many of which remain outside our control. Any of these risks could adversely affect our business and financial results.

The process of integrating SRx's operations into our operations could result in unforeseen operating difficulties and require significant resources.

The following factors, among others, could reduce our revenues and earnings, increase our operating costs, and result in a loss of projected synergies:

- if we are unable to successfully integrate the duties, responsibilities, and other factors of interest to the management and employees of the acquired business, we could lose employees to our competitors, which could significantly affect our ability to operate the business and complete the integration;

- if we are unable to implement and retain uniform standards, controls, policies, procedures and information systems; and

- if the integration process causes any delays with the delivery of our services, or the quality of those services, we could lose customers, which would reduce our revenues and earnings.

The process of integrating SRx and its associated services and technologies involves numerous risks that could materially and adversely affect our results of operations or stock price.

The following factors, among others, could materially and adversely affect our results of operations or stock price:

- expenses related to the acquisition process and impairment charges to goodwill and other intangible assets related to the acquisition;

- the dilutive effect on earnings per share as a result of issuances of stock and incurring operating losses;

- stock volatility due to investors' uncertainty regarding the value of SRx;

- diversion of capital from other uses;

- failure to achieve the anticipated benefits of the acquisition in a timely manner, or at all; and

- adverse outcome of litigation matters or other contingent liabilities assumed in or arising out of the acquisition.

Notwithstanding the due diligence investigation we performed in connection with the Acquisition, SRx may have liabilities, losses, or other exposures for which we do not have adequate insurance coverage, indemnification, or other protection.

While we performed significant due diligence on SRx prior to consummating the acquisition, we are dependent on the accuracy and completeness of statements and disclosures made or actions taken by SRx and its representatives when conducting due diligence and evaluating the results of such due diligence. We did not control and may be unaware of activities of SRx before the acquisition, including intellectual property and other litigation claims or disputes, information security vulnerabilities, violations of laws, policies, rules and regulations, commercial disputes, tax liabilities and other known and unknown liabilities.

Our post-closing recourse is limited under the Merger Agreement.

SRx's obligation to indemnify us is limited to, among others, breaches of specified representations and warranties and covenants included in the Merger Agreement and other specific indemnities as set forth in the Merger Agreement. Except in the event SRx breaches a Fundamental Representation (as defined in the Merger Agreement) or with respect to fraud, intentional misrepresentation or willful misconduct, we cannot make a claim for indemnification pursuant to the Merger Agreement with respect to representations and warranties unless and until the indemnifiable losses exceed $337,500 and we cannot make a claim against SRx for a breach of a non-Fundamental Representation after the date that is 18 months after the date of closing of the acquisition. In connection with the acquisition, we obtained a representation and warranty insurance policy but we cannot make a claim under this policy for a breach of a non-Fundamental Representation after the date that is three years after the date of closing of the acquisition or a breach of a Fundamental Representation or certain tax obligations after the date that is six years after the date of the closing of the acquisition. If any issues arise post-closing, we may not be entitled to sufficient, or any, indemnification or recourse from SRx or our representation and warranty insurance policy, which could have a material adverse impact on our business and results of operations.

The success of SRx depends on a license with the University of Arizona. If the University of Arizona chooses to terminate the license, our business and operations could be harmed.

On September 6, 2017, we completed our acquisition of SRx. SRx licenses certain software and related user documentation related to SRx's Medication Management Center from the University of Arizona, or the Arizona License. The Arizona License is an exclusive, sublicensable license within the United States. The majority of SRx's business is dependent on the software licensed under the Arizona License. The University of Arizona may terminate the Arizona License under certain circumstances, including if SRx breaches the Arizona License and does not cure such breach within 60 days, ceases the commercial use of the licensed software, or liquidates its business. The termination of the Arizona License could significantly disrupt SRx's business operations and may adversely affect our operating results. In the event of a termination, SRx may be unable to fulfill its responsibilities to customers or meet the expectations of customers, with the potential for liability claims and a loss of business reputation, and a loss of business reputation, loss of ability to attract or maintain customers, and reduction of our revenue or operating margin.

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

Not applicable

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

Exhibit No.	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Filing Date	Exhibit Number	
2.1	Agreement and Plan of Merger, dated September 6, 2017, by and among Tabula Rasa HealthCare, Inc., TRCRD, Inc., TRSHC Holdings, LLC, Sinfonia HealthCare Corporation, Michael Deitch, Fletcher McCusker and Michael Deitch, as Stockholders' Representative	8-K	9/7/2017	2.1	
3.1	Amended and Restated Certificate of Incorporation of Tabula Rasa HealthCare, Inc.	8-K	8/4/2016	3.1	
3.2	Amended and Restated Bylaws of Tabula Rasa HealthCare, Inc.	8-K	8/4/2016	3.2	
4.1	Investor Rights Agreement, dated as of June 30, 2014	S-1	1/4/2016	4.1	
4.2	Stockholders Agreement (as amended)	S-1/A	7/21/2016	4.2	
4.3	Amended and Restated Preferred Series A-1 Convertible Stock Warrant, dated as of April 21, 2016, issued to the New Jersey Economic Development Authority	S-1/A	7/21/2016	4.8	
10.1	Amended and Restated Loan and Security Agreement, dated September 6, 2017, by and among CareKinesis, Inc., Tabula Rasa HealthCare, Inc., Careventions, Inc., Capstone Performance Systems, LLC, J.A. Robertson, Inc., Medliance LLC, CK Solutions, LLC, SinfoníaRx, Inc., Sinfonía HealthCare Corporation, TRCRD, Inc., TRSHC Holdings, LLC, the several banks and other financial institutions or entities from time to time party thereto, and Western Alliance Bank, as a Lender and as administrative agent and collateral agent for the Lenders	8-K	9/7/2017	10.1	
10.2#	License Agreement and Asset Transfer, effective as of December 9, 2013, by and between The Arizona Board of Regents on behalf of The University of Arizona and Sinfonía HealthCare Corporation				X
10.3	First Amendment to License Agreement and Asset Transfer, dated December 8, 2014, by and between The Arizona Board of Regents on behalf of The University of Arizona and Sinfonía HealthCare Corporation				X
31.1	Certification of Chief Executive Officer (Principal Executive Officer) required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				X
31.2	Certification of Chief Financial Officer (Principal Financial Officer) required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				X
32.1*	Certification of Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Financial Officer), as required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				X
101.INS	XBRL Instance Document				X
101.SCH	XBRL Taxonomy Extension Schema Document				X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase				X
101.DEF	XBRL Taxonomy Extension Definition Linkbase				X
101.LAB	XBRL Taxonomy Extension Label Linkbase				X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase				X

Application has been made to the Securities and Exchange Commission for confidential treatment of certain provisions. Omitted material for which confidential treatment has been requested has been filed separately with the Securities and Exchange Commission.

* This certification attached as Exhibit 32.1 that accompanies this Quarterly Report on Form 10-Q is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Tabula Rasa HealthCare, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of this Form 10-Q), irrespective of any general incorporation language contained in such filing.

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.

TABULA RASA HEALTHCARE, INC.

Date: November 9, 2017

By: /s/ DR. CALVIN H. KNOWLTON
Name: Dr. Calvin H. Knowlton
Title: Chief Executive Officer
(Principal Executive Officer)

Date: November 9, 2017

By: /s/ BRIAN W. ADAMS
Name: Brian W. Adams
Title: Chief Financial Officer
(Principal Financial and Accounting Officer)

LICENSE AGREEMENT AND ASSET TRANSFER
BETWEEN
THE ARIZONA BOARD OF REGENTS ON BEHALF OF
THE UNIVERSITY OF ARIZONA
AND
SINFONIA HEALTHCARE CORP.

ARIZONA FILE UA09-108

This License Agreement and Asset Transfer (the "AGREEMENT") is made effective as of the EFFECTIVE DATE and is between The Arizona Board of Regents on behalf of The University of Arizona, an Arizona body corporate with its principal campus in Tucson, Arizona 85721 ("ARIZONA"), and Sinfonia Healthcare Corporation, a Delaware corporation with its principal place of business at One East Toole, Tucson, AZ 85701 ("LICENSEE").

Article 1 . DEFINITIONS

1.1 "AFFILIATES" shall mean any entity that owns or controls (directly or indirectly) at least 50% of LICENSEE, or at least fifty percent (50%) of which is (directly or indirectly) owned or controlled by LICENSEE.

1.2 "DERIVATIVE WORK" means all works developed by or on behalf of LICENSEE which would be characterized as derivative works of the PROGRAM under the United States Copyright Act of 1976, or subsequent revisions thereof, specifically including, but not limited to, translations, abridgments, condensations, recastings, transformations, or adaptations of the PROGRAM, or works consisting of editorial revisions, annotations, elaborations, or other modifications of the PROGRAM. The term "DERIVATIVE WORK" shall not include those derivative works that are developed by ARIZONA.

1.3 "EFFECTIVE DATE" shall mean the date on which each of the following conditions has been satisfied: (i) this Agreement has been duly executed by the authorized representatives of both Parties affirming acceptance of the terms and conditions of this Agreement, (ii) the Warrant (as defined in Section 4.3 below) has been issued and delivered to ARIZONA and (iii) LICENSEE and ARIZONA have fully executed the Professional Services Agreement (as defined in Article 7 and attached as Exhibit A).

1.4 "END USER" means any person or other entity to whom the PROGRAM or DERIVATIVE WORKS are distributed and who is not granted any rights to sublicense or distribute the PROGRAM or DERIVATIVE WORKS to others.

1.5 "FIELD OF USE" means all fields.

1.6 "GROSS SUB LICENSING REVENUE" shall mean all consideration received by LICENSEE and its Affiliates pursuant to any sublicense to an Affiliate or SUBLICENSEE.

1.7 "LICENSED SERVICE" shall mean any service offered utilizing or owing its origin to the PROGRAM.

1.8 "NET SALES" shall mean the amount billed or invoiced (and if any amount is not billed or invoiced, the amounts received) for licenses, sales, rental or lease to END USERS, however characterized, by LICENSEE and for uses of the PROGRAM and DERIVATIVE WORKS by LICENSEE, including any service, including but not limited to LICENSED SERVICE, provided by LICENSEE related to the use of the PROGRAM or directly related to the market purpose of the PROGRAM, less the following deductions:

(a) cash discounts actually granted to customers, but only in amounts customary in the trade;

(b) sales, tariff duties and/or use taxes separately stated in such bills or invoices with reference to particular sales and actually paid by LICENSEE to a governmental unit;

(c) actual freight expenses between LICENSEE and customers, to the extent such expenses are not charged to or reimbursed by customers;

(d) amounts actually refunded or credited on returns; and

(e) the amount paid by LICENSEE to The Arizona Board of Regents on behalf of The University of Arizona, for the period in question pursuant to the Professional Services Agreement referenced in Section 7 and attached as Exhibit A.

No deductions shall be made for the cost of collections or for commissions, whether paid to independent sales agencies or regular employees of LICENSEE. Where LICENSEE receives any consideration other than cash for such transactions, the fair market cash value of such consideration, to be agreed upon by the parties hereto, shall be included in NET SALES.

1.9 "PROGRAM(S)," shall mean the software and related user documentation known as Medication Management Center, as they exist on the EFFECTIVE DATE and further described in ARIZONA disclosure number UA09-108 mid assigned or under obligation to be assigned to ARIZONA.

1.10 "ROYALTY PERIOD(S)" means the six-month periods ending on the last days of June and December.

1.11 "SUBLICENSE(S)" means any agreement between LICENSEE and a SUBLICENSEE under which any of LICENSEE's rights under this Agreement are licensed. Licenses to END USERS, though in fact sublicenses to the license granted by this Agreement, shall be excluded from the defined, capitalized term, "SUBLICENSES," and shall be separately addressed herein as "END USER licenses."

1.12 "SUBLICENSEE(S)" means any person or entity sublicensed the PROGRAM or DERIVATIVE WORK, or granted an option for a sublicense to the PROGRAM or DERIVATIVE WORK by LICENSEE under this Agreement, other than an END USER.

1.13 "TERRITORY" shall mean the United States and all jurisdictions extending national treatment to United States copyright holders under the Berne Convention, Universal Copyright Convention, Trade Related Aspects of Intellectual Property (TRIPS) Agreement, or any other agreement providing such protection.

Article 2 . GRANT OF LICENSE & ASSET TRANSFER

2.1 Upon the EFFECTIVE DATE, and subject to the terms and conditions of this Agreement, ARIZONA hereby grants to LICENSEE an exclusive license with the right to grant SUBLICENSES, to create DERIVATIVE WORKS, and to use, reproduce, market, distribute, publicly display, publicly perform, and otherwise commercially exploit the PROGRAM and DERIVATIVE WORKS in the TERRITORY for use in the FIELD OF USE, including by way of END USER licenses and LICENSED SERVICE.

2.2 Without limiting any other rights it may have, ARIZONA specifically reserves the right for ARIZONA to create derivative works of the PROGRAM and to use, reproduce, publicly display and publicly perform the PROGRAM and derivative works thereof, for research, internal (including clinical) and/or educational purposes.

2.3 Any and all SUBLICENSES granted by LICENSEE shall include all of the rights and obligations contained in this Agreement due ARIZONA,

2.4 The grant of rights in Articles 2.1, 2.2 and 2.3 are subject to LICENSEE and its SUBLICENSEES being in compliance with applicable county, state, federal or foreign laws, rules, and regulations governing the LICENSEE) SERVICE in or between any county, state, federal, or foreign jurisdiction. The licenses granted in this Agreement are subject to any rights required to be granted under prior research or sponsorship agreements, or retained by the U.S. government, for example in accordance with Chapter 18 or Title 35 of U.S.C. 200-212 and the regulations thereunder (37 CFR Part 401), when applicable. LICENSEE agrees to comply in all respects, and shall provide ARIZONA with all reasonably requested information and cooperation for ARIZONA to comply with applicable provisions of the same.

2.5 ARIZONA shall transfer to LICENSEE the hardware defined in Exhibit B (attached) ("Assets") necessary for the operation of the software and the delivery of the service, and required to fully enable this license grant. The Assets are required by Licensee in the implementation of the Program. The Assets shall be assigned, transferred and conveyed by ARIZONA to LICENSEE pursuant to the form of Bill of Sale and Assignment and Assumption Agreement attached hereto as Exhibit C (the "Assignment") and incorporated herein.

Article 3 . DELIVERY

3.1 Should LICENSEE not be in possession of a copy of the PROGRAM at the time of signing, ARIZONA shall provide to LICENSEE a copy of the PROGRAM within thirty (30) days upon notification by LICENSEE to ARIZONA.

Article 4 . CONSIDERATION

4.1 LICENSEE shall pay royalties to ARIZONA until this Agreement is terminated. Royalties shall include:

(a) License Issue Fee of [___]** dollars ($[___]**). Such License Issue Fee shall be nonrefundable, non-creditable, and is due upon signing of this Agreement.

(b) Running Royalties only on NET SALES:

(i) 5% of NET SALES;

(ii) 25% of GROSS SUBLICENSING REVENUE.

4.2 LICENSEE shall pay to ARIZONA an Annual License maintenance fee ("Annual Fee"). This Annual Fee is accrued on June 30 of the years specified below, and is payable with the semi-annual report for the ROYALTY PERIOD in which the Annual Fee accrues. LICENSEE may credit each Annual Fee in full against all Running Royalties otherwise due ARIZONA for the prior July 1 through the June 30 on which the Annual Fee accrues. The Annual Royalties are:

(a) In 2014: $100,000.00;

(b) In 2015: $150,000.00;

(c) In 2016: $200,000.00; and

(d) In 2017 and in each year thereafter during the term of this Agreement: $250,000.00.

4.3 LICENSEE shall issue ARIZONA Transferable warrants representing [___]** percent ([___]**%) of the outstanding capital stock of LICENSEE as of the EFFECTIVE DATE as detailed in an accompanying Class A Common Stock Warrant ("Warrant").

4.4 LICENSEE shall pay to ARIZONA an Asset Transfer Fee of $[___]**. Such nonrefundable, non-creditable Asset Transfer Fee is specifically for the transfer of the Assets as described in Article 2.5 and shall not be subject to ARIZONA revenue distribution policies, and is due in two equal payments as follows:

(a) $[___]** due upon EFFECTIVE DATE;

(b) $[___]** due upon the one-year anniversary of the EFFECTIVE DATE.

Article 5 . PAYMENTS, REPORTS, RECORD KEEPING, AND INSPECTIONS

5.1 LICENSEE shall make all royalty payments under Article 4 semi-annually, within forty-five (45) days of December 31 and June 30, Each such royalty payment shall be for the most recently completed six-month period.

5.2 LICENSEE shall notify ARIZONA of each sublicense granted hereunder and upon ARIZONA's request provide a copy of said sublicense agreement to ARIZONA. LICENSEE shall monitor sublicenses and assure license terms are met and product or service quality is equal to or greater than that required by this Agreement.

5.3 With all royalty payments under Article 4, LICENSEE shall provide ARIZONA with a written report documenting:

(a) quantity of LICENSED SERVICE performed domestically and internationally and relevant information on maintaining LICENSED SERVICE quality;

(b) summary of LICENSED SERVICE gross sales and NET SALES for both LICENSEE and SUBLICENSEES; and

(c) any Running Royalties due, including the method used to calculate the amounts due, the exchange rates used, if applicable, as well as any reductions due to sales to the U.S. Government.

5.4 Payments hereunder shall be made in U.S. dollars in the United States. If LICENSED SERVICE is sold or performed for monies other than United States dollars, LICENSEE shall convert the amount into equivalent United States funds, using the exchange rate quoted in the Wall Street Journal on the last business day of the reporting period.

5.5 LICENSEE shall be responsible for the payment of all taxes, duties, levies, and other charges imposed by any taxing authority with respect to the royalties payable to ARIZONA under this agreement. Should LICENSEE be required under any law or regulation of any government entity or authority, domestic or foreign, to withhold or deduct any portion of the payments on royalties due to ARIZONA, then the sum payable to ARIZONA shall be increased by the amount necessary to yield to ARIZONA an amount equal to the sum it would have received had no withholdings or deductions been made. ARIZONA shall cooperate reasonably with LICENSEE in the event LICENSEE elects to assert, at its own expense, ARIZONA's exemption from any such tax or deduction.

5.6 Royalties accruing to ARIZONA shall be owed by LICENSEE to ARIZONA when NET SALES are invoiced, or if not invoiced, when delivered, provided or performed to or for a third party.

5.7 In the event that payments are not received when due, LICENSEE shall pay additional interest charges at an annual rate of [___]** percent ([___]**%). Interest shall be calculated from the date payment was due and until actually received by ARIZONA.

5.8 LICENSEE and its SUBLICENSEES shall maintain accurate books and records relevant to this Agreement and their performance and fulfillment of obligations related to it including but not limited to records and

books showing the maintenance, production, inventory, sale, distribution or sublicensing or the performance of LICENSED SERVICE. Upon reasonable advance notice by ARIZONA, LICENSEE's books, records, inventory, production and practice facilities relevant to this Agreement shall be open for inspection during normal business hours by ARIZONA or its authorized agents for the purpose of verifying the accuracy of reports and the auditing of payments due ARIZONA. In the event payment is in error by [___]** percent ([___]**%) or more and such error is [___]** U.S. Dollars (USD $[___]**) or more, LICENSEE shall pay all reasonable documented audit expenses in addition to any interest due on late payments.

Article 6 . INTELLECTUAL PROPERTY ENFORCEMENT

6.1 Each party shall promptly advise the other in writing of any known acts of potential infringement of the PROGRAM or DERIVATIVE WORKS by another party. LICENSEE has the first option to police the PROGRAM and DERIVATIVE WORKS against infringement by other parties within the TERRITORY and the FIELD OF USE, but LICENSEE shah notify ARIZONA in writing thirty (30) days before tiling any suit. LICENSEE shall not file any suit without a diligent investigation of the merits of such suit by its counsel. This right to police includes defending any action for declaratory judgment of non-infringement or invalidity; and prosecuting, defending or settling all infringement and declaratory judgment actions at its expense and through counsel of its selection, except that LICENSEE shall make any such settlement only with the advice and consent of ARIZONA. If LICENSEE has a reasonable basis for policing the rights outlined above, ARIZONA shall provide reasonable assistance to LICENSEE with respect to such actions, but only if LICENSEE reimburses ARIZONA for out-of-pocket expenses incurred in connection with any such assistance rendered at LICENSEE's request or reasonably required by ARIZONA and if LICENSEE notifies ARIZONA in writing thirty (30) days before filing any suit. ARIZONA retains the right to participate, with counsel of its own choosing and at its own expense, in any action under this Paragraph. LICENSEE, shall defend, indemnify and hold harmless ARIZONA with respect to any counterclaims asserted by an alleged infringer reasonably related to the enforcement of the intellectual property rights under this Paragraph, including but not limited to antitrust counterclaims and claims for recovery of attorney fees.

6.2 If LICENSEE recovers damages in the intellectual property litigation or settlement thereof, the award shall be applied first to satisfy LICENSEE'S reasonable expenses and legal fees for the litigation, and then to reimburse ARIZONA for any other reasonable unreimbursed expenses and legal fees for the litigation. The remaining balance shall be divided equally between LICENSEE and ARIZONA. This provision shall control the division of revenues where a license is granted as part of a settlement of such lawsuit.

6.3 If LICENSEE undertakes to enforce and/or defend the intellectual property rights by litigation in a foreign county, and recovers damages in the intellectual property litigation, the award shall be applied first to satisfy LICENSEE's unreimbursed expenses and legal fees for the litigation, and next to reimburse ARIZONA for any payments under Article 3 which are past due, and then to reimburse ARIZONA for any unreimbursed expenses and legal fees for the litigation. The remaining balance shall he divided equally between LICENSEE and ARIZONA.

6.4 If LICENSEE fails to take action to abate any alleged infringement within sixty (60) days of a request by ARIZONA to do so (or within a shorter period if required to preserve the legal rights of ARIZONA under any applicable laws) then ARIZONA has the right to take such action (including prosecution of a suit) at its expense and LICENSEE shall use reasonable efforts to cooperate in such action, at LICENSEE's expense. During such action LICENSEE shall not have the right to grant sublicenses without ARIZONA'S permission, and ARIZONA has full authority to settle on such terms as ARIZONA determines. ARIZONA retains one hundred percent (100%) of any recovery or settlement under this Paragraph after reimbursement of ARIZONA'S out-of-pocket expenses and payment to LICENSEE (such payment not to exceed the recovery or settlement amounts ARIZONA actually receives) of any unrecovered expenses LICENSEE pays at ARIZONA'S request to third parties in furtherance of such action.

Article 7

DILIGENCE

7.1 LICENSEE shall, using best business practice, diligently fill the market demands for PROGRAM, DERIVATIVE WORKS, and/or LICENSED SERVICES in the TERRITORY.

7.2 LICENSEE shall, at its own expense, diligently endeavor to obtain all necessary governmental approvals for the use, marketing, sale, and distribution of PROGRAM, DERIVATIVE WORKS, and LICENSED SERVICES.

7.3 LICENSEE shall use commercially reasonable efforts to bring PROGRAM, or DERIVATIVE WORKS, to market through a thorough, vigorous and diligent program for exploiting the PROGRAM and to continue active, diligent marketing efforts for one or more products based on the PROGRAM throughout the life of this Agreement.

7.4 LICENSEE and ARIZONA shall enter into a Professional Services Agreement substantially in the form attached hereto as Exhibit A.

Article 8

TERM AND TERMINATION

8.1 The term of this Agreement shall be from the EFFECTIVE DATE to the end of the last to expire of the COPYRIGHTS.

8.2 LICENSEE may terminate this Agreement, at any time, upon one hundred eighty (180) days prior written notice to ARIZONA and including in the notice a declaration that LICENSEE is no longer, and henceforth will not be, making commercial gain from the COPYRIGHTS, TECHNICAL INFORMATION, PROGRAM, or DERIVATIVE WORKS.

8.3 ARIZONA shall have the right, at its sole discretion, to terminate this Agreement if, during the term of this Agreement, LICENSEE:

(a) ceases the commercial sale PROGRAM or DERIVATIVE WORKS or performance of LICENSED SERVICE;

(b) except in circumstances contemplated by Sections 9.1 and 9.2 below, liquidates or takes steps to liquidate its assets reasonably required for the performance of LICENSED SERVICE; or

(c) breaches any term of this Agreement and fails upon ARIZONA providing written notice of the breach to correct such breach within sixty (60) days. This right, if exercised by ARIZONA, supersedes the rights granted in Article 2.

8.4 Either Party shall have the right, at its sole discretion, to terminate this Agreement if the EFFECTIVE DATE has not occurred on or before December 15, 2013.

8.5 This Agreement will terminate automatically, if during the term of this Agreement, LICENSEE:

(a) commits any act of bankruptcy;

(b) becomes insolvent;

(c) files a petition under any bankruptcy or insolvency act;

(d) has a petition under any bankruptcy or insolvency act filed against it which is not dismissed within sixty (60) days;

(e) offers any component of PROGRAMS for the benefit of its creditors; or

(f) except in connection with a transaction described in Section 9.1 or 9.2 below, is dissolved.

8.5 Upon termination of this Agreement for any reason, LICENSEE shall immediately cease use of the rights granted herein, including but not limited to the sale or transfer of LICENSEE) SERVICE. LICENSEE shall return or certify as destroyed all copies of the PROGRAM or DERIVATIVE WORKS in its possession. If at the time of such termination the payments due under Paragraph 4.4 have not been made in full, the Assets shall be promptly returned to ARIZONA in the functional equivalent condition of the Assets on the Effective Date. Upon payment in full of the payments due pursuant to Paragraph 4.4, Licensee shall hold clean and unrestricted title to the Assets. PROGRAM and DERIVATIVE WORKS under the control of LICENSEE and/or sublicensee(s) shall be fully and completely destroyed by LICENSEE using appropriate chemical and/or mechanical methods, excepting PROGRAMS held by sublicensee(s) that remains in compliance with the terms and conditions of this Agreement.

8.6 Upon termination of this Agreement for any reason, ARIZONA, at its sole discretion, shall determine whether any or all sublicenses shall be canceled or assigned to ARIZONA, LICENSEE agrees to use its reasonable commercial efforts to assign any sublicenses to ARIZONA if requested by ARIZONA.

8.7 Upon termination of this Agreement for any reason, LICENSEE agrees to assign, and hereby does assign, all its rights in any DERIVATIVE WORKS, whether patentable or not, to ARIZONA.

8.8 Termination of the Agreement granted hereunder for any reason by either party shall not relieve the parties of any obligation accruing prior to such termination.

8.9 Notwithstanding any termination or expiration of this Agreement, the provisions of Articles 1, 5.8, 8.5, 8.6, 8.7, 8.8, 8.9, 10, 14, and 15 shall survive and shall be enforceable according to the terms thereof

Article 9

ASSIGNMENT

9.1 Neither Party shall assign its rights nor delegate its duties under this Agreement without the consent of the other Party, such consent not to he unreasonably withheld.

9.2 Notwithstanding the above, LICENSEE has the right to assign its rights and delegate its duties under this Agreement to a non-Affiliate that is a successor in interest to LICENSEE'S business or the portion of it in which the PROGRAMS are used, whether by sale of assets, merger, consolidation, stock purchase or otherwise. ARIZONA'S compensation for such a transaction shall be realized through the rights of the Warrant in connection with the Sale of the Company, and the successor's assumption of LICENSEE'S obligations with respect to any remaining payments.

9.3 In connection with any assignment and delegation by LICENSEE, LICENSEE shall:

(a) cure or cause hi be cured any outstanding breaches of the Agreement and make or cause to be made all payments due through the date of the transfer;

(b) notify ARIZONA of the assignment and provide ARIZONA with the name of the assignee, its address for notices, and other necessary information required under this Agreement; and

(c) cause the transferee to deliver to ARIZONA a written assumption of the obligations of LICENSEE under this Agreement;

(d) After any such assignment. the terms of this Agreement shall continue to apply to the assignee to the same extent as to LICENSEE.

Article 10

NO WARRANTIES; LIMITATIONS ON ARIZONA'S LIABILITY

10.1 **THE PROGRAM AND TECHNICAL INFORMATION ARE PROVIDED "AS IS" AND ARIZONA MAKES NO REPRESENTATIONS, EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, NOR ASSUMES ANY RESPONSIBILITIES WHATSOEVER WITH RESPECT TO THE COMMERCIAL SUCCESS, USE, SALE, LEASE OR OTHER DISPOSITION OF THE PROGRAMS OR MATERIALS CONTAINING OR DERIVED FROM THE PROGRAMS, OR TECHNICAL INFORMATION BY OR FOR LICENSEE AND ITS SUBLICENSEES OR VENDORS, OR ANY ENTITY TO WHICH SUCH SERVICES ARE RENDERED.**

10.2 **NO WARRANTY OR REPRESENTATION IS MADE THAT ANYTHING MADE, USED, OR SOLD UNDER THE TERMS OF THIS AGREEMENT WILL BE FREE FROM INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.**

10.3 **NOTHING IN THIS AGREEMENT, EITHER EXPRESS OR IMPLIED, OBLIGATES ARIZONA EITHER TO BRING OR TO PROSECUTE ACTIONS OR SUITS AGAINST THIRD PARTIES FOR INFRINGEMENT OR TO FURNISH ANY KNOW-HOW OR TRADE SECRETS NOT PROVIDED IN ARIZONA'S COPYRIGHTs OR TECHNICAL INFORMATION.**

10.4 **IN NO EVENT SHALL ARIZONA BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE EXERCISE OF THIS LICENSE OR THE USE OF THE COPYRIGHTS, PROGRAMS, OR TECHNICAL INFORMATION, AND THE SALE OR PERFORMANCE OF LICENSED SERVICES; AND**

10.5 **LICENSEE AND SUBLICENSEES ASSUME THE ENTIRE RISK AS TO PERFORMANCE OF THE, PROGRAM AND ALL DERIVATIVE WORKS. In no event shall ARIZONA, INCLUDING ITS REGENTS, FELLOWS, OFFICERS, EMPLOYEES, AND AGENTS, BE RESPONSIBLE: OR LIABLE FOR ANY DIRECT, INDIRECT SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OR LOST PROFITS OR OTHER ECONOMIC LOSS OR DAMAGE WITH RESPECT TO THIS AGREEMENT, THE PROGRAM, OR ANY DERIVATIVE WORKS, TO LICENSEE, END USERS, SUBLICENSEES, OR ANY OTHER INDIVIDUAL OR ENTITY REGARDLESS OF LEGAL THEORY. THE ABOVE LIMITATIONS ON LIABILITY APPLY EVEN THOUGH ARIZONA, ITS REGENTS, FELLOWS, OFFICERS, EMPLOYEES, OR AGENTS MAY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.**

10.6 **LICENSEE shall not, and shall require that its SUBLICENSEES do not, make any statements, representations or warranties whatsoever to any person or entity, or accept any liabilities or responsibilities whatsoever from any person or entity that are inconsistent with any disclaimer or limitation included in this Article 10.**

10.7 **LICENSEE AGREES THAT IN NO EVENT SHALL ARIZONA, INCLUDING ITS FELLOWS, OFFICERS, EMPLOYEES, AND AGENTS, BE LIABLE TO LICENSEE, ITS AFFILIATES, SUBLICENSEES OR END USERS, WHETHER SUCH LIABILITY IS BASED ON CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT, INFRINGEMENT, WARRANTY, OR ANY OTHER LEGAL OR EQUITABLE THEORY, FOR RELIEF ARISING OUT OF OR RELATING TO THE PROGRAM OR DERIVATIVE WORKS, OR THIS AGREEMENT, ITS SUBJECT MATTER, THE ASSETS OR ANYONE'S CONDUCT RELATING THERETO, FOR ANY AMOUNT IN EXCESS OF THE ROYALTIES ACTUALLY PAID TO ARIZONA UNDER THIS**

AGREEMENT. THIS PROVISION SHALL NOT ELIMINATE OR DIMINISH ANY DISCLAIMERS OF WARRANTY PROVIDED ELSEWHERE IN THIS AGREEMENT.

Article 11
LICENSEE REPRESENTATIONS, INDEMNIFICATION, AND INSURANCE

11.1 LICENSEE warrants and represents that LICENSEE shall indemnify, hold harmless and defend ARIZONA, its officers, employees, and agents against any and all claims, suits, losses, damage, costs, fees, and expenses resulting from or arising out of the exercise by LICENSEE of this Agreement or any sublicense, and those arising from the breach or non-performance by. LICENSEE of the foregoing obligations, representations and warranties. This indemnification includes, but is not limited to, any product liability.

11.2 LICENSEE shall defend, indemnify and hold harmless ARIZONA, including its fellows, officers, employees, and agents, from and against any claims, damages or expenses (including attorney's Fees and other litigation expenses) arising out of any asserted patent, trade secret, copyright or-trademark infringement action brought as a result of the use, reproduction, modification, performance, display, licensing or other distribution of the PROGRAM or DERIVATIVE WORKS by LICENSEE, Affiliates, SUBLICENSEEs or End Users.

11.3 LICENSEE shall defend, indemnify and hold harmless and shall require its Affiliates and SUBLICENSEEs to defend, indemnify and hold harmless ARIZONA, its Regents, fellows, officers, employees and agents, for and against any and all claims, demands, damages, losses, and expenses of any nature (including attorneys' fees and other litigation expenses), resulting from, but not limited to, death, personal injury, illness, property damage, economic loss or products liability arising from or in connection with, any of the following:

(a) Any reproduction, use, display, performance, license, sale, or other disposition by LICENSEE, Affiliates, SUBLICENSEEs or transferees of the PROGRAM or any DERIVATIVE WORKS;

(b) The direct or indirect use by any person of the PROGRAM or DERIVATIVE WORKS reproduced, used, displayed, performed, licensed, sold or otherwise distributed by LICENSEE., Affiliates or SUBLICENSEEs.

11.4 LICENSEE, at its sole cost and expense, shall insure its activities in connection with the work under this Agreement and obtain, keep in force, and maintain insurance as follows, or an equivalent program of self-insurance:

(a) Comprehensive or commercial general liability, insurance (contractual liability included) with its minimum limits as follows:

(i) Each Occurrence One Million U.S., Dollars ($1,000,000);

(ii) Products/Completed Operations Aggregate Five Million U.S. Dollars ($5,000,000);

(iii) Personal and Advertising Injury One Million U.S. Dollars ($1,000,000);

(iv) General Aggregate (commercial form only) Five Million U.S. Dollars ($5,000,000).

(b) The coverage and limits specified above do not in any way limit the liability of LICENSEE under this Agreement. Such insurance coverage is required prior to the first sale of PROGRAM or DERIVATIVE WORKS, or performance of LICENSED SERVICE. LICENSEE shall furnish ARIZONA with certificates of insurance showing compliance with all requirements. Such certificates must:

(i) Provide for Thirty (30) day advance written notice to ARIZONA of any modification.

(ii) Indicate that ARIZONA has been endorsed as an additional Insured under the coverage specified above.

(iii) Include a provision that the coverage shall be primary and will not relate to nor will be excess over any valid and collectable insurance or program of self-insurance carried or maintained by ARIZONA.

11.5 ARIZONA shall notify LICENSEE in writing of any claim or suit brought against ARIZONA in respect of which ARIZONA intends to invoke the provisions of this Article. LICENSEE shall promptly keep ARIZONA informed on a current basis of its defense of any claims under this Article.

Article 12

NOTICES

12.1 Any fee payment, notice, or other communication required or permitted to be made or to be given to either party under this Agreement shall be sufficiently made or given on the (late of mailing if sent to such party by either certified first class U.S. mail, postage prepaid, or by traceable delivery services such as Federal Express, United Postal Service or DHL, addressed to that party at its address set forth below:

If to ARIZONA:

For USPS:
Tech Transfer Arizona
University Services Annex, 4th Floor
P.O. Box 210300A
Tucson AZ 85721-0300
Attn: TTA File: UA09-108

For Overnight Delivery:
Tech Transfer Arizona
220 W. 6th Street
4th Floor
Tucson AZ 85701
Attn: TTA File: UA09-108

If to LICENSEE:
Sinfonia Healthcare Corp.
One East Toole Ave.
Tucson, AZ 85701
Attn: Fletcher McCusker

The parties shall promptly notify each other of any change in their respective addresses for purposes of this Agreement.

Article 13

USE OF NAMES

13.1 Except as provided herein, nothing contained in this Agreement shall be construed as conferring any right to use in advertising, publicity, or other promotional activities any name, trade name, trademark or other designation of a party or of any identifying technology of either party including any contraction, abbreviation, or simulation of the foregoing.

13.2 LICENSEE may use the following factual statement in crediting ARIZONA in association with the appropriate use of the copyright notice "***Copyright [year] Arizona Board of Regents on Behalf of The University of Arizona***" utilizing the same typeface, color and font size as is used by LICENSEE in the crediting of any other content derived from non-LICENSEE sources.

Article 14

GENERAL

14.1 This Agreement including its exhibits embodies the entire understanding between the parties with respect to the subject matter of this Agreement and supersedes all previous discussions and documents respecting such subject matter.

14.2 The validity, construction, and performance of this Agreement, and any dispute between the parties relating thereto, shall be governed by and interpreted and determined in accordance with the laws of State of Arizona, except for those laws relating to conflict of laws.

14.3 No amendment or modification to this Agreement shall be effective or binding on either party unless the same has been reduced to writing and signed by authorized representatives of both parties.

14.4 The Section headings used herein are provided solely for convenience and are not to be used for interpreting this Agreement.

14.5 The provisions of this Agreement shall be deemed severable. If any provision in this Agreement is held invalid or unenforceable by an unappealed and unappealable final judgment of a court of competent jurisdiction, then the meaning of that provision shall be construed, to the extent feasible, to render the provision enforceable. If, however, no feasible interpretation would save such provision, it shall be severed from the remainder of this Agreement, which shall remain in full force and effect unless the invalidity or unenforceability of such provision substantially impairs the value of this Agreement, in its entirety, to either party. If such impairment occurs, the parties shall then each use reasonable efforts to negotiate a substitute, valid and enforceable provision which most nearly affects the parties' intent in entering into this Agreement.

14.6 No waiver of any term, provision or condition of this Agreement, whether by conduct or otherwise, in any one or more instances shall be deemed to be or construed as a further or continuing waiver of any such term, provision or condition or of any other term, provision or condition of this Agreement. Any delay or omission by either party to exercise any right or remedy under this Agreement or at law shall not be construed to be a waiver army such right or remedy or any other right or remedy. All the rights of either party under this Agreement shall be cumulative and may be exercised separately or concurrently.

14.7 Each of the parties hereto is an independent contractor and nothing herein shall be deemed to constitute the relationship of partners, joint venturers, or of principal and agent between the parties hereto.

14.8 The failure of any party hereto at any time or times to require performance of any provisions of this Agreement shall in no manner affect its right to enforce such provision at a later time.

14.9 LICENSEE shall notify ARIZONA if LICENSEE becomes aware that this Agreement is subject to any U.S. or foreign government reporting or approval requirement. LICENSEE shall make all necessary filings and pay all costs including, but not limited to, fees, penalties, and all other out-of-pocket costs associated with such reporting or approval process.

14.10 LICENSEE shall observe all applicable United States and foreign laws with respect to the transfer of PROGRAMS and TECHNICAL INFORMATION to foreign countries, including, without limitation, the Export Administration Regulations.

14.11 This Agreement shall bind the parries, their successors, trustees, and permitted assigns.

Article 15
STATE OF ARIZONA REQUIRED CLASSES

15.1 The parties agree to be hound by applicable state and federal rules governing equal employment opportunity, immigration and nondiscrimination.

15.2 The parties agree that should a dispute arise between them, in any manner, concerning this Agreement, and said dispute involves the sum of Fifty Thousand U.S. Dollars (USD $50,000) or less in money damages only, exclusive of interest or cost of attorney's fees, the parties will submit the matter to binding arbitration pursuant to the Arizona Supreme Court Rules for Compulsory Arbitration and the decision of the arbitrator(s) shall be final and binding upon the parties.

15.3 The parties recognize that the performance by ARIZONA may be dependent upon the appropriation of funds by the State Legislature of Arizona. Should the State Legislature of Arizona fail to appropriate the necessary funds, ARIZONA may cancel this Agreement without further duty or obligation,

15.4 This Agreement is subject to the provisions of A.R.S. § 38-511. ARIZONA may cancel this Agreement by written notice to the parties if any person substantially involved in obtaining, drafting, or procuring this Agreement for or on behalf of ARIZONA becomes an employee or consultant in any capacity of LICENSEE.

IN WITNESS WHEREOF, each party hereto has executed this Agreement in duplicate originals by their respective and duly authorized officers on the day and year below written.

	ARIZONA BOARD OF REGENTS on behalf of THE UNIVERSITY OF ARIZONA		**SINFONIA HEALTHCARE CORP.**
By	/s/ Douglas M. Hockstad (Signature)	By	/s/ Fletcher McCusker (Signature)
Name	Douglas M Hockstad (Printed)	Name	Fletcher McCusker (Printed)
Title	Director, Tech Transfer Arizona	Title	CEO
Date	11/19/2013	Date	11/19/2013

EXHIBIT A

Professional Services Agreement

PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement (the "**Agreement**") is made effective as of _____ ("**Effective Date**"), by and between SinfoniaRx, Inc., an Arizona corporation (the "**Company**"), and the Arizona Board of Regents, acting on behalf of the University of Arizona for its College of Pharmacy ("**UA**").

BACKGROUND INFORMATION

1. Prior to the Effective Date, UA operated the Medication Management Center ("**MMC**"), a pharmacist-led communication center providing medication therapy management ("**MTM**") advice to pharmacy benefit managers, health care plans, physicians, and other health care providers and their patients concerning prescription medicine regimens and medication interactions with other medicines; which utilizes proprietary software and related user documentation and other intellectual property (the "**UA Intellectual Property**") belonging to the UA,

2. Prior to the Effective Date, UA was a party to agreements ("**Service Agreements**") to provide MTM services with the third-party health care plans and health care providers listed on Exhibit A ("**Clients**"). As of the Effective Date, the Service Agreements will be assigned by UA to and assumed by the Company. UA is familiar with each of the Service Agreements and the requirements thereof relating to licensure, federal and state regulatory compliance, patient confidentiality, Client confidentiality, and Medicare Advantage and Medicare Part D Regulatory Compliance flow-down regulations ("**Medicare Regulations**"), etc. ("**Service Agreement Obligations**"). Reference in this Agreement to "Service Agreements" shall mean and include any similar agreements entered into by the Company subsequent to the Effective Date for which UA is providing Services.

3. The Company has been formed for the purpose of assuming the operations of the MMC and the obligations of UA under the Service Agreements.

4. As of the Effective Date, a license agreement (the "**License Agreement**") will be entered into between UA and the Company granting the Company an exclusive license to use the UA Intellectual Property (the "**License**").

5. Because of its professional expertise and experience with the operation of the MMC, the Company desires to retain VA to provide certain professional, technical and other services, relating to the operation of the MMC as more fully described on Exhibit B attached hereto and incorporated herein by reference (the "**Services**").

NOW THEREFORE. in consideration of the foregoing Background Information and of the mutual covenants, promises and agreements of the parties as set forth herein, the parties agree as follows:

1. Services

1.1 Retention of UA. The Company hereby retains UA to operate the MMC and perform the Services.

1.2 Performance of Services. UA agrees:

(a) to perform the Services (i) in a competent and reasonable manner consistent with the professional standards generally applicable to such Services; (ii) in strict accordance with the terms and conditions of this Agreement and the Service Agreement Obligations (including all applicable flow-downs from the Medicare Regulations) and (iii) in full compliance with all applicable federal, state, and local laws, rules, regulations, ordinances and regulatory guides (collectively, the "**Legal Requirements**");

(b) to provide appropriate oversight and supervision of UA employees, interns and any subcontractors who perform Services ("**Service Personnel**") and, except if they conflict with the UA Staff Personnel Policy Manual, UA Handbook for Appointed Personnel, UA Alcohol and Policy Regulations and or other policies applicable to Service Personnel, comply with requirements of the Service Agreements with respect to the hiring, evaluation and performance of Service Personnel;

(c) not to subcontract or delegate its obligation to perform any portion of the Services hereunder without the Company's prior written consent in each instance. Each approved subcontractor shall be subject to, and UA shall ensure that each approved subcontractor complies with, all the terms applicable to UA under this Agreement, provided that UA shall be responsible and retain liability for the performance of all obligations of UA under this Agreement and any breach thereof by any subcontractor;

(d) to ensure that the Services will be performed using staff that are fully qualified and trained and, to the extent required by law or the Service Agreements, licensed and are able to complete the Services in a professional and lawful manner in accordance with all Legal Requirements;

(e) to allocate sufficient numbers of employees and work hours to perform the Services and to use its reasonable efforts to ensure that all Services are performed in strict compliance with this Agreement, the Service Agreements and all Legal Requirements. UA shall operate the MMC and perform all Services during all hours required under the Service Agreements;

(f) to meet with the Company from time to time to consider personnel deployment and whether staffing levels and hours of operation are sufficient in order to meet the requirements of the Service Agreements;

(g) to assist the Company in developing protocols and procedures (i) for dealing with complaints from Members (as defined in Exhibit B), healthcare personnel and caregivers concerning the quality of service being provided by UA and (ii) designed to ensure and evaluate the quality of clinical and technical performance; and

(h) to enable the Company to utilize external monitoring of interactions between Service Personnel and Members, caregivers and Providers, so long as prior notice has been given to and authorized by UA.

(i) to provide support for CMS Part C and Part D data validation audits to ensure that all clients receiving services from University during the 2013 program year pass the 2014 data validation audits.

1.3 Protected Health Information and Compliance with HIPAA.

(a) UA shall not take any action in the course of performing Services under this Agreement that shall cause it to be deemed a "Covered Entity", under and as defined in the Health Insurance Portability and Accountability Act of 1996 and its implementing regulations as amended by the Health Information Technology for Economic and Clinical Health Act and regulations promulgated thereunder, as such law and regulations may be amended from time to time (collectively, "**HIPAA**"), at 45 CFR 160 *et seq*. The Company shall not take any action or enter into a Service Agreement that would cause UA to be deemed a Covered Entity. UA and the Company agree to establish and maintain such data protection and other security procedures and protocols as are reasonably appropriate in order to satisfy applicable HIPAA requirements.

(b) UA and the Company agree and acknowledge that UA is a business associate of the Company as evidenced by the Business Associate Agreement ("**BAA**") attached hereto as Exhibit D and incorporated herein. The terms and conditions of the BAA shall not be reduced, disclaimed, or otherwise limited by any terms or conditions of this Agreement. If a term or condition in the BAA conflicts with a term or condition in this Agreement, the BAA shall control.

2. Fees and Other Payments. In consideration of UA's performance of the Services, the Company shall make payments to UA in the amounts and according to the schedule specified in Exhibit C (which amounts are inclusive of all direct and indirect costs of performing the Services). The Company shall not be obligated to make any payments to UA except as expressly set forth in this Section 2 and Exhibit C unless the parties otherwise mutually agree in writing. UA shall invoice the Company for all fees and reimbursements on a monthly basis. The Company shall pay each invoice within sixty (60) days of receipt. All payments pursuant to this Section 2 shall be by check at the address specified on the invoices.

3. Term and Termination

3.1 Term. This Agreement shall commence on the Effective Date and shall remain in effect for five (5) years, and shall automatically renew for additional and consecutive five (5) year terms unless prior written notice of termination is provided by one party to the other at least 365 days prior to the end of the applicable Term. Reference herein to the "**Term**" shall mean and include the initial term and any renewal thereof.

3.2 Termination. This Agreement may be terminated upon the occurrence of any of the following events:

(a) By either party without cause upon twenty-four (24) months written notice to the other party;

(b) By either party upon ninety (90) days written notice of any failure to substantially perform under the obligations of this Agreement if such matter has not been remedied within such ninety (90) days; or

(c) Immediately upon the termination of the License.

4. Company Responsibilities. During the Term, the Company shall:

4.1 Operational Responsibilities.

(a) Develop and maintain all software required to deliver and document the Services;

(b) Provide day to day system and technology support for the applications and the systems on which they run as they pertain to the Services provided by UA;

(c) Use its best efforts to develop and maintain relationships and retain contracts with the Clients and to enter into contracts with new clients;

(d) Provide day to day program guidance related to overall program performance as well as individual client performance and expectations;

(e) Provide day to day support to determine appropriate short term and long term staffing;

(f) Chair an oversight committee to oversee and manage all quality assurance and quality improvement activities. The oversight committee shall be composed of a mutually agreed upon number of staff from both the Company and UA. For UA, oversight committee representatives shall consist of its Director, Information Provider, Quality Assurance Lead, Senior Information Coordinator, Senior Clinical Staff, Compliance Coordinator, UA Privacy Officer, and VP for Research Compliance & Policy. For Company, oversight committee representatives shall consist of Account Managers, Professional Affairs Specialists, Production Coordinator, and other designated personnel;

(g) Provide support in the development of training and compliance for all MMC staff;

(h) Manage all patient and provider contact (mail, faxes, etc.) using documentation provided by UA;

(i) Develop, finalize and maintain all workflow processes; and

(j) Ensure appropriate system uptime necessary to meet performance goals.

4.2 Hardware Responsibilities. Before such time as the computer hardware system has been relocated to the Company's facilities, and while the computer hardware system resides at UA, Company will pay to UA an amount of $171 per year which shall be prorated if the computer hardware system is relocated to the Company's facilities in less than a year's time. At such time as the computer hardware system hosting the UA Intellectual Property has been relocated to the Company's facilities, perform the following functions:

(a) Develop and manage secure system access;

(b) Provide day to day coordination of activities related to system security and access;

(c) Manage all system firewalls;

(d) Manage the back-up processes;

(e) Develop and facilitate testing of the disaster and business continuity plans; and

(f) Assist the College of Pharmacy IT group with the overall management of all applicable hardware.

5. Relationship between the Parties; Independent Contractor. The relationship between the Company and UA under this Agreement will be only that of principal and agent and UA's status under this Agreement will be that of an independent contractor. No joint venture, partnership, or other business organization will be created or be construed as being created by reason of this Agreement.

6. Recordkeeping and Audit

6.1 Access to Records. For the time and to the extent required by applicable law, both parties shall retain, and shall permit any Federal or state agency which has the right to access, and their respective duly authorized representatives access to examine or copy this Agreement and such books, documents, and records as are reasonably necessary to verify the nature and extent of the costs of the Services supplied under this Agreement. Either party shall immediately notify the other of any request for records by any such entity.

6.2 Ownership of Records. The Company's accounting, billing, collection and patient medical records, computer files and manuals shall at all times remain the property of the Company. The Company shall have the right to access its records that are generated by, held by or received by UA. Upon termination of this Agreement, UA shall turn over to the Company a copy of its records, computer files, manuals, and other material developed or created by UA in the course of performing the Services to the extent requested by the Company. UA may retain a copy of such material; provided it is kept in a secure location and such material may not be used by UA or shared with others unless required by law.

6.3 Confidentiality of Records. Both parties shall maintain all files and records in accordance with privacy and confidentiality provisions of all contracts and with all pertinent provisions of Federal, state and local statutes, rules and regulations. Each party agrees to operate its business in a manner, and enter into any mutually agreeable amendments hereto, to permit the other party to comply with HIPAA.

6.4 Right to Audit. The Company and its agents shall have access to, and the right to audit, at its expense, all of the UA's records and other information to determine whether UA has complied with its obligations under this Agreement. UA shall cooperate and shall require its staff to cooperate fully with the auditors, including but not limited to permitting such auditors to access their books and records pertaining to UA's obligations hereunder at mutually agreeable times during regular business hours upon reasonable notice, furnishing the auditors with copies of materials reasonably requested prior to the audit, and making personnel available for interview with the auditors to the extent reasonably related to the performance by UA of its obligations under this Agreement. Records or copies of records requested by the Company shall be provided to the Company at the Company's expense within no more than

ten (10) days from the date such request is made, except in the case of an on-site audit by the Company in such case records or copies of records shall be provided at the time of the audit.

7. Intellectual Property Matters

7.1 Ownership Work Made for Hire. All rights to Intellectual Property (as defined below) generated in the performance of work conducted under this Agreement by UA's employees, agents, consultants, subcontractors or other representatives, either solely or jointly with employees, agents, consultants or other, ,representatives of the Company, including all patent and other intellectual property rights therein will be owned exclusively by the Company, and UA hereby assigns to Company all of UA's right, title and interest in and to the Intellectual Property. Intellectual Property that is protectable by copyright shall be works made for hire pursuant to United States Copyright Act (17 U.S.C., Section 101) and shall belong to the Company. UA represents and certifies to Company that each employee, agent, consultant and subcontractor of UA is obligated to assign all of his/her/its right, title and interest in and to Intellectual Property to UA.

"**Intellectual Property**" shall mean all copyrights, trade secrets and confidential business information and any other proprietary rights, including without limitation ideas, data, operating and training manuals, program guidelines, protocols, scripts, specifications, and business and marketing plans and proposals and any and all results and products of the Services performed by UA, that are made, developed, perfected, designed, conceived or first reduced to practice by UA, either solely or jointly with others, in the course and as a result of performing the Services.

7.2 Grant of Sub-License. The Company hereby grants UA a royalty-free, limited, non-exclusive sublicense to use the License (the "**Sublicense**") to the extent reasonably necessary to perform the Services, or to provide training and teaching opportunities exclusively within and internal to the UA. The Sublicense shall terminate on the date of termination of this Agreement. The Sublicense may not be used for any purpose other than is reasonably necessary in order for UA to perform the Services, internal training and teaching. UA may not assign, transfer, or distribute the Sublicense in any way to any third-party without the prior written consent of the Company. UA shall have no right to reproduce, modify, adapt, reverse engineer, or create derivative works of the Sublicense. UA shall use commercially reasonable efforts to ensure that the Sublicense is not misappropriated, violated, infringed upon or breached, and in the event UA becomes aware of such impermissible conduct, it shall immediately notify the Company. In the event that UA makes an unauthorized use of or an unauthorized assignment, transfer, or distribution of the Sublicense, UA agrees that Company will suffer uncertain damages and Company shall be entitled to all available remedies at law and equity including direct, indirect, consequential, and incidental damages and injunctive relief from UA.

8. Warranties, Representations and Covenants

8.1 Warranties and Representations of the Company. The Company makes the following representations and warranties which are material representations and warranties upon which UA has relied as inducements to enter into this Agreement:

(a) This Agreement constitutes a valid and binding agreement by the Company, enforceable in accordance with its terms, and neither the execution and delivery of this Agreement nor the consummation of the transactions contemplated hereby nor compliance with any of the provisions hereof will:

(i) conflict with, or result in, a breach of the organizational documents of the Company;

(ii) to the best of the Company's knowledge, violate any applicable statute, law, rule or regulation or any other writ, injunction or decree of any court of governmental authority;

(iii) violate or conflict with or constitute a default under (or give rise to any right or termination, cancellation or acceleration under) the terms or conditions or provisions of any note, instrument, bond,

lease, mortgage, obligation, agreement, understanding, arrangement or restriction of any kind to which the Company is party or by which the Company or any of its respective assets or properties may be bound; or

(iv) to the best of the Company's knowledge, require the consent or approval by any governmental authority beyond those already obtained.

(b) The Company is duly organized, validly existing, and in good standing under the laws of its state of organization, and has all requisite power and authority to own and to carry on its business as now being conducted or as contemplated at and to perform its obligations hereunder.

(c) There are no material lawsuits, pending or threatened, against the Company, or to the best of its knowledge any threatened, anticipated or contemplated suits or governmental investigations against, by or relating to the facility, and there are no unsatisfied or outstanding judgments, orders, decrees or stipulations affecting the Company.

(d) The Company is in compliance with all applicable laws, rules and regulations of the jurisdictions in which it operates and the Federal government where the failure to comply therewith, singly or in the aggregate, could result in the material interference of the business of the Company as presently conducted or otherwise materially and adversely affect the Company.

(e) There are no contracts between the Company and labor unions which would materially affect this Agreement.

8.2 Certifications and Representations of UA. UA makes the following representations and certifications which are material representations and certifications upon which the Company has relied as inducements to enter into this Agreement:

(a) This Agreement constitutes a valid and binding agreement of UA, enforceable in accordance with its terms, and neither the execution and delivery of this Agreement nor the consummation of the transactions contemplated hereby nor compliance with any of the provisions hereof will:

(i) conflict with, or result in, a breach of the organizational documents of UA;

(ii) violate any applicable statute, law, rule or regulation or any other writ, injunction, or decree of any court of governmental authority;

(iii) violate or conflict with or constitute a default under (or give rise to any right or termination, cancellation or acceleration under) the terms or conditions or provisions of any note, instrument, bond, lease, mortgage, obligation, agreement, understanding, arrangement or restriction of any kind to which UA is party or by which UA or any of its respective assets or properties may be bound; or

(iv) require the consent or approval by any governmental authority beyond those already obtained.

(b) There are no material lawsuits, pending or threatened, against UA, or to the best of its knowledge any threatened, anticipated or contemplated suits or governmental investigations against, by or relating to the company, and there are no unsatisfied or outstanding judgments, orders, decrees or stipulations affecting UA.

(c) UA is in compliance with all applicable laws, rules and regulations of the states in which it operates and the Federal government where the failure to comply therewith, singly or in the aggregate, could result in the material interference of the work of UA as presently conducted or otherwise materially and adversely affect UA.

(d) There are no contracts between UA and labor unions which would materially affect this Agreement.

(e) UA shall perform all Services in compliance with all Legal Requirements and the standards, rules and regulations of all agencies having authority and jurisdiction relating to the work, and applicable state and Federal laws;

(f) UA shall in all areas for which it provides Services:

(i) remain current with policies, regulations, and licensure of state and Federal agencies, bodies and programs;

(ii) provide a representative of UA at or available to the Company during normal business hours; and

(iii) act consistent with the purposes, powers and philosophies of the Company.

9. Insurance, Indemnification and Limitation of Liability

9.1 Insurance of the Company. Company shall purchase and maintain in effect for the duration of this Agreement insurance policies for the coverage of products and professional liability, and errors and omissions insurance. Each such insurance policy shall provide reasonable coverage for all claims related the performance of Company's obligations under this Agreement, including losses for personal injury, property damage, employee liability, workers' compensation, and damage arising out of the use or misuse of Company's licensed software or other intellectual property.

9.2 Insurance of UA. UA agrees that all Services and operations of the MMC under this Agreement are covered by the UA insurance program as described in A.R.S. § 41-621 et seq. to cover all losses from all liability claims, property damage, and workers' compensation.

9.3 Indemnification by the Company. The Company agrees to indemnify, exonerate, defend and save UA harmless from, against, for and in respect of the full amount of any and all damages, losses, demands, obligations, liabilities, debts, claims, actions, causes of action, encumbrances, cost and expense of any kind and nature, including, without limitation, reasonable attorneys' fees suffered, sustained, incurred, or required to be paid at any time (including in the enforcement of this indemnity) arising out of, or resulting from, or because of any of the following;

(i) events, occurrences, claims or liabilities of any type arising out of the ownership or operation of the Company prior to the date hereof, and during the term of this Agreement, arising out of the Company's acts or omissions;

(ii) the inaccuracy of any representation made by the Company, as of the date when made;

(iii) any breach of any warranty or covenant made by the Company hereunder; and

(iv) any action taken, or omitted to be taken, by UA at the direction of the Company; except in the case of clauses (i), (ii) or (iii) above, to the extent that any such loss, damage, liability, obligation, claims, actions, cost or expense was caused or contributed to by the negligence of UA pursuant to this Agreement or misconduct of UA.

9.4 Liability of UA. UA shall be responsible only for liabilities arising from claims, damages, or suits to the extent arising from the negligence or misconduct of its officers, agents, and employees. Notwithstanding the

foregoing, UA expressly understands and agrees that the Company is not assuming and expressly disclaims any and all responsibility or liability for events or obligations occurring or arising prior to the Effective Date.

10. **Right of First Negotiation.** If, during the term of this Agreement, the Company desires to expand the nature or scope of the MTM services it is providing or to expand its client base (the "**Expanded Services**"), the Company shall, prior to the commencement of such activities, notify UA of such desire and grant UA a right of first negotiation with respect to such Expanded Services ("**ROFN**"). Along with such notice, the Company shall provide UA with a complete description of its proposed activities and services; including, without limitation, its estimate of the number and qualification of the pharmacists and other personnel necessary in order to perform such Expanded Services. Within thirty (30) days ("**Notice Period**") after receiving such notice and information, UA shall notify Company in writing whether or not it is interested in negotiating terms to provide Expanded Services. If UA desires to provide the Expanded Services, it must reasonably be able to provide the requisite additional facility space and personnel to accommodate the Expanded Services within a reasonable period of time. If UA notifies Company that it is interested in negotiating such terms, the parties shall negotiate in good faith for up to thirty (30) days ("**Negotiation Period**") after Company receives such notice from UA. If the parties fail to enter into an agreement within such a Negotiation Period, or if UA does not provide written notice of its interest within the Notice Period, then the Company shall be free to negotiate with any third-party contractor; provided that Company shall not enter into a final agreement with a third-party contractor unless Company first offers UA the opportunity to obtain the right to conduct Expanded Services on the same such terms and UA notifies Company within thirty (30) days that it is no longer interested. In the event that UA notifies Company that it is not interested in obtaining the right to conduct the Expanded Services, the Company shall use its best efforts to collaborate with UA in selecting a qualified third-party contractor.

11. **Service Agreement Modifications.** The Company agrees that it will not make any modifications or amendments to an existing Service Agreement with a Client to substantially change the type or level of Services required of UA without first having consulted with UA to confirm that UA has the capability of meeting the requirements of such modification or amendment.

12. **General Terms**

12.1 Prior Agreements. This Agreement embodies the entire understanding of the parties and supersedes any other agreement or understanding between the parties relating to the subject matter hereof.

12.2 Amendments. This Agreement may not be amended, modified, altered or changed in any respect whatsoever, except by further agreement, in writing, fully executed by each of the parties.

12.3 Effort. The preparation of this Agreement has been a joint effort of the parties, and the resulting document shall not be construed more severely against one of the parties than the other.

12.4 Assignment. Neither party may assign this Agreement without the prior written authorization of the other.

12.5 Notices. Notices to be given to any of the parties shall be in writing and either hand delivered or sent by registered or certified mail, return receipt requested, or by established one day courier services, and postage prepaid, as follows:

(a) In the event that notice is directed to the Company, it shall be sent to the following address or to such other address as it may in writing direct:

SinfoniaRx, Inc.
One East Toole
Tucson, AZ 85701
(520)
Attention: Fletcher McCusker

With a copy to:
Lawrence M. Hecker
405 W. Franklin
Tucson, AZ 85701
(520) 798-3803

(b) In the event that notice is directed to UA, it shall be sent to the following address or to such other address as it may in writing direct:

University of Arizona
Rose Martin, Pharm.D.
Director, Medication Management Center
220 W. 6th Street
USA room B113
PO Box 210300
Tucson, Arizona 85721

With a copy to:
Office of the General Counsel
University of Arizona
1401 E. University Blvd., Room 103
P.O. Box 210066
Tucson, AZ 85721-0066

12.6 Headings. The headings of this Agreement are for convenience and reference only and in no way define, describe, extend or limit the scope or intent of this Agreement or the intent of any provision hereof.

12.7 Governing Law. This Agreement shall be governed by, construed and enforced in accordance with the laws of the State of Arizona. Venue for any legal action of this Agreement or the obligations arising hereunder shall be in Arizona.

12.8 Attorneys' Fees. The prevailing party in any dispute between the parties to this agreement shall be entitled to recover from the other party all court awarded costs, court awarded attorneys' fees and court awarded expenses that shall be made or incurred in enforcing this Agreement.

12.9 Waiver. The failure by one party to enforce a provision of this Agreement shall not constitute a waiver of such party's right to enforce any future provision of this Agreement.

12.10 Severability. If any provision of this Agreement is held unenforceable, then such provision shall be modified to reflect the parties' intention. All remaining provisions of this Agreement shall remain in full force and effect.

12.11 Compliance. The parties agree to be bound by applicable state and federal rules governing equal employment opportunity, nondiscrimination and immigration.

12.12 Conflict of Interest. This Agreement is subject to cancellation under Arizona Revised Statutes section 38-511 regarding conflict of interest on the part of individuals negotiating contracts on behalf of the State of Arizona.

12.13 Arbitration. The parties agree that should a dispute arise between them concerning this Agreement and no party seeks affirmative relief other than money damages in the amount of [___]** Dollars ($[___]**) or less, exclusive of interest, costs and attorneys' fees, the parties shall submit the matter to arbitration pursuant to the Revised Uniform Arbitration Act, A.R.S §12-3001 et seq. (the "Act"), whose rules shall govern the interpretation, enforcement,

and proceedings pursuant to this section. Except as otherwise provided in the Act, the decision of the arbitrator(s) shall be final and binding upon the parties.

12.14 State Obligation. The parties recognize that the performance by the UA may be dependent upon the appropriation of funds by the Legislature of the State of Arizona. Should this Legislature fail to appropriate the necessary funds or if the UA's appropriation is reduced during the fiscal year, the UA may reduce the scope of the Agreement or cancel the Agreement without further duty or obligation. The UA agrees to notify the Company as soon as reasonably possible after the unavailability of said funds comes to the UA's attention.

[Signature Page Follows]

[Signature Page to Professional Services Agreement]

IN WITNESS WHEREOF. the parties have caused this Professional Services Agreement to be executed by their duly authorized representatives as of the Effective Date.

SINFONIARX, INC.

by:

its:

THE ARIZONA BOARD OF REGENTS ON BEHALF OF THE UNIVERSITY OF ARIZONA FOR ITS COLLEGE OF PHARMACY

by:

its:

Read and understood by:

by:
J. Lyle Bootman

Dean, College of Pharmacy

The University's Technology Transfer Arizona office has reviewed and hereby accepts the intellectual property provisions stated in Section 7 herein:

Name:

Title:

EXHIBIT A

LIST OF EXISTING CLIENTS AND SERVICE AGREEMENTS

[___]**

EXHIBIT B

DESCRIPTION OF SERVICES

A. Member Services and Client Related Services

UA shall:

1. Operate a Medication Therapy Management **("MTM")** program for the MMC compliant with *Prescription Drug Benefit Manual, Chapter* 7 *– Medication Therapy Management and Quality Improvement Program,* current applicable edition, and any applicable MTM program guidance released during the contract year as published by the Centers for Medicare and Medicaid Services **("CMS")** for all programs designated as Medicare Part D MTM programs by the Company.

2. Operate, to the Company's specifications and requirements, other programs outside of the Medicare Part D MTM programs, subject to UA's prior written consent.

3. Maintain an appropriate staffing ratio of qualified personnel to provide customer service, handle the toll-free phone line, conduct interactive medicine reviews, and perform the operational and administrative components of the MTM program at the MMC.

4. Provide Members with a toll-free number to contact the MMC (i) regarding questions about the MTM program, (ii) to change participation in or opt-out of the program, and (iii) to schedule person-to-person comprehensive medication review **("CMR")** for any follow-up questions or concerns.

5. Provide 24 hours a day, 7 days week coverage for Members to contact and include documentation of after-hours calls.

6. Collect and collate data from mailed-in and phoned-in Member communications to track dates and reasons for changes in participation in the program, including "opt-outs," as required for reporting to the Company.

7. Offer a CMR for all Members qualified for the respective programs, when appropriate.

8. CMRs will be interactive and conducted by registered pharmacists or qualified licensed pharmacy interns. The CMRs will cover topics appropriate to individual Member needs and may include:

    a. drug therapy for chronic conditions

    b. drug/drug, drug/food, drug/disease interactions

    c. drug duplications

    d. information on how to take medicines as prescribed

    e. help in managing side effects of medicines

    f. information on vaccines and other preventive care

    g. recognition of medicines that may be inappropriate

9. After CMR is completed, UA will document a written summary for the Member.

10. For Members who do not opt-out of the entire MTM program, UA will provide the appropriate targeted medication reviews ("TMRs") and follow up with each prescription claims data feed. All Members with identified targeted opportunities will be sorted into queues based on alert severity and in accordance with the following guidelines:

a. Members with identified targeted opportunities may be contacted by phone or by mail depending on the quality and severity of the alert.

b. Members not reached by phone may receive written materials including, but not limited to, a medication action plan ("MAP") and summary of interventions communicated to the Member's prescriber.

c. The Member's prescriber may be contacted with recommendations.

d. The parties acknowledge that any particular Member may not want UA to contact the prescriber and choose to discuss the issue directly with his/her prescriber. If the Member makes this request, UA will provide the Member with detailed information regarding the requested interchange. The intent is for the Member to present this information to his/her prescriber upon next visit in lieu of UA contacting the prescriber directly. The parties agree, however, that if the issue is life threatening, UA, in its best judgment, will call "911" or other emergency responders as appropriate to the circumstances in adherence with UA's Policies and Procedures on handling emergency situations.

11. Process prescriber communications via automated and manual fax system. For Provider communications that involve a specific change in therapy, the Provider is asked to notify UA of approved recommendations. UA will maintain a record of recommendations received by Providers that are made outside of the Company's application.

12. Maintain documentation within the Company's application of all attempts to contact Members, information obtained during telephone-based assessments, recommendations made to Members and prescribers, and all other information required for reporting to the Company.

13. Provide Company any specific Member level documentation requested for audit purposes.

14. Operate under specific requirements outlined by the Company including but not limited to:

a. Complete CMR verbal offers within sixty (60) days of qualification when appropriate.

b. Complete Satisfaction Surveys after a CMR when appropriate.

c. Document and maintain a feedback log to include Member and Provider feedback.

d. Document and maintain a success story log for each program when appropriate.

15. Invoice Company monthly based on fee schedule included in this Exhibit.

16. Definitions:

a. "**Member**" means: Individuals that have been identified by the Company and/or its clients for MTM services to be provided by UA.

b. "**Provider**" means: Medical professionals that have been identified by the Company and/or their clients for Members including but not limited to physicians, nurses, and physician assistants.

c. "**Program**" means: Specific and customized clinical services delivered by UA for the Company and its clients as defined in this Agreement. Reference in this Agreement to "Programs" shall mean and include all related clinical programs.

B. Quality Assurance and Regulatory Compliance

UA shall:

1. Collaborate with the Company to ensure the Members identified as qualified Members do in fact meet qualification criteria at least annually and at each initiation of any program.

2. Collaborate with the Company to ensure the business rules developed by the Company are operating as intended at least annually and at each initiation of any program.

3. When needed, collaborate with the Company to review the conversions table developed by the Company at least annually and at each initiation of any program including but not limited to:

    a. Clinical appropriateness

    b. Consistency

    c. Appropriate Provider and Member language

4. When needed, collaborate with the Company to review materials developed by the Company including but not limited to:

    a. Member letters – qualification letters, CMR letters, summary MAP letters, etc.

    b. Provider faxes

    c. Reports

5. When needed, collaborate with the Company in testing the any appropriate software developed by the Company when appropriate.

6. Maintain policies and procedures and provide reports to ensure that the quality and quantity of the Services provided meet the standards, as mutually agreed upon by both parties. Such policies and procedures shall be made available to the Company upon request.

7. Maintain policies and procedures to ensure compliance with Federal and State law, along with other applicable governmental agencies. Such policies and procedures shall be made available to the Company upon request.

8. Collaborate with the Company to revise policies and procedures to meet each other's standards and specifications.

C. Training and Professional Development Support

UA shall:

1. Assist with the clinical training needs of the Company.

2. For any new or potential sites in which the Company's proprietary software will be used for MTM purposes, the UA shall implement and maintain a training program, including but not limited to:

    a. Overview and description of Member services

    b. Appropriate compliance and regulatory training

    c. Software and systems training

    d. Clinical training

    e. Quality assurance training

        i. Member communication observations

        ii. System user error

        iii. Appropriate documentation

    f. MTM content and informational training

    g. Appropriate follow up training

D. Clinical Services/Development and Review

In collaboration with the Company, UA shall:

1. Develop and maintain a clinical based program to meet the expectations set forth by the Company and its clients.

2. Collaborate with the Company in the development, review, and the maintenance of all clinical aspects for MTM and related clinical programs serviced by the UA.

3. Review all clinical call scripts at least annually and at each program initiation.

4. Participate in the development and maintenance of the clinical business rules that are applied in the programs serviced by the UA.

5. Develop and maintain any documentation of new drug updates that may impact the clinical business rules for the Company.

6. Develop and maintain any documentation of the clinical rationale and level of evidence to support the clinical business rules.

7. Be provided the right of first option in the development of Member and Provider communication materials, including but not limited to follow up letters to Members from CMRs and Provider faxes.

8. Be provided the right of first option to prepare informational literature to Provider, clients or patient groups.

9. Provide technical assistance for any clinical support and guidance for the Company when appropriate.

10. Work with the Company to correct and resolve any material identified errors.

E. Computing Environment and Support

UA shall:

1. Provide, support, manage, and maintain the core services required to support the MTM Program located at UA. The core services include:

    a. DNS

    b. DHCP

    c. VLAN

    d. Firewalling

    e. System deployment

    f. Active Directory

    g. Networking

    h. Email

    i. Emergency response

    j. Lync for IM

2. Provide, support, manage, and maintain the computing hardware utilized by the MTM program. The support includes:

a. Helpdesk

    b. Remote connectivity

    c. Application deployment

    d. System updates

e. Application updates

f. Anti-Virus

g. System remediation

h. Centralized printing

i. Network scanning

j. Desktop faxing

k. Encrypted File Storage/Sharing

l. GPO system policy compliance

m. Encrypted desktop drives

n. Backup of MTM Group data on Encrypted File Storage

3. Consult with the Company as needed to identify, implement, and comply with new technological requirements, capacities, and needs.

4. Provide appropriate staffing levels for the support of the MTM program users and computing environment.

5. Ensure that the computing infrastructure is maintained and refreshed as appropriate to ensure continuity of service.

6. Ensure secure network connectivity with the Company to allow Company personnel to continue accessing existing hardware. When Company equipment is no longer on UA property, the secure connectivity will be revisited to ensure the MTM program users have access to Company resources.

7. Implement approved technologies and policies to ensure secure and reliable computing environment.

8. Provide a stable environment for the existing hardware owned by the Company until the Company can establish a permanent location for existing hardware.

    a. Ensure backup generator and UPS equipment is maintained and tested at regular intervals.

    b. Provide access during business hours and, in emergencies off hours to authorized Company staff and equipment vendors to make enhancements or repair/maintain equipment as necessary.

EXHIBIT C

COMPENSATION OF UA; INVOICES

A. Compensation. As its total compensation for providing the Services, the Company shall pay UA on a monthly basis the sum of the following direct expense amounts, equal to actual costs incurred:

1. Personnel Services. An amount equal to the **"Allocable Portion"** of the salaries, wages, benefits and other expenses of pharmacists, pharmacy interns, other healthcare personnel, and other staff **("Service Provider")** involved in the performance of the Services. The Allocable Portion shall mean the percentage of the Service Provider's compensable work day dedicated to or in support of the performance of Services. For example: if a pharmacist employed by UA devotes 50% of his or her work day in the performance of the Services, UA shall be paid 50% of the salary, benefits, malpractice insurance, licensure and other professional fees of such pharmacist. In addition, employee/intern costs shall include amounts for after-hours coverage.

2. Operations. To the extent not included in #1 above, (a) the professional licensure fees of the Service Providers for state and federal licenses required for the performance of the Services, (b) initial and recurrent training costs and expenses for the Service Providers, (c) a monthly operational cost of $[___]**, (d) professional organizational dues payable to the Arizona Pharmacy Association, (e) background checks on prospective Service Providers, (f) the cost of software, hardware, telephone, UA internet fee, office supplies and equipment required, and other office expenses (i.e. shredding, software license fees) incurred by UA in the performance of the Services, (g) the cost of federal or state licenses required by UA in order to perform the Services and (h) the cost of remodeling and physical expansion including but not limited to construction costs, furniture costs, labor costs (provided prior approval of the Company is obtained).

3. Travel. Subject to prior written approval by the Company: (a) a reasonable amount for travel related expenses relating to conferences and seminars and (b) travel related to client services.

4. Scholarly Support and Research Payments. Company shall pay to UA an amount equal to $[___]** monthly, ($[___]** for the full year) for year one as a Scholarly Support payment of which an applicable portion shall compensate graduate assistant personnel. Research payments for year two will be negotiated, and mutually agreed upon by Company and UA in writing. Future Scholarly Support and Research payments will be negotiated by Company and UA annually, and mutually agreed upon in writing.

B. Invoices. UA shall invoice the Company on a monthly basis for the compensation, items of reimbursement and other items listed in A. above. Each invoice shall state the month to which it relates and itemize each of the items listed in A. above. UA shall collaborate with the Company in providing specifications requested by the Company.

In addition, Company shall be obligated to pay UA amounts as follows:

C. A principal amount equal to $[___]** with interest, such amount representing an internal loan from the University of Arizona. Such principal amount with interest to be paid as follows:

	Principal	Interest	Total
6/15/2014	$[___]**	$[___]**	$[___]**
6/15/2015	[___]**	[___]**	[___]**
6/15/2016	[___]**	[___]**	[___]**

Total	$[ ]**	$[ ]**	$[ ]**

BUSINESS ASSOCIATE AGREEMENT

This Business Associate Agreement (this "**BAA"**) supplements and is made a part of the Professional Services Agreement entered into on December __ _, 2013, (the **"Services Agreement")** by and between SinfoniaRx, Inc., an Arizona corporation, (the "Business **Associate") and** its subcontractor, the Arizona Board of Regents, acting on behalf of the University of Arizona for its College of Pharmacy (the **"Subcontractor").** This BAA sets out the responsibilities and obligations for the services Subcontractor provides to Business Associate **("Services")** under the Health Insurance Portability and Accountability Act of 1996 as amended by the Health Information Technology for Economic and Clinical Health Act **("HITECH Act")** and regulations promulgated thereunder, as such law and regulations may be amended from time to time (collectively, **"HIPAA"**).

Background

A. Business Associate provides certain services to various third-party healthcare providers known as covered entities (collectively **"Covered Entities"** or singularly, **"Covered Entity"** as listed in Exhibit A of the Services Agreement) pursuant to separate service agreements between Business Associate and each Covered Entity (collectively, the "**Underlying Agreements"**).

B. Pursuant to the Underlying Agreements. Each Covered Entity will make available and/or disclose to Business Associate certain individually identifiable Protected Health Information **("PHI")** relating to patients of Covered Entity that is subject to protection under HIPAA, which Business Associate will use or disclose only in accordance with a separately required business associate agreement **("Additional BAA").**

C. Business Associate affirms it has executed an Additional BAA with each applicable Covered Entity.

D. Pursuant to the Services Agreement, Subcontractor shall provide services to Business Associate in order for Business Associate to perform its responsibilities and obligations to the Covered Entities under each Underlying Agreement and Additional BAA. Subcontractor is a "business associate" of Business Associate as defined in 45 CFR 160.103.

E. In addition, pursuant to the Services Agreement, Business Associate will make available and/or disclose to Subcontractor certain PHI that is subject to protection under HIPAA.

F. Business Associate and Subcontractor wish to comply in all respects with the requirements of HIPAA.

I. DEFINITIONS

Unless otherwise defined in this Agreement, capitalized terms shall have the same meanings as set forth in HIPAA under 45 CFR §§ 160 and 164 or HITECH and the

respective implementing regulations as in effect or as amended or supplemented from time to time.

2. PERMITTED USES AND DISCLOSURES BY SUBCONTRACTOR

(a) Permitted Uses. Subcontractor will use or disclose PHI received from Business Associate or Covered Entity only for those purposes necessary to perform Services, or as otherwise expressly permitted in this BAA, provided that such use or disclosure would not violate HIPAA except for the specific uses and disclosures set forth below.

(b) Proper Management and Administration. Except as otherwise expressly limited in this BAA or the Services Agreement, Subcontractor may use PHI for the proper management and administration of the Subcontractor or to carry out the legal responsibilities of the Subcontractor.

(c) Data Aggregation. Subcontractor may use PHI to perform data aggregation services as permitted by 45 CFR § 164.504(e)(2(i)(B).

(d) Use by or Disclosure to Subcontractor or Agent. Subcontractor agrees that if it provides PHI to a subcontractor or agent to perform Services for the Business Associate or Covered Entity, Subcontractor will first enter into a written agreement with such subcontractor or agent that contains the same terms, conditions, and restrictions on the use and disclosure of PHI as contained in this BAA in accordance with 45 CFR § 164.502(e)(1)(ii). If Subcontractor becomes aware of a pattern or practice of activity of a subcontractor or agent that would constitute a material breach or violation of the written agreement between Subcontractor and such subcontractor or agent, Subcontractor shall take reasonable steps to cure such breach or terminate such written agreement with such subcontractor or agent.

(e) Whistleblower. Subcontractor may disclose PHI as a whistleblower provided that Subcontractor or its workforce member acts in good faith and disclosure is to a health oversight agency, public health authority authorized by law to investigate or otherwise oversee the relevant conduct of Business Associate or a Covered Entity, appropriate health care accreditation organization, or attorney retained by Subcontractor or its workforce member and any such disclosure is in accordance with the standard and requirements of 45 CFR § 164.502(j)(1).

3. OBLIGATIONS AND ACTIVITIES OF SUBCONTRACTOR

(a) Safeguards. Subcontractor shall use appropriate safeguards, including without limitation, administrative, physical and technical safeguards, to prevent the use or disclosure of the PHI other than as provided for by this BAA and to reasonably and appropriately employ the same standards as required by law to, protect the confidentiality, integrity and availability of any electronic protected health information **("e-PHI")** that it may receive, maintain or transmit on behalf of the Business Associate or Covered Entity.

(b) Reporting. Subcontractor shall report to Business Associate and/or Covered Entity within fifteen (15) business days any use or disclosure of PHI not provided for by this BAA of which it becomes aware, including breaches of unsecured PHI as required by 45 CFR § 164.410, and any security incident of which it becomes aware.

(c) Mitigation. Subcontractor shall mitigate or cure, to the extent practicable, any harmful effect that is known to Subcontractor of a use or disclosure of PHI by Subcontractor in violation of the requirements of this BAA.

(d) Request for Access to PHI. Within fifteen (15) business days of a request by Business Associate or Covered Entity for access to PHI, Subcontractor shall make requested PHI available to Business Associate or Covered Entity as required under 45 CFR §164.524.

(e) Request for Access to PHI by Individual. If Subcontractor receives a request from an individual or an individual's designee for PHI, Subcontractor shall forward any such request to Business Associate and/or Covered Entity within twenty (20) business days and will coordinate any responsive communication to the request consistent with the direction of Business Associate and/or Covered Entity.

(f) Amending PHI. Subcontractor shall make any amendment(s) to PHI in a Designated Record Set (as defined in 45 CFR §164.501) as the Business Associate or the Covered Entity may direct or agree to pursuant to 45 CFR §I 64.526 based upon a written request made by a Covered Entity or an individual. If Subcontractor receives a request from an individual or a individual's designee to amend PHI in a Designated Record Set, Subcontractor will forward any such request to Business Associate and Covered Entity within twenty (20) business days and will coordinate any responsive communication to the requested amendment consistent with the direction of Covered Entity.

(g) Internal Practices, Books and Records. Subcontractor shall make its internal practices, books and records relating to the use or disclosure of PHI available to the Secretary of the Department of Health and Human Services (the "Secretary") in a time and manner designated by the Secretary for purposes of the Secretary determining compliance with HIPAA. Notwithstanding this provision, no attorney-client, accountant-client or other legal privilege will be deemed waived by Subcontractor or Business Associate as a result of this Section.

(h) Accounting of PHI Disclosure.

(i) Subcontractor shall document and keep a record of any disclosure of PHI and information related to such disclosures as would be required for Covered Entity to respond to a request by an individual for an accounting of disclosures of PHI in accordance 45 CFR § 164.528.

(ii) Subcontractor shall provide Business Associate, an applicable Covered Entity or an individual with information collected in accordance with subparagraph (i) of this Section to permit Business Associate and such Covered Entity to respond to a request by an individual for an accounting of disclosures of PHI in accordance with 45 CFR §164.528.

(iii) Subcontractor shall maintain this disclosure record for six (6) years from the termination of this BAA.

(i) Notifications Regarding Breaches of Unsecured PHI.

(i) If Subcontractor discovers a breach of unsecured PHI, Subcontractor shall notify Business Associate and/or Covered Entity in writing of such breach within twenty (20) business days in accordance with 45 CFR §§ 164.410 and 164.412.

(ii) Subcontractor shall establish reasonable systems to detect breaches of unsecured PHI and to provide appropriate training to its workforce members regarding Subcontractor's policies and procedures pertaining to use and disclosure of PHI and the detection and reporting of breaches of unsecured PHI.

4. OBLIGATIONS OF BUSINESS ASSOCIATE

(a) Each party represents and certifies that it has obtained, and will obtain, from individuals, consents, authorizations and other permissions necessary or required by all applicable laws applicable to Business Associate and Covered Entity for Subcontractor, Business Associate and Covered Entity to fulfill the obligations of the Services Agreement, the Underlying Agreements, and this BAA.

(b) Business Associate shall promptly notify Subcontractor in writing of any changes in, or revocation of, permission by an individual to use or disclose such individual's PHI, to the extent that such changes may reasonably affect Subcontractor's use or disclosure of such PHI.

(c) Business Associate shall promptly notify Subcontractor in writing of any restrictions on the use or disclosure of an individual's PHI that Business Associate or Covered Entity has agreed to, or is required to, abide by under 45 CFR § 164.522, to the extent that such restriction may reasonably affect Subcontractor's use or disclosure of PHI.

(d) Business Associate shall promptly notify Subcontractor of any limitations in the form or notice of privacy practices that Business Associate or Covered Entity provides to individuals pursuant to 45 CFR 164.520, to the extent that such limitation may affect Subcontractor's use or disclosure of PHI.

5. TERM AND TERMINATION

(a) Term. This BAA is effective as of the date of execution of the Services Agreement and shall terminate on the earlier date of either the (i) termination of the Services Agreement, or (ii) termination of this BAA in accordance with paragraph (b) of this Section.

(b) Termination for Cause. Without limiting the rights of the parties elsewhere set forth in this BAA or Services Agreement or available under applicable law, if either party breaches its material obligations under this BAA, then the breaching party shall promptly take reasonable steps to cure the violation as may be mutually agreed upon with the non-breaching party to maintain compliance with this BAA and the non-breaching party shall retain the right to report the violation to the Secretary of the Department of Health and Human Services. The breaching party shall have thirty (30) days to cure the violation, if curable. If the breaching party has not cured the breach within thirty (30) days to the reasonable satisfaction of the non-breaching party, or if the cure of a breach is not reasonably possible, the non-breaching party may immediately terminate this BAA.

(c) Effect of Termination. The term of this BAA is effective as of the date specified in 5(a). Upon termination, cancellation, expiration or other conclusion of the BAA, Subcontractor will limit its further Use or Disclosure of that PHI to those purposes that make return or destruction of that PHI infeasible. The parties agree that records retention requirements make return or destruction of the PHI infeasible. Subcontractor will continue to protect the security of any PHI that is maintained pursuant to the security provisions of this BAA for so long as the PHI is maintained.

6. MISCELLANEOUS

(a) Compliance with and Changes to Laws. The parties are required to comply with applicable federal and state laws. If HIPAA and/or HITECH are amended, or if new laws and/or regulations affecting the terms of this BAA are required, the parties shall engage in good faith negotiations to amend the terms of this BAA in accordance with the new amendments, laws and/or regulations. If the parties are unable to agree on such modifications following a reasonable period of good faith negotiations, then any party that would become noncompliant in the absence of such modifications shall have the right to terminate this BAA and the provisions of Section 5(c) shall then apply.

(b) Interpretation. Any ambiguity in this BAA shall be resolved to permit compliance by the parties with HIPAA and HITECH.

(c) No Third Party Beneficiaries. Nothing in this BAA will confer upon any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

(d) Governing Law. This BAA shall be governed by, and construed in accordance with, the laws of the State of Arizona.

(e) Notices. Any notice required or permitted under this BAA shall be given in writing to:

Business Associate Contact:
SinfoniaRx, Inc.
One East Toole
Tucson, AZ 85701
(520)
Attention: Fletcher McCusker

Subcontractor Contact:
University of Arizona
Rose Martin, Pharm.D.
Director, Medication Management Center
220 W. 6th Street
USA room B113
PO Box 210300
Tucson, Arizona 85721

(f) Entire Agreement. This BAA constitutes the entire agreement between the parties with regard to HIPAA and its Privacy Standards and Security Standards. There are no understandings or agreements relating to this BAA that are not fully expressed in this BAA and no change, waiver or discharge of obligations arising under this BAA will be valid unless in writing and executed by the party against whom such change, waiver or discharge is sought to be enforced.

(g) Incorporation into Services Agreement. This BAA shall be considered an attachment to the Services Agreement and incorporated as though fully set forth within the Services Agreement. This BAA will govern in the event of conflict or inconsistency with any provision of the Services Agreement.

(h) Counterparts. This BAA may be executed in two or more counterparts, each of which shall be deemed an original and when taken together shall constitute one agreement.

(i) Facsimile and Electronic Signatures. Facsimile and electronic signatures shall be deemed to be original signatures for all purposes of this BAA.

IN WITNESS WHEREOF, the parties have caused this Business Associate Agreement to be executed by their duly authorized representatives as of the Effective Date.

SINFONIARX, INC.

By: _____

Print Name: _____

Title: _____

Date: _____

UNIVERSITY OF ARIZONA BOARD OF REGENTS ON BEHALF OF THE UNIVERSITY OF ARIZONA FOR ITS COLLEGE OF PHARMACY

By: _____

Print Name: _____

Title: _____

Date: _____

SUBCONTRACTOR PRIVACY OFFICER

By: _____

Print Name: _____

Title: _____

Date: _____

EXHIBIT B

Hardware Assets to be Transferred

EXHIBIT C

Bill of Sale and Assignment and Assumption Agreement

For value received, the receipt of which is hereby acknowledged, and pursuant to that License Agreement and Asset Transfer Between the Arizona Board of Regents on Behalf of the University of Arizona and Sinfonia Healthcare Corp. dated 19 Nov., 2013 (the "Agreement") among ARIZONA and LICENSEE, ARIZONA sells, assigns, conveys and transfers to LICENSEE the Assets as defined in the Agreement, as described in Exhibit B hereto. The Assets are transferred in as-is condition with no warranty either express or implied.

Dated: 19 Nov., 2013

ARIZONA:

By /s/ David Allen

Title: VP, Tech Launch Arizona

STATE OF)
) ss
COUNTY)
OF PIMA

The foregoing was acknowledged this _19th_ day of __November__, 2013 before me, the undersigned Notary Public, by __David Allen_____ as ___VP_____ of _Tech Launch Arizona_ on behalf of such corporation, and not otherwise.

/s/ Hermelinda Velazquez
Notary Public

My Commission Expires:
October 5, 2014

Assets To Be Transferred

Line	Workstation Model	Serial Number	Manufacturer	Description	Location	Tag Number	Document Information	Net Book Value
1	M-A1312	[___]**	Apple	Desktop Computer	[___]**	N034676		[___]**
2	M-A1312	[___]**	Apple	Desktop Computer	[___]**		IBF 1683714	[___]**
3	M-A1312	[___]**	Apple	Desktop Computer	[___]**	N034678		[___]**
4	M-A1312	[___]**	Apple	Desktop Computer	[___]**		IBF 1683714	[___]**
5	M-A1312	[___]**	Apple	Desktop Computer	[___]**		IBF 1683714	[___]**
6	M-A1312	[___]**	Apple	Desktop Computer	[___]**	x	Cats Order Invoice# oi018219	[___]**
7	M-A1312	[___]**	Apple	Desktop Computer	[___]**		IBF 1683714	[___]**
8	M-A1312	[___]**	Apple	Desktop Computer	[___]**	N034677		[___]**
9	M-A1312	[___]**	Apple	Desktop Computer	[___]**		IBF 1683714	[___]**
10	M-A1312	[___]**	Apple	Desktop Computer	[___]**	N034679		[___]**
11	M-A1312	[___]**	Apple	Desktop Computer	[___]**	N034680		[___]**
12	M-A1312	[___]**	Apple	Desktop Computer	[___]**	N032190		[___]**
13	M-A1312	[___]**	Apple	Desktop Computer	[___]**	x	Cats Order Invoice# oi018219	[___]**
14	A1370	[___]**	Apple	MACbook Air	[___]**	N032150		[___]**
15	M-8200 Elite CMT PC E	[___]**	HP Compaq	Desktop Computer	[___]**	x	PO# 37556	[___]**
16	M-8200 Elite Convertible Minitower	[___]**	HP Compaq	Desktop Computer	[___]**	N032469		[___]**
17	M-8200 Elite Convertible Minitower	[___]**	HP Compaq	Desktop Computer	[___]**	x	PO#115458	[___]**
18	M-8200 Elite Convertible Minitower	[___]**	HP Compaq	Desktop Computer	[___]**	x	PO#115458	[___]**

19	M-8200 Elite Convertible Minitower	[___]**	HP Compaq	Desktop Computer	[___]**	x	PO#115458	[___]**
20	M-8200 Elite Convertible Minitower	[___]**	HP Compaq	Desktop Computer	[___]**	x	PO#115458	[___]**
21	M-8200 Elite Convertible Minitower	[___]**	HP Compaq	Desktop Computer	[___]**	x	PO#115458	[___]**
22	M-8200 Elite CMT PC	[___]**	HP Compaq	Desktop Computer	[___]**	x	PO#37556	[___]**
23	M-4520s	[ ]**	HP	PC Laptop	[ ]**	x	FRS R726925	[ ]**
24	M-4520s	[ ]**	HP	PC Laptop	[ ]**	x	FRS R726925	[ ]**
25	M-4520s	[ ]**	HO	PC Laptop	[ ]**	x	FRS R726925	[ ]**
26	E-952OT	[ ]**	Gateway	Server	[ ]**	A319124		[ ]**
27	M-MacPro 5.1	[___]**	Apple	Server	[___]**		1670143 Bookstore	[___]**
28	CUSTOM	[ ]**	IBM	Zenterprise	[ ]**	A324132		[ ]**
								[___]**

First Amendment To
License Agreement And Asset Transfer Between
The Arizona Board Of Regents On Behalf Of The University Of Arizona
And
Sinfonia Healthcare Corp.
Arizona File UA09-108

This First Amendment to License Agreement and Asset Transfer (the "First Amendment") is made effective on the date of the last authorized signature below ("Amendment Effective Date") and is between The Arizona Board of Regents on behalf of The University of Arizona, an Arizona body corporate with its principal campus in Tucson, Arizona 85721 ("ARIZONA"), and Sinfonia Healthcare Corporation, a Delaware corporation with its principal place of business at One East Toole, Tucson, AZ 85701 ("LICENSEE"). Capitalized terms used but not defined in this First Amendment will have the meanings assigned to such terms in the Agreement.

WHEREAS, ARIZONA and LICENSEE are parties to a License Agreement and Asset Transfer (the "Agreement") executed November 19, 2013 pursuant to which, among other things, ARIZONA agreed to license to LICENSEE certain intellectual property described in the Agreement; and

WHEREAS, ARIZONA and LICENSEE desire to amend the Agreement as provided herein.

Now and therefore, ARIZONA and LICENSEE hereby agree as follows:

1. Net Sales. Article I, Section 1.8 is amended to read as follows:

1.8 "NET SALES" shall mean the amount billed or invoiced (and if any amount is not billed or invoiced, the amounts received) for licenses, sales, rental or lease to END USERS, however characterized, by LICENSEE and for uses of the PROGRAM and DERIVATIVE WORKS by LICENSEE, including any service, including but not limited to LICENSED SERVICE, provided by LICENSEE related to the use of the PROGRAM or directly related to the market purpose of the PROGRAM, less the following deductions:

a) cash discounts actually granted to customers, but only in amounts customary in the trade;

b) sales, tariff duties and/or use taxes separately stated in such bills or invoices with reference to particular sales and actually paid by LICENSEE to a governmental unit;

c) actual freight expenses between LICENSEE and customers, to the extent such expenses are not charged to or reimbursed by customers;

d) amounts actually refunded or credited on returns;

e) the amount paid by LICENSEE to The Arizona Board of Regents on behalf of The University of Arizona, for the period in question pursuant to the Professional Services Agreement referenced in Section 7 and attached as Exhibit A (the "PSA"); and

f) amounts paid by LICENSEE to third parties not affiliated with LICENSEE for the period in question providing services to LICENSEE pursuant to agreements substantially similar to the PSA; provided, in each case, that the terms of the PSA have been satisfied.

No deductions shall be made for the cost of collections or for commissions, whether paid to independent sales agencies or regular employees of LICENSEE. Where LICENSEE receives any consideration other

than cash for such transactions, the fair market cash value of such consideration, to be agreed upon by the parties hereto, shall be included in NET SALES.

2. Continuing Effect of Agreement. All other terms and conditions of the Agreement shall remain unchanged and in effect.

IN WITNESS WHEREOF, the parties hereto agree to execute this Amendment by the below signatures of their duly authorized officers or representatives.

ARIZONA BOARD OF REGENTS on behalf of THE UNIVERSITY OF ARIZONA	**SINFONIA HEALTHCARE CORP.**
By: /s/ Douglas M. Hockstad (Signature)	By: /s/ Michael Deitch (Signature)
Name: Douglas M Hockstad (Printed)	Name: /s/ Michael Deitch Michael Deitch
Title: Director, Tech Transfer Arizona	Title: Secretary/Treasurer; CFO
Date: 12/8/14	Date: 12/4/14

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Calvin H. Knowlton, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Tabula Rasa HealthCare, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2017

/s/ DR. CALVIN H. KNOWLTON
Dr. Calvin H. Knowlton
Chief Executive Officer
Principal Executive Officer

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Brian W. Adams, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Tabula Rasa HealthCare, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2017

/s/ BRIAN W. ADAMS
Brian W. Adams
Chief Financial Officer
Principal Financial and Accounting Officer

Exhibit 32.1

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

In connection with the Quarterly Report of Tabula Rasa HealthCare, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended September 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Calvin H. Knowlton, Chief Executive Officer of the Company, and I, Brian W. Adams, Chief Financial Officer of the Company, each hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 9, 2017

By: /s/ DR. CALVIN H. KNOWLTON
Name: **Dr. Calvin H. Knowlton**
Title: **Chief Executive Officer**
(Principal Executive Officer)

Date: November 9, 2017

By: /s/ BRIAN W. ADAMS
Name: **Brian W. Adams**
Title: **Chief Financial Officer**
(Principal Financial and Accounting Officer)

**This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Tabula Rasa HealthCare, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing*