UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 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: 001-36309

INOGEN, INC.

(Exact name of registrant as specified in its charter)

Delaware	**33-0989359**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
326 Bollay Drive Goleta, California	**93117**
(Address of principal executive offices)	**(Zip Code)**

(805) 562-0500
(Registrant's telephone number, including area code)

None
(Former name, former address and former fiscal year, if changed since last report)

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 (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

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 July 28, 2017, the registrant had 20,726,405 shares of common stock, par value $0.001, outstanding.

TABLE OF CONTENTS

Item 1. Financial Statements

Inogen, Inc.
Consolidated Balance Sheets
(amounts in thousands)

	June 30, 2017	December 31, 2016
	(unaudited)	
Assets		
Current assets		
Cash and cash equivalents	$ 114,711	$ 92,851
Marketable securities	29,498	21,033
Accounts receivable, net	34,803	30,828
Inventories, net	15,920	14,343
Deferred cost of revenue	385	398
Income tax receivable	1,500	433
Prepaid expenses and other current assets	2,030	1,659
Total current assets	198,847	161,545
Property and equipment		
Rental equipment, net	52,183	54,582
Manufacturing equipment and tooling	6,470	6,133
Computer equipment and software	5,138	4,705
Furniture and equipment	780	779
Leasehold improvements	921	816
Land and building	125	125
Construction in process	230	75
Total property and equipment	65,847	67,215
Less accumulated depreciation	(43,886)	(42,016)
Property and equipment, net	21,961	25,199
Goodwill	2,253	—
Intangible assets, net	1,684	241
Deferred tax asset - noncurrent	25,992	26,654
Other assets	493	410
Total assets	$ 251,230	$ 214,049

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Consolidated Balance Sheets (continued)
(amounts in thousands, except share and per share amounts)

	June 30, 2017	December 31, 2016
	(unaudited)	
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable and accrued expenses	$ 21,981	$ 12,795
Accrued payroll	4,603	6,123
Warranty reserve - current	1,962	1,688
Deferred revenue - current	3,585	2,239
Income tax payable	59	—
Total current liabilities	32,190	22,845
Long-term liabilities		
Warranty reserve - noncurrent	2,691	1,792
Deferred revenue - noncurrent	7,924	7,042
Deferred tax liability - noncurrent	400	—
Other noncurrent liabilities	248	282
Total liabilities	43,453	31,961
Commitments and contingencies (Note 8)		
Stockholders' equity		
Common stock, $0.001 par value per share; 200,000,000 authorized; 20,709,797 and 20,389,860 shares issued and outstanding as of June 30, 2017 and December 31, 2016, respectively	21	20
Additional paid-in capital	205,883	194,466
Retained earnings (accumulated deficit)	1,907	(12,363)
Accumulated other comprehensive loss	(34)	(35)
Total stockholders' equity	207,777	182,088
Total liabilities and stockholders' equity	$ 251,230	$ 214,049

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Consolidated Statements of Comprehensive Income
(unaudited)
(amounts in thousands, except share and per share amounts)

	Three months ended June 30,		Six months ended June 30,	
	2017	**2016**	**2017**	**2016**
Revenue				
Sales revenue	$ 58,038	$ 45,578	$ 104,004	$ 78,389
Rental revenue	6,083	8,989	12,617	19,167
Total revenue	64,121	54,567	116,621	97,556
Cost of revenue				
Cost of sales revenue	27,993	23,046	49,906	39,553
Cost of rental revenue, including depreciation of $2,522 and $2,908 for the three months ended and $5,211 and $5,855 for the six months ended, respectively	4,561	5,306	9,404	10,509
Total cost of revenue	32,554	28,352	59,310	50,062
Gross profit				
Gross profit-sales revenue	30,045	22,532	54,098	38,836
Gross profit-rental revenue	1,522	3,683	3,213	8,658
Total gross profit	31,567	26,215	57,311	47,494
Operating expense				
Research and development	1,260	1,379	2,569	2,547
Sales and marketing	11,945	9,576	22,474	18,541
General and administrative	9,865	7,241	18,200	15,110
Total operating expense	23,070	18,196	43,243	36,198
Income from operations	8,497	8,019	14,068	11,296
Other income (expense)				
Interest expense	—	(2)	—	(5)
Interest income	146	36	247	65
Other income (expense)	523	(11)	730	86
Total other income, net	669	23	977	146
Income before provision for income taxes	9,166	8,042	15,045	11,442
Provision for income taxes	828	550	775	1,429
Net income	8,338	7,492	14,270	10,013
Other comprehensive income (loss), net of tax				
Change in foreign currency translation adjustment	197	—	197	—
Change in net unrealized gains (losses) on foreign currency hedging	(300)	63	(246)	(35)
Less: reclassification adjustment for net (gains) losses included in net income	49	44	(8)	50
Total net change in unrealized gains (losses) on foreign currency hedging	(251)	107	(254)	15
Change in net unrealized gains (losses) on available-for-sale investments	(6)	9	58	20
Total other comprehensive income (loss), net of tax	(60)	116	1	35
Comprehensive income	$ 8,278	$ 7,608	$ 14,271	$ 10,048
Basic net income per share attributable to common stockholders (Note 5)	$ 0.40	$ 0.38	$ 0.69	$ 0.50
Diluted net income per share attributable to common stockholders (Note 5)	$ 0.38	$ 0.36	$ 0.66	$ 0.48
Weighted-average number of shares used in calculating net income per share attributable to common stockholders:				
Basic common shares	20,622,320	19,972,395	20,556,293	19,900,032
Diluted common shares	21,848,359	20,997,429	21,731,592	20,931,802

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Consolidated Statements of Stockholders' Equity
(amounts in thousands, except share amounts)

	Common stock		Additional paid-in capital	Retained earnings (accumulated deficit)	Accumulated other comprehensive income (loss)	Total stockholders' equity
	Shares	Amount				
Balance, December 31, 2015	19,782,403	$ 20	$ 179,143	$ (45,108)	$ (37)	$ 134,018
Cumulative effect of change in accounting principle	—	—	—	12,226	—	12,226
Stock-based compensation	—	—	3,451	—	—	3,451
Employee stock purchases	17,724	—	500	—	—	500
Stock options exercised	268,828	—	1,992	—	—	1,992
Net income	—	—	—	10,013	—	10,013
Other comprehensive income	—	—	—	—	35	35
Balance, June 30, 2016 (unaudited)	20,068,955	$ 20	$ 185,086	$ (22,869)	$ (2)	$ 162,235
Balance, December 31, 2016	20,389,860	20	194,466	(12,363)	(35)	182,088
Stock-based compensation	—	—	4,107	—	—	4,107
Employee stock purchases	11,805	—	581	—	—	581
Stock options exercised	308,132	1	6,729	—	—	6,730
Net income	—	—	—	14,270	—	14,270
Other comprehensive income	—	—	—	—	1	1
Balance, June 30, 2017 (unaudited)	20,709,797	$ 21	$ 205,883	$ 1,907	$ (34)	$ 207,777

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Consolidated Statements of Cash Flows
(unaudited)
(amounts in thousands)

	Six months ended June 30,	
	2017	**2016**
Cash flows from operating activities		
Net income	$ 14,270	$ 10,013
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	6,321	6,874
Loss on rental units and other fixed assets	604	567
Gain on sale of former rental assets	(50)	(203)
Provision for sales returns and doubtful accounts	6,702	5,053
Provision for rental revenue adjustments	2,903	5,470
Provision for inventory obsolescence and other inventory losses, net of recoveries	102	108
Stock-based compensation expense	4,107	3,451
Deferred tax assets	662	1,454
Changes in operating assets and liabilities:		
Accounts receivable	(12,369)	(18,436)
Inventories	(2,154)	(4,980)
Deferred cost of revenue	13	(106)
Income tax receivable	(1,062)	930
Prepaid expenses and other current assets	(157)	(1,493)
Accounts payable and accrued expenses	8,466	6,383
Accrued payroll	(1,551)	(743)
Warranty reserve	1,171	1,048
Deferred revenue	2,228	1,415
Income tax payable	(61)	(11)
Other noncurrent liabilities	(34)	3
Net cash provided by operating activities	30,111	16,797
Cash flows from investing activities		
Purchases of available-for-sale investments	(22,725)	(14,857)
Maturities of available-for-sale investments	14,318	18,054
Investment in property and equipment	(969)	(1,226)
Production and purchase of rental equipment	(1,834)	(2,957)
Proceeds from sale of former assets	91	298
Payment for acquisition, net of cash acquired	(4,442)	—
Net cash used in investing activities	(15,561)	(688)

(continued on next page)

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Consolidated Statements of Cash Flows (continued)
(unaudited)
(amounts in thousands)

	Six months ended June 30,	
	2017	**2016**
Cash flows from financing activities		
Proceeds from stock options exercised	6,730	1,992
Proceeds from employee stock purchases	581	500
Repayment of debt from investment in intangible assets	—	(156)
Net cash provided by financing activities	7,311	2,336
Effect of exchange rates on cash	(1)	(51)
Net increase in cash and cash equivalents	21,860	18,394
Cash and cash equivalents, beginning of period	92,851	66,106
Cash and cash equivalents, end of period	$ 114,711	$ 84,500
Supplemental disclosures of cash flow information		
Cash paid during the period for interest	$ —	$ 7
Cash paid (received) during the period for income taxes, net of refunds received	1,070	(927)
Supplemental disclosure of non-cash transactions		
Property and equipment in accounts payable and accrued liabilities	$ 153	$ —

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Condensed Notes to the Consolidated Financial Statements
(unaudited)
(amounts in thousands, except share and per share amounts)

1. Business overview

Inogen, Inc. (Company or Inogen) was incorporated in Delaware on November 27, 2001. The Company is a medical technology company that primarily develops, manufactures and markets innovative portable oxygen concentrators used to deliver supplemental long-term oxygen therapy to patients suffering from chronic respiratory conditions. Traditionally, these patients have relied on stationary oxygen concentrator systems for use in the home and oxygen tanks or cylinders for mobile use, which the Company calls the delivery model. The tanks and cylinders must be delivered regularly and have a finite amount of oxygen, which requires patients to plan activities outside of their homes around delivery schedules and a finite oxygen supply. Additionally, patients must attach long, cumbersome tubing to their stationary concentrators simply to enable mobility within their homes. The Company's proprietary Inogen One® systems concentrate the air around the patient to offer a single source of supplemental oxygen anytime, anywhere with a portable device weighing approximately 2.8, 4.8 or 7.0 pounds with a single battery. The Company's Inogen One G4®, Inogen One G3® and Inogen One G2® have up to 2.6, 4.7 and 5.0 hours of battery life, respectively, with a single battery and can be plugged into an outlet when at home, in a car, or in a public place with outlets available. The Company's Inogen One systems reduce the patient's reliance on stationary concentrators and scheduled deliveries of tanks with a finite supply of oxygen, thereby improving patient quality of life and fostering mobility.

Portable oxygen concentrators represented the fastest-growing segment of the Medicare oxygen therapy market between 2012 and 2015. The Company estimates based on 2015 Medicare data that patients using portable oxygen concentrators represent approximately 8% of the total addressable oxygen market in the United States, although the Medicare data does not account for private insurance and cash-pay sales into the market. Based on 2015 industry data, the Company believes it was the leading worldwide manufacturer of portable oxygen concentrators, as well as the largest provider of portable oxygen concentrators to Medicare patients, as measured by dollar volume. The Company believes it is the only manufacturer of portable oxygen concentrators that employs a direct-to-consumer strategy in the United States, meaning the Company markets its products to patients, processes their physician paperwork, provides clinical support as needed and bills Medicare or insurance on their behalf. To pursue a direct-to-consumer strategy, the Company's manufacturing competitors would need to meet national accreditation and state-by-state licensing requirements and secure Medicare billing privileges, including Medicare competitive bidding contracts, as well as compete with the home medical equipment providers who many of the Company's manufacturing competitors sell to across their entire homecare business.

Since adopting the Company's direct-to-consumer strategy in 2009 following its acquisition of Comfort Life Medical Supply, LLC, which had an active Medicare billing number but few other assets and limited business activities, the Company has directly sold or rented more than 289,000 of its Inogen oxygen concentrators as of June 30, 2017.

The Company incorporated Inogen Europe Holding B.V., a Dutch limited liability company, on April 13, 2017. The Company owns all outstanding stock of Inogen Europe Holding B.V., which became a wholly owned subsidiary of the Company.

On May 4, 2017, the Company, through its wholly owned subsidiary, Inogen Europe Holding B.V., acquired all issued and outstanding capital stock of MedSupport Systems B.V. (MedSupport) for approximately $5,934, comprised of $5,779 of cash paid at closing and estimated net working capital adjustments of approximately $155 to be paid in the third quarter of 2017 classified in accounts payable and accrued expenses. In aggregate, $1,337 was cash acquired, $1,529 was attributed to intangible assets, $2,154 was attributed to goodwill, and $914 was attributed to net assets assumed. MedSupport is engaged in the business of importing and distributing medical devices throughout Europe. The acquisition allows the Company to add a European customer support and repair site in the Netherlands and is currently operating as Inogen Europe B.V.. Goodwill associated with this acquisition is not deductible for tax purposes. Acquisition expenses of approximately $370 were expensed in 2017 and are classified within general and administrative expense. The Company's allocation of the purchase price remains incomplete and any measurement period adjustments that result from the finalization of the purchase price allocation will be recorded retrospectively to the acquisition date. Pro forma results of operations for this acquisition have not been presented because they are not material to the consolidated results of operations, either individually or in aggregate.

2. Basis of presentation and summary of significant accounting policies

The accompanying consolidated financial statements are unaudited. The balance sheet at December 31, 2016 has been derived from the audited financial statements of the Company. The accompanying consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America (U.S. GAAP) for interim financial information, and in management's opinion, includes all adjustments, consisting of only normal recurring adjustments, necessary for the fair statement of the Company's financial position, its results of operations, stockholders' equity and cash flows for the interim periods presented. The results of operations for the three and six months ended June 30, 2017 are not necessarily indicative of the results to be expected for the full fiscal year or any other period.

The accompanying consolidated financial statements should be read in conjunction with the financial statements and notes thereto contained in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on February 28, 2017. There have been no significant changes in the Company's accounting policies from those disclosed in its Annual Report on Form 10-K filed with the SEC on February 28, 2017.

Basis of consolidation

The consolidated financial statements include the accounts of Inogen, Inc. and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated.

Use of estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Management bases these estimates and assumptions upon historical experience, existing and known circumstances, authoritative accounting pronouncements and other factors that management believes to be reasonable. Significant areas requiring the use of management estimates relate to revenue recognition, inventory and rental asset valuations and write-downs, accounts receivable allowances for bad debts, returns and adjustments, stock compensation expense, depreciation and amortization, income tax provision and uncertain tax positions, fair value of financial instruments, and fair value of acquired intangible assets and goodwill. Actual results could differ from these estimates.

Business combinations

The results of operations of the businesses acquired by the Company are included as of the acquisition date. The purchase price of an acquisition is allocated to the underlying assets acquired and liabilities assumed based upon their estimated fair values at the date of acquisition. To the extent the purchase price exceeds the fair value of the net identifiable tangible and intangible assets acquired and liabilities assumed, such excess is allocated to goodwill. The Company may adjust the preliminary purchase price allocation, as necessary, for up to one year after the acquisition closing date if it obtains more information regarding asset valuations and liabilities assumed. Acquisition-related expenses are recognized separately from the business combination and are expensed as incurred.

Goodwill and other acquired intangibles

Goodwill is tested for impairment on an annual basis as of October 1. Interim testing of goodwill for impairment is also required whenever an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit or asset below its carrying amount. Intangible assets with definite lives are amortized over their estimated useful lives on a straight-line basis.

Foreign currency

The functional currency of the Company's international subsidiary is in the local currency. The financial statements of the subsidiary are translated to U.S. dollars using month-end exchange rates for assets and liabilities, and average rates of exchange for revenues, cost of revenue, and operating expense. Translation gains and losses are recorded in accumulated other comprehensive income (loss) as a component of stockholders' equity. Foreign exchange transaction gains and losses resulting from the conversion of the transaction currency to functional currency are reflected as a component of foreign currency exchange gains or losses in other income (expense) in the consolidated statements of comprehensive income.

Recently issued accounting pronouncements not yet adopted

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2014-09, *Revenue from Contracts with Customers*, which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU No. 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. ASU No. 2014-09 defines a five-step process to achieve this core principle and, in doing so, more judgment and estimates may be required within the revenue recognition process than are required under existing U.S. GAAP. In August 2015, the FASB decided to delay the effective date of ASU No. 2014-09 by one year. The FASB also agreed to allow entities to choose to adopt the standard as of the original effective date. As such, the updated standard will be effective for the Company in the first quarter of 2018. In March 2016, the FASB issued ASU No. 2016-08, *Revenue with Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*, which is an amendment to ASU No. 2014-09 that improved the operability and understandability of implementation guidance versus agent considerations by clarifying the determination of principal versus agent. The new standard also permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the modified retrospective method). To date, the Company has performed an initial assessment of the Company's revenue streams, substantially completed its summary of all outstanding contracts, and begun the process of applying the five-step model to those contracts and revenue streams. The Company anticipates adopting the standard using the modified retrospective method. The Company expects to adopt on January 1, 2018 and is currently developing its plan for adoption and the impact on its revenue recognition policies, procedures and control framework and the resulting impact on its consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-01, *Clarifying the Definition of a Business*. The new guidance revises the definition of a business and provides new guidance in evaluating when a set of transferred assets and activities is a business. The ASU is effective for fiscal years beginning after December 15, 2017, and interim periods within those years, with early adoption permitted. The Company is currently evaluating the effect of the new guidance but does not expect it to have a material impact on the Company's consolidated financial statement presentation or results.

In January 2017, the FASB issued ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment*. The new guidance eliminates step two of the goodwill impairment test. Under the new guidance, an entity should recognize an impairment charge for the amount by which a reporting unit's carrying value exceeds its fair value. The ASU is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. The Company is currently evaluating the effect of the new guidance but does not expect it to have a material impact on the Company's consolidated financial statement presentation or results.

Recently adopted accounting pronouncements

In July 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory*. The ASU requires entities to measure most inventory "at the lower of cost and net realizable value" thereby simplifying the current guidance under which an entity must measure inventory at the lower of cost or market. The Company adopted this guidance on January 1, 2017. The adoption of this ASU did not have a material effect on the Company's consolidated financial presentation or results.

In March 2016, the FASB issued ASU No. 2016-09, *Improvements to Employee Share-Based Payment Accounting.* The Company elected to early adopt ASU No. 2016-09 in the fourth quarter of 2016, which requires any adjustments to be recorded as of the beginning of fiscal 2016. As a result, the consolidated statements of comprehensive income and statements of cash flows for the three and six months ended June 30, 2016 had been adjusted to include the impact of ASU No. 2016-09 adoption. See "Note 2 –Summary of significant accounting policies" in the notes to the financial statements in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 for detailed adoption information.

Business segments

The Company operates and reports in only one operating and reportable segment – development, manufacturing, marketing, sales, and rental of respiratory products. Management reports financial information on an aggregate basis to the Company's chief operating decision maker.

3. Fair value of financial instruments

The Company's financial instruments consist of cash and cash equivalents, marketable securities, accounts receivable, accounts payable and accrued expenses. The carrying values of cash and cash equivalents, marketable securities, accounts receivable and accounts payable and accrued expenses approximate fair values based on the short-term nature of these financial instruments.

Imputed interest associated with the Company's non-interest bearing debt was insignificant and was appropriately recognized in the respective periods.

Fair value accounting

Accounting Standards Codification (ASC) 820 —*Fair Value Measurements and Disclosures*, creates a single definition of fair value, establishes a framework for measuring fair value in U.S. GAAP and expands disclosures about fair value measurements. ASC 820 emphasizes that fair value is a market-based measurement, not an entity-specific measurement, and states that a fair value measurement is to estimate the price at which an orderly transaction to sell an asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. Assets and liabilities adjusted to fair value in the balance sheet are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Level inputs, as defined by ASC 820, are as follows:

Level input	Input definition
Level 1	Inputs are unadjusted, quoted prices for identical assets or liabilities in active markets at the measurement date.
Level 2	Inputs, other than quoted prices included in Level 1 that are observable for the asset or liability through corroboration with market data at the measurement date.
Level 3	Unobservable inputs that reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date.

The Company obtained the fair value of its available-for-sale investments, which are not in active markets, from a third-party professional pricing service using quoted market prices for identical or comparable instruments, rather than direct observations of quoted prices in active markets. The Company's professional pricing service gathers observable inputs for all of its fixed income securities from a variety of industry data providers (e.g., large custodial institutions) and other third-party sources. Once the observable inputs are gathered, all data points are considered and the fair value is determined. The Company validates the quoted market prices provided by its primary pricing service by comparing their assessment of the fair values against the fair values provided by its investment managers. The Company's investment managers use similar techniques to its professional pricing service to derive pricing as described above. As all significant inputs were observable, derived from observable information in the marketplace or supported by observable levels at which transactions are executed in the marketplace, the Company has classified its available-for-sale investments within Level 2 of the fair value hierarchy.

(amounts in thousands, except share and per share amounts)

The following table summarizes fair value measurements by level for the assets measured at fair value on a recurring basis for cash, cash equivalents and marketable securities:

	As of June 30, 2017				
	Adjusted cost	Gross unrealized losses	Fair value	Cash and cash equivalents	Marketable securities
Cash	$ 58,032	$ —	$ 58,032	$ 58,032	$ —
Level 1:					
Money market accounts	52,239	—	52,239	52,239	—
Level 2:					
Certificates of deposit	15,912	(15)	15,897	3,438	12,459
Corporate bonds	13,049	(18)	13,031	—	13,031
Agency mortgage-backed securities	5,015	(5)	5,010	1,002	4,008
Total	$ 144,247	$ (38)	$ 144,209	$ 114,711	$ 29,498

	As of December 31, 2016				
	Adjusted cost	Gross unrealized losses	Fair value	Cash and cash equivalents	Marketable securities
Cash	$ 48,533	$ —	$ 48,533	$ 48,533	$ —
Level 1:					
Money market accounts	39,277	—	39,277	39,277	—
Level 2:					
Certificates of deposit	15,904	(8)	15,896	5,041	10,855
Corporate bonds	10,200	(22)	10,178	—	10,178
Agency mortgage-backed securities	—	—	—	—	—
Total	$ 113,914	$ (30)	$ 113,884	$ 92,851	$ 21,033

The following table summarizes the estimated fair value of the Company's investments in marketable securities, accounted for as available-for-sale securities and classified by the contractual maturity date of the securities:

	June 30, 2017
Due within one year	$ 29,498

Derivative instruments and hedging activities

The Company transacts business in foreign currencies and has international sales and expenses denominated in foreign currencies, subjecting the Company to foreign currency risk. The Company has entered into foreign currency forward contracts, generally with maturities of twelve months or less, to reduce the volatility of cash flows primarily related to forecasted revenue denominated in certain foreign currencies. These contracts allow the Company to sell Euros in exchange for U.S. dollars at specified contract rates. Forward contracts are used to hedge forecasted sales over specific months. Changes in the fair value of these forward contracts designed as cash flow hedges are recorded as a component of accumulated other comprehensive income (loss) within the consolidated statements of stockholders' equity and are recognized in the consolidated statements of comprehensive income during the period which approximates the time the corresponding sales occur. The Company may also enter into foreign exchange contracts that are not designated as hedging instruments for financial accounting purposes. These contracts are generally entered into to offset the gains and losses on certain asset and liability balances until the expected time of repayment. Accordingly, any gains or losses resulting from changes in the fair value of the non-designated contracts are reported in other income (expense), net in the consolidated statements of comprehensive income. The gains and losses on these contracts generally offset the gains and losses associated with the underlying foreign currency-denominated balances, which are also reported in other income (expense), net.

(amounts in thousands, except share and per share amounts)

The Company records the assets or liabilities associated with each derivative instrument and hedging activity at fair valu e based on Level 2 inputs in other current assets or other current liabilities, respectively, net in the balance sheet. The Company had a payable of $221 as of June 30, 2017 and a receivable of $15 as of December 31, 2016, respectively. The Company classifies the foreign currency derivative instruments within Level 2 in the fair value hierarchy as the valuation inputs are based on quoted prices and market observable data of similar instruments. The accounting for gains and losses resulting from changes in fair value depends on the use of the derivative and whether it is designated and qualifies for hedge accounting.

The Company documents the hedging relationship and its risk management objective and strategy for undertaking the hedge, the hedging instrument, the hedged transaction, the nature of the risk being hedged, how the hedging instrument's effectiveness in offsetting the hedged risk will be assessed prospectively and retrospectively, and a description of the method used to measure ineffectiveness. The Company assesses hedge effectiveness and ineffectiveness at a minimum quarterly but may assess it monthly. For derivative instruments that are designed and qualify as part of a cash flow hedging relationship, the effective portion of the gain or loss on the derivative is reported in other comprehensive income (loss) and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current period earnings.

The Company will discontinue hedge accounting prospectively when it determines that the derivative is no longer effective in offsetting cash flows attributable to the hedge risk. The cash flow hedge is de-designated because a forecasted transaction is not probable of occurring, or management determines to remove the designation of the cash flow hedge. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the Company continues to carry the derivative at its fair value on the balance sheet and recognizes any subsequent changes in the fair value in earnings. When it is probable that a forecasted transaction will not occur, the Company will discontinue hedge accounting and recognize immediately in earnings gains and losses that were accumulated in other comprehensive income (loss) related to the hedging relationship.

Accumulated other comprehensive income (loss)

The components of accumulated other comprehensive income (loss) were as follows:

	Foreign currency translation adjustments	Unrealized gains (losses) on available-for-sale investments	Unrealized gains (losses) on cash flow hedges	Accumulated other comprehensive income (loss)
Balance as of December 31, 2016	$ —	$ (82)	$ 47	$ (35)
Other comprehensive gain (loss)	197	58	(254)	1
Balance as of June 30, 2017	$ 197	$ (24)	$ (207)	$ (34)

4. Balance sheet components

Cash, cash equivalents, and marketable securities

The Company considers all short-term, highly liquid investments with a maturity of three months or less to be cash equivalents. Cash equivalents are recorded at cost plus accrued interest, which is considered adjusted cost, and approximates fair value. Certificates of deposit and agency mortgage-backed securities are included in cash equivalents and marketable securities based on the maturity date of the security. Short-term investments are included in marketable securities in the current period presentation.

The Company considers investments with maturities greater than three months to be marketable securities. Investments are classified as available-for-sale and are reported at fair value with unrealized gains or losses, if any, reported, net of tax, in accumulated other comprehensive income (loss). All income generated and realized gains or losses from investments are recorded to other income (expense), net on the consolidated statements of comprehensive income.

The Company reviews its investments to identify and evaluate investments that have an indication of possible impairment. Factors considered in determining whether a loss is temporary include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the investee, and the Company's intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value. Credit losses and other-than-temporary impairments are declines in fair value that are not expected to recover and are charged to other income (expense), net in the

(amounts in thousands, except share and per share amounts)

consolidated statements of comprehensive income. During the three and six months ended June 30, 2017 and 2016, respectively, no losses were recognized for other-than-temporary impairments. Cash, cash equivalents and marketable securities consist of the following:

Cash and cash equivalents	**June 30, 2017**	**December 31, 2016**
Cash	$ 58,032	$ 48,533
Money market accounts	52,239	39,277
Certificates of deposit	3,438	5,041
Agency mortgage-backed securities	1,002	—
Total cash and cash equivalents	$ 114,711	$ 92,851
Marketable securities		
Certificates of deposit	$ 12,459	$ 10,855
Corporate bonds	13,031	10,178
Agency mortgage-backed securities	4,008	—
Total marketable securities	$ 29,498	$ 21,033

Accounts receivable and allowance for bad debts, returns, and adjustments

Accounts receivable are customer obligations due under normal sales and rental terms. The Company performs credit evaluations of the customers' financial condition and generally does not require collateral. The allowance for doubtful accounts is maintained at a level that, in management's opinion, is adequate to absorb potential losses related to accounts receivable and is based upon the Company's continuous evaluation of the collectability of outstanding balances. Management's evaluation takes into consideration such factors as past bad debt experience, economic conditions and information about specific receivables. The Company's evaluation also considers the age and composition of the outstanding amounts in determining their net realizable value.

The allowance for doubtful accounts is based on estimates, and ultimate losses may vary from current estimates. As adjustments to these estimates become necessary, they are reported in earnings in the periods in which they become known. This allowance is increased by bad debt provisions charged to bad debt expense, net of recoveries, in operating expense and is reduced by direct write-offs.

The Company generally does not allow returns from providers for reasons not covered under its standard warranty. Therefore, provision for sales returns applies primarily to direct-to-consumer sales. This reserve is calculated based on actual historical return rates under the Company's 30-day return program and is applied to the related sales revenue for the last month of the quarter reported.

The Company also records an allowance for rental revenue adjustments, which is recorded as a reduction of rental revenue and net rental accounts receivable balances. These adjustments result from contractual adjustments, including untimely claims filings, or billings not paid due to another provider performing same or similar functions for the patient in the same period, all of which prevent billed revenue from becoming realizable. The allowance is based on historical revenue adjustments as a percentage of rental revenue billed and unbilled during the related period.

When recording the allowance for doubtful accounts, the bad debt expense account (general and administrative expense account) is charged; when recording allowance for sales returns, the sales returns account (contra sales revenue account) is charged; and when recording the allowance for rental reserve adjustments, the rental revenue adjustments account (contra rental revenue account) is charged.

As of June 30, 2017 and December 31, 2016, included in accounts receivable on the consolidated balance sheets were earned but unbilled receivables of $5,565 and $7,484, respectively. These balances reflect gross unbilled rental receivables prior to any allowances for adjustments and write-offs. The Company consistently applies its allowance estimation methodology from period-to-period. The Company's best estimate is made on an accrual basis and adjusted in future periods as required. Any adjustments to the prior period estimates are included in the current period. As additional information becomes known, the Company adjusts its assumptions accordingly to change its estimate of the allowance.

(amounts in thousands, except share and per share amounts)

Gross accounts receivable balance concentrations by major category as of June 30, 2017 and December 31, 2016 were as follows:

Gross accounts receivable	June 30, 2017	December 31, 2016
Medicare	$ 7,361	$ 12,500
Medicaid/other government	464	617
Private insurance	1,970	3,475
Patient responsibility	3,755	3,227
Business-to-business & other receivables (1)	26,434	19,541
Total gross accounts receivable	$ 39,984	$ 39,360

Net accounts receivable (gross accounts receivable, net of allowances) balance concentrations by major category as of June 30, 2017 and December 31, 2016 were as follows:

Net accounts receivable	June 30, 2017	December 31, 2016
Medicare	$ 5,039	$ 7,208
Medicaid/other government	326	410
Private insurance	1,649	1,832
Patient responsibility	2,208	2,538
Business-to-business & other receivables (1)	25,581	18,840
Total net accounts receivable	$ 34,803	$ 30,828

(1) Business-to-business receivables include one single customer with an accounts receivable balance of $11,055 and $9,791, respectively, which represented more than 10% of the Company's net accounts receivable balance as of June 30, 2017 and December 31, 2016. This customer received extended payment terms through a direct financing plan offered. The Company also has a credit insurance policy in place, which allocates up to $12,000 in coverage as of June 30, 2017 and allocated up to $9,000 in coverage as of December 31, 2016 for this customer with a $1,000 deductible and 10% retention.

The following tables set forth the accounts receivable allowances as of June 30, 2017 and December 31, 2016:

Allowances - accounts receivable	June 30, 2017	December 31, 2016
Doubtful accounts	$ 1,552	$ 1,869
Rental revenue adjustments	2,912	6,078
Sales returns	717	585
Total allowances - accounts receivable	$ 5,181	$ 8,532

Concentration of credit risk

Financial instruments that potentially subject the Company to concentration of credit risk consist principally of cash, cash equivalents, marketable securities and accounts receivable. At times, cash account balances may be in excess of the amounts insured by the Federal Deposit Insurance Corporation (FDIC). However, management believes the risk of loss to be minimal. The Company performs periodic evaluations of the relative credit standing of these institutions and has not experienced any losses on its cash and cash equivalents to date. The Company has entered into hedging relationships with a single counterparty to offset a portion of the forecasted Euro based revenues. The credit risk has been reduced due to a net settlement arrangement whereby the Company is allowed to net settle transactions with a single net amount payable by one party to the other.

Concentration of customers and vendors

The Company primarily sells its products to traditional home medical equipment providers, distributors, and resellers in the United States and in foreign countries on a credit basis. The Company also sells its products direct to consumers on a primarily prepayment basis. One single customer represented more than 10% of the Company's total revenue for the six months ended June 30, 2017, and no single customer represented more than 10% of the Company's total revenue for the six months ended June 30, 2016. One single customer with

(amounts in thousands, except share and per share amounts)

an accounts receivable balance of $11,055, represented more than 10% of the Company's net accounts receivable balance as of June 30, 2017, and one single customer with an accounts receivable balance of $9,791, represented more than 10% of the Company's net accounts receivable balance as of December 31, 2016.

The Company also rents products directly to consumers for insurance reimbursement, which resulted in a customer concentration relating to Medicare's service reimbursement programs. Medicare's service reimbursement programs accounted for 74.7% and 72.2% of rental revenue for the three months ended June 30, 2017 and June 30, 2016, respectively, and based on total revenue was 7.1% and 11.9% for the three months ended June 30, 2017 and June 30, 2016, respectively. Medicare's service reimbursement programs accounted for 74.0% and 71.8% of rental revenue for the six months ended June 30, 2017 and June 30, 2016, respectively, and based on total revenue was 8.0% and 14.1% for the six months ended June 30, 2017 and June 30, 2016, respectively. Net accounts receivable balances relating to Medicare's service reimbursement programs (including held and unbilled, net of allowances) amounted to $5,039 or 14.5% of total net accounts receivable as of June 30, 2017 as compared to $7,208, or 23.4% of total net accounts receivable as of December 31, 2016.

The Company currently purchases raw materials from a limited number of vendors, which resulted in a concentration of three major vendors. The three major vendors supply the Company with raw materials used to manufacture the Company's products. For the six months ended June 30, 2017, the Company's three major vendors accounted for 18.6%, 14.6%, and 9.8%, respectively, of total raw material purchases. For the six months ended June 30, 2016, the Company's three major vendors accounted for 21.9%, 13.6% and 7.7%, respectively, of total raw material purchases.

A portion of revenue is earned from sales outside the United States. Approximately 75.4% and 69.1% of the non-U.S. revenue for the three months ended June 30, 2017 and June 30, 2016, respectively, were invoiced in Euros. Approximately 73.9% and 69.2% of the non-U.S. revenue for the six months ended June 30, 2017 and June 30, 2016, respectively, were invoiced in Euros. A breakdown of the Company's revenue from U.S. and non-U.S. sources for the three months and six months ended June 30, 2017 and June 30, 2016 is as follows:

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
U.S. revenue	$ 49,202	$ 41,469	$ 90,279	$ 74,493
Non-U.S. revenue	14,919	13,098	26,342	23,063
Total revenue	$ 64,121	$ 54,567	$ 116,621	$ 97,556

Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using a standard cost method, including material, labor and manufacturing overhead, whereby the standard costs are updated at least quarterly to reflect approximate actual costs using the first-in, first-out (FIFO) method. The Company records adjustments at least quarterly to inventory for potentially excess, obsolete, slow-moving or impaired items. The Company recorded noncurrent inventories related to inventories that are expected to be realized or consumed after one year of $397 and $314 as of June 30, 2017 and December 31, 2016, respectively. Noncurrent inventories are primarily related to raw materials purchased to support long-term expected repairs in bulk-purchases to reduce costs and are classified in other assets. Inventories that are considered current consist of the following:

	June 30, 2017	December 31, 2016
Raw materials and work-in-progress	$ 13,090	$ 12,382
Finished goods	3,061	2,152
Less: reserves	(231)	(191)
Inventories	$ 15,920	$ 14,343

(amounts in thousands, except share and per share amounts)

Property and equipment

Property and equipment are stated at cost. Depreciation and amortization are calculated using the straight-line method over the assets' estimated useful lives as follows:

Rental equipment	1.5-5 years
Manufacturing equipment and tooling	2-5 years
Computer equipment and software	2-3 years
Furniture and equipment	3-5 years
Leasehold improvements	Lesser of estimated useful life or remaining lease term

Expenditures for additions, improvements and replacements are capitalized and depreciated or amortized to a salvage value of $0. Repair and maintenance costs on rental equipment are included in cost of rental revenue on the consolidated statements of comprehensive income. Repair and maintenance expense, which includes labor, parts and freight, for rental equipment was $694 and $746 for the three months ended June 30, 2017 and June 30, 2016, respectively, and $1,345 and $1,433 for the six months ended June 30, 2017 and June 30, 2016, respectively.

Included within property and equipment is construction in process, primarily related to the design and engineering of tooling, jigs and other machinery. In addition, this item also includes computer software or development costs that have been purchased, but have not completed the final configuration process for implementation into the Company's systems. These items have not been placed in service; therefore, no depreciation or amortization was recognized for these items in the respective periods.

Depreciation and amortization expense related to property and equipment and rental equipment are summarized below for the three and six months ended June 30, 2017 and June 30, 2016, respectively.

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Rental equipment	$ 2,522	$ 2,908	$ 5,211	$ 5,855
Other property and equipment	470	496	958	974
Total depreciation and amortization	$ 2,992	$ 3,404	$ 6,169	$ 6,829

Property and equipment and rental equipment with associated accumulated depreciation are summarized below for June 30, 2017 and December 31, 2016, respectively.

Property and equipment	June 30, 2017	December 31, 2016
Rental equipment, net of allowances of $690 and $725, respectively	$ 52,183	$ 54,582
Other property and equipment	13,664	12,633
Property and equipment	65,847	67,215
Accumulated depreciation		
Rental equipment	34,890	33,937
Other property and equipment	8,996	8,079
Accumulated depreciation	43,886	42,016
Net property and equipment		
Rental equipment, net of allowances of $690 and $725, respectively	17,293	20,645
Other property and equipment	4,668	4,554
Property and equipment, net	$ 21,961	$ 25,199

(amounts in thousands, except share and per share amounts)

Long-lived assets

The Company accounts for the impairment and disposition of long-lived assets in accordance with ASC 360-*Property, Plant, and Equipment*. In accordance with ASC 360, long-lived assets to be held are reviewed for events or changes in circumstances that indicate that their carrying value may not be recoverable. The Company periodically reviews the carrying value of long-lived assets to determine whether or not impairment to such value has occurred. No impairments were recorded during the three months or six months ended June 30, 2017 and June 30, 2016.

Goodwill

The changes in the carrying amount of goodwill for the six months ended June 30, 2017 were as follows:

Balance as of December 31, 2016	$ —
Acquisition	2,154
Foreign currency translation	99
Balance as of June 30, 2017	$ 2,253

Intangible assets

There were no impairments recorded related to the Company's intangible assets during the three months or six months ended June 30, 2017 and June 30, 2016. Amortization expense for intangible assets for the three months ended June 30, 2017 and June 30, 2016 was $125 and $22, respectively, and for the six months ended June 30, 2017 and June 30, 2016 was $152 and $45, respectively.

The following tables represent the net carrying values of intangible assets as of the respective dates:

June 30, 2017	**Average estimated useful lives (in years)**	**Gross carrying amount**	**Accumulated amortization**	**Net amount**
Licenses	10	$ 185	$ 128	$ 57
Patents and websites	5	873	824	49
Customer relationships	4	1,370	88	1,282
Non-compete agreement	3	228	14	214
Commercials	2-3	287	205	82
Total		$ 2,943	$ 1,259	$ 1,684

December 31, 2016	**Average estimated useful lives (in years)**	**Gross carrying amount**	**Accumulated amortization**	**Net amount**
Licenses	10	$ 185	$ 118	$ 67
Patents and websites	5	873	810	63
Commercials	2-3	287	176	111
Total		$ 1,345	$ 1,104	$ 241

Annual estimated amortization expense for intangibles for each of the succeeding fiscal years is summarized as follows:

	June 30, 2017
Remaining 6 months of 2017	$ 225
2018	505
2019	452
2020	377
2021	121
Thereafter	4
	$ 1,684

(amounts in thousands, except share and per share amounts)

Accounts payable and accrued expenses

Accounts payable and accrued expenses as of June 30, 2017 and December 31, 2016 consisted of the following:

	June 30, 2017	December 31, 2016
Accounts payable	$ 11,990	$ 5,738
Accrued inventory (in-transit and unvouchered receipts) and trade payables	6,397	4,290
Accrued purchasing card liability	2,081	1,760
Accrued franchise, sales and use taxes	404	281
Other accrued expenses	1,109	726
Accounts payable and accrued expenses	$ 21,981	$ 12,795

5. Earnings per share

Earnings per share (EPS) is computed in accordance with ASC 260—*Earnings per Share*, and is calculated using the weighted-average number of common shares outstanding during each period. Diluted EPS assumes the conversion, exercise or issuance of all potential common stock equivalents (which can include dilution of outstanding stock options and restricted stock units) unless the effect is to reduce a loss or increase the income per share. For purposes of this calculation, common stock subject to repurchase by the Company, options are considered to be common stock equivalents and are only included in the calculation of diluted earnings per share when their effect is dilutive.

Basic earnings per share is calculated using the Company's weighted-average outstanding common shares. Diluted earnings per share is calculated using the Company's weighted-average outstanding common shares including the dilutive effect of stock awards as determined under the treasury stock method.

The computation of EPS is as follows:

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Numerator—basic and diluted:				
Net income	$ 8,338	$ 7,492	$ 14,270	$ 10,013
Denominator:				
Weighted-average common shares - basic common stock	20,622,320	19,972,395	20,556,293	19,900,032
Weighted-average common shares - diluted common stock	21,848,359	20,997,429	21,731,592	20,931,802
Net income per share - basic common stock	$ 0.40	$ 0.38	$ 0.69	$ 0.50
Net income per share - diluted common stock	$ 0.38	$ 0.36	$ 0.66	$ 0.48
Denominator calculation from basic to diluted:				
Weighted-average common shares - basic common stock	20,622,320	19,972,395	20,556,293	19,900,032
Stock options and other dilutive awards	1,226,039	1,025,034	1,175,299	1,031,770
Weighted-average common shares - diluted common stock	21,848,359	20,997,429	21,731,592	20,931,802
Shares excluded from diluted weighted-average shares:				
Stock options	64,498	1,322,551	69,498	1,381,834
Restricted stock units	—	—	5,700	—
Shares excluded from diluted weighted-average shares	64,498	1,322,551	75,198	1,381,834

The computations of diluted net income attributable to common stockholders excluded common stock options and restricted stock units which were anti-dilutive for the three months and six months ended June 30, 2017 and June 30, 2016, respectively.

6. Income taxes

The Company accounts for income taxes in accordance with ASC 740—*Income Taxes*. Under ASC 740, income taxes are recognized for the amount of taxes payable or refundable for the current period and deferred tax liabilities and assets are recognized for the future tax consequences of transactions that have been recognized in the Company's consolidated financial statements or tax returns. A valuation allowance is provided when it is more likely than not that some portion, or all, of the deferred tax asset will not be realized.

The Company accounts for uncertainties in income tax in accordance with ASC 740-10—*Accounting for Uncertainty in Income Taxes*. ASC 740-10 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This accounting standard also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

The Company recognizes interest and penalties on taxes, if any, within its income tax provision on its consolidated statements of comprehensive income. No significant interest or penalties were recognized during the periods presented.

The Company operates in multiple states domestically and as a result of the acquisition of MedSupport, the Company now has operations in the Netherlands. The statute of limitations has expired for all tax years prior to 2012 for federal jurisdictions and the Netherlands, and 2011 to 2012 for various state tax jurisdictions. However, the net operating loss generated on the Company's federal and state tax returns in prior years may be subject to adjustments by the federal and state tax authorities.

The Company determined the income tax provision for interim periods using an estimate of the Company's annual effective tax rate, adjusted for discrete items arising in that quarter. In each quarter, the Company updates its estimated annual effective tax rate, and if the estimated annual effective tax rate changes, a cumulative adjustment is recorded in that quarter. The Company's quarterly income tax provision and quarterly estimate of the annual effective tax rate are subject to volatility due to several factors, including our ability to accurately predict the proportion of our income (loss) before provision for income taxes in multiple jurisdictions, the tax effects of our stock-based compensation, and the effects of its acquisition and the integration of that acquisition.

7. Stockholders' equity

The Company has a 2012 Equity Incentive Plan (2012 Plan) under which the Company granted options to purchase shares of its common stock. As of June 30, 2017, options to purchase 352,744 shares of common stock remained outstanding under the 2012 Plan. The 2012 Plan was terminated in connection with the Company's initial public offering in February 2014, and accordingly, no new options are available for issuance under this plan. The 2012 Plan continues to govern outstanding awards granted thereunder.

The Company has a 2002 Stock Incentive Plan (2002 Plan) as amended, under which the Company granted options to purchase shares of its common stock. As of June 30, 2017, options to purchase 96,472 shares of common stock remained outstanding under the 2002 Plan. The 2002 Plan was terminated in March 2012 in connection with the adoption of the 2012 Plan, and, accordingly, no new options are available for issuance under this plan. The 2002 Plan continues to govern outstanding awards granted thereunder.

The Company's board of directors adopted and its stockholders approved a 2014 Equity Incentive Plan (2014 Plan) effective immediately prior to the effectiveness of its initial public offering. The 2014 Plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to the Company's employees and any parent and subsidiary corporation's employees, and for the grant of nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to its employees, directors and consultants and its parent and subsidiary corporations' employees and consultants.

As of June 30, 2017, awards to purchase 1,605,920 shares of the Company's common stock were outstanding, and 1,242,013 shares of common stock remained available for issuance under the 2014 Plan. The shares available for issuance under the 2014 Plan will be increased by any shares returned to the 2002 Plan, 2012 Plan and the 2014 Plan as a result of expiration or termination of awards (provided that the maximum number of shares that may be added to the 2014 Plan pursuant to such previously granted awards under the 2002 Plan and 2012 Plan is 2,328,569 shares). The number of shares available for issuance under the 2014 Plan also is increased annually on the first day of each fiscal year by an amount equal to the least of:

- 895,346 shares;

(amounts in thousands, except share and per share amounts)

- 4% of the outstanding shares of common stock as of the last day of the Company's immediately preceding fiscal year; or
- such other amount as the Company's board of directors may determine.

For 2017, an additional 815,594 shares were added to the 2014 Plan share reserve pursuant to the provision described above.

Stock options

Options typically expire between seven and ten years from the date of grant and vest over one to four-year terms. Options have been granted to employees, directors and consultants of the Company, as determined by the board of directors, at the deemed fair market value of the shares underlying the options at the date of grant.

The activity for stock options under the Company's stock plans is as follows:

	Options	Price per share	Weighted-average exercise price	Remaining weighted-average contractual terms (in years)	Per share average intrinsic value
Outstanding as of December 31, 2016	2,355,527	$0.60-$58.95	$ 28.22	5.42	$ 38.95
Granted	64,498	83.30	83.30		
Exercised	(308,132)	0.60-56.72	21.68		
Forfeited	(62,424)	24.52-58.95	43.75		
Expired	(33)	8.70	8.70		
Outstanding as of June 30, 2017	2,049,436	0.60-83.30	30.47	5.07	64.95
Vested and exercisable as of June 30, 2017	1,106,535	0.60-83.30	21.62	4.83	73.80
Vested and expected to vest as of June 30, 2017	1,984,249	$0.60-$83.30	$ 30.18	5.06	$ 65.24

The unrecognized compensation expense related to non-vested stock-based compensation granted under the Plans as of June 30, 2017 and June 30, 2016 was $13,285 and $19,067, respectively.

Restricted stock units

The Company granted time-based awards of restricted stock units (RSU) at a weighted-average grant date fair value of $73.26.

RSU activity for the six months ended June 30, 2017, is summarized below:

	Units	Weighted-average grant date fair value per share
Unvested as of December 31, 2016	—	$ —
Granted	5,700	73.26
Vested	—	—
Forfeited/canceled	—	—
Unvested as of June 30, 2017	5,700	$ 73.26

As of June 30, 2017, the unrecognized compensation cost related to unvested employee RSUs was $345, excluding estimated forfeitures. This amount is expected to be recognized over a weighted-average period of 3.5 years.

Employee stock purchase plan

The Company's board of directors adopted and its stockholders approved a 2014 Employee Stock Purchase Plan (ESPP) effective immediately prior to the effectiveness of its initial public offering. The ESPP provides for the grant to all eligible employees an option to purchase stock under the ESPP, within the meaning Section 423 of the Internal Revenue Code. The ESPP permits participants to

(amounts in thousands, except share and per share amounts)

purchase common stock through payroll deductions of up to 15% of their eligible compensation, which includes a participant's base straight time gross earnings, incentive compensation, bonuses, overtime and shift premium, but exclusive of payments for equity compensation and other similar compensation. A participant may purchase a maximum of 1,500 shares during a purchase period. Amounts deducted and accumulated by the participant are used to purchase shares of the Company's common stock at the end of each six-month period. The purchase price of the shares will be 85% of the lower of the fair market value of the Company's common stock on the first trading day of each offering period or on the exercise date. The offering periods are currently approximately six months in length beginning on the first business day on or after March 1 and September 1 of each year and ending on the first business day on or after September 1 and March 1 approximately six months later.

As of June 30, 2017, a total of 605,629 shares of common stock were available for sale pursuant to the ESPP. The number of shares available for sale under the ESPP is increased annually on the first day of each fiscal year by an amount equal to the least of:

- 179,069 shares;
- 1.5% of the outstanding shares of the Company's common stock on the last day of the Company's immediately preceding fiscal year; or
- such other amount as may be determined by the administrator.

For 2017, an additional 179,069 shares were added to the ESPP share reserve pursuant to the provision described above.

Stock-based compensation

Stock-based compensation expense recognized for the three months and six months ended June 30, 2017 and June 30, 2016 was as follows:

	Three months ended June 30,		Six months ended June 30,	
	2017	**2016**	**2017**	**2016**
Stock-based compensation expense by type of award:				
Stock option plan awards	$ 2,055	$ 2,001	$ 3,799	$ 3,205
Restricted stock units	24	—	48	—
Employee stock purchase plan	137	155	260	246
Total stock-based compensation expense	$ 2,216	$ 2,156	$ 4,107	$ 3,451

Employee stock-based compensation expense was calculated based on stock option plan awards and restricted stock units ultimately expected to vest based on the Company's historical option cancellations. The employee stock-based compensation expense recognized for the six months ended June 30, 2017 and June 30, 2016 has been reduced for estimated forfeitures of stock option plan awards at a rate of 7.3% and 7.3%, respectively. The employee stock-based compensation expense recognized for the six months ended June 30, 2017 has been reduced for estimated forfeitures of restricted stock units at a rate of 5.7%. There were no grants of restricted stock units for the six months ended June 30, 2016. ASC 718 – *Compensation-Stock Compensation* requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

For the three months and six months ended June 30, 2017 and June 30, 2016, stock-based compensation expense recognized under ASC 718, included in cost of revenues, sales and marketing expense, general and administrative expense, and research and development expense was as follows:

	Three months ended June 30,		Six months ended June 30,	
	2017	**2016**	**2017**	**2016**
Cost of revenue	$ 212	$ 160	$ 403	$ 279
Research and development	250	207	473	338
Sales and marketing	347	314	662	541
General and administrative	1,407	1,475	2,569	2,293
Total stock-based compensation expense	$ 2,216	$ 2,156	$ 4,107	$ 3,451

(amounts in thousands, except share and per share amounts)

401(k) retirement savings plan

The Company maintains a 401(k) retirement savings plan for the benefit of eligible employees. Under the terms of this plan, eligible employees are able to make contributions to the plan on a tax-deferred basis. The Company began matching employees' contributions, effective January 1, 2017. The Company made $293 in contributions to the 401(k) plan for the six months ended June 30, 2017. The Company made no contributions to the 401(k) plan for the six months ended June 30, 2016.

8. Commitments and contingencies

Leases and non-cancelable contractual obligations

The Company leases its offices and certain equipment under operating leases that expire through September 2024. As of June 30, 2017, the minimum aggregate payments due under non-cancelable leases and specified contractual cash obligations, which consist of software license and maintenance agreements, are summarized as follows:

	Operating leases	Related party leases	Non-cancelable contractual obligations	Total
Remaining 6 months of 2017	$ 599	$ 15	$ 289	$ 903
2018	1,301	31	578	1,910
2019	1,413	31	578	2,022
2020	1,031	10	578	1,619
2021	531	—	455	986
Thereafter	824	—	—	824
	$ 5,699	$ 87	$ 2,478	$ 8,264

As a result of the MedSupport acquisition, the Company leases a property owned by a related party. Rent expense for the property was $5 for the three and six months ended June 30, 2017.

Rent expense of $278 and $239 for the three months ended June 30, 2017 and June 30, 2016, respectively, and $540 and $502 for the six months ended June 30, 2017 and June 30, 2016, respectively, was included in the accompanying consolidated statements of comprehensive income.

Purchase obligations

The Company had approximately $36,600 of outstanding purchase orders with its outside vendors and suppliers as of June 30, 2017.

Warranty obligations

The following table identifies the changes in the Company's aggregate product warranty liabilities for the six and twelve month periods ended June 30, 2017 and December 31, 2016, respectively:

	June 30, 2017	December 31, 2016
Product warranty liability at beginning of period	$ 3,480	$ 1,973
Accruals for warranties issued	2,360	3,123
Adjustments related to preexisting warranties (including changes in estimates)	—	118
Settlements made (in cash or in kind)	(1,187)	(1,734)
Product warranty liability at end of period	$ 4,653	$ 3,480

Legislation and HIPAA

The healthcare industry is subject to numerous laws and regulations of federal, state and local governments. These laws and regulations include, but are not necessarily limited to, matters such as licensure, accreditation, government healthcare program participation requirements, reimbursement for patient services, and Medicare and Medicaid fraud and abuse. Government activity has

continued with respect to investigations and allegations concerning possible violations of fraud and abuse statutes and regulations by healthcare providers. Violations of these laws and regulations could result in expulsion from government healthcare programs together with the imposition of significant fines and penalties, as well as significant repayments for patient services previously billed.

The Company believes that it is in compliance in all material respects with applicable fraud and abuse regulations and other applicable government laws and regulations. Compliance with such laws and regulations can be subject to future government review and interpretation as well as regulatory actions unknown or unasserted at this time. The Company believes that it complies in all material respects with the provisions of those regulations that are applicable to the Company's business.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) assures health insurance portability, reduces healthcare fraud and abuse, guarantees security and privacy of health information, and enforces standards for health information. The Health Information Technology for Economic and Clinical Health Act (HITECH Act) imposes notification requirements of certain security breaches relating to protected health information. The Company may be subject to significant fines and penalties if found not to be compliant with the provisions outlined in the regulations.

Legal proceedings

Separation Design Group lawsuit

On October 23, 2015, Separation Design Group IP Holdings, LLC (SDGIP) filed a lawsuit against the Company in the United States District Court for the Central District of California. On December 7, 2015, SDGIP filed a First Amended Complaint in the SDGIP Lawsuit.

SDGIP alleges that the Company willfully infringes U.S. Patent Nos. 8,894,751 ('751 Patent) and 9,199,055 ('055 Patent), both of which are titled "Ultra Rapid Cycle Portable Oxygen Concentrator." SDGIP also alleges misappropriation of trade secrets and breach of contract stemming from a meeting in September 2010. The Company never received any communication from SDGIP related to patent infringement, misuse of trade secrets, or breach of the mutual non-disclosure agreement prior to SDGIP filing the lawsuit. SDGIP seeks to recover damages (including compensatory and treble damages), costs and expenses (including attorneys' fees), pre-judgment and post-judgment interest, and other relief that the Court deems proper. SDGIP also seeks a permanent injunction against the Company.

The Company has and continues to vigorously contest SDGIP's claims. The Company has answered SDGIP's First Amended Complaint, denying SDGIP's allegations of patent infringement, trade secret misappropriation, and breach of contract and asserting several affirmative defenses. The Company has also filed counterclaims against SDGIP alleging that the patents-in-suit are unenforceable due to inequitable conduct.

On May 19, 2017, the Patent Trial and Appeal Board (PTAB) of the U.S. Patent and Trademark Office granted the Company's inter partes review (IPR) petition with respect to the '751 Patent and instituted review of the validity of the patent claims in the '751 Patent asserted by SDGIP in the lawsuit. On June 16, 2017, the PTAB granted the Company's IPR petition with respect to the '055 Patent and instituted review of the validity of the patent claims in the '055 Patent asserted by SDGIP in the lawsuit.

CAIRE Inc. lawsuit

On September 12, 2016, CAIRE Inc. (CAIRE) filed a lawsuit in the United States District Court for the Northern District of Georgia against the Company. CAIRE alleges that the Company infringes U.S. Patent No. 6,949,133, entitled "Portable Oxygen Concentrator." CAIRE alleges willful infringement and seeks damages, injunctive relief, pre-judgment and post-judgment interest, costs, and attorneys' fees. The Company denies CAIRE's allegations and plans to vigorously contest CAIRE's claims.

Other legal proceedings

The Company is party to various legal proceedings arising in the normal course of business. The Company carries insurance, subject to specified deductibles under the policies, to protect against losses from certain types of legal claims. At this time, the Company does not anticipate that any of these other proceedings will have a material adverse effect on the Company's business. Regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources, and other factors.

9. Foreign currency exchange contracts and hedging

As of June 30, 2017 and June 30, 2016, the Company's total non-designated and designated derivative contracts had notional amounts totaling approximately $2,529 and $8,644, respectively, and $882 and $2,280, respectively. These contracts were comprised of offsetting contracts with the same counterparty, each expires within one to six months, and had an unrealized loss of approximately $254, net of tax, during the six months ended June 30, 2017, and an unrealized gain of approximately $15, net of tax, during the six months ended June 30, 2016.

The nonperformance risk of the Company and the counterparty did not have a material impact on the fair value of the derivatives. During the six months ended June 30, 2017 and June 30, 2016, the ineffective portion relating to these hedges was immaterial and the hedges remained effective through their respective settlement dates. As of June 30, 2017, the Company had thirteen designated hedges and four non-designated hedges. As of June 30, 2016, the Company had eleven designated hedges.

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

Forward-Looking Statements

The following discussion and analysis should be read together with our consolidated financial statements and the condensed notes to those statements included elsewhere in this Quarterly Report on Form 10-Q. This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are based on our management's beliefs and assumptions and on information currently available to our management. The forward-looking statements are contained principally in the section entitled "Risk Factors" and this Management's Discussion and Analysis of Financial Condition and Results of Operations. Forward-looking statements include, but are not limited to, statements concerning the following:

- information concerning our possible or assumed future cash flow, revenue, sources of revenue and results of operations, operating and other expenses;
- our assessment of reduced reimbursement rates, the continued impact from competitive bidding, future declines in rental revenue, and future decline in rental patients on service;
- our expectations regarding regulatory approvals and government and third-party payor coverage and reimbursement;
- our ability to develop new products, improve our existing products and increase the value of our products;
- our expectations regarding the timing of new product and product improvement launches;
- market share expectations, unit sales, business strategies, financing plans, expansion of our business, competitive position, industry environment, potential growth opportunities;
- our expectations regarding the market size, market growth and the growth potential for our business;
- our ability to sustain and manage growth, including our ability to develop new products and enter new markets;
- our expectations regarding the average selling price and manufacturing costs of our products, including our expectations to continue to reduce average unit costs for our systems;
- our expectation to expand our sales and marketing channels, including through hiring additional sales representatives, and securing contracts with healthcare payors and insurers;
- our expectations with respect to our European and Ohio facilities;
- our ability to successfully acquire and integrate companies and assets and the anticipated benefits from our acquisition of MedSupport Systems B.V.;
- our assessments and estimates of our effective tax rate;
- our internal control environment;
- the expected timing of reimbursements in connection with the 21st Century Cures Act;
- the effects of seasonal trends on our results of operations and estimated impact of the implementation of our new customer relationship management (CRM) system and hiring plans;
- our expectations regarding the international launch and market acceptance of our Inogen One G4 portable oxygen concentrator;
- our expectation that our existing capital resources, available borrowings under our revolving line of credit, and the cash to be generated from expected product sales and rentals will be sufficient to meet our projected operating and investing requirements for at least the next twelve months; and
- the effects of competition.

Forward-looking statements include statements that are not historical facts and can be identified by terms such as "anticipates," "believes," "could," "seeks," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would," or similar expressions and the negatives of those terms.

Forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. We discuss these risks in greater detail in Part II, Item 1A, "Risk Factors," elsewhere in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

Except as required by law, we assume no obligation to update these forward-looking statements, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. You should read this Quarterly Report on Form 10-Q completely and with the understanding that our actual future results may be materially different from what we expect.

This Quarterly Report on Form 10-Q also contains estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

"Inogen," "Inogen One," "Inogen One G2," "Inogen One G3," "G4," "Oxygenation," "Live Life in Moments, not Minutes," "Never Run Out of Oxygen," "Oxygen Therapy on Your Terms," "Oxygen.Anytime.Anywhere," "Reclaim Your Independence," "Intelligent Delivery Technology," "Inogen At Home," and the Inogen design are registered trademarks with the United States Patent and Trademark Office of Inogen, Inc. We own trademark registrations for the mark "Inogen" in Australia, Canada, South Korea, Mexico, Europe (European Union registration), and Japan. We own a trademark registration for the mark "□□□□□" in Japan. We own trademark registrations for the mark "Inogen One" in Australia, Canada, China, South Korea, Mexico, and Europe (European Union registration). We own a trademark registration for the mark "Satellite Conserver" in Canada. We own a trademark registration for the mark "Inogen At Home" in Europe (European Union Registration). We own an International Registration designating the European Union and the United Kingdom for the mark G4. Other service marks, trademarks, and trade names referred to in this Quarterly Report on Form 10-Q are the property of their respective owners.

In this Quarterly Report on Form 10-Q, "we," "us" and "our" refer to Inogen, Inc. and its subsidiaries.

The following discussion of our financial condition and results of operations should be read together with our consolidated financial statements and the accompanying condensed notes to those statements included elsewhere in this document. Also, forward-looking statements represent our management's beliefs and assumptions only as of the date of this Quarterly Report on Form 10-Q.

Critical accounting policies and significant estimates

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements which have been prepared in accordance with generally accepted accounting principles in the United States, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and related disclosure of contingent assets and liabilities, revenue and expenses at the date of the financial statements. Generally, we base our estimates on historical experience and on various other assumptions in accordance with U.S. GAAP that we believe to be reasonable under the circumstances. Actual results may differ from these estimates and such differences could be material to the financial position and results of operations.

There have been no material changes in our critical accounting policies and estimates in the preparation of our consolidated financial statements during the three and six months ended June 30, 2017 compared to those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016, as filed with the SEC on February 28, 2017.

Overview

We are a medical technology company that primarily develops, manufactures and markets innovative portable oxygen concentrators used to deliver supplemental long-term oxygen therapy to patients suffering from chronic respiratory conditions. Traditionally, these patients have relied on stationary oxygen concentrator systems for use in the home and oxygen tanks or cylinders for mobile use, which we call the delivery model. The tanks and cylinders must be delivered regularly and have a finite amount of oxygen, which requires patients to plan activities outside of their homes around delivery schedules and a finite oxygen supply. Additionally, patients must attach long, cumbersome tubing to their stationary concentrators simply to enable mobility within their homes. Our proprietary Inogen One® systems concentrate the air around the patient to offer a single source of supplemental oxygen anytime, anywhere with a portable device weighing approximately 2.8, 4.8 or 7.0 pounds with a single battery. We believe our Inogen One systems reduce the patient's reliance on stationary concentrators and scheduled deliveries of tanks with a finite supply of oxygen, thereby improving patient quality of life and fostering mobility.

In May 2004, we received 510(k) clearance from the U.S. Food and Drug Administration, or the FDA, for our Inogen One portable oxygen concentrator. From our launch of the Inogen One in 2004, through 2008, we derived our revenue almost exclusively from sales to healthcare providers and distributors. In December 2008, we acquired Comfort Life Medical Supply, LLC in order to secure access to the Medicare rental market and began accepting Medicare reimbursement for our oxygen solutions in certain states. At the time of the acquisition, Comfort Life Medical Supply, LLC had an active Medicare billing number but few other assets and limited business activities. In January 2009, following the acquisition of Comfort Life Medical Supply, LLC, we initiated our direct-to-consumer marketing strategy and began selling Inogen One systems directly to patients and building our Medicare rental business in the United States. In April 2009, we became a Durable, Medical Equipment, Prosthetics, Orthotics, and Supplies accredited Medicare supplier by the Accreditation Commission for Health Care for our Goleta, California facility for Home/Durable Medical Equipment Services for oxygen equipment and supplies. In addition, in May 2015, we again received notice of accreditation approval from the Accreditation Commission for Health Care for all six locations in which we conduct business, effective from May 8, 2015 through May 7, 2018. We believe we are the only portable oxygen concentrator manufacturer that employs a direct-to-consumer marketing strategy in the United States, meaning we advertise directly to patients, process their physician paperwork, provide clinical support as needed and bill Medicare or insurance on their behalf.

We derive the majority of our revenue from the sale and rental of our Inogen One systems and related accessories to patients, insurance carriers, home healthcare providers and distributors, including our private label partner. We sell multiple configurations of our Inogen One systems with various batteries, accessories, warranties, power cords and language settings. We also rent our products to Medicare beneficiaries and patients with other insurance coverage to support their oxygen needs as prescribed by a physician as part of a care plan. Our goal is to design, build and market oxygen solutions that redefine how oxygen therapy is delivered. To accomplish this goal and to grow our revenue, we intend to continue to:

- *Expand our sales and marketing channels*. During the year ended December 31, 2016, we increased our internal sales representatives to 177 from 166 as of December 31, 2015. Typically, we expect new sales representatives to take 4-6 months to reach full productivity. Additionally, we are building a physician referral channel that consists of 18 sales representatives as of December 31, 2016, up from 14 as of December 31, 2015. Lastly, we are focused on building our international and domestic business-to-business partnerships, including relationships with distributors, key accounts, resellers, our private label partner, and traditional home medical equipment (HME) providers.
- *Invest in our product offerings to develop innovative products*. We expended $1.3 million and $1.4 million for the three months ended June 30, 2017 and June 30, 2016, respectively, and $2.6 million and $2.5 million for the six months ended June 30, 2017 and June 30, 2016, respectively, in research and development expenses, and we intend to continue to make such investments in the foreseeable future. We launched our upgraded Inogen One G3 product in December 2015, which has 25% increased oxygen output (1,050 ml/minute versus 840 ml/minute previously), is less expensive to manufacture than our former Inogen One G3 product, and features improvements in sound level (from 42 dBA to 39 dBA). We also launched our fourth-generation portable oxygen concentrator, the Inogen One G4, in May 2016. The Inogen One G4 weighs 2.8 pounds, versus 4.8 pounds for our Inogen One G3, and is approximately half the size of the Inogen One G3. The sound level is 40 dBA at setting 2 and it produces up to 630 ml/minute of oxygen output. We estimate that it will be suitable for more than 85% of supplemental long-term ambulatory oxygen therapy patients who contact us. The Inogen One G4 system is also less expensive to manufacture than our Inogen One G3 system. We also launched an upgraded battery option for the Inogen One G3 system to increase battery life by approximately 10% in the fourth quarter of 2016.
- *Secure contracts with healthcare payors and insurers*. Based on our patient population, we estimate that at least 30% of oxygen therapy patients are covered by non-Medicare payors, and that these patients often represent a younger, more active patient segment. By becoming an in-network provider with more insurance companies, we can reduce the patients' co-insurance and deductible obligations on their oxygen services, which we believe will allow us to attract additional patients to our Inogen One and Inogen At Home solutions.

We have been developing and refining the manufacturing of our Inogen One systems since 2004. While nearly all of our manufacturing and assembly processes were originally outsourced, assembly of the compressor, sieve bed, concentrator and certain manifolds is now conducted in-house in order to improve quality control and reduce cost. Additionally, we use lean manufacturing practices to maximize manufacturing efficiency. We rely on third-party manufacturers to supply several components of our Inogen One and Inogen At Home systems. We typically enter into supply agreements for these components that specify quantity and quality requirements and delivery terms. In certain cases, these agreements can be terminated by either party upon relatively short notice. We have elected to source certain key components from single sources of supply, including our batteries, motors, valves, and some molded plastic components. While alternative sources of supply are readily available for these components, we believe that maintaining a single source of supply allows us to control production costs and inventory levels and to manage component quality. We began sales of the Inogen One G4 in our domestic business-to-business channel in the third quarter of 2016, and began sales in our international business-to-business channel in the second quarter of 2017.

Historically, we have generated a majority of our revenue from sales and rentals to customers and patients in the United States. For the three months ended June 30, 2017 and June 30, 2016, approximately 23.3% and 24.0%, respectively, and 22.6% and 23.6% for the six months ended June 30, 2017 and June 30, 2016, respectively, of our total revenue was from sales to customers outside the United States, primarily in Europe. Approximately 75.4% and 69.1% of the non-U.S. revenue for the three months ended June 30, 2017 and June 30, 2016, respectively, and 73.9% and 69.2% for the six months ended June 30, 2017 and June 30, 2016, respectively, was invoiced in Euros with the remainder invoiced in United States dollars. As of June 30, 2017, we sold our products in 45 countries outside the United States through distributors or directly to large "house" accounts, which include gas companies, HME oxygen providers, and resellers. In those instances, we sell to and bill the distributor or "house" accounts directly, leaving responsibility for the patient billing, support and clinical setup to the local provider.

Our total revenue increased $9.6 million to $64.1 million for the three months ended June 30, 2017 from $54.6 million for the three months ended June 30, 2016, and increased $19.1 million to $116.6 million for the six months ended June 30, 2017 from $97.6 million for the six months ended June 30, 2016, primarily due to growth in sales revenue associated with the increases in business-to-business sales and direct-to-consumer sales of our Inogen One systems, and partially offset by a decline in rental revenue primarily associated with decreased reimbursement rates and a focus on sales instead of rentals. We generated net income of $8.3 million and $7.5 million for the three months ended June 30, 2017 and June 30, 2016, respectively. We generated net income of $14.3 million and $10.0 million for the six months ended June 30, 2017 and June 30, 2016, respectively. We generated Adjusted EBITDA of $14.4 million and $13.6 million for the three months ended June 30, 2017 and June 30, 2016, respectively and $25.2 million and $21.7 million for the six months ended June 30, 2017 and June 30, 2016, respectively, (see "Non-GAAP financial measures" for reconciliations between U.S. GAAP and non-GAAP results). As of June 30, 2017, our retained earnings were $1.9 million.

Sales revenue

Our future financial performance will be driven in part by the growth in sales of our Inogen One systems, and, to a lesser extent, sales of batteries, other accessories, and sales of our Inogen At Home stationary oxygen concentrators. We plan to grow our system sales in the coming years through multiple strategies including: expanding our direct-to-consumer sales efforts through hiring additional sales representatives, investing in consumer awareness through increased marketing efforts, expanding our sales infrastructure and efforts outside of the United States, expanding our business-to-business sales through key partnerships, and enhancing our product offerings through additional product launches. As our product offerings grow, we solicit feedback from our customers and focus our research and development efforts on continuing to improve patient preference and reduce the total cost of the product in order to further drive sales of our products.

Our direct-to-consumer sales process involves numerous interactions with the individual patient, the physician and the physician's staff, and includes an in-depth analysis and review of our product, the patient's diagnosis and prescribed oxygen therapy including procuring an oxygen prescription. The patient may consider whether to finance the product through an Inogen-approved third-party or purchase the equipment. Product is not deployed until both the prescription and payment are received. Once product is deployed, the patient has 30 calendar days to return the product, subject to the payment of a minimal processing and handling fee. Approximately 8-13% of consumers who purchase a system return the system during this 30-day return period.

Our business-to-business efforts are focused on selling to distributors, HME oxygen providers, resellers, and our private label partner who are based inside and outside of the United States. This process involves interactions with various key customer stakeholders including sales, purchasing, product testing, and clinical personnel. Businesses that have patient demand that can be met with our oxygen concentrator systems place purchase orders to secure product deployment. This may be influenced based on outside factors, including the result of tender offerings, changes in insurance plan coverage, and overall changes in the net oxygen therapy patient population. Products are shipped freight on board (FOB) Inogen dock domestically, and based on financial history and profile, businesses may either prepay or receive extended terms. Products are shipped both FOB Inogen dock and Delivery Duty Paid (DDP) for certain international shipments depending on the shipper used. DDP shipments are Inogen's property until title has changed which is upon duty being paid and delivered to the customer. As a result of these factors, product purchases can be subject to changes in demand by customers.

We sold approximately 32,400 systems in the three months ended June 30, 2017 compared to 25,100 systems for the same period in 2016. We sold approximately 58,000 systems in the six months ended June 30, 2017 compared to 42,100 systems for the same period in 2016. Management focuses on system sales as an indicator of current business success.

Rental revenue

Our direct-to-consumer rental process involves numerous interactions with the individual patient, the physician and the physician's staff. The process includes an in-depth analysis and review of our product, the patient's diagnosis and prescribed oxygen therapy, and their medical history to confirm the appropriateness of our product for the patient's oxygen therapy and compliance with

Medicare and private payor billing requirements, which often necessitates additional physician evaluation and/or testing as well as a Certificate of Medical Necessity. Once the product is deployed, the patient receives direction on product use and receives a clinical titration from our licensed staff to confirm the product meets the patient's medical oxygen needs prior to billing. As a result, the time from initial contact with a customer to billing can vary significantly and be up to one month or longer.

We expect declining rental revenue of approximately 30% in 2017 compared to 2016 primarily associated with reimbursement rate declines and a continued focus on sales versus rentals. We plan to grow our rental patients on service in 2018 and beyond through multiple strategies, including expanding our direct-to-consumer marketing efforts through hiring additional sales representatives, investing in patient and physician awareness, and securing additional insurance contracts. However, patients may come off of our services due to death, a change in their condition, a change in location, a change in healthcare provider or other factors. In each case, we maintain asset ownership and can redeploy assets as appropriate following such events. Given the length and uncertainty of our patient acquisition cycle and potential returns we have experienced in the past, and likely will experience in the future, fluctuations in our net new patient setups will occur on a period-to-period basis and we may experience negative net patient additions in future periods. At this time we do not plan to offer our Inogen One G4 system to rental patients but will continue to use the Inogen One G3 system as the primary ambulatory solution deployed in our rental fleet.

A portion of rentals include a capped rental period during which no additional reimbursement is allowed unless additional criteria are met. In this scenario, the ratio of billable patients to total patients on service is critical to maintaining rental revenue growth as patients on service increases. Medicare has noted a certain percentage of beneficiaries, approximately 25%, based on their review of Medicare claims, reach the 36th month of eligible reimbursement and enter the capped rental period. Our capped patients as a percentage of total patients on service was approximately 17.9% as of June 30, 2017 compared to approximately 13.8% as of June 30, 2016. The percentage of capped patients may fluctuate over time as new patients come on service, patients come off of service before and during the capped rental period, and existing patients enter the capped rental period.

As of June 30, 2017, we had approximately 32,300 oxygen rental patients, a decrease from approximately 33,600 oxygen rental patients as of June 30, 2016. Management focuses on patients on service as a leading indicator of likely future rental revenue; however, actual rental revenue recognized is subject to a variety of other factors, including reimbursement levels by payor, patient location, the number of capped patients, write-offs for uncollectable balances, and adjustments for patients in transition.

Reimbursement

We rely heavily on reimbursement from the Centers for Medicare and Medicaid Services (CMS), and secondarily, from private payors, Medicaid and patients for our rental revenue. For the three months and six months ended June 30, 2017, approximately 74.7% and 74.0% of our rental revenue was derived from Medicare's service reimbursement programs. The U.S. list price for our stationary oxygen rentals (HCPCS E1390) is $260 per month and the U.S. list price for our oxygen generating portable equipment (OGPE) rentals (HCPCS E1392) is $70 per month. Effective January 1, 2016, the current standard Medicare allowable varies by state instead of the one national standard allowable as in previous years. Effective January 1, 2016, the Medicare allowable for stationary oxygen rentals (E1390) ranges from $135.14 to $145.61 per month and the OGPE rentals (E1392) ranges from $46.69 to $49.52 per month. Effective January 1, 2017, the Medicare allowable for stationary oxygen rentals (E1390) ranges from $66.53 to $77.16 per month and the OGPE rentals (E1392) ranges from $36.14 to $41.91 per month. These are the two primary codes that we bill to Medicare and other payors for our oxygen product rentals.

As of January 1, 2011, Medicare phased in the competitive bidding program. The competitive bidding program impacts the amount Medicare reimburses suppliers of durable medical equipment rentals, including portable oxygen concentrators. The program is defined geographically, with suppliers submitting bids to provide medical equipment for specific product categories within a specified geographic region called competitive bidding areas, or CBAs. Once bids have been placed, an individual company's bids within a product category are aggregated and weighted by each product's market share in the category. The weighted-average price is then indexed against all bidding suppliers. Medicare determines a "clearing price" out of these weighted-average prices, at which a sufficient number of suppliers have indicated they will support patients in the category. This threshold is typically designed to generate theoretical supply that is twice the expected demand. Bids for each modality among the suppliers that made the cut are then arrayed to determine what Medicare will reimburse for each product category and geographic area. The program has strict anti-collusion guidelines to ensure bidding is truly competitive. A competitive bidding contract lasts up to three years once implemented, after which the contract is subject to a new round of bidding. Discounts off the standard Medicare allowable occur in CBAs where contracts have been awarded as well as in cases where private payors pay less than this allowable. Competitive bidding rates are based on the zip code where the patient resides. Rental revenue includes payments for product, disposables, and customer service/support.

In the CBAs covered under round two re-compete of the competitive bidding program, which began July 1, 2016, the Medicare allowable for stationary oxygen rentals (E1390) ranges from $70.00 to $89.86 per month (average of $76.84 per month) and the OGPE rentals (E1392) ranges from $33.97 to $42.00 per month (average of $37.90 per month). In the CBAs covered under round one re-compete 2017 of the competitive bidding program, which began January 1, 2017, the Medicare allowable for stationary oxygen rentals (E1390) ranges from $70.04 to $90.01 per month (average of $77.97 per month) and the OGPE rentals (E1392) ranges from $35.11 to $37.15 per month (average of $36.06 per month).

As of January 1, 2016, all areas previously not subject to competitive bidding program (non-competitive bidding areas or "non-CBAs") have experienced reductions in the Medicare fee schedule for durable medical equipment, prosthetics, orthotics and supplies (DMEPOS). The fee schedules in the non-CBAs were adjusted based on regional averages of the single payment amounts that apply to the competitive bidding program (Adjusted Fee Schedule). The regional prices are limited by a national ceiling (110% of the average of the regional prices) and a national floor (90% of the average regional prices). From January 1, 2016 to June 30, 2016, the reimbursement rates for these non-CBAs (with dates of service from January 1, 2016 to June 30, 2016) were 50% of the un-adjusted fee schedule amount plus 50% of the Adjusted Fee schedule amount. As of July 1, 2016, Medicare reimbursed DMEPOS at 100% of the Adjusted Fee Schedule amount. However, in December 2016, the 21st Century Cures Act ("Cures Act") was passed, which included a provision to roll-back the second cut to the non-CBA areas that was effective July 1, 2016 through December 31, 2016. Pricing in these areas was increased to the rates experienced in the period from January 1, 2016 through June 30, 2016. Pricing in these areas was increased to the rates experienced in the period from January 1, 2016 through June 30, 2016. This led to a non-recurring benefit in rental revenue of $2.0 million in the fourth quarter of 2016 and $0.2 million in the first quarter of 2017. The additional payments due under the Cures Act are expected to be processed in the third and fourth quarter of 2017. Effective January 1, 2017, rates are set at 100% of the adjusted fee schedule amount, based on the regional competitive bidding rates. The Cures Act also calls for a study of the impact of the competitive bidding pricing on rural areas, which is expected to be conducted in 2017, and accelerated the implementation of the Omnibus bill passed in December 2015 that will require state Medicaid agencies to match Medicare fee schedule reimbursement rates (including single payment amounts in applicable areas) to be effective beginning January 1, 2018, including for oxygen.

The competitive bidding regions are defined as follows:

Region Name	States Covered
Far West	CA, NV, OR, WA
Great Lakes	IL, IN, MI, OH, WI
Mideast	DC, DE, MD, NJ, NY, PA
New England	CT, MA, NH, RI
Plains	IA, KS, MN, MO, NE
Rocky Mountain	CO, ID, UT
Southeast	AL, AR, FL, GA, KY, LA, NC, SC, TN, VA
Southwest	AZ, NM, OK, TX

In addition to regional pricing, CMS imposed different pricing on "frontier states" and rural areas. CMS defines frontier states as states where more than 50% of the counties in the state have a population density of 6 people or less per square mile and rural states are defined as states where more than 50% of the population lives in rural areas per census data. Current frontier states include MT, ND, SD and WY; rural states include ME, MS, VT and WV; and non-contiguous United States areas include AK, HI, Guam and Puerto Rico. For frontier and rural states, and frontier and rural zip codes in non-frontier/rural states, the single payment amount will be the national ceiling (110% of the average of the regional prices) to account for higher servicing costs in these areas. For non-contiguous United States areas, single payment amounts will be the higher of the national ceiling, or the average of competitive bidding pricing from these areas, if the areas had been bid through competitive bidding. We estimate that less than 10% of our patients would be eligible to receive the 110% of the regional prices for rural and frontier areas based on the geographic locations of our current patient population.

CMS has also re-bid for competitive bidding round two re-compete, which is associated with approximately 50% of the Medicare market, with contracts which began on July 1, 2016 and will continue through December 31, 2018. CMS updated the product categories and the competitive bidding areas in the round two re-compete contracts. Respiratory equipment now includes oxygen, oxygen equipment, continuous positive airway pressure devices, respiratory assist devices and related supplies and accessories. Nebulizers are now their own separate product category instead of being included in the respiratory equipment category. Round two re-compete is in the same geographic areas that were included in the original round two. However, as a result of the Office of Management and Budget's updates to the original 91 round two metropolitan statistical areas, there are now 90 metropolitan statistical areas for round two re-compete and 117 competitive bidding areas (CBAs). Any CBA that was previously located in multi-state metropolitan statistical areas was redefined so that no CBA is included in more than one state. The round two re-compete competitive bidding areas have nearly the same zip codes as the round two competitive bidding areas; the associated changes in the zip codes since competitive bidding was implemented are reflective in this round two re-compete.

CMS has also re-bid for the round one re-compete 2017 contracts effective January 1, 2017 through December 31, 2018. In round one re-compete 2017, there are 9 metropolitan statistical areas and 13 CBAs to ensure there are no multi-state CBAs. We estimate approximately 9% of the Medicare market will be impacted by the round one re-compete 2017 contracts.

The following table sets forth the current Medicare standard allowable reimbursement rates and the average of reimbursement rates applicable in Metropolitan Statistical Areas covered by rounds one and two of competitive bidding.

	Round two average 7/1/13-6/30/16	Round one re-compete average 1/1/14-12/31/16	Round two re-compete average 7/1/16-12/31/18	Round one re-compete 2017 average 1/1/17-12/31/18
E1390 (stationary oxygen rentals)	$ 93.07	$ 95.74	$ 76.84	$ 77.97
E1392 (portable oxygen rentals)	42.72	38.08	37.90	36.06
Total	$ 135.79	$ 133.82	$ 114.74	$ 114.03

In addition to reducing the Medicare reimbursement rates in the Metropolitan Statistical Areas (MSAs), the competitive bidding program has effectively reduced the number of oxygen suppliers that can participate in the Medicare program. Based on industry data analyzing the number of unique supplier companies by state from July 2013 to April 2017, there has been a 41% decrease in the numbers of DMEPOS suppliers who have an active NPI number. We believe that approximately 59% of the Medicare market was covered by round one and round two of competitive bidding.

Cumulatively in round one, round two, round one re-compete, round two re-compete and round one re-compete 2017, we were offered contracts for a substantial majority of the CBAs and product categories for which we submitted bids. However, there is no guarantee that we will garner additional market share as a result of these contracts. The contracts include products that may require us to subcontract certain services or products to third parties, which must be approved by CMS. We currently operate in 49 of the 50 states in the U.S. We do not operate in Hawaii due to the licensure requirements.

Moreover, we cannot guarantee that we will be offered contracts in subsequent rounds of competitive bidding. In all five rounds of competitive bidding in which we have participated, we have gained access to certain CBAs and been excluded from other CBAs.

Following round one of competitive bidding, we were excluded from providing services to Medicare beneficiaries in the Kansas City-MO-KS, Miami-Fort Lauderdale-Pompano Beach-FL, and Orlando-Kissimmee-FL CBAs. We had access to six CBAs of the nine regions subject to competitive bidding round one for the respiratory product category.

After round one re-compete of competitive bidding, we were excluded from providing services to Medicare beneficiaries in the following CBAs: Cleveland-Elyria-Mentor-OH, Cincinnati-Middleton-OH-KY-IN, Miami-Fort Lauderdale-Pompano Beach-FL, Orlando-Kissimmee-Sanford-FL, Pittsburg-PA, and Riverside-San Bernardino-Ontario-CA. We gained access to the Kansas City-MO -KS CBA. We had access to three CBAs of the nine regions subject to competitive bidding round one re-compete for the respiratory product category.

After round one re-compete 2017 of competitive bidding, we have been excluded from the Chester-Lancaster and York Counties-SC CBA, which we previously won under round one re-compete. We also have been excluded from the Miami-Fort Lauderdale-West Palm Beach-FL and Orlando-Kissimmee-Sanford-FL CBAs. We have access to 10 of the 13 CBAs in which we bid for the respiratory product category: Charlotte-Concord-Gastonia-NC, Cincinnati-OH, Cleveland-Elyria-OH, Covington-Florence-Newport-KY, Dallas-Fort Worth-Arlington-TX, Dearborn-Franklin-Ohio, and Union Counties-IN, Kansas City-MO, Kansas City-Overland Park-Ottawa-KS, Pittsburgh-PA, and Riverside-San Bernardino-Ontario-CA. We have access to ten CBAs of the thirteen regions subject to competitive bidding round one re-compete 2017 for the respiratory product category.

After round two of competitive bidding, we were excluded from 12 CBAs: Akron-OH, Cape Coral-Fort Myers-FL, Deltona-Daytona Beach-Ormond Beach-FL, Honolulu-HI, Jacksonville-FL, Lakeland-Winter Haven-FL, Memphis-TN-MS-AR, North Port-Bradenton-Sarasota-FL, Ocala-FL, Palm Bay-Melbourne-Titusville-FL, Tampa-St. Petersburg-Clearwater-FL, and Toledo-OH. We had access to 88 CBAs of the 100 regions subject to competitive bidding round two for the respiratory product category.

After round two re-compete of competitive bidding, we were excluded from the following CBAs that we had previously won under round two: Allentown-Bethlehem-Easton-PA, Asheville-NC, Augusta-Richmond County-GA, Camden-NJ, Catoosa-Dade-Walker Counties-GA, Elizabeth-Lakewood-New Brunswick-NJ, Flint-MI, Greensboro-High Point-NC, Greenville-Anderson-Mauldin-SC, Jersey City-Newark-NJ, Las Vegas-Henderson-Paradise-NV, Little Rock-North Little Rock-Conway-AR, Louisville-

Jefferson County-KY, Mercer County-PA, Poughkeepsie-Newburgh-Middletown-NY, Raleigh-NC, Scranton-Wilkes-Barre-Hazelton-PA, Stockton-Lodi-CA, Syracuse-NY, Wilmington-DE, and Youngstown-Warren-Boardman-OH. We were also excluded from the following CBAs in both round two and round two re-compete: Akron-OH and Toledo-OH. We gained access to certain Medicare markets in Cape-Coral-Fort Myers-FL, Deltona-Daytona Beach-Ormond Beach-FL, Jacksonville-FL, Lakeland-Winter Haven-FL, North Port-Sarasota-Bradenton-FL, Ocala-FL, Palm Bay-Melbourne-Titusville-FL, and Tampa-St. Petersburg-Clearwater-FL. We have access to 93 CBAs of the 117 regions subject to competitive bidding round two re-compete for the respiratory products category.

Effective January 1, 2017, we believe we have access to over 85% of the Medicare oxygen therapy market based on our analysis of the 103 CBAs that we have won out of the 130 total CBAs. These 130 CBAs represent approximately 59% of the market with the remaining approximately 41% of the market not subject to competitive bidding. The loss of access to the CBAs where we were not awarded contracts is not expected to lead to a material adverse impact on our rental business. Medicare revenue, including patient co-insurance and deductible obligations, represented 7.1% of our total revenue in the three months ended June 30, 2017 and 8.0% of our total revenue in the six months ended June 30, 2017. We expect the decline in total revenue resulting from the loss of competitive bidding contracts in the areas that we were excluded from to be partially offset by the "grandfathering" of existing Medicare patients (discussed below), direct sales to patients with third-party insurance coverage, or Medicare patients paying out-of-pocket to purchase our products. Our revenue from Medicare in the 27 CBAs where we were not offered contracts as of January 1, 2017 was approximately $0.2 million and $0.5 million in the three months ended June 30, 2017 and June 30, 2016, respectively, and $0.5 million and $1.1 million in the six months ended June 30, 2017 and June 30, 2016, respectively.

Under the competitive bidding program, DME suppliers that are not awarded a competitive bid contract in a CBA and product category which the DME supplier had previously been awarded a competitive bid contract may "grandfather" existing patients on service beginning on the effective date of the competitive bidding round. This means DME suppliers may retain all existing patients and continue to receive reimbursement for them, so long as the new reimbursement rate is accepted by the DME supplier and the beneficiary chooses to continue to receive equipment from the supplier. For example, a supplier that received a round two contract but not a round two re-compete contract may elect to "grandfather' the patients that it serviced through the round two contract period. Suppliers must either keep or release all patients under this "grandfathering" arrangement in each CBA; a supplier may not select specific individuals to retain or release. Suppliers can continue to sell equipment in CBAs where they were not awarded contracts to patients paying out-of-pocket or with third-party insurance coverage.

We have elected to "grandfather" and retain all patients in CBAs in which we were not awarded contracts. In addition, we continue to accept patients in CBAs where we did not receive contracts through private insurance. We also pursue retail sales of our equipment to patients in those areas.

Medicare reimbursement for oxygen rental equipment is limited to a maximum of 36 months within a 60-month service period, and the equipment remains the property of the home oxygen supplier. The supplier that billed Medicare for the 36th month of service continues to be responsible for the patient's oxygen therapy needs for months 37 through 60, and there is generally no additional reimbursement for oxygen generating portable equipment for these later months. CMS does not separately reimburse suppliers for oxygen tubing, cannulas and supplies that may be required for the patient. The supplier is required to keep the equipment provided in working order and in some cases, CMS will reimburse for repair costs. At the end of the five-year useful life of the equipment, the patient may request replacement equipment and, if he or she can be re-qualified for the Medicare benefit, a new maximum 36-month payment cycle out of the next 60 months of service would begin. The supplier may not arbitrarily issue new equipment. We have analyzed the potential impact to revenue associated with patients in the capped rental period and have deferred $0 associated with the capped rental period for the three months and six months ended June 30, 2017 and June 30, 2016, respectively.

Our obligations to service Medicare patients over the contract rental period include supplying working equipment that meets each patient's oxygen needs pursuant to his/her doctor's prescription and certificate of medical necessity form and supplying all disposables required for the patient to operate the equipment, including cannulas, filters, replacement batteries, carts and carry bags, as needed. If the equipment malfunctions, we must repair or replace the equipment. We determine what equipment the patient receives, as long as that equipment meets the physician's prescription, and we can deploy used assets in working order as long as the prescription requirements are met. We must also procure a recertification of the certificate of medical necessity from the patient's doctor to confirm the patient's need for oxygen therapy one year after the patient first receives oxygen therapy and one year after each new 36-month reimbursement period begins. The patient can choose to receive oxygen supplies and services from another supplier at any time, but the supplier may only transition the patient to another supplier in certain circumstances.

In addition to the adoption of the competitive bidding program, from 2010 through 2015, Medicare reimbursement rates for oxygen rental services in non-CBAs were eligible to receive mandatory annual updates based upon the Consumer Price Index for all Urban Consumers, or CPI-U. For 2014, the CPI-U was +1.8%, but the multi-factor productivity adjustment (Adjustment) was -0.8%, so the net result was a 1.0% increase in fee schedule payments in 2014 for items and services provided in areas not subject to competitive bidding. However, by law, the stationary oxygen equipment codes payment amounts must be adjusted on an annual basis,

as necessary, to ensure budget neutrality of the new payment class for oxygen generating portable equipment (OGPE). Thus, the increase in allowable payment amounts for stationary oxygen equipment codes increased 0.5% from 2013 to 2014. For 2015, the CPI-U was +2.1%, but the Adjustment was -0.6%, so the net result was a 1.5% increase in fee schedule payments in 2015 for stationary oxygen equipment for items and services not included in an area subject to competitive bidding. Beginning in 2016, the standard allowable for all areas was set based on regional averages of the competitive bidding prices as described previously and no fees were based on non-competitive bidding. Accordingly, we do not anticipate future adjustments to the reimbursable fees based upon changes in CPI-U. However, as of January 1, 2017 the Medicare reimbursement rates in the non-CBAs were adjusted to ensure budget neutrality based on the increased usage of the OGPE class that led to lower rates in these areas.

On November 4, 2016, CMS published a final rule in the Federal Register imposing additional regulations on the competitive bidding process. The final rule requires bidders choosing to participate in the competitive bidding program to obtain a $0.05 million surety bond for each CBA in which they bid. If a bidder does not accept a contract offer when its composite bid is at or below the median composite bid rate for suppliers used in the calculation of the single payment amount, the bid surety bond for the applicable CBA will be forfeited to CMS. In instances where the bidder does not meet the forfeiture conditions specified in the final rule, the bid surety bond liability will be returned to the bidder within 90 days of the public announcement of the contract suppliers for the CBA. Currently, there are 130 CBAs, which would mean a bidding supplier could incur a surety bond obligation with forfeiture conditions of up to $6.5 million. The final rule also changes the bid limits for individual items for future rounds of competitive bidding to reflect the 2015 unadjusted fee schedule to avoid a downward trend in bid pricing, to ensure the long-term viability of the competitive bidding program, and to allow suppliers to take into account both decreases and increases in costs in determining their bids. The rule also finalizes an appeals process for all breach of contract actions that CMS may take under the competitive bidding program. Lastly, the final rule sets forth a provision for lead item bidding for certain product categories in future bidding rounds to prevent the creation of price inversions, which occurred in round two of competitive bidding. Lead item bidding means that all HCPCS codes for similar items will be grouped together and priced relative to the bid for the "lead item," as calculated by CMS. For additional discussion of the impact of the recent competitive bidding proposals, see "Risk Factors" herein.

As of June 30, 2017, we had 93 contracts with Medicaid and private payors. These contracts qualify us as an in-network provider for these payors. As a result, patients can rent or purchase our systems at the same patient obligation as other in-network oxygen suppliers. Based on our patient population, we believe at least 30% of all oxygen therapy patients are covered by private payors. Private payors typically provide reimbursement at a rate between 60% and 100% of Medicare allowables for in-network plans, and although private payor plans can have 36-month capped rental periods similar to Medicare, they typically do not. We anticipate that private payor reimbursement levels will generally be reset in accordance with Medicare payment amounts established through competitive bidding.

We cannot predict the full extent to which reimbursement for our products will be affected by competitive bidding, the 2017 federal budget or future federal budgets, or by initiatives to reduce costs for private payors. We believe that we are well positioned to respond to the changing reimbursement environment because our product offerings are innovative, patient-focused and cost-effective. We have historically been able to reduce our costs through scalable manufacturing, better sourcing, continuous innovation, and reliability improvements, as well as innovations that reduce our product service costs by minimizing exchanges, such as user replaceable batteries. As a result of design changes, supplier negotiations, bringing manufacturing and assembly largely in-house and our commitment to driving efficient manufacturing processes, we have reduced our overall system cost 56% from 2009 to 2016. We intend to continue to seek ways to reduce our cost of revenue through manufacturing and design improvements.

Basis of presentation

The following describes the line items set forth in our consolidated statements of comprehensive income.

Revenue

We classify our revenue in two main categories: sales revenue and rental revenue. There will be fluctuations in mix between business-to-business sales, direct-to-consumer sales and rentals from period-to-period. Inogen One and Inogen At Home system selling prices and gross margins may fluctuate as we introduce new products, reduce our product costs, have changes in purchase volumes, and as currency variations occur. For example, the gross margin for our Inogen One G3 system is higher than our Inogen One G2 system due to lower manufacturing costs and similar average selling prices. Thus, to the extent our sales of our Inogen One G3 systems are higher than sales of our Inogen One G2 systems, our overall gross margins should improve and, conversely, to the extent our sales of our Inogen One G2 systems are higher than sales of our Inogen One G3 systems, our overall gross margins should decline. Similarly, the gross margin for our Inogen One G4 system is higher than our Inogen One G3 system due to lower manufacturing costs and similar average selling prices. Quarter-over-quarter results may vary due to seasonality in both the international and domestic markets. For example, we typically experience higher total sales in the second and third quarters as a result of consumers traveling and vacationing during warmer weather in the spring and summer months, but this may vary year-over-year.

For example, we have previously seen lower international revenue in the third quarter due to reduced economic activity in Europe in the summer months, but this trend did not continue in 2016. In addition, due to the expected timing of sales representatives hiring, the opening of our new facility in Cleveland, Ohio expected in the third quarter of 2017, and the anticipated short-term decline in productivity associated with our new CRM system that we implemented in the second quarter of 2017, we expect higher sales revenue in our direct-to-consumer channel in the second half of 2017 compared to the first half of 2017. As more HME providers adopt portable oxygen concentrators in their businesses, we expect that this could change our historical seasonality in the domestic business-to-business channel in 2017 as well, which was previously influenced mainly by consumer buying patterns.

Sales revenue

Our sales revenue is primarily derived from the sale of our Inogen One systems, Inogen At Home systems, and related accessories to individual consumers, HME providers, distributors, our private label partner and resellers worldwide. Sales revenue is classified into two areas: business-to-business sales and direct-to-consumer sales. For the three months ended June 30, 2017 and June 30, 2016, business-to-business sales as a percentage of total sales revenue were 62.2% and 63.8%, respectively. For the six months ended June 30, 2017 and June 30, 2016, business-to-business sales as a percentage of total sales revenue were 62.5% and 61.9%, respectively. Generally, our direct-to-consumer sales have higher gross margins than our business-to-business sales.

We offer a lifetime warranty for direct-to-consumer sales. For a fixed price, we agree to provide a fully functional oxygen concentrator for the remaining life of the patient. Lifetime warranties are only offered to patients upon the initial sale of our portable oxygen concentrators by us and are non-transferable. Product sales with lifetime warranties are considered to be multiple element arrangements within the scope of the Accounting Standards Codification (ASC) 605-25—*Revenue Recognition-Multiple-Element Arrangements.*

There are two deliverables when a product that includes a lifetime warranty is sold. The first deliverable is the oxygen concentrator equipment which comes with a standard warranty of three years. The second deliverable is the lifetime warranty that provides for a functional oxygen concentrator for the remaining life of the patient. These two deliverables qualify as separate units of accounting.

The revenue is allocated to the two deliverables on a relative selling price method. We have vendor-specific objective evidence of selling price for the equipment including the standard warranty. To determine the selling price of the lifetime warranty, we use our best estimate of the selling price for that deliverable as the lifetime warranty is neither separately priced nor is selling price available through third-party evidence. To calculate the selling price associated with the lifetime warranties, management considered the profit margins of the overall business, the average estimated cost of lifetime warranties and the price of extended warranties. A significant estimate used to calculate the price and expense of lifetime warranties is the life expectancy of patients. Based on clinical studies, we estimate that 60% of patients will succumb to their disease within three years. Given the approximate mortality rate of 20% per year, we estimate on average all patients will succumb to their disease within five years. We have taken into consideration that when patients decide to buy an Inogen portable oxygen concentrator with a lifetime warranty, they typically have already been on oxygen for a period of time, which can have a large impact on their life expectancy from the time our product is deployed.

After applying the relative selling price method, revenue from equipment sales is recognized when all other revenue recognition criteria for product sales are met. Lifetime warranty revenue is deferred for the first three years and is recognized using the straight-line method during the fourth and fifth year after the delivery of the equipment which is the estimated usage period of the contract based on the average patient life expectancy.

For certain business-to-business sales, we offer a 5-year total warranty. Product sales with 5-year warranties are not considered to be multiple element arrangements within the scope of ASC 605-25 and the additional service component is recognized at the time of product sale. Provisions for the extended warranty obligations, which are included in cost of sales revenue, are provided for at the time of revenue recognition.

Freight revenue is included in sales revenue and consists of fees associated with the deployment of products internationally or domestically when expedited freight options are requested or when minimum order quantities are not met. Freight revenue is a percentage markup of freight costs.

Rental revenue

Our rental revenue is primarily derived from the rental of our Inogen One and Inogen At Home systems to patients through reimbursement from Medicare, private payors and Medicaid, which typically also includes a patient responsibility component for patient co-insurance and deductibles. We expect our rental revenue per patient to decline in future periods due to competitive bidding reimbursement declines, continued reimbursement declines across third-party payors in response to lower Medicare reimbursement rates, increases in capped patients on service, and decreases in net patients on service as we continue to focus on sales versus new rentals. We also will be impacted by the number of sales representatives, the level of and response from potential customers to direct-to-consumer marketing spend, product launches, and other uncontrollable factors such as changes in the market and competition. We expect total rental revenue to decline by approximately 30% in 2017 from 2016. At this time, we do not plan to offer our Inogen One G4 system to rental patients but will continue to use the Inogen One G3 system as the primary ambulatory solution deployed in our rental fleet.

We recognize equipment rental revenue over the non-cancelable lease term, which is one month, less estimated adjustments, in accordance with ASC 840 — *Leases*. We have a separate contract with each patient that is not subject to a master lease agreement with any payor. The lease term begins on the date products are shipped to patients and is recorded at amounts estimated to be received under reimbursement arrangements with third-party payors, including Medicare, private payors, and Medicaid. Due to the nature of the industry and the reimbursement environment in which we operate, certain estimates are required to record net revenue and accounts receivable at their net realizable values. Inherent in these estimates is the risk that they will have to be revised or updated as additional information becomes available. Specifically, the complexity of many third-party billing arrangements and the uncertainty of reimbursement amounts for certain services from certain payors may result in adjustments to amounts originally recorded. Such adjustments are typically identified and recorded at the point of cash application, claim denial or account review. Amounts billed but not earned due to the timing of the billing cycle are deferred and recognized in revenue on a straight-line basis over the monthly billing period. For example, if the first day of the billing period does not fall on the first of the month, then a portion of the monthly billing period will fall in the subsequent month and the related revenue and cost would be deferred based on the service days in the following month. Included in rental revenue are unbilled amounts for which the revenue recognition criteria had been met as of period-end but were not billed. The estimate of unbilled rental revenue accrual is reported net of adjustments that are based on historical trends and estimates of future collectability.

Cost of revenue

Cost of sales revenue

Cost of sales revenue consists primarily of costs incurred in the production process, including costs of component materials, assembly labor and overhead, warranty, provisions for slow-moving and obsolete inventory, rework and delivery costs for items sold. Labor and overhead expenses consist primarily of personnel-related expenses, including wages, bonuses, benefits, and stock-based compensation for manufacturing, logistics, repair and quality assurance employees, and temporary labor. They also include manufacturing freight in, depreciation expense, facilities costs and materials. We provide a 3-year, 5-year or lifetime warranty on Inogen One systems sold and a 3-year warranty on Inogen At Home systems sold. We established a reserve for the cost of future warranty repairs based on historical warranty repair costs incurred as well as historical failure rates. Provisions for warranty obligations, which are included in cost of sales revenue, are provided for at the time of revenue recognition.

We expect the average unit costs of our Inogen One and Inogen At Home systems to continue to decline in future periods as a result of our ongoing efforts to develop lower-cost systems, negotiate with our suppliers, improve our manufacturing processes, and increase production volume and yields. We expect sales gross margin percentage to fluctuate over time based on the sales channel mix, product mix, and changes in average selling prices and cost of goods sold per unit.

Cost of rental revenue

Cost of rental revenue consists primarily of depreciation expense and service costs for rental patients, including rework costs, material, labor, freight, consumable disposables and logistics costs.

We expect rental gross margin percentage to decline in 2017 compared to 2016 due to rental reimbursement rate reductions and decreases in net patients on service as we continue to focus on sales versus new rentals, partially offset by lower cost of rental revenue per patient on service. We expect the average rental service costs per patient to decline in future periods as a result of our ongoing efforts to reduce average unit costs of our systems, including reductions in logistics costs, material, labor and depreciation.

Operating expense

Research and development

Our research and development expense consists primarily of personnel-related expenses, including wages, bonuses, benefits and stock-based compensation for research and development and engineering employees, allocated facility costs, laboratory supplies, product development materials, consulting fees and related costs, and testing costs for new product launches. We have made substantial investments in research and development since our inception. Our research and development efforts have focused primarily on the tasks required to enhance our technologies and to support development and commercialization of new and existing products. We plan to continue to invest in research and development activities to stay at the forefront of patient preference in oxygen therapy devices. We expect research and development expense to increase in absolute dollars in future periods as we continue to invest in our engineering and technology teams to support our new and enhanced product research and development efforts and manufacturing line support.

Sales and marketing

Our sales and marketing expense primarily supports our direct-to-consumer strategy and consists mainly of personnel-related expenses, including wages, bonuses, commissions, benefits, and stock-based compensation for sales, marketing, customer service and clinical service employees. It also includes expenses for media and advertising, printing, informational kits, dues and fees, including credit card fees, sales promotional and marketing activities, travel and entertainment expenses as well as allocated facilities costs. Sales and marketing expense increased throughout 2016, primarily due to an increase in the sales force and marketing expenses, and we expect a further increase in 2017 as we continue to invest in our business, including expanding our sales and sales support team, increasing media spend to drive consumer awareness, and increasing patient support costs as our patient and consumer base increases. In addition, we implemented a new CRM system in the second quarter of 2017 which has increased our sales and marketing costs, but we believe will help improve sales and customer service productivity. We also intend to open a new facility in the Cleveland, Ohio area in the third quarter of 2017. In that facility, we are planning on adding additional headcount of approximately 240 people over the next three years primarily in sales and customer service, which is expected to increase our sales and marketing costs. However, we are expecting to receive certain offsetting business development incentives of up to $1.9 million based on our forecasted headcount additions and facility tenant improvement costs. We also have established a physical presence in Europe by acquiring our former distributor, MedSupport Systems B.V. (“MedSupport”) on May 4, 2017. This acquisition is expected to increase sales and marketing costs, but is also expected to improve customer service and repair services in the European markets.

General and administrative

Our general and administrative expense consists primarily of personnel-related expenses, including wages, bonuses, benefits, and stock-based compensation for employees in our compliance, finance, medical billing, human resources, and information technology departments as well as facilities costs, bad debt expense, and board of directors’ expenses, including stock-based compensation. In addition, general and administrative expense includes professional services, such as legal, patent registration and defense costs, insurance, consulting and accounting services, including audit and tax services, and travel and entertainment expenses.

We expect general and administrative expense to increase in future periods as the number of administrative personnel grows and we continue to introduce new products, broaden our customer base and grow our business. We expect general and administrative expense to increase in absolute dollars as we continue to invest in corporate infrastructure to support our growth including personnel-related expenses, professional services fees and compliance costs associated with operating as a public company. In addition, we expect our administration costs to increase in absolute dollars. We also expect legal, accounting and compliance costs to increase due to costs associated with being a public company. Those costs include increases in our accounting, human resources, IT personnel, additional consulting, legal and accounting fees, insurance costs, board members’ compensation and the costs of maintaining compliance with Section 404 of the Sarbanes-Oxley Act of 2002. In addition, we also expect our patent defense costs to increase substantially in 2017 from 2016 associated with our two pending lawsuits.

Other income (expense), net

Our other income (expense), net consists primarily of foreign currency gains and (losses), and interest income driven by the interest earned on cash equivalents and marketable securities.

Results of operations

Comparison of three months ended June 30, 2017 and June 30, 2016

Revenue

(amounts in thousands)	Three months ended June 30,		Change 2017 vs. 2016		% of Revenue	
	2017	**2016**	**$**	**%**	**2017**	**2016**
Sales revenue	$ 58,038	$ 45,578	$ 12,460	27.3%	90.5%	83.5%
Rental revenue	6,083	8,989	(2,906)	-32.3%	9.5%	16.5%
Total revenue	$ 64,121	$ 54,567	$ 9,554	17.5%	100.0%	100.0%

Sales revenue increased $12.5 million to $58.0 million for the three months ended June 30, 2017 from $45.6 million for the three months ended June 30, 2016, or an increase of 27.3% over the comparable period. The increase was primarily attributable to a 7,300-unit increase in the number of oxygen systems sold. We sold approximately 32,400 oxygen systems during the three months ended June 30, 2017 compared to approximately 25,100 oxygen systems sold during the three months ended June 30, 2016, or an increase of 29.1% over the comparable period. The increase in the number of systems sold resulted mainly from an increase in direct-to-consumer sales in the United States, mainly due to increased sales and marketing efforts and an increase in worldwide business-to-business sales, primarily due to traditional HME purchases and continued strong private label demand.

Rental revenue decreased $2.9 million to $6.1 million for the three months ended June 30, 2017 from $9.0 million for the three months ended June 30, 2016, or a decrease of 32.3% over the comparable period. The decrease in rental revenue was primarily related to the declines in Medicare reimbursement rates that took effect in the third quarter of 2016 and the first quarter of 2017, declines in private-payor rates which decreased reimbursements in response to lower Medicare rates, and a continued focus on sales versus rentals.

(amounts in thousands)	Three months ended June 30,		Change 2017 vs. 2016		% of Revenue	
Revenue by region and category	**2017**	**2016**	**$**	**%**	**2017**	**2016**
Business-to-business domestic sales	$ 21,154	$ 15,996	$ 5,158	32.2%	33.0%	29.3%
Business-to-business international sales	14,919	13,098	1,821	13.9%	23.3%	24.0%
Direct-to-consumer domestic sales	21,965	16,484	5,481	33.3%	34.2%	30.2%
Direct-to-consumer domestic rentals	6,083	8,989	(2,906)	-32.3%	9.5%	16.5%
Total revenue	$ 64,121	$ 54,567	$ 9,554	17.5%	100.0%	100.0%

Domestic sales in business-to-business and direct-to-consumer increased 32.2% and 33.3%, respectively, for the three months ended June 30, 2017 compared to the three months ended June 30, 2016. The increase in domestic business-to-business sales was primarily the result of increased demand from our traditional HME providers and private label partner and increased consumer demand for our products due to our marketing efforts as well as the marketing efforts of our business partners. Revenue from our private label partner and traditional HME providers combined represented more than half of the domestic business-to-business channel's total sales revenue in the second quarter of 2017.

Business-to-business international sales increased 13.9% for the three months ended June 30, 2017 compared to the three months ended June 30, 2016, primarily due to increases in sales from our partners in Europe. As of June 30, 2017, we sold our products in 45 countries outside of the United States, and we plan to continue to expand our presence in other countries as the opportunities present themselves. Of our international sales revenue in the three months ended June 30, 2017, 87.6% was sold in Europe versus 92.1% in the comparative period in 2016. European sales increased primarily associated with increased purchases from our distributors and HME providers. We also acquired our former distributor, MedSupport, in the second quarter of 2017, which also contributed to increased revenues in the second quarter of 2017.

The increase in direct-to-consumer sales was primarily due to the hiring of additional internal sales representatives, our expansion of marketing strategies, and our continued focus on direct-to-consumer sales with more selective new rental patient set-ups.

In future periods, revenue may be impacted by seasonality resulting in higher total sales in the warmer weather spring and summer months due to patients traveling in those periods and lower revenue in the low travel and colder weather months, but this may vary year-over-year. For example, we have previously seen lower international revenue in the third quarter due to reduced economic activity in Europe in the summer months, but this trend did not continue in 2016. In addition, due to the expected timing of sales representatives hiring, the opening of our new facility in Cleveland, Ohio, and the anticipated short-term decline in productivity

associated with our CRM system implemented in the second quarter of 2017, we expect higher sales revenue in our direct-to-consumer channel in the second half of 2017 compared to the first half of 2017. As more HME providers adopt portable oxygen concentrators in their businesses, we expect that this could change our historical seasonality in the domestic business-to-business channel in 2017 as well, which was previously influenced mainly by consumer buying patterns. We also will be impacted by lower Medicare and third-party reimbursement rates, including competitive bidding, the number of sales representatives, the level of and response from potential customers to direct-to-consumer marketing spend, the number and demand of business-to-business partners and distributors, product launches, and other uncontrollable factors such as changes in the market and competition. We expect our rental revenue per patient to decline in future periods due to competitive bidding reimbursement declines, continued reimbursement declines across third-party payors in response to lower Medicare reimbursement rates, and increases in the number of capped patients on our service. We also currently expect total rental revenue to decline approximately 30% in 2017 as compared to 2016.

Cost of revenue and gross profit

	Three months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	2017	2016	$	%	2017	2016
Cost of sales revenue	$ 27,993	$ 23,046	$ 4,947	21.5%	43.7%	42.3%
Cost of rental revenue	4,561	5,306	(745)	-14.0%	7.1%	9.7%
Total cost of revenue	$ 32,554	$ 28,352	$ 4,202	14.8%	50.8%	52.0%
Gross profit - sales revenue	$ 30,045	$ 22,532	$ 7,513	33.3%	46.8%	41.3%
Gross profit - rental revenue	1,522	3,683	(2,161)	-58.7%	2.4%	6.7%
Total gross profit	$ 31,567	$ 26,215	$ 5,352	20.4%	49.2%	48.0%
Gross margin percentage - sales revenue	51.8%	49.4%				
Gross margin percentage- rental revenue	25.0%	41.0%				
Total gross margin percentage	49.2%	48.0%				

We manufacture our subassemblies and/or products in our Goleta, California and Richardson, Texas facilities. Our manufacturing process includes final assembly, testing, and packaging to quality and customer specifications. The cost of sales revenue increased $4.9 million to $28.0 million for the three months ended June 30, 2017 from $23.0 million for the three months ended June 30, 2016, or an increase of 21.5%. The increase in cost of sales revenue was primarily attributable to an increase in the number of systems sold, partially offset by reduced bill of material costs for our products associated with new product launches, design changes, better sourcing and increased volumes. We expect the cost of sales revenue as a percentage of sales revenue in future periods to fluctuate based on customer mix, product mix, and changes in sales prices and cost of goods sold per unit.

The cost of rental revenue decreased $0.7 million to $4.6 million for the three months ended June 30, 2017 from $5.3 million for the three months ended June 30, 2016, or a decrease of 14.0% from the comparable period. The decrease in cost of rental revenue was primarily attributable to a decrease of depreciation expense and servicing costs per patient on service. Cost of rental revenue included $2.5 million of rental asset depreciation for the three months ended June 30, 2017 and $2.9 million for the three months ended June 30, 2016.

Gross margin percentage is defined as revenue less costs of revenue divided by revenue. Sales revenue gross margin percentage increased to 51.8% for the three months ended June 30, 2017 from 49.4% for the three months ended June 30, 2016. The increase in sales gross margin percentage was primarily related to lower cost of goods sold, and an increase in sales mix toward higher margin domestic direct-to-consumer sales, partially offset by a decline in business-to-business average selling prices as volumes in these channels increased. Total worldwide business-to-business sales revenue accounted for 62.2% of total sales revenue in the second quarter of 2017 versus 63.8% in the second quarter of 2016. We expect sales gross margin to fluctuate over time based on the sales channel mix, product mix, and changes in average selling prices and cost of goods sold per unit.

Rental revenue gross margin percentage decreased to 25.0% for the three months ended June 30, 2017 from 41.0% for the three months ended June 30, 2016, primarily due to lower net revenue per rental patient resulting from the reimbursement reductions and lower rental patients on service in the second quarter of 2017, partially offset by lower cost of rental revenues associated primarily with lower depreciation and servicing costs per patient.

Research and development expense

	Three months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	2017	2016	$	%	2017	2016
Research and development expense	$ 1,260	$ 1,379	$ (119)	-8.6%	2.0%	2.5%

Research and development expense decreased $0.1 million to $1.3 million for the three months ended June 30, 2017 from $1.4 million for the three months ended June 30, 2016, or a decrease of 8.6% over the comparable period. The decrease was primarily attributable to a $0.1 million decrease in engineering project-related expenses. In the second quarter of 2016, we launched the Inogen One G4 domestically which drove higher engineering costs in that period.

Sales and marketing expense

	Three months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	2017	2016	$	%	2017	2016
Sales and marketing expense	$ 11,945	$ 9,576	$ 2,369	24.7%	18.6%	17.5%

Sales and marketing expense increased $2.4 million to $11.9 million for the three months ended June 30, 2017 from $9.6 million for the three months ended June 30, 2016, or an increase of 24.7% over the comparable period. The increase was primarily attributable to $1.3 million in media spending to supply leads for the increased number of sales representatives hired to support the growth of our business and $1.0 million of sales and marketing personnel-related expenses as a result of the increased headcount (which included $0.6 million of wages, benefits and payroll tax expense and $0.4 million of commissions expense) and $0.2 million for dues, fees and license costs. These increases were partially offset by decreases of $0.1 million in giveaways/incentives. In the three months ended June 30, 2017, we spent $2.7 million in media and advertising costs versus $1.5 million in the comparative period in 2016. In the three months ended June 30, 2017, we spent $0.1 million in sales and marketing expenses for our Inogen Europe location in the Netherlands versus $0.0 million in the three months ended June 30, 2016.

General and administrative expense

	Three months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	2017	2016	$	%	2017	2016
General and administrative expense	$ 9,865	$ 7,241	$ 2,624	36.2%	15.4%	13.3%

General and administrative expense increased $2.6 million to $9.9 million for the three months ended June 30, 2017 from $7.2 million for the three months ended June 30, 2016, or an increase of 36.2% over the comparable period. The increase was primarily attributable to a $1.0 million benefit recognized in the second quarter of 2016 for a litigation settlement that did not recur in the second quarter of 2017 and increases of $0.8 million of bad debt expense, $0.6 million of patent defense costs, $0.3 million of legal fees primarily associated with the acquisition of MedSupport, $0.2 million in lower net proceeds received from sale of assets, $0.1 million of audit and tax fees and $0.1 million for dues/fees/licensing costs. These increases were partially offset by a decrease of $0.6 million of personnel-related expenses.

Bad debt expense, expressed as a percentage of total revenue, was 2.3% and 1.3% in the three months ended June 30, 2017 and June 30, 2016, respectively. In the three months ended June 30, 2017, we spent $0.9 million in patent defense costs compared to $0.4 million in the three months ended June 30, 2016.

Other income (expense), net

	Three months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	2017	2016	$	%	2017	2016
Interest expense	$ —	$ (2)	$ 2	-100.0 %	0.0 %	0.0 %
Interest income	146	36	110	305.6 %	0.2 %	0.1 %
Other income (expense)	523	(11)	534	4854.5 %	0.8 %	0.0 %
Total other income, net	$ 669	$ 23	$ 646	2808.7 %	1.0 %	0.1 %

Total other income, net, increased to $0.7 for the three months ended June 30, 2017 from the three months ended June 30, 2016. The increase was primarily due to the increase in foreign currency gains arising from increased transactions in Euros as well as the increase in interest income on cash equivalents and marketable securities.

Income tax expense

	Three months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	2017	2016	$	%	2017	2016
Income tax expense	$ 828	$ 550	$ 278	50.5 %	1.3 %	1.0 %
Effective income tax rate	*9.0 %*	*6.8 %*				

Income tax expense increased to $0.8 million for the three months ended June 30, 2017 from $0.6 million for the three months ended June 30, 2016, or an increase of 50.5% from the comparative period, primarily attributable to the increase in income before provision for income tax, partially offset by higher excess benefits recognized from stock-based compensation.

In the second quarter of 2017, excess tax benefits recognized from stock-based compensation decreased our income tax expense by $2.5 million and our effective tax rate by 27.2%, as compared to the U.S. statutory rate. For comparison, in the second quarter of 2016, excess tax benefits recognized from stock-based compensation decreased our income tax expense by $2.4 million and our effective tax rate by 29.3%, as compared to the U.S. statutory rate.

The tax effects of the accounting for stock-based compensation will increase or decrease our effective tax rate based upon the difference between our stock-based compensation expense and the benefits taken on our U.S. tax return, which depends upon the stock price at the time of employee option exercise or award vesting. We recognize excess tax benefits on a discrete basis and we anticipate our effective tax rate will vary from quarter to quarter depending on our stock price in each period.

Net income

	Three months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	2017	2016	$	%	2017	2016
Net income	$ 8,338	$ 7,492	$ 846	11.3 %	13.0 %	13.7 %

Net income increased $0.8 million to $8.3 million for the three months ended June 30, 2017 from $7.5 million for the three months ended June 30, 2016, or an increase of 11.3% over the comparable year. The increase in net income was primarily related to the increase in revenues of 17.5% and improved gross margin, partially offset by increased operating expense as a percent of total revenue and a higher effective tax rate.

Comparison of six months ended June 30, 2017 and June 30, 2016

Revenue

(amounts in thousands)	Six months ended June 30, 2017	Six months ended June 30, 2016	Change 2017 vs. 2016 $	Change 2017 vs. 2016 %	% of Revenue 2017	% of Revenue 2016
Sales revenue	$ 104,004	$ 78,389	$ 25,615	32.7%	89.2%	80.4%
Rental revenue	12,617	19,167	(6,550)	-34.2%	10.8%	19.6%
Total revenue	$ 116,621	$ 97,556	$ 19,065	19.5%	100.0%	100.0%

Sales revenue increased $25.6 million to $104.0 million for the six months ended June 30, 2017 from $78.4 million for the six months ended June 30, 2016, or an increase of 32.7% over the comparable period. The increase was primarily attributable to a 15,900-unit increase in the number of oxygen systems sold. We sold approximately 58,000 oxygen systems during the six months ended June 30, 2017 compared to approximately 42,100 oxygen systems sold during the six months ended June 30, 2016, or an increase of 37.8% over the comparable period. The increase in the number of systems sold resulted mainly from an increase in worldwide business-to-business sales, primarily due to traditional HME purchases and continued strong private label demand, as well as an increase in direct-to-consumer sales, mainly due to increased sales and marketing efforts.

Rental revenue decreased $6.6 million to $12.6 million for the six months ended June 30, 2017 from $19.2 million for the six months ended June 30, 2016, or a decrease of 34.2% over the comparable period. The decrease was primarily related to the declines in Medicare reimbursement rates that took effect in the third quarter of 2016 and the first quarter of 2017, declines in private-payor reimbursement rates which decreased reimbursements in response to lower Medicare rates, and a continued focus on sales versus rentals. Included in the first six months of 2017 was $0.2 million associated with additional revenue expected to be collected from the Cures Act.

(amounts in thousands) **Revenue by region and category**	Six months ended June 30, 2017	Six months ended June 30, 2016	Change 2017 vs. 2016 $	Change 2017 vs. 2016 %	% of Revenue 2017	% of Revenue 2016
Business-to-business domestic sales	$ 38,615	$ 25,474	$ 13,141	51.6%	33.1%	26.1%
Business-to-business international sales	26,342	23,063	3,279	14.2%	22.6%	23.6%
Direct-to-consumer domestic sales	39,047	29,852	9,195	30.8%	33.5%	30.7%
Direct-to-consumer domestic rentals	12,617	19,167	(6,550)	-34.2%	10.8%	19.6%
Total revenue	$ 116,621	$ 97,556	$ 19,065	19.5%	100.0%	100.0%

Domestic sales in business-to-business and direct-to-consumer increased 51.6% and 30.8%, respectively, for the six months ended June 30, 2017 compared to the six months ended June 30, 2016. The increase in domestic business-to-business sales was primarily the result of increased demand from our traditional HME providers and private label partner, as well as increased consumer demand for our products due to our marketing efforts as well as the marketing efforts of our business partners. Revenue from our private label partner and traditional HME providers combined represented more than half of the domestic business-to-business channel's total sales revenue in the first six months of 2017. The increase in direct-to-consumer sales was primarily due to the hiring of additional internal sales representatives, our expansion of marketing strategies, and our continued focus on direct-to-consumer sales with more selective new rental patient set-ups.

Business-to-business international sales increased 14.2% for the six months ended June 30, 2017 compared to the six months ended June 30, 2016, primarily due to increases in sales from our partners in Europe, South Korea, and Canada. As of June 30, 2017, we sold our products in 45 countries outside of the United States, and we plan to continue to expand our presence in other countries as the opportunities present themselves. Of our international sales revenue in the six months ended June 30, 2017, 81.4% was sold in Europe versus 91.6% in the comparative period in 2016. The increase in international sales outside of Europe in the first six months of 2017 versus the comparative period in the prior year was primarily related to increases in sales in South Korea and Canada. The increase in international sales in Europe was primarily associated with increased purchases from our distributors and HME providers.

Cost of revenue and gross profit

(amounts in thousands)	Six months ended June 30, 2017	Six months ended June 30, 2016	Change 2017 vs. 2016 $	Change 2017 vs. 2016 %	% of Revenue 2017	% of Revenue 2016
Cost of sales revenue	$ 49,906	$ 39,553	$ 10,353	26.2%	42.8%	40.5%
Cost of rental revenue	9,404	10,509	(1,105)	-10.5%	8.1%	10.8%
Total cost of revenue	$ 59,310	$ 50,062	$ 9,248	18.5%	50.9%	51.3%
Gross profit - sales revenue	$ 54,098	$ 38,836	$ 15,262	39.3%	46.4%	39.8%
Gross profit - rental revenue	3,213	8,658	(5,445)	-62.9%	2.7%	8.9%
Total gross profit	$ 57,311	$ 47,494	$ 9,817	20.7%	49.1%	48.7%
Gross margin percentage - sales revenue	52.0%	49.5%				
Gross margin percentage- rental revenue	25.5%	45.2%				
Total gross margin percentage	49.1%	48.7%				

We manufacture our subassemblies and/or products in our Goleta, California and Richardson, Texas facilities. Our manufacturing process includes final assembly, testing, and packaging to quality and customer specifications. The cost of sales revenue increased $10.4 million to $49.9 million for the six months ended June 30, 2017 from $39.6 million for the six months ended June 30, 2016, or an increase of 26.2%. The increase in cost of sales revenue was primarily attributable to an increase in the number of systems sold, partially offset by reduced bill of material costs for our products associated with new product launches, design changes, better sourcing and increased volumes. We expect the cost of sales revenue as a percentage of sales revenue in future periods to fluctuate based on customer mix, product mix, and changes in sales prices and cost of goods sold per unit.

The cost of rental revenue decreased $1.1 million to $9.4 million for the six months ended June 30, 2017 from $10.5 million for the six months ended June 30, 2016, or a decrease of 10.5% from the comparable period. The decrease in cost of rental revenue was primarily attributable to a decrease of depreciation expense and servicing costs per patient on service. Cost of rental revenue included $5.2 million of rental asset depreciation for the six months ended June 30, 2017 and $5.9 million for the six months ended June 30, 2016.

Gross margin percentage is defined as revenue less costs of revenue divided by revenue. Sales revenue gross margin percentage increased to 52.0% for the six months ended June 30, 2017 from 49.5% for the six months ended June 30, 2016. The increase in sales gross margin percentage was primarily related to lower cost of goods sold, partially offset by an increase in sales mix toward lower margin domestic business-to-business sales as volumes in this channel increased. Total worldwide business-to-business sales revenue accounted for 62.5% of total sales revenue in the first six months of 2017 versus 61.9% in the first six months of 2016. We expect sales gross margin to fluctuate over time based on the sales channel mix, product mix, and changes in average selling prices and cost of goods sold per unit.

Rental revenue gross margin percentage decreased to 25.5% for the six months ended June 30, 2017 from 45.2% for the six months ended June 30, 2016, primarily due to lower net revenue per rental patient resulting from the reimbursement reductions and lower rental patients on service in the first half of 2017, partially offset by lower cost of rental revenues associated primarily with lower depreciation and servicing costs per patient.

Research and development expense

(amounts in thousands)	Six months ended June 30, 2017	Six months ended June 30, 2016	Change 2017 vs. 2016 $	Change 2017 vs. 2016 %	% of Revenue 2017	% of Revenue 2016
Research and development expense	$ 2,569	$ 2,547	$ 22	0.9%	2.2%	2.6%

Research and development expense increased to $2.6 million for the six months ended June 30, 2017 from $2.5 million for the six months ended June 30, 2016, or an increase of 0.9% over the comparable period. The increase was primarily attributable to a $0.1 million increase in personnel-related expenses.

Sales and marketing expense

	Six months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	2017	2016	$	%	2017	2016
Sales and marketing expense	$ 22,474	$ 18,541	$ 3,933	21.2%	19.3%	19.0%

Sales and marketing expense increased $3.9 million to $22.5 million for the six months ended June 30, 2017 from $18.5 million for the six months ended June 30, 2016, or an increase of 21.2% over the comparable period. The increase was primarily attributable to $2.0 million in media spending to supply leads for the increased sales force headcount hired, $1.8 million of sales and marketing personnel-related expenses as a result of increased headcount (which included $1.1 million of wages, benefits and payroll tax expense and $0.6 million of commissions expense, and $0.1 million of stock compensation expense), $0.3 million for dues, fees and license costs, $0.2 million of clinical outside services and $0.1 million in credit card processing fees. These increases were partially offset by decreases of $0.3 million in giveaways/incentives and $0.1 million in personnel-related costs for our clinical and customer service teams. In the six months ended June 30, 2017, we spent $4.8 million in media and advertising costs compared to $3.0 million in the comparative period in 2016. In the six months ended June 30, 2017, we spent $0.1 million in sales and marketing expenses for our Inogen Europe location in the Netherlands versus $0.0 million in the six months ended June 30, 2016.

General and administrative expense

	Six months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	2017	2016	$	%	2017	2016
General and administrative expense	$ 18,200	$ 15,110	$ 3,090	20.5%	15.6%	15.5%

General and administrative expense increased $3.1 million to $18.2 million for the six months ended June 30, 2017 from $15.1 million for the six months ended June 30, 2016, or an increase of 20.5% over the comparable period. The increase was primarily attributable to $1.4 million of patent defense costs, $0.4 million of bad debt expense, $0.3 million for dues/fees/licensing costs, $0.3 million in audit and tax fees, $0.3 million in legal fees, $0.2 million of increased personnel-related expenses (which included $0.3 million of stock compensation expense, $0.2 million of wages, benefits and payroll tax expense, partially offset by a decrease of $0.2 million of bonus expense). In the six months ended June 30, 2016, we recorded a $1.0 million benefit in general and administrative expense for a litigation settlement that did not recur in the six months ended June 30, 2017 and a $1.0 million litigation settlement expense associated with a California wage and hour claim in the first quarter of 2016. Bad debt expense, expressed as a percentage of total revenue, was 1.7% and 1.6% in the six months ended June 30, 2017 and June 30, 2016, respectively. In the six months ended June 30, 2017, we spent $2.0 million in patent defense costs compared to $0.7 million in the six months ended June 30, 2016. We also incurred $0.4 million primarily in legal costs associated with the MedSupport acquisition in the six months ended June 30, 2017.

Other income (expense), net

	Six months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	2017	2016	$	%	2017	2016
Interest expense	$ —	$ (5)	$ 5	-100.0%	0.0%	0.0%
Interest income	247	65	182	280.0%	0.2%	0.1%
Other income	730	86	644	748.8%	0.6%	0.1%
Total other income, net	$ 977	$ 146	$ 831	569.2%	0.8%	0.2%

Total other income, net, increased to $1.0 million for the six months ended June 30, 2017 from $0.1 million for the six months ended June 30, 2016. The increase was primarily due to the increase in foreign currency gains from the sale of goods in Euros as well as the increase in interest income on cash equivalents and marketable securities.

Income tax expense (benefit)

	Six months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	**2017**	**2016**	**$**	**%**	**2017**	**2016**
Income tax expense	$ 775	$ 1,429	$ (654)	-45.8%	0.7%	1.5%
Effective income tax rate	*5.2%*	*12.5%*				

Income tax expense decreased to $0.8 million for the six months ended June 30, 2017 from $1.4 million for the six months ended June 30, 2016, or a decrease of 45.8% from the comparative period, primarily attributable to excess benefits recognized from stock-based compensation.

In the first six months of 2017, excess tax benefits recognized from stock-based compensation decreased our income tax expense by $4.7 million and our effective tax rate by 31.2%, as compared to the U.S. statutory rate. For comparison, in the first six months of 2016, excess tax benefits recognized from stock-based compensation decreased our income tax expense by $2.5 million and our effective tax rate by 21.9%, as compared to the U.S. statutory rate.

The tax effects of the accounting for stock-based compensation will increase or decrease our effective tax rate based upon the difference between our stock-based compensation expense and the benefits taken on our tax return, which depends upon the stock price at the time of employee option exercise or award vesting. We recognize excess tax benefits on a discrete basis and we anticipate our effective tax rate will vary from quarter to quarter depending on our stock price in each period.

Net income

	Six months ended June 30,		Change 2017 vs. 2016		% of Revenue	
(amounts in thousands)	**2017**	**2016**	**$**	**%**	**2017**	**2016**
Net income	$ 14,270	$ 10,013	$ 4,257	42.5%	12.2%	10.3%

Net income increased $4.3 million to $14.3 million for the six months ended June 30, 2017 from $10.0 million for the six months ended June 30, 2016, or an increase of 42.5% over the comparable year. The increase in net income was primarily related to the increase in revenues of 19.5%, improved gross margin, and a lower effective tax rate.

Seasonality

We believe our sales may be impacted by seasonal factors. For example, we typically experience higher total sales in the second and third quarter, as a result of consumers traveling and vacationing during warmer weather in the spring and summer months, but this may vary year-over-year in certain domestic and international locations in our business-to-business channels. In particular, we have previously seen lower international revenue in the third quarter due to reduced economic activity in Europe in the summer months, but this trend did not continue in 2016. In addition, due to the expected timing of sales representatives hiring, the opening of our new facility in Cleveland, Ohio expected in the third quarter of 2017, and the anticipated short-term decline in productivity associated with our new CRM system that we implemented in the second quarter of 2017, we expect higher sales revenue in our direct-to-consumer channel in the second half of 2017 compared to the first half of 2017. As more HME providers adopt portable oxygen concentrators in their businesses, we expect that this could change our historical seasonality in the domestic business-to-business channel in 2017 as well, which was previously influenced mainly by consumer buying patterns. The following table summarizes our quarterly net sales, gross profit and income from operations:

(amounts in thousands) **Quarterly Results 2017**	**Q1**	**Q2**	**Six months ended June 30, 2017**
Net revenue	$ 52,500	$ 64,121	$ 116,621
Gross profit	25,744	31,567	57,311
Net income	5,932	8,338	14,270

(amounts in thousands) **Quarterly Results 2016**	**Q1**	**Q2**	**Six months ended June 30, 2016**
Net revenue	$ 42,989	$ 54,567	$ 97,556
Gross profit	21,279	26,215	47,494
Net income	2,521	7,492	10,013

Contractual obligations

We obtain individual components for our products from a wide variety of individual suppliers. Consistent with industry practice, we acquire components through a combination of purchase orders, supplier contracts, and open orders based on projected demand information. Where appropriate, the purchases are applied to inventory component prepayments that are outstanding with the respective supplier. As of June 30, 2017, we had purchase obligations with outside vendors and suppliers of approximately $36.6 million of which the timing varies depending on demand, current supply on hand and other factors. The obligations normally do not extend beyond twelve-month time frames. As of June 30, 2017, we had minimum aggregate payments of $8.3 million due under non-cancelable leases and specified contractual cash obligations related to software license and maintenance agreements.

Except as indicated above, there have been no other material changes, outside of the ordinary course of business, in our outstanding contractual obligations from those disclosed within “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section contained in our Annual Report on Form 10-K filed with the SEC on February 28, 2017.

Off-balance sheet arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or for any other contractually narrow or limited purpose. However, from time-to-time, we enter into certain types of contracts that contingently require us to indemnify parties against third-party claims including certain real estate leases, supply purchase agreements, and directors and officers. The terms of such obligations vary by contract and in most instances a maximum dollar amount is not explicitly stated therein. Generally, amounts under these contracts cannot be reasonably estimated until a specific claim is asserted thus no liabilities have been recorded for these obligations on our balance sheets for any of the periods presented.

Liquidity and capital resources

As of June 30, 2017, we had cash and cash equivalents of $114.7 million, which consisted of highly-liquid investments with a maturity of three months or less. In addition, we held $29.5 million in certificates of deposits, corporate bonds and agency mortgage-backed securities, which had maturities greater than three months, but less than twelve months, and which were classified as marketable securities. Since inception, we have financed our operations primarily through cash from operations, the sale of equity securities and, to a lesser extent, from borrowings. As of June 30, 2017, we had no outstanding patent licensing debt. Since inception, we have received net proceeds of $91.7 million from the issuance of redeemable convertible preferred stock and convertible preferred

stock and $52.5 million ($49.7 million net proceeds) in connection with the sale of common stock in our initial public offering. Since 2013, we have received $20.4 million from proceeds related to stock option exercises and employee stock purchase plans. For the six months ended June 30, 2017 and June 30, 2016, we received $7.3 million and $2.5 million, respectively, in proceeds related to these stock programs.

In November 2014, we secured a primary banking relationship that provides access to a $15.0 million working capital revolving line of credit and treasury and cash management services through commercial banking with JPMorgan Chase Bank. This agreement is a three-year working capital revolving line of credit which replaced the previous loan facility we maintained with Comerica Bank. The interest rate on outstanding debt balances is the London Interbank Offer Rate (LIBOR) plus 1.25%.

Pursuant to the revolving credit agreement, we are subject to certain financial covenants relating to our net worth and EBITDA. Tangible net worth under the revolving credit agreement is calculated by subtracting the sum of intangible assets and total liabilities from total assets. EBITDA is defined in the revolving credit agreement as our net income plus interest expense, plus depreciation expense, plus amortization expense, plus income tax expense, plus non-cash expense, plus extraordinary losses, minus non-cash income, and minus extraordinary gains, as computed during certain test periods provided in the revolving credit agreement. We are required to maintain at all times a tangible net worth of $90.0 million and EBITDA (i) of $10.0 million for any period of four consecutive quarters commencing with the four-quarter test period ended September 30, 2014 through the four-quarter test period ended March 31, 2016 and (ii) of $12.5 million for any four-quarter test period commencing with the four-quarter test period ended June 30, 2016 and continuing thereafter.

The agreement contains events of default customary for transactions of this type, including nonpayment, misrepresentation, breach of covenants, and bankruptcy. In the event we fail to satisfy our covenants, or otherwise go into default, JPMorgan Chase Bank has a number of remedies, including sale of our assets and acceleration of all outstanding indebtedness. Certain of these remedies would likely have a material adverse effect on our business. As of June 30, 2017, in order to be in compliance with the EBITDA and tangible net worth requirements, we were required to maintain $12.5 million in EBITDA for the preceding test period, and we had $47.3 million in EBITDA for that period. In addition, we were required to maintain a tangible net worth of $90.0 million and we had a tangible net worth of $203.8 million. As of June 30, 2017, we had $15.0 million in available debt capacity under the revolving facility.

Our principal uses of cash in the six months ended June 30, 2017 consisted of net purchases of available-for-sale investments of $8.4 million, net payment of $4.4 million for the acquisition of MedSupport and the funding of our capital expenditures including additional rental equipment and other property, plant and equipment of $2.8 million. These uses of cash were partially offset by $0.1 million of gross proceeds received from the sale of former rental assets. We believe that our current cash, cash equivalents, marketable securities, available borrowings under our revolving credit and the cash to be generated from expected product sales and rentals will be sufficient to meet our projected operating and investing requirements for at least the next twelve months. However, our liquidity assumptions may prove to be incorrect, and we could utilize our available financial resources sooner than we currently expect. Our future funding requirements will depend on many factors, including market acceptance of our products; the cost of our research and development activities; reimbursement from Medicare, and secondarily, from private payors; the cost associated with litigation or disputes relating to intellectual property rights or otherwise; the cost and timing of regulatory clearances or approvals; the cost and timing of establishing additional sales, marketing, and distribution capabilities; and the effect of competing technological and market developments. In the future, we may acquire businesses or technologies from third parties, and we may decide to raise additional capital through debt or equity financing to the extent we believe this is necessary to successfully complete these acquisitions. Our future capital requirements will also depend on many additional factors, including those set forth in the section of this Quarterly Report on Form 10-Q entitled “Risk Factors.”

If we require additional funds in the future, we may not be able to obtain such funds on acceptable terms, or at all. In the future, we may also attempt to raise additional capital through the sale of equity securities or through equity-linked or debt financing arrangements. If we raise additional funds by issuing equity or equity-linked securities, the ownership of our existing stockholders will be diluted. If we raise additional financing by the incurrence of indebtedness, we will be subject to increased fixed payment obligations and could also be subject to restrictive covenants, such as limitations on our ability to incur additional debt, and other operating restrictions that could adversely impact our ability to conduct our business. Any future indebtedness we incur may result in terms that could be unfavorable to equity investors. There can be no assurances that we will be able to raise additional capital, which would adversely affect our ability to achieve our business objectives. In addition, if our operating performance during the next twelve months is below our expectations, our liquidity and ability to operate our business could be adversely affected.

The following tables show a summary of our cash flows and working capital for the periods and as of the dates indicated:

(amounts in thousands)	Six months ended June 30,		Change 2017 vs. 2016	
Summary of cash flows	**2017**	**2016**	**$**	**%**
Cash provided by operating activities	$ 30,111	$ 16,797	$ 13,314	79.3%
Cash provided by (used in) investing activities	(15,561)	(688)	(14,873)	2161.8%
Cash provided by financing activities	7,311	2,336	4,975	213.0%
Effect of exchange rates on cash	(1)	(51)	50	-98.0%
Net increase in cash and cash equivalents	$ 21,860	$ 18,394	$ 3,466	18.8%

(amounts in thousands)	June 30,	December 31,
Working capital	**2017**	**2016**
Cash and cash equivalents	$ 114,711	$ 92,851
Marketable securities	29,498	21,033
Accounts receivable, net	34,803	30,828
Inventories, net	15,920	14,343
Deferred cost of revenue	385	398
Income tax receivable	1,500	433
Prepaid expenses and other current assets	2,030	1,659
Total current assets	198,847	161,545
Accounts payable and accrued expenses	21,981	12,795
Accrued payroll	4,603	6,123
Warranty reserve-current	1,962	1,688
Deferred revenue-current	3,585	2,239
Income tax payable	59	—
Total current liabilities	32,190	22,845
Net working capital	$ 166,657	$ 138,700

Operating activities

We derive operating cash flows from net cash collected from the sales and rental of our products and services. These cash flows received are partially offset by our use of cash for operating expenses to support the growth of our business. Net income in each period has increased associated with increased sales, improving product mix and lower costs of revenues. The changes in cash related to operating assets and liabilities discussed below were primarily due to the following factors that occurred across both periods presented: an increase in cash used by accounts receivable resulting from an increase in business-to-business receivables due to extended payment terms offered and an increase in sales revenue over the prior periods; and an increase in cash provided by accounts payable resulting from the higher level of cost of sales revenue and operating expenses needed to support the increased sales level.

Net cash provided by operating activities for the six months ended June 30, 2017 consisted primarily of our net income of $14.3 million and non-cash expense items such as provision for sales returns and doubtful accounts of $6.7 million, depreciation and amortization of our equipment and leasehold improvements of $6.3 million, , stock-based compensation expense of $4.1 million, provision for rental revenue adjustments of $2.9 million, deferred tax assets of $0.7 million and loss on disposal of rental equipment and other fixed assets of $0.6 million. The net changes in operating assets and liabilities resulted in a net decrease in cash of $5.5 million, of which $15.7 million was due to a net increase in accounts receivable, inventories, income tax receivable, and other current assets, as well as a net decrease of $1.6 million of accrued payroll. These were partially offset by net increases of $8.5 million of accounts payable and accrued expenses, $2.2 million of deferred revenue, and $1.2 million of warranty reserve.

Net cash provided by operating activities for the six months ended June 30, 2016 consisted primarily of our net income of $10.0 million and non-cash expense items such as depreciation and amortization of our equipment and leasehold improvements of $6.9 million, provision for rental revenue adjustments of $5.5 million, provision for sales returns and doubtful accounts of $5.1 million, deferred tax assets of $1.5 million, stock-based compensation expense of $3.5 million, and loss on disposal of rental equipment and other fixed assets of $0.6 million, partially offset by a gain on sale of former assets of $0.2 million. The net changes in operating assets and liabilities resulted in a net decrease in cash of $16.0 million, of which $24.9 million was due to a net increase in accounts receivable, inventory, and other current assets during this period, and $0.7 million was due to a net decrease in accrued payroll. These were partially offset by net increases of $6.4 million of accounts payable and accrued expenses, $1.4 million of deferred revenue, $1.0 million of warranty reserve and a net decrease of $1.0 million of income tax receivable.

Investing activities

Net cash used in investing activities for each of the periods presented included cash used in the production and purchase of rental assets, manufacturing tooling, and computer equipment and software to support our expanding business as well as net (purchases) maturities of available-for-sale investments. In addition, cash used in investing activities for the current period included net payment for our acquisition.

For the six months ended June 30, 2017, we had $22.7 million of purchases that we invested in certificates of deposits, corporate bonds, and agency mortgage-backed securities with maturities greater than three months that were classified as marketable securities, partially offset by $14.3 million in maturities of available-for-sale investments. In addition, we acquired MedSupport for a net cash payment of $4.4 million and invested $2.8 million in rental assets and other property, equipment, and leasehold improvements, partially offset from gross proceeds received from the sale of former rental assets of $0.1 million.

For the six months ended June 30, 2016, we had $18.1 million in maturities of available-for-sale investments, partially offset by $14.9 million of purchases that we invested in certificates of deposits with maturities greater than three months that were classified as marketable securities. In addition, we invested $4.2 million in rental assets and other property, equipment, and leasehold improvements, partially offset from gross proceeds received from the sale of former assets of $0.3 million.

We expect to continue investing in property, equipment and leasehold improvements as we expand our operations. Our business is inherently capital intensive. For example, we expend significant manufacturing and production expense in connection with the development and production of our oxygen concentrator products and, in connection with our rental business, we incur expense in the deployment of rental products to our patients. Investments will continue to be required in order to grow our sales revenue and continue to supply and replace rental equipment to our rental patients on service.

Financing activities

Historically, we have funded our operations through our sales and rental revenue, the issuance of preferred and common stock, and the incurrence of indebtedness.

For the six months ended June 30, 2017, net cash provided by financing activities consisted of $7.3 million from the proceeds received from stock options that were exercised and purchased under our employee stock purchase program.

For the six months ended June 30, 2016, net cash provided by financing activities consisted of $2.5 million from the proceeds received from stock options that were exercised, purchases under our employee stock purchase program, and partially offset by $0.2 million of payments on our contractual obligation.

Working Capital

Working capital at any specific point in time is subject to many variables including seasonality, inventory management, and the timing of cash receipts and payments.

Current assets increased $37.3 million during the six months ended June 30, 2017 from December 31, 2016 primarily due to an increase in cash, cash equivalents, and marketable securities of $30.3 million driven by strong cash flows from operations as well as increases of $4.0 million in net accounts receivable, $1.6 million in net inventories, and $1.1 million in income tax receivable.

Gross accounts receivable increased $0.6 million during the six months ended June 30, 2017 from December 31, 2016, primarily due to an increase in business-to-business accounts receivable balance of $6.9 million primarily as a result of higher sales in the second quarter of 2017 versus the fourth quarter of 2016, partially offset by a decrease in rental accounts receivable balances of $6.3 million. Allowances on accounts receivable declined $3.4 million during the six months ended June 30, 2017 from December 31, 2016 primarily due to a decline in the allowance for rental revenue adjustments of $3.2 million from the comparative consolidated balance sheet date.

Allowances on accounts receivable vary based on credit quality, age, and accounts receivable source. Business-to-business sales have higher allowances for doubtful accounts on accounts receivable versus direct-to-consumer as direct-to-consumer sales are generally paid in advance of shipment. Rental revenue has higher allowances on accounts receivable versus sales revenue due to the nature of the collectability of these balances.

Current liabilities increased by $9.3 million during the six months ended June 30, 2017 from December 31, 2016, primarily due to an increase in accounts payable and accrued expenses of $9.2 million mainly caused by the timing of payments for inventory as well as increases in deferred revenue of $1.3 million and warranty reserve of $0.3 million. The increases were partially offset by a decrease of $1.5 million of accrued payroll, primarily due to the timing of payments for other personnel-related expenses, including wages, bonuses, and commissions.

Non-GAAP financial measures

EBITDA, Adjusted EBITDA, and Adjusted net income, are financial measures that are not calculated in accordance with U.S. GAAP. We define EBITDA as net income excluding interest income, interest expense, taxes and depreciation and amortization. Adjusted EBITDA also excludes stock-based compensation. Adjusted net income excludes certain tax benefit adjustments. Below, we have provided a reconciliation of EBITDA, Adjusted EBITDA and Adjusted net income to our net income, the most directly comparable financial measure calculated and presented in accordance with U.S. GAAP. EBITDA, Adjusted EBITDA and Adjusted net income should not be considered alternatives to net income or any other measure of financial performance calculated and presented in accordance with U.S. GAAP. Our EBITDA, Adjusted EBITDA and Adjusted net income may not be comparable to similarly titled measures of other organizations because other organizations may not calculate EBITDA, Adjusted EBITDA and Adjusted net income in the same manner as we calculate these measures.

We include EBITDA, Adjusted EBITDA and Adjusted net income in this Quarterly Report on Form 10-Q because they are important measures upon which our management assesses our operating performance. We use EBITDA, Adjusted EBITDA and Adjusted net income as key performance measures because we believe they facilitate operating performance comparisons from period-to-period by excluding potential differences primarily caused by variations in capital structures, tax positions, the impact of depreciation and amortization expense on our fixed assets and the impact of stock-based compensation expense. Because EBITDA, Adjusted EBITDA and Adjusted net income facilitate internal comparisons of our historical operating performance on a more consistent basis, we also use EBITDA, Adjusted EBITDA and Adjusted net income for business planning purposes, to incentivize and compensate our management personnel, and in evaluating acquisition opportunities. In addition, we believe EBITDA, Adjusted EBITDA and Adjusted net income and similar measures are widely used by investors, securities analysts, ratings agencies, and other parties in evaluating companies in our industry as a measure of financial performance and debt-service capabilities.

Our uses of EBITDA, Adjusted EBITDA and Adjusted net income have limitations as analytical tools, and you should not consider them in isolation or as a substitute for analysis of our results as reported under U.S. GAAP. Some of these limitations are:

- EBITDA and Adjusted EBITDA do not reflect our cash expenditures for capital equipment or other contractual commitments;
- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and EBITDA and Adjusted EBITDA do not reflect capital expenditure requirements for such replacements;
- EBITDA and Adjusted EBITDA do not reflect changes in, or cash requirements for, our working capital needs;
- EBITDA and Adjusted EBITDA do not reflect the interest expense or the cash requirements necessary to service interest or principal payments on our indebtedness;
- Adjusted net income does not reflect the tax benefit adjustments recorded based on U.S. GAAP; and
- other companies, including companies in our industry, may calculate EBITDA, Adjusted EBITDA and Adjusted net income measures differently, which reduces their usefulness as a comparative measure.

In evaluating EBITDA, Adjusted EBITDA and Adjusted net income, you should be aware that in the future we will incur expenses within these categories similar to this presentation. Our presentation of EBITDA, Adjusted EBITDA and Adjusted net income should not be construed as an inference that our future results will be unaffected by certain expenses. When evaluating our performance, you should consider EBITDA, Adjusted EBITDA and Adjusted net income alongside other financial performance measures, including U.S. GAAP results.

The following table presents a reconciliation of EBITDA, Adjusted EBITDA and Adjusted net income to our net income, the most comparable U.S. GAAP measure, for each of the periods indicated:

(amounts in thousands)	Three months ended June 30,		Six months ended June 30,	
Non-GAAP EBITDA and Adjusted EBITDA	**2017**	**2016**	**2017**	**2016**
Net income	$ 8,338	$ 7,492	$ 14,270	$ 10,013
Non-GAAP adjustments:				
Interest expense	—	2	—	5
Interest income	(146)	(36)	(247)	(65)
Provision for income taxes	828	550	775	1,429
Depreciation and amortization	3,117	3,426	6,321	6,874
EBITDA (non-GAAP)	12,137	11,434	21,119	18,256
Stock-based compensation	2,216	2,156	4,107	3,451
Adjusted EBITDA (non-GAAP)	$ 14,353	$ 13,590	$ 25,226	$ 21,707

(amounts in thousands)	Three months ended June 30,		Six months ended June 30,	
Non-GAAP Adjusted net income	**2017**	**2016**	**2017**	**2016**
Net income	$ 8,338	$ 7,492	$ 14,270	$ 10,013
Non-GAAP adjustments:				
Tax benefit adjustments	—	—	—	—
Adjusted net income (non-GAAP)	$ 8,338	$ 7,492	$ 14,270	$ 10,013

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to various market risks, including fluctuation in interest rates, foreign currency, and exchange rates. Market risk is the potential loss arising from adverse changes in market rates and prices. We do not hold or issue financial instruments for trading purposes.

Interest rate fluctuation risk

The principal market risk we face is interest rate risk. We had cash and cash equivalents of $114.7 million as of June 30, 2017, which consisted of highly-liquid investments with a maturity of three months or less, and $29.5 million of marketable securities with maturity dates of greater than three months and less than twelve months. The primary goals of our investment policy are liquidity and capital preservation. We do not enter into investments for trading or speculative purposes. We believe that we do not have any material exposure to changes in the fair value of these assets as a result of changes in interest rates due to the short-term nature of our cash and cash equivalents. Declines in interest rates, however, would reduce future investment income. We considered the historical volatility of short-term interest rates and determined that it was reasonably possible that an adverse change of 100 basis points could be experienced in the near term. A hypothetical 1.00% (100 basis points) increase in interest rates would not have materially impacted the fair value of our marketable securities as of June 30, 2017 and December 31, 2016. If overall interest rates had decreased by 1.00% (100 basis points), our interest income would not have been materially affected for the three months or six months ended June 30, 2017 or June 30, 2016.

As of June 30, 2017 and December 31, 2016, we did not have outstanding borrowings under our JPMorgan Chase Bank credit facility. If overall interest rates had increased by 1.00% (100 basis points) during the periods presented, our interest expense would not have been affected.

Foreign currency exchange risk

Historically, the majority of our revenue has been denominated in U.S. dollars. In the fourth quarter of 2014, we began invoicing certain European sales in Euros and in the second quarter of 2017, we acquired MedSupport with net assets denominated in Euros. Our results of operations, certain balance sheet balances and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. The volatility of exchange rates depends on many factors that we cannot forecast with reliable accuracy. We have experienced and will continue to experience fluctuations in our net income or loss as a result of transaction gains or losses related to revaluing certain current asset and current liability balances that are denominated in currencies other than the functional currency in which they are recorded. The effect of a 10% adverse change in exchange rates on foreign denominated cash, receivables and payables as of June 30, 2017 would not have had a material effect on our financial position, results of operations or cash flows. As our operations in countries outside of the United States grow, our results of operations and cash flows will be subject to fluctuations due to changes in foreign currency exchange rates, which could harm our business in the future.

We began entering into foreign exchange forward contracts to protect our forecasted U.S. dollar-equivalent earnings from adverse change in foreign currency exchange rates in December 2015. These hedging contracts reduce, but will not entirely eliminate, the impact of adverse currency exchange rate movements. We performed a sensitivity analysis assuming a hypothetical 10% adverse movement in foreign exchange rates to the hedging contracts and the underlying exposures described above. As of June 30, 2017, the analysis indicated that these hypothetical market movements would not have a material effect on our financial position, results of operations or cash flows. We estimate prior to any hedging activity that a 10% adverse change in exchange rates on our foreign denominated sales would have resulted in a $1.9 million decline in revenue for the first six months of 2017. We designate these forward contracts as cash flow hedges for accounting purposes. The fair value of the forward contract is separated into intrinsic and time values. The fair value of forward currency-exchange contracts is sensitive to changes in currency exchange rates. Changes in the time value are coded in other income (expense), net. Changes in the intrinsic value are recorded as a component of accumulated other comprehensive income and subsequently reclassified into revenue to offset the hedged exposures as they occur.

Inflation risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we might not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

Item 4. Controls and Procedures

Evaluation of disclosure controls and procedures

The Company maintains a system of disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which are designed to provide reasonable assurance that information required to be disclosed in the reports that the Company files or submits under the Exchange Act, is recorded, processed, summarized and reported accurately and completely within the time periods specified in the SEC's rules and forms. These disclosure controls and procedures include, among other processes, controls and procedures designed to ensure that information required to be disclosed in the reports that the Company files or submits under the Exchange Act is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Due to inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Further, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions over time, or that the degree of compliance with the policies and procedures may deteriorate. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2017. Based upon the evaluation described above, our Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2017, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in internal control over financial reporting

There has been no change in our internal control over financial reporting during the three months ended June 30, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Limitations on effectiveness of controls

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Because of the inherent limitations in any control system, misstatements due to error or fraud may occur and not be detected.

Part II. OTHER INFORMATION

Item 1. Legal Proceedings

Separation Design Group lawsuit

On October 23, 2015, Separation Design Group IP Holdings, LLC (SDGIP) filed a lawsuit against Inogen in the United States District Court for the Central District of California. On December 7, 2015, SDGIP filed a First Amended Complaint in the SDGIP Lawsuit.

SDGIP alleges that we willfully infringe U.S. Patent Nos. 8,894,751 (‘751 Patent) and 9,199,055 (‘055 Patent), both of which are titled “Ultra Rapid Cycle Portable Oxygen Concentrator.” SDGIP also alleges misappropriation of trade secrets and breach of contract stemming from a meeting in September 2010. We never received any communication from SDGIP related to patent infringement, misuse of trade secrets, or breach of the mutual non-disclosure agreement prior to SDGIP filing the lawsuit. SDGIP seeks to recover damages (including compensatory and treble damages), costs and expenses (including attorneys’ fees), pre-judgment and post-judgment interest, and other relief that the Court deems proper. SDGIP also seeks a permanent injunction against us.

We have and continue to vigorously contest SDGIP’s claims. We have answered SDGIP’s First Amended Complaint, denying SDGIP’s allegations of patent infringement, trade secret misappropriation, and breach of contract and asserting several affirmative defenses. We have also filed counterclaims against SDGIP alleging that the patents-in-suit are unenforceable due to inequitable conduct.

On May 19, 2017, the Patent Trial and Appeal Board (PTAB) of the U.S. Patent and Trademark Office granted our inter partes review (IPR) petition with respect to the ‘751 Patent and instituted review of the validity of the patent claims in the ‘751 Patent asserted by SDGIP in the lawsuit. On June 16, 2017, the PTAB granted our IPR petition with respect to the ‘055 Patent and instituted review of the validity of the patent claims in the ‘055 Patent asserted by SDGIP in the lawsuit.

CAIRE Inc. lawsuit

On September 12, 2016, CAIRE Inc. (CAIRE) filed a lawsuit in the United States District Court for the Northern District of Georgia against Inogen. CAIRE alleges we infringe U.S. Patent No. 6,949,133, entitled “Portable Oxygen Concentrator.” CAIRE alleges willful infringement and seeks damages, injunctive relief, pre-judgment and post-judgment interest, costs, and attorneys’ fees. We deny CAIRE’s allegations and plan to vigorously contest CAIRE’s claims.

Other legal proceedings

In the normal course of business, we are from time to time involved in various legal proceedings or potential legal proceedings, including matters involving employment and intellectual property. We carry insurance, subject to specified deductibles under our policies, to protect against losses from certain types of legal claims. At this time, we do not anticipate that any of these proceedings will have a material adverse effect on our 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

We operate in a rapidly changing environment that involves numerous uncertainties and risks. In addition to the other information included in this Quarterly Report on Form 10-Q, the following risks and uncertainties may have a material and adverse effect on our business, financial condition, results of operations, or stock price. You should consider these risks and uncertainties carefully, together with all of the other information included or incorporated by reference in this Quarterly Report on Form 10-Q. If any of the risks or uncertainties we face were to occur, the trading price of our securities could decline, and you may lose all or part of your investment. This Quarterly Report on Form 10-Q also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of factors that are described below and elsewhere in this report.

Risks related to our business and strategy

A significant majority of our rental patients who use our product have health coverage under the Medicare program, and recently enacted and future changes in the reimbursement rates or payment methodologies under Medicare and other government programs have affected and could continue to materially and adversely affect our business and operating results.

As a provider of oxygen product rentals, we depend heavily on Medicare reimbursement as a result of the higher proportion of elderly persons suffering from chronic respiratory conditions. Medicare Part B, or Supplementary Medical Insurance Benefits, provides coverage to eligible beneficiaries that include items of durable medical equipment for use in the home, such as oxygen equipment and other respiratory devices. We believe that more than 60% of oxygen therapy patients in the United States have primary coverage under Medicare Part B. For the three months ended June 30, 2017 and June 30, 2016, we derived 7.1% and 11.9%, respectively, and for the six months ended June 30, 2017 and June 30, 2016, we derived 8.0% and 14.1%, respectively, of our total revenue from Medicare's program or beneficiaries (including patient co-insurance obligations). There are increasing pressures on Medicare to control healthcare costs and to reduce or limit reimbursement rates for home medical products.

Legislation, including the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, the Deficit Reduction Act of 2005, the Medicare Improvements for Patients and Providers Act of 2008, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, and the 21st Century Cures Act (Cures Act) contain provisions that directly impact reimbursement for the durable medical equipment products provided by us:

- The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 significantly reduced reimbursement for inhalation drug therapies beginning in 2005, reduced payment amounts for certain durable medical equipment, including oxygen, beginning in 2005, froze payment amounts for other covered home medical equipment items through 2008, established a competitive bidding program for home medical equipment and implemented quality standards and accreditation requirements for durable medical equipment suppliers.
- The Deficit Reduction Act of 2005 limited the total number of continuous rental months for which Medicare will pay for oxygen equipment to 36 months, after which time there is generally no additional reimbursement to the supplier (other than for periodic, in-home maintenance and servicing). The Deficit Reduction Act of 2005 also provided that title of the equipment would transfer to the beneficiary, which was later repealed by the Medicare Improvements for Patients and Providers Act of 2008. For purposes of the rental cap, the Deficit Reduction Act of 2005 provided for a new 36-month rental period that began January 1, 2006 for all oxygen equipment. After the 36th continuous month during which payment is made for the oxygen equipment, the supplier is generally required to continue to furnish the equipment during the period of medical need for the remainder of the useful lifetime of the equipment, provided there are no breaks in service due to medical necessity that exceed 60 days. The reasonable useful lifetime for our portable oxygen equipment is 60 months. After 60 months, if the patient requests, and the patient meets Medicare coverage criteria, the rental cycle starts over and a new 36-month rental period begins. There are no limits on the number of 60-month cycles over which a Medicare patient may receive benefits and an oxygen therapy provider may receive reimbursement, so long as such equipment continues to be medically necessary for the patient. We anticipate that the Deficit Reduction Act of 2005 oxygen payment rules will continue to negatively affect our net revenue on an ongoing basis, as each month additional customers reach the capped rental period in month thirty-seven, resulting in potentially two or more years without rental income from these customers. Our capped patients as a percentage of total patients on service was approximately 17.9% as of June 30, 2017, which is higher than the capped patients as a percentage of total patients on service of approximately 13.8% as of June 30, 2016. The percentage of capped patients may fluctuate over time as new patients come on service, patients come off of service before and during the capped rental period, and existing patients enter the capped rental period. We cannot predict the potential impact to rental revenues in future periods associated with patients in the capped rental period.
- The Medicare Improvements for Patients and Providers Act of 2008 retroactively delayed the implementation of competitive bidding for 18 months from previously established dates and decreased the 2009 fee schedule payment amounts by 9.5% for product categories included in competitive bidding. In addition to the 9.5% reduction under Medicare Improvements for Patients and Providers Act of 2008, the Centers for Medicare and Medicaid Services (CMS) implemented a reduction to the monthly payment amount for stationary oxygen equipment. The monthly payment rate for non-delivery ambulatory oxygen in the years beginning January 1, 2010 to January 1, 2015 was flat at $51.63. The table below summarizes the increases and decreases in the monthly payment amounts for stationary oxygen equipment. This does not apply for 2016 as the standard allowables were set based on regional averages of the competitive bidding prices as described in the "Business" section and below in this "Risk Factors" section.

	2010	2011	2012	2013	2014	2015
Stationary oxygen percentage rate changes	-1.50%	0.10%	1.60%	0.70%	0.50%	1.50%
Stationary oxygen monthly payment amounts	$ 173.17	$ 173.31	$ 176.06	$ 177.36	$ 178.24	$ 180.92

- The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, includes, among other things, new face-to-face physician encounter requirements for certain durable medical equipment and home health services, and a requirement that by 2016, the competitive bidding process must be nationalized or prices in non-competitive bidding areas must be adjusted to match competitive bidding prices. As of January 1, 2017, CMS has decreased prices for durable medical equipment in non-competitive bidding areas to match competitive bidding prices.
- The Cures Act was passed in December 2016 and included a provision to roll-back the second cut to the non-CBA areas that was effective July 1, 2016 through December 31, 2016. Reimbursement in these areas was increased to the rates experienced in the period from January 1, 2016 through June 30, 2016. This led to a non-recurring benefit in rental revenue of $2.0 million in the fourth quarter of 2016 and $0.2 million in the first quarter of 2017. Effective January 1, 2017, rates are set at 100% of the adjusted fee schedule amount, based on the regional competitive bidding rates. The Cures Act also calls for a study of the impact of the competitive bidding pricing on rural areas which is expected to be conducted in 2017. These legislative provisions, as currently in effect and when fully implemented, have had and will continue to have a material and adverse effect on our business, financial condition and operating results.

These legislative provisions, as currently in effect and when fully implemented, have had and will continue to have a material and adverse effect on our business, financial condition and operating results.

The Health and Human Services (HHS) Office of Inspector General (OIG) has recommended states to review Medicaid reimbursement for durable medical equipment (DME) and supplies. The OIG cites an earlier report estimating that four states (California, Minnesota, New York, and Ohio) could have saved more than $18.1 million on selected DME items if their Medicaid prices were comparable to those under round one of the Medicare competitive bidding program. Since issuing those reports, the OIG identified $12 million in additional savings that the four states could have obtained on the selected items by using pricing similar to the Medicare round two competitive bidding and national mail-order programs. In light of varying Medicaid provider rates for DME and the potential for lower spending, the OIG recommends that CMS (1) seek legislative authority to limit state Medicaid DME reimbursement rates to Medicare program rates, and (2) encourage further reduction of Medicaid reimbursement rates through competitive bidding or manufacturer rebates (the OIG did not determine the cost of implementing a rebate or competitive bidding program in each state). In December 2015, the Omnibus bill passed that will require state Medicaid agencies to match Medicare fee schedule reimbursement rates (including single payment amounts in applicable areas) beginning January 1, 2019, including for oxygen. The Cures Act accelerated the timing of this implementation to be effective beginning January 1, 2018.

On January 28, 2016, the Department of Health and Human Services (DHHS) published a final rule to implement Medicare's face-to-face provisions for home health and DME under the Medicaid program, effective July 1, 2016. Medicaid programs are run by state agencies that must coordinate with state legislative bodies, therefore the state agencies have until July 1, 2017 or July 1, 2018 (depending on the timing of their legislative sessions) to allow state agencies to publish compliant initiatives on this rule. All states except Montana, Nevada, North Dakota, and Texas were expected to initiate this requirement effective July 1, 2017. Montana, Nevada, North Dakota, and Texas are expected to implement the requirements by July 1, 2018. The Medicaid definition of medical supplies, equipment and appliances were aligned with the Medicare definitions. In addition, the DHHS is implementing the requirement for a face-to-face visit related to the beneficiary's primary need for medical equipment within 6 months prior to the start of certain durable medical equipment services, including oxygen. These legislative provisions, when enacted, could have an adverse impact on our business, financial conditions and operating results.

On January 17, 2017, the U.S. Department of Health and Human Services published a final rule effective March 20, 2017 to address the appeals backlog that includes allowing certain decisions to be made by the Medicare Appeals Council to set precedent for lower levels of appeal, expansion of the pool of available adjudicators, and increasing decision-making consistency among the levels of appeal. In addition, it included provisions to improve the efficiency by streamlining the appeals process, allowing attorneys to handle some procedural matters at the administrative law judge level, and proposed funding increases and legislative actions outlined in the federal budget for 2017. DHHS estimates estimate this could eliminate the backlog in appeals by 2021. However, if this plan is not effective, the appeals backlog could increase, which could increase our collection times and decrease our cash flow, increase billing administrative costs, and/or increase the provision for rental revenue adjustments, which would adversely affect our business financial condition and results of operations.

Due to budgetary shortfalls, many states are considering, or have enacted, cuts to their Medicaid programs. These cuts have included, or may include, elimination or reduction of coverage for our products, amounts eligible for payment under co-insurance arrangements, or payment rates for covered items. Continued state budgetary pressures could lead to further reductions in funding for the reimbursement for our products which, in turn, would adversely affect our business, financial condition and results of operations.

The competitive bidding process under Medicare could negatively affect our business and financial condition.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 requires the Secretary of Health and Human Services to establish and implement programs under which competitive acquisition areas are established throughout the United States for purposes of awarding contracts for the furnishing of competitively priced items of durable medical equipment, including oxygen equipment.

As of January 1, 2011, Medicare phased in the competitive bidding program. The competitive bidding program impacts the amount Medicare reimburses suppliers of durable medical equipment rentals, including portable oxygen concentrators. The program is defined geographically, with suppliers submitting bids to provide medical equipment for specific product categories within a specified geographic region called competitive bidding areas, or CBAs. Once bids have been placed, an individual company's bids within a product category are aggregated and weighted by each product's market share in the category. The weighted-average price is then indexed against all bidding suppliers. Medicare determines a "clearing price" out of these weighted-average prices, at which a sufficient number of suppliers have indicated they will support patients in the category. This threshold is typically designed to generate theoretical supply that is twice the expected demand. Bids for each modality among the suppliers that made the cut are then arrayed to determine what Medicare will reimburse for each product category and geographic area. The program has strict anti-collusion guidelines to ensure bidding is truly competitive. A competitive bidding contract lasts up to three years, once implemented, after which the contract is subject to a new round of bidding. Discounts off the standard Medicare allowable occur in CBAs where contracts have been awarded as well as in cases where private payors pay less than this allowable. Competitive bidding rates are based on the zip code where the patient resides. Rental revenue includes payments for product, disposables, and customer service/support.

As of January 1, 2016, all areas previously not subject to the competitive bidding program (non-competitive bidding areas or "non-CBAs") have experienced reductions in the Medicare fee schedule for DMEPOS. The fee schedules in the non-CBAs were adjusted based on regional averages of the single payment amounts that apply to the competitive bidding program (Adjusted Fee Schedule). The regional prices are limited by a national ceiling (110% of the average of the regional prices) and a national floor (90% of the average regional prices). From January 1, 2016 to June 30, 2016, the reimbursement rates for these non-CBAs (with dates of service from January 1, 2016 to June 30, 2016) were 50% of the un-adjusted fee schedule amount plus 50% of the Adjusted Fee Schedule amount. As of July 1, 2016, Medicare reimbursed DMEPOS at 100% of the Adjusted Fee Schedule amount. However, in December 2016, the Cures Act was passed, which included a provision to roll-back the second cut to the non-CBA areas that was effective July 1, 2016 through December 31, 2016. Pricing in these areas was increased to the rates experienced in the period from January 1, 2016 through June 30, 2016. This led to a non-recurring benefit in rental revenue of $2.0 million in the fourth quarter of 2016 and $0.2 million in the first quarter of 2017. The additional payments due under the Cures Act are expected to be processed in the third and fourth quarter of 2017. Effective January 1, 2017, rates are set at 100% of the adjusted fee schedule amount, based on the regional competitive bidding rates. The Cures Act also calls for a study of the impact of the competitive bidding pricing on rural areas which is expected to be conducted in 2017, and accelerated the implementation of the Omnibus bill passed in December 2015 that will require state Medicaid agencies to match Medicare fee schedule reimbursement rates (including single payment amounts in applicable areas) to be effective beginning January 1, 2018, including for oxygen.

The competitive bidding regions are defined as follows:

Region Name	States Covered
Far West	CA, NV, OR, WA
Great Lakes	IL, IN, MI, OH, WI
Mideast	DC, DE, MD, NJ, NY, PA
New England	CT, MA, NH, RI
Plains	IA, KS, MN, MO, NE
Rocky Mountain	CO, ID, UT
Southeast	AL, AR, FL, GA, KY, LA, NC, SC, TN, VA
Southwest	AZ, NM, OK, TX

In addition to regional pricing, CMS imposed different pricing on "frontier states" and rural areas. CMS defines frontier states as states where more than 50% of the counties in the state have a population density of 6 people or less per square mile and rural states are defined as states where more than 50% of the population lives in rural areas per census data. Current frontier states include MT, ND, SD and WY; rural states include ME, MS, VT and WV; and non-contiguous United States areas include AK, HI, Guam and

Puerto Rico. For frontier and rural states, and frontier and rural zip codes in non-frontier/rura1 states, the single payment amount will be the national ceiling (110% of the average of the regional prices) to account for higher servicing costs in these areas. For non-contiguous United States areas, single payment amounts will be the higher of the national ceiling, or the average of competitive bidding pricing from these areas, if the areas had been bid through competitive bidding. We estimate that less than 10% of our patients would be eligible to receive the 110% of the regional prices for rural and frontier areas based on the geographic locations of our current patient population.

With regard to round two re-compete, which began on July 1, 2016, CMS updated the product categories and the competitive bidding areas. Respiratory equipment includes oxygen, oxygen equipment, continuous positive airway pressure devices, respiratory assist devices and related supplies and accessories. Nebulizers are now a separate product category from respiratory equipment. Round two re-compete is in the same geographic areas that were included in the original round two. However, as a result of the Office of Management and Budget's updates to the original 91 round two metropolitan statistical areas, there are now 90 metropolitan statistical areas for round two re-compete and 117 CBAs. Any CBA that was previously located in multi-state metropolitan statistical areas was redefined so that no CBA is included in more than one state. The round two re-compete CBAs have nearly the same zip codes as the round two CBAs; the associated changes in the zip codes since competitive bidding was implemented are reflective in this round two re-compete. Pricing was announced in March 2016 and impacts both the zip codes covered under round two and also the rates for the non-CBAs effective July 1, 2016.

In round one 2017, there are 9 metropolitan statistical areas and 13 CBAs to make sure each CBA does not cross state boundaries. We estimate approximately 9% of the Medicare market will be impacted by these contracts set to begin January 1, 2017 and continue through December 31, 2018. Pricing was announced in September 2016, and impacts both the zip codes covered under round one and also the rates for the non-CBAs effective January 1, 2017. To the extent that we are not successful in future competitive bidding rounds, we may lose access to patients in CBAs in which we are not awarded contracts, which would adversely affect our business, financial condition and results of operation. Moreover, any items and services provided by the Company to Medicare patients that reside in non-CBAs will be affected by the reimbursement reductions aimed at bringing national reimbursement in line with the competitive bidding program single payment amounts.

On April 16, 2015, the Medicare Access and CHIP Reauthorization Act of 2015 was signed into law which requires Medicare suppliers that bid under the DMEPOS competitive bidding program to obtain a $0.05 million to $0.1 million bid surety bond for each CBA. The provision is intended to prevent suppliers from submitting not-binding, "low-ball" bids that artificially drive down prices and jeopardize beneficiary access to equipment. If the supplier bids at or lower than the median composite bid rate and does not accept a contract offered for a CBA, the bid bond would be forfeited. The Act also codifies that competitive bidding contracts can only be awarded to suppliers that meet applicable state licensure requirements. We will incur additional expense to obtain the appropriate surety bonds in the CBAs where we win contracts in future competitive bidding rounds. As of January 1, 2017, there are 13 CBAs under contract in round one 2017 and 117 CBAs under contract in round two re-compete. CBAs are defined by Medicare and are subject to change at each new bidding period.

On November 4, 2016, CMS published a final rule in the Federal Register imposing additional regulations on the competitive bidding process. The final rule requires bidders choosing to participate in the competitive bidding program to obtain a $0.05 million surety bond for each CBA in which they bid. If a bidder does not accept a contract offer when its composite bid is at or below the median composite bid rate for suppliers used in the calculation of the single payment amount, the bid surety bond for the applicable CBA will be forfeited to CMS. In instances where the bidder does not meet the forfeiture conditions specified in the final rule, the bid surety bond liability will be returned to the bidder within 90 days of the public announcement of the contract suppliers for the CBA. Currently, there are 130 CBAs, which would mean a bidding supplier could incur a surety bond obligation with forfeiture conditions of up to $6.5 million. The final rule also changes the bid limits for individual items for future rounds of competitive bidding to reflect the 2015 unadjusted fee schedule to avoid a downward trend in bid pricing, to ensure the long-term viability of the competitive bidding program, and to allow suppliers to take into account both decreases and increases in costs in determining their bids. The rule also finalizes an appeals process for all breach of contract actions that CMS may take under the competitive bidding program. Lastly, the final rule sets forth a provision for lead item bidding for certain product categories in future bidding rounds to prevent the creation of price inversions, which occurred in round two of competitive bidding. Lead item bidding means that all HCPCS codes for similar items will be grouped together and priced relative to the bid for the "lead item," as calculated by CMS.

Although we continue to monitor developments regarding the implementation of the competitive bidding program, we cannot predict the outcome of the competitive bidding program on our business when fully implemented, nor the Medicare payment rates that will be in effect in future years for the items subject to competitive bidding, including our products. We expect that the stationary oxygen and non-delivery ambulatory oxygen payment rates will continue to fluctuate and a large negative payment adjustment would adversely affect our business, financial conditions and results of operations.

The implementation of prior authorization rules for DMEPOS under Medicare could negatively affect our business and financial condition.

CMS has issued a final rule to require Medicare prior authorization (PA) for certain durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) that the agency characterizes as frequently subject to unnecessary utilization. The final rule was published on December 30, 2015 and specifies a master list of 135 items that could potentially be subject to PA, including stationary oxygen rentals (E1390). The master list will be updated annually and published in the Federal Register. The presence of an item on the master list does not automatically mean that a PA is required. CMS will select a subset of these master list items for its "Required Prior Authorization List", which has not yet been published in the Federal Register. There will be a notice period of at least 60 days prior to implementation. The ruling does not create any new clinical documentation requirements; instead the same information necessary to support Medicare payment will be required *prior* to the item being furnished to the beneficiary. CMS has proposed that reasonable efforts are made to provide a PA decision within 10 days of receipt of all applicable information, unless this timeline could seriously jeopardize the life or health of the beneficiary or the beneficiary's ability to regain maximum function, in which case the proposed PA decision would be 2 business days. CMS will issue additional sub-regulatory guidance on these timelines in the future. CMS has announced that two power mobility codes (HCPCS K0856 and K0861) will be considered for PA as CMS moves forward with the implementation of this final rule. No other codes have been publicly discussed. If our products are subject to prior authorization, it could reduce the number of patients qualified to come on service using their Medicare benefits, it could delay the start of those patients while we wait for the prior authorization to be received, and/or it could decrease sales productivity. As a result, this could adversely affect our business, financial conditions and results of operations.

The Medicare Fee-For-Service (FFS) sequestration reduction has and may continue to negatively impact our revenue and profits.

Medicare FFS claims with dates of service on or after April 1, 2013 are subject to a 2% reduction in Medicare payment, including claims for DMEPOS, including in competitive bidding areas. The claims payment adjustment is applied to all claims after determining coinsurance, any applicable deductible, and any applicable Medicare secondary payment adjustments. These reductions are included in rental revenue adjustments. This sequestration reduction will continue until further notice. As a result, this could adversely affect our financial conditions and results of operations.

We face intense international, national, regional and local competition and if we are unable to compete successfully, it could have an adverse effect on our revenue, revenue growth rate, if any, and market share.

The oxygen therapy market is a highly competitive industry. We compete with a number of manufacturers and distributors of portable oxygen concentrators, as well as providers of other oxygen therapy solutions such as home delivery of oxygen tanks or cylinders, stationary concentrators, transfilling concentrators, and liquid oxygen.

Our significant manufacturing competitors are Invacare Corporation, Respironics (a subsidiary of Koninklijke Philips N.V.), AirSep Corporation and SeQual Technologies (subsidiaries of Chart Industries, Inc.), Inova Labs, Inc. (a subsidiary of ResMed), DeVilbiss Healthcare (a subsidiary of Drive Medical), O2 Concepts, Precision Medical and Gas Control Equipment. Given the relatively straightforward regulatory path in the oxygen therapy device manufacturing market, we expect that the industry will become increasingly competitive in the future. Manufacturing companies compete for sales to providers primarily on the basis of product features, service and price.

For many years, Lincare, Inc. (a subsidiary of the Linde Group), Apria Healthcare, Inc., Rotech Healthcare, Inc. and American HomePatient, Inc. (now a subsidiary of Lincare, Inc.) have been among the market leaders in providing oxygen therapy, while the remaining oxygen therapy market is serviced by local providers. Because many oxygen therapy providers were either excluded from contracts in the Medicare competitive bidding process, or will have difficulty providing service at the prevailing Medicare reimbursement rates, we expect more industry consolidation. Oxygen therapy providers compete primarily on the basis of product features and service, rather than price, since reimbursement levels are established by Medicare and Medicaid, or by the individual determinations of private payors.

Some of our competitors are large, well-capitalized companies with greater resources than we have. As a consequence, they are able to spend more aggressively on product development, marketing, sales and other product initiatives than we can. Some of these competitors have:

- significantly greater name recognition;
- established relationships with healthcare professionals, customers and third-party payors;
- established distribution networks;
- additional lines of products, and the ability to offer rebates or bundle products to offer higher discounts, longer warranties, financing or extended terms, other incentives to gain a competitive advantage;

- greater history in conducting research and development, manufacturing, marketing and obtaining regulatory approval for oxygen device products; and
- greater financial and human resources for product development, sales and marketing, patent litigation and customer financing.

As a result, our competitors may be able to respond more quickly and effectively than we can due to new or changing opportunities, technologies, standard regulatory and reimbursement development and customer requirements. In light of these advantages that our competitors maintain, even if our technology and direct-to-consumer distribution strategy is more effective than the technology and distribution strategy of our competitors, current or potential customers might accept competitor products and services in lieu of purchasing our products. We anticipate that we will face increased competition in the future as existing companies and competitors develop new or improved products and distribution strategies and as new companies enter the market with new technologies and distribution strategies. We may not be able to compete effectively against these organizations. Our ability to compete successfully and to increase our market share is dependent upon our reputation for providing responsive, professional and high-quality products and services and achieving strong customer satisfaction. Increased competition in the future could adversely affect our revenue, revenue growth rate, margins and market share.

Healthcare reform measures may have a material adverse effect on our business and results of operations.

In the United States, the legislative landscape, particularly as it relates to healthcare regulation and reimbursement coverage, continues to evolve. In March 2010, the Patient Protection and Affordable Care Act was passed, which has the potential to substantially change healthcare financing by both governmental and private insurers, and significantly impact the U.S. medical device industry. In addition, as discussed above, the Patient Protection and Affordable Care Act also expands round two of the competitive bidding program to a total of 117 CBAs, and in 2016 prices in non-CBAs were adjusted to match competitive bidding prices.

In addition, other legislative changes have been proposed and adopted in the United States since the Patient Protection and Affordable Care Act was enacted. On August 2, 2011, the Budget Control Act of 2011 created, among other things, measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers up to 2% per fiscal year, which went into effect on April 1, 2013, and will remain in effect through 2024 unless additional Congressional action is taken. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012 which, among other things, further reduced Medicare payments to certain providers, including physicians, hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our products or additional pricing pressures.

In addition to the legislative changes discussed above, the Patient Protection and Affordable Care Act also requires healthcare providers to voluntarily report and return an identified overpayment within 60 days after identifying the overpayment. Failure to repay the overpayment within 60 days will result in the claim being considered a "false claim" and the healthcare provider will be subject to False Claims Act liability.

State legislative bodies also have the right to enact legislation that would impact requirements of home medical equipment providers, including oxygen therapy providers. Some states have already enacted legislation that would require in-state facilities. States such as Arizona and New York have recently considered such legislation. Arizona introduced HB2266 in the beginning of 2016. HB2266 would have required any durable medical equipment supplier to maintain a physical location within Arizona or 100 miles of an Arizona resident who is a Medicare beneficiary being serviced by the supplier. HB2266 died in legislature in 2016. New York considered bill A05074, which would have required certain durable medical equipment suppliers to maintain a storefront in New York state. Although the bill passed Assembly and Senate, it was vetoed by the Governor in 2016. We are monitoring all state requirements to maintain compliance with state-specific legislation and access to service patients in these states. To the extent such legislation is enacted, it could result in increased administrative costs or otherwise exclude us from doing business in a particular state, which would adversely impact our business, financial condition and operating results.

The current presidential administration and Congress are also expected to attempt broad sweeping changes to the current health care laws. We face uncertainties that might result from modification or repeal of any of the provisions of the Patient Protection and Affordable Care Act, including as a result of current and future executive orders and legislative actions. The impact of those changes on us and potential effect on the durable medical equipment industry as a whole is currently unknown. But, any changes to the Patient Protection and Affordable Care Act are likely to have an impact on our results of operations, and may have a material adverse effect on our results of operations. We cannot predict what other healthcare programs and regulations will ultimately be implemented at the federal or state level or the effect of any future legislation or regulation in the United States may have on our business.

If we are unable to continue to enhance our existing products and develop and market new products that respond to customer needs and preferences and achieve market acceptance, we may experience a decrease in demand for our products and our business could suffer.

We may not be able to compete as effectively with our competitors, and ultimately satisfy the needs and preferences of our customers, unless we can continue to enhance existing products and develop new innovative products. Product development requires significant financial, technological and other resources. While we expended $1.3 million and $1.4 million for the three months ended June 30, 2017 and June 30, 2016, respectively, and $2.6 million and $2.5 million for the six months ended June 30, 2017 and June 30, 2016, respectively, for research and development efforts, we cannot assure that this level of investment will be sufficient to maintain a competitive advantage in product innovation, which could cause our business to suffer. Product improvements and new product introductions also require significant planning, design, development, patent protection, and testing at the technological, product, and manufacturing process levels and we may not be able to timely develop product improvements or new products, or obtain necessary patent protection and regulatory clearances or approvals for such product improvements or new products in a timely manner, or at all. Our competitors' new products may enter the market before our new products reach market, be more effective with more features, obtain better market acceptance, or render our products obsolete. Any new products that we develop may not receive market acceptance or otherwise generate any meaningful sales or profits for us relative to our expectations based on, among other things, existing and anticipated investments in manufacturing capacity and commitments to fund advertising, marketing, promotional programs and research and development.

We depend upon reimbursement from Medicare, private payors, Medicaid and patients for a significant portion of our revenue, and if we fail to manage the complex and lengthy reimbursement process, our business and operating results could suffer.

A significant portion of our rental revenue is derived from reimbursement by third-party payors. We accept assignment of insurance benefits from customers and, in a majority of cases, invoice and collect payments directly from Medicare, private payors and Medicaid, as well as direct from patients under co-insurance provisions. For the three months ended June 30, 2017 and June 30, 2016, approximately 9.5% and 16.5%, respectively, and for the six months ended June 30, 2017 and June 30, 2016, approximately 10.8% and 19.6%, respectively, of our total revenue was derived from Medicare, private payors, Medicaid, and individual patients who directly receive reimbursement from third-party payors.

Our financial condition and results of operations may be affected by the healthcare industry's reimbursement process, which is complex and can involve lengthy delays between the time that a product is delivered to the consumer and the time that the reimbursement amounts are settled. Depending on the payor, we may be required to obtain certain payor-specific documentation from physicians and other healthcare providers before submitting claims for reimbursement. Certain payors have filing deadlines and they will not pay claims submitted after such time. We are also subject to extensive pre-payment and post-payment audits by governmental and private payors that could result in material delays, refunds of monies received or denials of claims submitted for payment under such third-party payor programs and contracts. We cannot ensure that we will be able to continue to effectively manage the reimbursement process and collect payments for our products promptly. If we fail to manage the complex and lengthy reimbursement process, it would adversely affect our business, financial conditions and results of operations.

Failure to obtain private payor contracts and future reductions in reimbursement rates from private payors could have a material adverse effect on our financial condition and operating results.

A portion of our revenue is derived from private payors. Based on our patient population, we estimate at least 30% of potential customers have non-Medicare insurance coverage, and we believe these patients represent a younger and more active patient population that will be drawn to the quality-of-life benefits of our solution. Failing to maintain and obtain private payor contracts from private insurance companies and employers and secure in-network provider status could have a material adverse effect on our financial condition and operating results. In addition, private payors are under pressure to increase profitability and reduce costs. In response, certain private payors are limiting coverage or reducing reimbursement rates for the products we provide. We believe that private payor reimbursement levels will generally be reset in accordance with the Medicare payment amounts determined by competitive bidding. We cannot predict the extent to which reimbursement for our products will be affected by competitive bidding or by initiatives to reduce costs for private payors. Failure to obtain or maintain private payor contracts or the unavailability of third-party coverage or inadequacy of reimbursement for our products would adversely affect our business, financial conditions and results of operations.

We obtain some of the components, subassemblies and completed products included in our Inogen One systems and our Inogen At Home from a single source or a limited group of manufacturers or suppliers, and the partial or complete loss of one of these manufacturers or suppliers could cause significant production delays, an inability to meet customer demand and a substantial loss in revenue.

We utilize single-source suppliers for some of the components and subassemblies we use in our Inogen One systems and our Inogen At Home systems. We have qualified alternate sources of supply sufficient to support future needs and we have taken other mitigating steps to reduce the impact of a loss or required change in supplier; however, there may be delays and additional costs associated with switching to alternative suppliers if our primary source is terminated without notice. Our dependence on single-source suppliers of components may expose us to several risks, including, among other things:

- our suppliers may encounter financial hardships as a result of unfavorable economic and market conditions unrelated to our demand for components, which could inhibit their ability to fulfill our orders and meet our requirements;
- suppliers may fail to comply with regulatory requirements, be subject to lengthy compliance, validation or qualification periods, or make errors in manufacturing components that could negatively affect the performance or safety of our products or cause delays in supplying of our products to our customers;
- newly identified suppliers may not qualify under the stringent quality regulatory standards to which our business is subject;
- we or our suppliers may not be able to respond to unanticipated changes in customer orders, and if orders do not match forecasts, we or our suppliers may have excess or inadequate inventory of materials and components;
- we may be subject to price fluctuations due to a lack of long-term supply arrangements for key components;
- we may experience delays in delivery by our suppliers due to changes in demand from us or their other customers;
- we or our suppliers may lose access to critical services and components, resulting in an interruption in the manufacture, assembly and shipment of our systems;
- our suppliers may be subject to allegations by other parties of misappropriation of proprietary information in connection with their supply of products to us, which could inhibit their ability to fulfill our orders and meet our requirements;
- fluctuations in demand for products that our suppliers manufacture for others may affect their ability or willingness to deliver components to us in a timely manner;
- our suppliers may wish to discontinue supplying components or services to us; and
- we may not be able to find new or alternative components or reconfigure our system and manufacturing processes in a timely manner if the necessary components become unavailable.

In addition, we may be deemed to manufacture or contract to manufacture products that contain certain minerals that have been designated as “conflict minerals” under the Dodd-Frank Wall Street Reform and Consumer Protection Act. As a result, we may be required to perform due diligence to determine the origin of such minerals, and disclose and report whether or not such minerals originated in the Democratic Republic of the Congo or adjoining countries. The implementation of these new requirements could adversely affect the sourcing, availability, and pricing of minerals used in the manufacture of our products. In addition, we may incur additional costs to comply with the disclosure requirements, including costs related to determining the source of any of the relevant minerals and metals used in our products. If any of these risks materialize, costs could significantly increase and our ability to meet demand for our products could be impacted. If we are unable to satisfy commercial demand for our Inogen One systems and Inogen At Home systems in a timely manner, our ability to generate revenue would be impaired, market acceptance of our products could be adversely affected, and customers may instead purchase or use alternative products. In addition, we could be forced to secure new or alternative components and subassemblies through a replacement supplier. Finding alternative sources for these components and subassemblies could be difficult in certain cases and may entail a significant amount of time and disruption. In some cases, we would need to change the components or subassemblies if we sourced them from an alternative supplier. This, in turn, could require a redesign of our Inogen One systems and Inogen At Home systems and, potentially, require additional Food and Drug Administration (FDA) clearance or approval before we could use any redesigned product with new components or subassemblies, thereby causing further costs and delays that could adversely affect our business, financial condition and operating results.

We do not have long-term supply contracts with many of our third-party suppliers.

We purchase components and subassemblies from third-party suppliers, including some of our single-source suppliers, through purchase orders and do not have long-term supply contracts with many of these third-party suppliers. Many of our third-party suppliers, therefore, are not obligated to perform services or supply products to us for any specific period, in any specific quantity or at any specific price, except as may be provided in a particular purchase order. We do not maintain large volumes of inventory from most of these suppliers. If we inaccurately forecast demand for components or subassemblies, our ability to manufacture and commercialize our Inogen One systems and Inogen At Home systems could be delayed and our competitive position and reputation could be harmed. In addition, if we fail to effectively manage our relationships with these suppliers, we may be required to change suppliers which would be time consuming and disruptive and could adversely affect our business, financial condition and operating results.

If our manufacturing facilities become unavailable or inoperable, we will be unable to continue manufacturing our Inogen One systems and Inogen At Home systems and, as a result, our business, financial condition, and operating results will be harmed until we are able to secure a new facility.

We assemble our Inogen One concentrators and Inogen At Home concentrators at our facility in Richardson, Texas and assemble compressors as well as load and assemble sieve beds (columns) at our facility in Goleta, California. No other manufacturing facilities are currently available to us, particularly facilities of the size and scope of our Texas facility. Our facilities and the equipment we use to manufacture our Inogen One systems and Inogen At Home systems would be costly to replace and could require substantial lead time to repair or replace. Our facilities may be harmed or rendered inoperable by natural or man-made disasters, including fire, flood, earthquakes and power outages, which may render it difficult or impossible for us to manufacture our products for some period of time. If any of our facilities become unavailable to us, we cannot provide assurances that we will be able to secure and equip a new manufacturing facility on acceptable terms, in a timely manner. The inability to manufacture our products, combined with delays in replacing parts inventory and manufacturing supplies and equipment, may result in the loss of customers and/or harm our reputation, and we may be unable to reestablish relationships with those customers in the future. Although we have insurance coverage for certain types of disasters which may help us recover some of the costs of damage to our property and lost income from the disruption of our business, this insurance is limited and may not be sufficient to cover any or all of our potential losses and may not continue to be available to us on acceptable terms, or at all. If our manufacturing capabilities are impaired, we may not be able to manufacture, store, and ship our products in a cost effective or timely manner, which would adversely impact our business, financial condition, and operating results.

If we are unable to manage our anticipated growth effectively, our business could be harmed.

The rapid growth of our business has placed a significant strain on our managerial and operational resources and systems. To execute our anticipated growth successfully, we must continue to attract and retain qualified personnel and manage and train them effectively. We must also upgrade our internal business processes and capabilities to create the scalability that a growing business demands.

We believe our facilities located in Richardson, Texas, and Goleta, California, are sufficient to meet our manufacturing needs. However, our anticipated growth will place additional strain on our suppliers and manufacturing facilities, resulting in an increased need for us to carefully monitor quality assurance. Any failure by us to manage our growth effectively could have an adverse effect on our ability to achieve our development and commercialization goals.

We may expand through acquisitions of, or investments in, other companies, each of which may divert our management's attention, result in additional dilution to our stockholders, increase expenses, disrupt our operations, and harm our results of operations.

Our business strategy may, from time to time, include acquiring or investing in complementary services, technologies or businesses, such as our recent acquisition of MedSupport Systems B.V. We cannot assure you that we will successfully identify suitable acquisition candidates, integrate or manage disparate technologies, lines of business, personnel and corporate cultures, realize our business strategy or the expected return on our investment, or manage a geographically dispersed company. Any such acquisition or investment could materially and adversely affect our results of operations. The acquisition and integration process is complex, expensive and time-consuming, and may cause an interruption of, or loss of momentum in, product development and sales activities and operations of both companies, and we may incur substantial cost and expense, as well as divert the attention of management. We may issue equity securities which could dilute current stockholders' ownership, incur debt, assume contingent or other liabilities and expend cash in acquisitions, which could negatively impact our financial position, stockholder equity, and stock price.

Acquisitions and other strategic investments involve significant risks and uncertainties, including:

- the potential failure to achieve the expected benefits of the combination or acquisition;
- unanticipated costs and liabilities;
- difficulties in integrating new products, businesses, operations, and technology infrastructure in an efficient and effective manner;
- difficulties in maintaining customer relations;
- the potential loss of key employees of the acquired businesses;
- the diversion of the attention of our senior management from the operation of our daily business;
- the potential adverse effect on our cash position to the extent that we use cash for the purchase price;
- the potential significant increase of our interest expense, leverage, and debt service requirements if we incur additional debt to pay for an acquisition;
- the potential issuance of securities that would dilute our stockholders' percentage ownership;
- the potential to incur large and immediate write-offs and restructuring and other related expenses; and
- the inability to maintain uniform standards, controls, policies, and procedures.

Any acquisition or investment could expose us to unknown liabilities. Moreover, we cannot assure you that we will realize the anticipated benefits of any acquisition or investment. In addition, our inability to successfully operate and integrate newly acquired businesses appropriately, effectively, and in a timely manner could impair our ability to take advantage of future growth opportunities and other advances in technology, as well as on our revenues, gross margins, and expenses.

We may experience manufacturing problems or delays that could limit our growth or adversely affect our operating results.

Our Inogen One systems and Inogen At Home systems are manufactured using complex processes, sophisticated equipment and strict adherence to specifications and quality standards. Any unforeseen manufacturing problems, such as contamination of our facility, equipment malfunction, regulatory findings, or failure to strictly follow procedures or meet specifications, could result in delays or shortfalls in production of our products. Identifying and resolving the cause of any such manufacturing issues could require substantial time and resources. If we are unable to keep up with demand for our products by successfully manufacturing and shipping our products in a timely and quality manner, our operating results could be impaired, market acceptance for our products could be adversely affected and our customers might instead purchase our competitors' products.

In addition, the introduction of new products may require the development of new manufacturing processes and procedures. While all of our products are assembled using the same basic processes, significant changes in technology, programming, and other variations may be required to meet product specifications. Developing new processes can be very time consuming and affect quality, as such any unexpected difficulty in doing so could delay the introduction of a new product and our ability to produce sufficient quantities of existing products.

We are exposed to the credit and non-payment risk of our HME providers, distributors, private label partners and resellers, especially during times of economic uncertainty and tight credit markets, which could result in material losses.

We make sales to certain HME providers, distributors, private label partner and resellers on unsecured credit, with terms that vary depending upon the customer's credit history, solvency, cash flow, credit limits and sales history, as well as prevailing terms with similarly situated customers and whether sufficient credit insurance can be obtained. Challenging economic conditions may impair the ability of our customers to pay for products they have purchased, and as a result, our reserves for doubtful accounts and write-off of accounts receivable could increase and, even if increased, may turn out to be insufficient. Moreover, even in cases where we have insolvency risk insurance to protect against a customer's bankruptcy, insolvency or liquidation, this insurance typically contains a significant deductible and co-payment obligation, and does not cover all instances of non-payment. Our exposure to credit risks of our business partners may increase if our business partners and their end customers are adversely affected by global or regional economic conditions. One or more of these business partners could delay payments or default on credit extended to them, either of which could adversely impact our business, financial condition, and operating results.

We generate a substantial portion of our revenue internationally and are subject to various risks relating to such international activities, which could adversely affect our operating results. In addition, any disruption or delay in the shipping of our products, whether domestically or internationally, may have an adverse effect on our financial condition and results of operations.

During the six months ended June 30, 2017 and June 30, 2016, approximately 22.6% and 23.6%, respectively, of our total revenue was generated from customers located outside of the United States. We believe that a significant percentage of our future revenue will come from international sources as we expand our international operations and develop opportunities in other countries. Engaging in international business inherently involves a number of difficulties and risks, including:

- required compliance with anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act and U.K. Bribery Act, data privacy requirements, labor laws, and anti-competition regulations;
- export or import restrictions;
- obtaining and maintaining regulatory clearances, approvals and certifications;
- laws and business practices favoring local companies;
- difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- unstable economic, political, and regulatory conditions;
- fluctuations in currency exchange rates;
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements, and other trade barriers; and
- difficulties protecting or procuring intellectual property rights.

If one or more of these risks occurs, it could require us to dedicate significant resources to remedy, and if we are unsuccessful in finding a solution, our financial results will suffer.

In addition, on June 23, 2016, the United Kingdom (U.K.) held a referendum in which voters approved an exit from the European Union, commonly referred to as “Brexit.” In February 2017, the British Parliament voted in favor of allowing the British government to begin the formal process of Brexit and discussions with the European Union began in March 2017. Adverse consequences concerning Brexit or the future of the European Union could include deterioration in global economic conditions, instability in global financial markets, political uncertainty, volatility in currency exchange rates or adverse changes in the cross-border agreements currently in place, any of which could have an adverse impact on our financial results in the future.

A majority of our product sales are currently denominated in U.S. dollars and fluctuations in the value of the U.S. dollar relative to foreign currencies could decrease demand for our products and adversely impact our financial performance. For example, if the value of the U.S. dollar increases relative to foreign currencies, our products could become more costly to the international consumer and therefore less competitive in international markets. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. The volatility of exchange rates depends on many factors that we cannot forecast with reliable accuracy. We have experienced and will continue to experience fluctuations in our net income or loss as a result of transaction gains or losses related to revaluing certain current asset and current liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. For example, for the six months ended June 30, 2017, we experienced a net foreign currency gain of $0.7 million and for the year ended December 31, 2016, we experienced a net foreign currency loss of $0.3 million. Fluctuations in currency exchange rates could have an adverse impact on our financial results in the future. While we have a hedging program for Euros that attempts to manage currency exchange rate risks to an acceptable level based on management's judgment of the appropriate trade-off between risk, opportunity, and cost, this hedging program does not completely eliminate the effects of currency exchange rate fluctuations. A discussion of the hedging program is contained in Item 7A, Quantitative and Qualitative Disclosures about Market Risk in our Annual Report on Form 10-K for the period ended December 31, 2016. Additional information on our hedging arrangements is also contained in Note 9 to the notes to the financial statements in our Annual Report on Form 10-K for the period ended December 31, 2016.

We rely on shipping providers to deliver products to our customers globally. Labor, tariff, or World Trade Organization-related disputes, piracy, physical damage to shipping facilities or equipment caused by severe weather or terrorist incidents, congestion at shipping facilities, inadequate equipment to load, dock, and offload our products, energy-related tie-ups, or other factors could disrupt or delay shipping or off-loading of our products domestically and internationally. Such disruptions or delays may have an adverse effect on our financial condition and results of operations.

Failure to comply with anti-bribery, anti-corruption, and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, and similar laws associated with our activities outside of the United States could subject us to penalties and other adverse consequences.

We are subject to the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, the United Kingdom Bribery Act of 2010 and possibly other anti-corruption, anti-bribery and anti-money laundering laws in the more than forty countries around the world where we conduct activities and sell our products. We face significant risks and liability if we fail to comply with the FCPA and other anti-corruption and anti-bribery laws that prohibit companies and their employees and third-party business partners, such as distributors or resellers, from authorizing, offering or providing, directly or indirectly, improper payments or benefits to foreign government officials, political parties or candidates, employees of public international organizations including healthcare professionals, or private-sector recipients for the corrupt purpose of obtaining or retaining business, directing business to any person, or securing any advantage.

We leverage various third parties to sell our products and conduct our business abroad. We, our distributors and channel partners, and our other third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities (such as in the context of obtaining government approvals, registrations, or licenses) and may be held liable for the corrupt or other illegal activities of these third-party business partners and intermediaries, our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize such activities. In many foreign countries, particularly in countries with developing economies, it may be a local custom that businesses engage in practices that are prohibited by the FCPA or other applicable laws and regulations. As such, we intend to continue to implement an FCPA/anti-corruption compliance program to ensure compliance with such laws but cannot assure you that all of our employees and agents, as well as those companies to which we outsource certain of our business operations, will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible.

Any violation of the FCPA, other applicable anti-bribery, anti-corruption laws, and anti-money laundering laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions and, in the case of the FCPA, suspension or debarment from U.S. government contracts, which could have a material and adverse effect on our reputation, business, operating results and prospects. In addition, responding to any enforcement action or related investigation may result in a materially significant diversion of management's attention and resources and significant defense costs and other professional fees.

If we fail to comply with U.S. export control and economic sanctions or fail to expand and maintain an effective sales force or successfully develop our international distribution network, our business, financial condition and operating results may be adversely affected.

We currently derive the majority of our revenue from rentals or sales generated from our own direct sales force. Failure to maintain or expand our direct sales force could adversely impact our financial and operating performance. Additionally, we use international distributors to augment our sales efforts, certain of which are exclusive distributors in certain foreign countries. We cannot assure you that we will be able to successfully develop our relationships with third-party distributors internationally. In addition, we are subject to United States export control and economic sanctions laws relating to the sale of our products, the violation of which could result in substantial penalties being imposed against us. In particular, we have secured annual export licenses from the U.S. Treasury Department's Office of Foreign Assets Control to sell our products to a distributor and hospital and clinic end-users in Iran. The use of this license requires us to observe strict conditions with respect to products sold, end-user limitations and payment requirements. Although we believe we have maintained compliance with license requirements, there can be no assurance that the license will not be revoked, be renewed in the future or that we will remain in compliance. More broadly, if we fail to comply with export control laws or successfully develop our relationship with international distributors, our sales could fail to grow or could decline, and our ability to grow our business could be adversely affected. Distributors that are in the business of selling other medical products may not devote a sufficient level of resources and support required to generate awareness of our products and grow or maintain product sales. If our distributors are unwilling or unable to market and sell our products, or if they do not perform to our expectations, we could experience delayed or reduced market acceptance and sales of our products.

We may be subject to substantial warranty or product liability claims or other litigation in the ordinary course of business that may adversely affect our business, financial condition and operating results.

As manufacturers of medical devices, we may be subject to substantial warranty or product liability claims or other litigation in the ordinary course of business that may require us to make significant expenditures to defend these claims or pay damage awards. For example, our Inogen One systems contain lithium ion batteries, which, under certain circumstances, can be a fire hazard. We, as well as our key suppliers, maintain product liability insurance, but this insurance is limited in amount and subject to significant deductibles. There is no guarantee that insurance will be available or adequate to protect against all claims. Our insurance policies are subject to

annual renewal and we may not be able to obtain liability or product insurance in the future on acceptable terms or at all. In addition, our insurance premiums could be subject to increases in the future, which may be material. If the coverage limits are inadequate to cover our liabilities or our insurance costs continue to increase as a result of warranty or product liability claims or other litigation, then our business, financial condition and operating results may be adversely affected.

We may also be subject to other types of claims arising from our normal business activities. These may include claims, suits, and proceedings involving labor and employment, wage and hour, commercial, alleged securities laws violations or other investor claims, patent defense and other matters. The outcome of any litigation, regardless of its merits, is inherently uncertain. Any claims and lawsuits, and the disposition of such claims and lawsuits, could be time-consuming and expensive to resolve, divert management attention and resources, and lead to attempts on the part of other parties to pursue similar claims. Any adverse determination related to litigation could require us to change our technology or our business practices, pay monetary damages or enter into royalty or licensing arrangements, which could adversely impact our business, financial condition, and operating results.

Increases in our operating costs could have a material adverse effect on our business, financial condition and operating results.

Reimbursement rates are established by fee schedules mandated by Medicare, private payors and Medicaid, and are likely to remain constant or decrease due, in part, to federal and state government budgetary constraints. As a result, with respect to Medicare and Medicaid related revenue, we are not able to offset the effects of general inflation on our operating costs through increases in prices for our products. In particular, labor and related costs account for a significant portion of our operating costs and we compete with other healthcare providers to attract and retain qualified or skilled personnel and with various industries for administrative and service employees. This competitive environment could result in increased labor costs. As such, we must control our operating costs, particularly labor and related costs and failing to do so could adversely affect our financial conditions and results of operations.

We depend on the services of our senior executives and other key technical personnel, the loss of whom could negatively affect our business.

Our success depends upon the skills, experience and efforts of our senior executives and other key technical personnel, including certain members of our engineering staff and our sales and marketing executives. Much of our corporate expertise is concentrated in relatively few employees, the loss of which for any reason could negatively affect our business. Competition for our highly skilled employees is intense and we cannot prevent the resignation of any employee. We do not maintain “key man” life insurance on any of our senior executives. None of our senior executive team is bound by written employment contracts to remain with us for a specified period. In addition, we have not entered into non-compete agreements with members of our executive management team. The loss of any member of our executive management team could harm our ability to implement our business strategy and respond to the market conditions in which we operate.

We rely on information technology, and if we are unable to protect against service interruptions, data corruption, cyber-based attacks or network security breaches, our operations could be disrupted and our business could be negatively affected.

We rely on information technology networks and systems to process, transmit and store electronic, customer, operational, compliance, and financial information; to coordinate our business; and to communicate within our company and with customers, suppliers, partners and other third-parties. These information technology systems may be susceptible to damage, disruptions or shutdowns, hardware or software failures, power outages, computer viruses, cyber-attacks, security breaches, telecommunication failures, user errors or catastrophic events. If our information technology systems suffer unauthorized access, severe damage, disruption or shutdown, and our business continuity do not effectively identify or resolve the issues in a timely manner, our operations could be disrupted, we could be subject to regulatory and consumer lawsuits and our business could be negatively affected. In addition, cyber-attacks could lead to potential unauthorized access and disclosure of confidential information (including patient-identifiable health information), and data loss and corruption. There is no assurance that we will not experience service interruptions, security breaches, cyber-attacks, or other information technology failures in the future.

Our failure to properly and efficiently implement and operate our new customer relationship management computer system could adversely affect our operations and financial performance.

We may now and in the future implement new systems to increase efficiencies and profitability, including a new customer relationship management (CRM) system we implemented in the second quarter of 2017. As with any major new computer system, there are risks inherent in the cost estimates, design, construction, implementation and operation of our new CRM system and there will be similar risks involved in the implementation of any similar systems implemented in the future. These risks include the potential failures to properly design the system, to efficiently and economically construct and implement the system and to effectively operate the system. We anticipate a short-term decline in productivity associated with the adoption of our new CRM system implemented in the second quarter of 2017 and, while this system is anticipated to simplify the sales and order processing efforts, enhance customer

service, and increase sales revenue in our direct-to-consumer channel, there is a risk that the project will not achieve the anticipated benefits or that the benefits will not be achieved as quickly as anticipated. Failures or delays in properly implementing the new CRM system or new systems in the future could harm our ability to effectively operate our business and adversely impact our business, financial condition, and operating results.

Our financial results may vary significantly from quarter-to-quarter due to a number of factors, which may lead to volatility in our stock price.

Our quarterly revenue and results of operations have varied in the past and may continue to vary significantly from quarter-to-quarter. This variability may lead to volatility in our stock price as research analysts and investors respond to these quarterly fluctuations. These fluctuations are due to numerous factors, including: fluctuations in consumer demand for our products; seasonal cycles in consumer spending; our ability to design, manufacture and deliver products to our consumers in a timely and cost-effective manner; quality control problems in our manufacturing operations; our ability to timely obtain adequate quantities of the components used in our products; new product introductions and enhancements by us and our competitors; unanticipated increases in costs or expenses; unanticipated regulatory reimbursement changes that could result in positive or negative impacts to our earnings; changes or updates to generally accepted accounting principles; and fluctuations in foreign currency exchange rates. For example, we typically experience higher total sales in the second and third quarters as a result of consumers traveling and vacationing during warmer weather in the spring and summer months and lower revenue in the low travel and colder weather months, but this may vary year-over-year in certain domestic and international locations in our business-to-business channels. In particular, we have previously seen lower international revenue in the third quarter due to reduced economic activity in Europe in the summer months, but this trend did not continue in 2016. In addition, due to the expected timing of sales representatives hiring, the opening of our new facility in Cleveland, Ohio expected in the third quarter of 2017, and the anticipated short-term decline in productivity associated with our new CRM system that we implemented in the second quarter of 2017, we expect higher sales revenue in our direct-to-consumer channel in the second half of 2017 compared to the first half of 2017. As more HME providers adopt portable oxygen concentrators in their businesses, we expect that this could change our historical seasonality in the domestic business-to-business channel in 2017 as well, which was previously influenced mainly by consumer buying patterns. The foregoing factors are difficult to forecast, and these, as well as other factors, could materially and adversely affect our quarterly and annual results of operations. We have experienced significant revenue growth in the past, but we may not achieve similar growth rates in future periods. You should not rely on our operating results for any prior quarterly or annual period as an indication of our future operating performance. If we are unable to maintain adequate revenue growth, our operating results could suffer and our stock price could decline. In addition, a significant amount of our operating expenses are relatively fixed due to our manufacturing, research and development and sales and general administrative efforts. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of such revenue shortfall on our results of operations. Our results of operations may not meet the expectations of research analysts or investors, in which case the price of our common stock could decrease significantly.

If the market opportunities for our products are smaller than we believe they are, our revenues may be adversely affected and our business may suffer.

Our projections regarding (i) the size of the oxygen therapy market, both in the United States and internationally, (ii) the size and percentage of the oxygen therapy market that is subject to competitive bidding in the United States, (iii) the number of oxygen therapy patients, (iv) the number of patients requiring ambulatory and stationary oxygen, (v) the number of patients who rely on the delivery model, and (vi) the share of portable oxygen concentrators as a percentage of the total oxygen therapy spend are based on estimates that we believe are reliable. These estimates may prove to be incorrect, new data or studies may change the estimated incidence or prevalence of patients requiring oxygen therapy, or the type of oxygen therapy patients. The number of patients in the United States and internationally may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our products, or new patients may become increasingly difficult to identify or gain access to, all of which would adversely affect our results of operations and our business.

The terms of our revolving credit agreement may restrict our current and future operations, and could affect our ability to respond to changes in our business and to manage our operations.

On November 7, 2014, we entered into a revolving credit agreement with JPMorgan Chase Bank, which we refer to as our revolving credit agreement. The agreement provides for a revolving line of credit in an aggregate principal amount of $15.0 million with a sublimit of $1.0 million for the issuance of letters of credit on our behalf. The agreement is secured by all or substantially all of our assets.

Pursuant to the revolving credit agreement, we are subject to certain financial covenants relating to our net worth and EBITDA. Tangible net worth under the revolving credit agreement is calculated by subtracting the sum of intangible assets and total liabilities from total assets. EBITDA is defined in the revolving credit agreement as our net income plus interest expense, plus depreciation

expense, plus amortization expense, plus income tax expense, plus non-cash expense, plus extraordinary losses, minus non-cash income, and minus extraordinary gains, as computed during certain test periods provided in the revolving credit agreement. We are required to maintain at all times a tangible net worth of $90.0 million and EBITDA (i) of $10.0 million for any period of four consecutive quarters commencing with the four-quarter test period ended September 30, 2014 through the four-quarter test period ended March 31, 2016 and (ii) of $12.5 million for any four-quarter test period commencing with the four-quarter test period ended June 30, 2016 and continuing thereafter.

The agreement contains events of default customary for transactions of this type, including non-payment, misrepresentation, breach of covenants, and bankruptcy. In the event we fail to satisfy our covenants, or otherwise go into default, JPMorgan Chase Bank, has a number of remedies, including sale of our assets and acceleration of all outstanding indebtedness. Certain of these remedies would likely have a material adverse effect on our business. As of June 30, 2017, in order to be in compliance with the EBITDA and tangible net worth requirements, we were required to maintain $12.5 million in EBITDA for the preceding test period, and we had $47.3 million in EBITDA for that period. As of June 30, 2017, we were also required to maintain a tangible net worth of $90.0 million, and we had a tangible net worth of $203.8 million.

An adverse outcome of a sales and use tax audit could have a material adverse effect on our results of operations and financial condition.

The California State Board of Equalization conducted a sales and use tax audit of our operations in California in 2008. As a result of the audit, the California State Board of Equalization confirmed that our sales are not subject to California sales and use tax. We believe that our sales in other states should not be subject to sales and use tax. There can be no assurance, however, that other states may agree with our position and we may be subject to an audit that may not be resolved in our favor. Such an audit could be expensive and time-consuming and result in substantial management distraction. If the matter were to be resolved in a manner adverse to us, it could have a material adverse effect on our results of operations and financial position.

Changes in accounting principles, or interpretations thereof, could have a significant impact on our financial position and results of operations.

We prepare our financial statements in accordance with accounting principles generally accepted in the United States of America, referred to as U.S. GAAP. These principles are subject to interpretation by the Securities and Exchange Commission (SEC) and various bodies formed to interpret and create appropriate accounting principles. A change in these principles can have a significant effect on our reported results and may even retroactively affect previously reported transactions. Additionally, the adoption of new or revised accounting principles may require that we make significant changes to our systems, processes and controls.

For example, the U.S.-based Financial Accounting Standards Board, referred to as FASB, is currently working together with the International Accounting Standards Board, referred to as IASB, on several projects to further align accounting principles and facilitate more comparable financial reporting between companies who are required to follow U.S. GAAP under SEC regulations and those who are required to follow International Financial Reporting Standards outside of the United States. These efforts by the FASB and IASB may result in different accounting principles under U.S. GAAP that may result in materially different financial results for us in areas including, but not limited to, principles for recognizing revenue and lease accounting. Additionally, significant changes to U.S. GAAP resulting from the FASB's and IASB's efforts may require that we change how we process, analyze and report financial information and that we change financial reporting controls.

It is not clear if or when these potential changes in accounting principles may become effective, whether we have the proper systems and controls in place to accommodate such changes and the impact that any such changes may have on our financial position and results of operations.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

Our existing net operating losses (NOLs) are subject to limitations arising from ownership changes subject to the provisions of Section 382 of the Internal Revenue Code of 1986, as amended. If we undergo one or more future ownership changes our ability to utilize NOLs could be further limited.

Risks related to the regulatory environment

We are subject to extensive federal and state regulation, and if we fail to comply with applicable regulations, we could suffer severe criminal or civil sanctions and be required to make significant changes to our operations that could adversely affect our business, financial condition and operating results.

The federal government and all states in which we currently operate regulate various aspects of our business. In particular, our operations are subject to state laws governing, among other things, distribution of medical equipment and certain types of home health activities, and we are required to obtain and maintain licenses in each state to act as a durable medical equipment supplier. Certain of our employees are subject to state laws and regulations governing the professional practices of respiratory therapy.

As a healthcare provider participating in governmental healthcare programs, we are subject to laws directed at preventing fraud and abuse, which subject our marketing, billing, documentation and other practices to strict government scrutiny. To ensure compliance with Medicare, Medicaid and other regulations, government agencies or their contractors often conduct routine audits and request customer records and other documents to support our claims submitted for payment of services rendered. Government agencies or their contractors also periodically open investigations and obtain information from healthcare providers. Violations of federal and state regulations can result in severe criminal, civil and administrative penalties and sanctions, including debarment, suspension or exclusion from Medicare, Medicaid and other government reimbursement programs, any of which would have a material adverse effect on our business.

Changes in healthcare laws and regulations and new interpretations of existing laws and regulations may affect permissible activities, the relative costs associated with doing business, and reimbursement amounts paid by federal, state and other third-party payors. There have been and will continue to be regulatory initiatives affecting our business and we cannot predict the extent to which future legislation and regulatory changes could have a material adverse effect on our business.

We are subject to burdensome and complex billing and record-keeping requirements in order to substantiate our claims for payment under federal, state and commercial healthcare reimbursement programs, and our failure to comply with existing requirements, or changes in those requirements or interpretations thereof, could adversely affect our business, financial condition and operating results.

We are subject to burdensome and complex billing and record-keeping requirements in order to substantiate our claims for payment under federal, state and commercial healthcare reimbursement programs. Our records also are subject to routine and other reviews by third-party payors, which can result in delays in payments or refunds of paid claims. We could experience a significant increase in pre-payment reviews of our claims by the Durable Medical Equipment Medicare Administrative Contractors, which could cause substantial delays in the collection of our Medicare accounts receivable as well as related amounts due under supplemental insurance plans.

Current law provides for a significant expansion of the government's auditing and oversight of suppliers who care for patients covered by various government healthcare programs. Examples of this expansion include audit programs being implemented by the Durable Medical Equipment Medicare Administrative Contractors, the Zone Program Integrity Contractors, the Recovery Audit Contractors, and the Comprehensive Error Rate Testing contractors, operating under the direction of CMS, and the various state Medicaid Fraud Control Units.

We have been informed by these auditors that healthcare providers and suppliers of certain durable medical equipment product categories are expected to experience further increased scrutiny from these audit programs. When a government auditor ascribes a high billing error rate to one or more of our locations, it generally results in protracted pre-payment claims review, payment delays, refunds and other payments to the government and/or our need to request more documentation from providers than has historically been required. It may also result in additional audit activity in other company locations in that state or Durable Medical Equipment Medicare Administrative Contractors jurisdiction. We cannot currently predict the adverse impact that these audits, methodologies and interpretations might have on our business, financial condition or operating results, but such impact could be material.

We are subject to significant regulation by numerous government agencies, including the U.S. Food and Drug Administration, or FDA. We cannot market or commercially distribute our products without obtaining and maintaining necessary regulatory clearances or approvals.

Our Inogen concentrators are medical devices subject to extensive regulation in the United States and in the foreign markets where we distribute our products. The FDA and other U.S. and foreign governmental agencies regulate, among other things, with respect to medical devices:

- design, development and manufacturing;
- testing, labeling, content and language of instructions for use and storage;
- clinical trials;
- product safety;
- marketing, sales and distribution;
- pre-market clearance and approval;
- record keeping;
- advertising and promotion;
- recalls and field safety corrective actions;
- post-market surveillance, including reporting of deaths or serious injuries and malfunctions that, if they were to recur, could lead to death or serious injury;
- post-market approval studies; and
- product import and export.

Before we can market or sell a medical device in the United States, we must obtain either clearance from the FDA under Section 510(k) of the Federal Food, Drug, and Cosmetic Act, or the FDCA, or approval of a pre-market approval application from the FDA, unless an exemption applies. In the 510(k) clearance process, the FDA must determine that a proposed device is "substantially equivalent" to a device legally on the market, known as a "predicate" device, with respect to intended use, technology and safety and effectiveness, in order to clear the proposed device for marketing.

Our commercial products have received 510(k) clearance by the FDA. If the FDA requires us to go through a lengthier, more rigorous examination for future products or modifications to existing products than we had expected, our product introductions or modifications could be delayed or canceled, which could cause our sales to decline. In addition, the FDA may determine that future products will require the more costly, lengthy and uncertain pre-market approval process. Although we do not currently market any devices under a pre-market approval, the FDA may demand that we obtain a pre-market approval prior to marketing certain future products. In addition, if the FDA disagrees with our determination that a product we currently market is subject to an exemption from pre-market review, the FDA may require us to submit a 510(k) or pre-market approval application in order to continue marketing the product. Further, even with respect to those future products where a pre-market approval is not required, we cannot assure you that we will be able to obtain the 510(k) clearances with respect to those products, or do so in a timely fashion.

The FDA can delay, limit or deny clearance or approval of a device for many reasons, including:

- we may not be able to demonstrate to the FDA's satisfaction that our products are safe and effective for their intended uses;
- the data from our pre-clinical studies and clinical trials may be insufficient to support clearance or approval, where required; and
- the manufacturing process or facilities we use may not meet applicable Quality System Regulations.

Medical devices may only be promoted and sold for the indications for which they are approved or cleared. In addition, even if the FDA has approved or cleared a product, it can take action affecting such product approvals or clearances if serious safety or other problems develop in the marketplace. Delays in obtaining clearances or approvals could adversely affect our ability to introduce new products or modifications to our existing products in a timely manner, which would delay or prevent commercial sales of our products. Additionally, the FDA and other regulatory authorities have broad enforcement powers. Regulatory enforcement or inquiries, or other increased scrutiny on us, could affect the perceived safety and performance of our products and dissuade our customers from using our products.

If we modify our FDA cleared devices, we may need to seek additional clearances or approvals, which, if not granted, would prevent us from selling our modified products.

Any modification we make to our Inogen One systems and Inogen At Home system that could significantly affect their safety or effectiveness, or would constitute a major change in intended use, manufacture, design, materials, labeling, or technology requires the submission and clearance of a new 510(k) pre-market notification or, possibly, pre-market approval. The FDA requires every manufacturer to make this determination in the first instance, but the FDA may review and disagree with any manufacturer's decision. The FDA may not agree with our decisions regarding whether new clearances or approvals are necessary. We have modified some of our 510(k) cleared products, and have determined that in certain instances new 510(k) clearances or pre-market approval are not required. If the FDA disagrees with our determination and requires us to submit new 510(k) notifications or pre-market approval for modifications to our previously cleared products for which we have concluded that new clearances or approvals are unnecessary, we may be required to cease marketing or to recall the modified product until we obtain clearance or approval, and we may be subject to significant regulatory fines or penalties.

If we fail to comply with FDA or state regulatory requirements, we can be subject to enforcement action.

Even after we have obtained regulatory clearance or approval to market a product, we have ongoing responsibilities under FDA regulations. The FDA and state authorities have broad enforcement powers. Our failure to comply with applicable regulatory requirements could result in enforcement action by the FDA or state agencies, which may include any of the following sanctions:

- adverse publicity, warning letters, fines, injunctions, consent decrees and civil penalties;
- recalls, termination of distribution, or seizure of our products;
- operating restrictions or partial suspension or total shutdown of production;
- delays in the introduction of products into the market;
- refusal to grant our requests for future 510(k) clearances or approvals of new products, new intended uses, or modifications to exiting products;
- withdrawals or suspensions of current 510(k) clearances or approvals, resulting in prohibitions on sales of our products; and
- criminal prosecution.

Any of these sanctions could result in higher than anticipated costs or lower than anticipated sales and have a material adverse effect on our reputation, business, results of operations and financial condition.

A recall of our products, either voluntarily or at the direction of the FDA or another governmental authority, or the discovery of serious safety issues with our products that leads to corrective actions, could have a significant adverse impact on us.

The FDA and similar foreign governmental authorities have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design, labeling or manufacture of a product or in the event that a product poses an unacceptable risk to health. Manufacturers may also, under their own initiative, recall a product if any material deficiency in a device is found or withdraw a product to improve device performance or for other reasons. A government-mandated or voluntary recall by us or one of our distributors could occur as a result of an unacceptable risk to health, component failures, manufacturing errors, design or labeling defects or other deficiencies and issues. Similar regulatory agencies in other countries have similar authority to recall devices because of material deficiencies or defects in design or manufacture that could endanger health. Any recall would divert management attention and financial resources, could cause the price of our stock to decline and expose us to product liability or other claims and harm our reputation with customers. A recall involving our Inogen concentrators could be particularly harmful to our business, financial and operating results.

We are required to timely report to the FDA any incident in which our product may have caused or contributed to a death or serious injury or in which our product malfunctioned and, if the malfunction were to recur, would likely cause or contribute to death or serious injury. Repeated product malfunctions may result in a voluntary or involuntary product recall. Depending on the corrective action we take to redress a product's deficiencies or defects, the FDA may require, or we may decide, that we will need to obtain new approvals or clearances for the device before we may market or distribute the corrected device. Seeking such approvals or clearances may delay our ability to replace the recalled devices in a timely manner. Moreover, if we do not adequately address problems associated with our devices, we may face additional regulatory enforcement action, including adverse publicity, FDA warning letters, product seizure, injunctions, administrative penalties, or civil or criminal fines. We may also be required to bear other costs or take other actions that may have a negative impact on our sales as well as face significant adverse publicity or regulatory consequences, which could harm our business, including our ability to market our products in the future.

Any adverse event involving our products, whether in the United States or abroad, could result in future voluntary corrective actions, such as recalls or customer notifications, or agency action, such as inspection, mandatory recall or other enforcement action. Any corrective action, whether voluntary or involuntary, as well as defending ourselves in a lawsuit, will require the dedication of our time and capital, distract management from operating our business and may harm our reputation and financial results.

If we or our component manufacturers fail to comply with the FDA's Quality System Regulation, our manufacturing operations could be interrupted, and our product sales and operating results could suffer.

We and our component manufacturers are required to comply with the FDA's Quality System Regulation, or QSR, which covers the procedures and documentation of the design, testing, production, control, quality assurance, labeling, packaging, storage and shipping of our devices. The FDA audits compliance with the QSR through periodic announced and unannounced inspections of manufacturing and other facilities. We and our component manufacturers have been, and anticipate in the future being, subject to such inspections. Although we believe our manufacturing facilities and those of our component manufacturers are in compliance with the QSR, we cannot provide assurance that any future inspection will not result in adverse findings. If our manufacturing facilities or those of any of our component manufacturers or suppliers are found to be in violation of applicable laws and regulations, or we or our manufacturers or suppliers fail to take prompt and satisfactory corrective action in response to an adverse inspection, the FDA could take enforcement action, including any of the following sanctions:

- adverse publicity, untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties;
- customer notifications or repair, replacement, refunds, recall, detention or seizure of our products;
- operating restrictions or partial suspension or total shutdown of production;
- refusing or delaying our requests for 510(k) clearance or pre-market approval of new products or modified products;
- withdrawing 510(k) clearances or pre-market approvals that have already been granted;
- refusal to grant export approval for our products; or
- criminal prosecution.

Any of these sanctions could adversely affect our business, financial conditions and operating results.

Outside the United States, our products and operations are also often required to comply with standards set by industrial standards bodies, such as the International Organization for Standardization, or ISO. Foreign regulatory bodies may evaluate our products or the testing that our products undergo against these standards. The specific standards, types of evaluation and scope of review differ among foreign regulatory bodies. If we fail to adequately comply with any of these standards, a foreign regulatory body may take adverse actions similar to those within the power of the FDA. Any such action may harm our reputation and could have an adverse effect on our business, results of operations and financial condition.

The primary regulatory body in Europe is the European Commission, which includes most of the major countries in Europe. The European Commission has adopted numerous directives and standards regulating the design, manufacture, clinical trial, labeling and adverse event reporting for medical devices. Devices that comply with the requirements of a relevant directive will be entitled to bear the CE conformity marking, indicating that the device conforms to the essential requirements of the applicable directives and, accordingly, can be commercially distributed throughout Europe. The method of assessing conformity varies depending on the class of the product, but normally involves a combination of self-assessment by the manufacturer and a third-party assessment by a "Notified Body." An assessment by a Notified Body of one country within the European Union is required in order for a manufacturer to commercially distribute the product throughout the European Union.

If we fail to obtain and maintain regulatory approval in foreign jurisdictions, our market opportunities will be limited.

Approximately 23.3% and 24.0% of our revenue was from sales outside of the United States for the three months ended June 30, 2017 and June 30, 2016, respectively, and 22.6% and 23.6% for the six months ended June 30, 2017 and June 30, 2016, respectively. As of June 30, 2017, we sold our products in 45 countries outside of the United States through distributors or directly to large "house" accounts. In order to market our products in the European Union or other foreign jurisdictions, we must obtain and maintain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies from country to country and can involve additional product testing. The time required to obtain approval abroad may be longer than the time required to obtain FDA clearance. The foreign regulatory approval process includes many of the risks associated with obtaining FDA clearance and we may not obtain foreign regulatory approvals on a timely basis, if at all. FDA clearance does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries. However, the failure to obtain clearance or approval in one jurisdiction may have a negative impact on our ability to obtain clearance or approval elsewhere. If we do not obtain or maintain necessary approvals to commercialize our products in markets outside the United States, we may be required to discontinue sales in those countries which would negatively affect our overall market penetration, revenues, results of operation and financial condition.

We may be subject to fines, penalties or injunctions if we are determined to be promoting the use of our products for unapproved or "off-label" uses, resulting in damage to our reputation and business.

Our promotional materials and training methods must comply with the FDA and other applicable laws and regulations, including the prohibition of the promotion of a medical device for a use that has not been cleared or approved by the FDA. Physicians may use our products off-label, as the FDA does not restrict or regulate a physician's choice of treatment within the practice of medicine. If the FDA determines that our promotional materials or training constitutes promotion of an off-label use that is either false or misleading, it could request that we modify our training or promotional materials or subject us to regulatory or enforcement actions, which could have an adverse impact on our reputation and financial results.

Failure to comply with the Federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, the Health Information Technology for Economic and Clinical Health Act, or HITECH Act, and implementing regulations could result in significant penalties.

Numerous federal and state laws and regulations, including HIPAA and the HITECH Act, govern the collection, dissemination, security, use and confidentiality of patient-identifiable health information. HIPAA and the HITECH Act require us to comply with standards for the use and disclosure of protected health information within our company and with third parties. The Privacy Standards and Security Standards under HIPAA establish a set of basic national privacy and security standards for the protection of individually identifiable health information by health plans, healthcare clearinghouses and certain healthcare providers, referred to as covered entities, and the business associates with whom such covered entities contract for services. Notably, whereas HIPAA previously directly regulated only these covered entities, the HITECH Act, which was signed into law as part of the stimulus package in February 2009, makes certain of HIPAA's privacy and security standards also directly applicable to covered entities' business associates. As a result, both covered entities and business associates are now subject to significant civil and criminal penalties for failure to comply with Privacy Standards and Security Standards.

HIPAA requires healthcare providers like us to develop and maintain policies and procedures with respect to protected health information that is used or disclosed, including the adoption of administrative, physical and technical safeguards to protect such information. The HITECH Act expands the notification requirement for breaches of patient-identifiable health information, restricts certain disclosures and sales of patient-identifiable health information and provides a tiered system for civil monetary penalties for HIPAA violations. The HITECH Act also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney fees and costs associated with pursuing federal civil actions. Additionally, certain states have adopted comparable privacy and security laws and regulations, some of which may be more stringent than HIPAA.

If we do not comply with existing or new laws and regulations related to patient health information, we could be subject to criminal or civil sanctions. New health information standards, whether implemented pursuant to HIPAA, the HITECH Act, congressional action or otherwise, could have a significant effect on the manner in which we handle healthcare related data and communicate with payors, and the cost of complying with these standards could be significant.

The 2013 final HITECH omnibus rule modifies the breach reporting standard in a manner that will likely make more data security incidents qualify as reportable breaches. Any liability from a failure to comply with the requirements of HIPAA or the HITECH Act could adversely affect our financial condition. The costs of complying with privacy and security related legal and regulatory requirements are burdensome and could have a material adverse effect on our results of operations.

Regulations requiring the use of "standard transactions" for healthcare services issued under HIPAA may negatively impact our profitability and cash flows.

Pursuant to HIPAA, final regulations have been implemented to improve the efficiency and effectiveness of the healthcare system by facilitating the electronic exchange of information in certain financial and administrative transactions while protecting the privacy and security of the information exchanged.

The HIPAA transaction standards are complex, and subject to differences in interpretation by third-party payors. For instance, some third-party payors may interpret the standards to require us to provide certain types of information, including demographic information not usually provided to us by physicians. As a result of inconsistent application of transaction standards by third-party payors or our inability to obtain certain billing information not usually provided to us by physicians, we could face increased costs and complexity, a temporary disruption in accounts receivable and ongoing reductions in reimbursements and net revenue. In addition, requirements for additional standard transactions, such as claims attachments or use of a national provider identifier, could prove technically difficult, time-consuming or expensive to implement, all of which could harm our business.

If we fail to comply with state and federal fraud and abuse laws, including anti-kickback, Stark, false claims and anti-inducement laws, we could face substantial penalties and our business, operations, and financial condition could be adversely affected.

The federal anti-kickback statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce or in return for purchasing, leasing, ordering, or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid, or other federal healthcare programs. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution, the exceptions and safe harbors are drawn narrowly, and any remuneration to or from a prescriber or purchaser of healthcare products or services may be subject to scrutiny if it does not qualify for an exception or safe harbor. Our practices may not in all cases meet all of the criteria for safe harbor protection from anti-kickback liability. Failure to meet all requirements of a safe harbor is not determinative of a kickback issue, but could subject the practice to increased scrutiny by the government.

The "Stark Law" prohibits a physician from referring Medicare or Medicaid patients to an entity providing "designated health services," which includes durable medical equipment, if the physician or immediate family member of the physician, has an ownership or investment interest in or compensation arrangement with such entity that does not comply with the requirements of a Stark exception. Violation of the Stark Law could result in denial of payment, disgorgement of reimbursements received under a non-compliant arrangement, civil penalties, and exclusion from Medicare, Medicaid or other governmental programs. Although we believe that we have structured our provider arrangements to comply with current Stark Law requirements, these arrangements may not expressly meet the requirements for applicable exceptions from the law.

Federal false claims laws prohibit any person from knowingly presenting or causing to be presented a false claim for payment to the federal government, or knowingly making or causing to be made a false statement to get a false claim paid. The majority of states also have statutes or regulations similar to the federal anti-kickback and self-referral laws and false claims laws, which apply to items or services, reimbursed under Medicaid and other state programs, or, in several states, apply regardless of payor. These false claims statutes allow any person to bring suit in the name of the government alleging false and fraudulent claims presented to or paid by the government (or other violations of the statutes) and to share in any amounts paid by the entity to the government in fines or settlement. Such suits, known as *qui tam* actions, have increased significantly in the healthcare industry in recent years. Sanctions under these federal and state laws may include civil monetary penalties, exclusion of a manufacturer's products from reimbursement under government programs, criminal fines and imprisonment. In addition, the recently enacted Patient Protection and Affordable Care Act, among other things, amends the intent requirement of the federal anti-kickback and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. In addition, the Patient Protection and Affordable Care Act provides that the government may assert that a claim including items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the false claims statutes. Because of the breadth of these laws and the narrowness of the safe harbors and exceptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. Such a challenge, regardless of the outcome, could have a material adverse effect on our business, business relationships, reputation, financial condition and results of operations.

The Patient Protection and Affordable Care Act also imposes annual reporting and disclosure requirements on device and drug manufacturers for "transfers of value" made or distributed to licensed physicians and teaching hospitals. Device and drug manufacturers are also required to report and disclose annually any investment interests held by physicians and their immediate family members during the preceding calendar year. Failure to submit required information may result in civil monetary penalties of up to an aggregate of $0.15 million per year (and up to an aggregate of $1.0 million per year for "knowing failures"), for all payments, transfers of value or ownership or investment interests not reported in an annual submission.

In addition, there has been a recent trend of increased federal and state regulation of payments made to physicians. Certain states, mandate implementation of compliance programs and/or the tracking and reporting of gifts, compensation and other remuneration to physicians. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with different compliance and/or reporting requirements in multiple jurisdictions increase the possibility that a healthcare company many violate one or more of the requirements.

The Federal Civil Monetary Penalties Law prohibits the offering or giving of remuneration to a Medicare or Medicaid beneficiary that the person knows or should know is likely to influence the beneficiary's selection of a particular supplier of items or services reimbursable by a Federal or state governmental healthcare program. We sometimes offer customers various discounts and other financial incentives in connection with the sales of our products. While it is our intent to comply with all applicable laws, the government may find that our marketing activities violate the Civil Monetary Penalties Law. If we are found to be in non-compliance, we could be subject to civil money penalties of up to $0.01 million for each wrongful act, assessment of three times the amount claimed for each item or service and exclusion from the federal or state healthcare programs.

On February 3, 2017, the Department of Justice (DOJ) published a final rule that applies an inflation adjustment to civil monetary penalty (CMP) amounts, as mandated by the Bipartisan Budget Act of 2015. The new maximum CMP for False Claims Act violations is $0.02 million for civil penalties assessed after August 1, 2016 and whose violations occurred after November 2, 2015.

The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. If our operations are found to be in violation of any of the laws described above or any other government regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restricting of our operations. Any penalties, damages, fines, curtailment or restructuring or our operations could harm our ability to operate our business and our financial results. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state fraud laws may prove costly.

Foreign governments tend to impose strict price controls, which may adversely affect our future profitability.

As of June 30, 2017, we sold our products in 45 countries outside the United States through distributors or directly to large "house" accounts. In some foreign countries, particularly in the European Union, the pricing of medical devices is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to supply data that compares the cost-effectiveness of our Inogen One and Inogen At Home systems to other available oxygen therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, it may not be profitable to sell our products in certain foreign countries, which would negatively affect the long-term growth of our business.

Our business activities involve the use of hazardous materials, which require compliance with environmental and occupational safety laws regulating the use of such materials. If we violate these laws, we could be subject to significant fines, liabilities or other adverse consequences.

Our research and development programs as well as our manufacturing operations involve the controlled use of hazardous materials. Accordingly, we are subject to federal, state and local laws governing the use, handling and disposal of these materials. Although we believe that our safety procedures for handling and disposing of these materials comply in all material respects with the standards prescribed by state and federal regulations, we cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of an accident or failure to comply with environmental laws, we could be held liable for resulting damages, and any such liability could exceed our insurance coverage.

Risks related to our intellectual property

If we are unable to secure and maintain patent or other intellectual property protection for the intellectual property used in our products, we will lose a significant competitive advantage, which may adversely affect our future profitability.

Our commercial success depends, in part, on obtaining, defending, and maintaining patent and other intellectual property protection for the technologies used in our products. The patent positions of medical device companies, including ours, can be highly uncertain and involve complex and evolving legal and factual questions. Furthermore, we might in the future opt to license intellectual property from other parties. If we, or the other parties from whom we would license intellectual property, fail to obtain, defend, and maintain adequate patent or other intellectual property protection for intellectual property used in our products, or if any protection is reduced or eliminated, others could use the intellectual property used in our products, resulting in harm to our competitive business position. In addition, patent and other intellectual property protection may not:

- prevent our competitors from duplicating our products;
- prevent our competitors from gaining access to our proprietary information and technology
- prevent our competitors or other parties from suing us for alleged infringement; or
- permit us to gain or maintain a competitive advantage.

Any of our patents may be challenged, invalidated, circumvented or rendered unenforceable. We cannot provide assurance that we will be successful should one or more of our patents be challenged for any reason. If our patent claims are rendered invalid or unenforceable, or narrowed in scope, the patent coverage afforded our products could be impaired, which could make our products less competitive.

As of June 30, 2017, we had seven pending U.S. patent applications, thirty-one issued U.S. patents and one issued Canadian patent relating to the design and construction of our oxygen concentrators and our intelligent delivery technology. We cannot specify which of these patents individually or as a group will permit us to gain or maintain a competitive advantage. U.S. patents and patent applications may be subject to interference proceedings, and U.S. patents may be subject to reexamination, *inter partes* review, post-grant review, and derivation proceedings in the U.S. Patent and Trademark Office. Foreign patents may be subject to opposition or comparable proceedings in the corresponding foreign patent offices. Any of these proceedings could result in loss of the patent or denial of the patent application, or loss or reduction in the scope of one or more of the claims of the patent or patent application. Changes in either patent laws or in interpretations of patent laws may also diminish the value of our intellectual property or narrow the scope of our protection. Interference, reexamination, *inter partes* review, defense, and opposition proceedings may be costly and time consuming, and we, or the other parties from whom we might potentially license intellectual property, may be unsuccessful in defending against such proceedings. Thus, any patents that we own or might license may provide limited or no protection against competitors. In addition, our pending patent applications and those we may file in the future may have claims narrowed during prosecution or may not result in patents being issued. Even if any of our pending or future applications are issued, they may not provide us with any competitive advantage or adequate protection from allegations of infringement, whether valid or frivolous, which may result in the incurrence of material defense costs. Our patents and patent applications are directed to particular aspects of our products. Other parties may develop and obtain patent protection for more effective technologies, designs or methods for oxygen therapy. If these developments were to occur, it would likely have an adverse effect on our sales. Our ability to develop additional patentable technology is also uncertain.

Non-payment or delay in payment of patent fees or annuities, whether intentional or unintentional, may also result in the loss of patents or patent rights important to our business. Many countries, including certain countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. In addition, many countries limit the enforceability of patents against other parties, including government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of the patent. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as do the laws of the United States, particularly in the field of medical products and procedures.

Our products could infringe or appear to infringe the intellectual property rights of others, which may lead to patent and other intellectual property litigation that could itself be costly, could result in the payment of substantial damages or royalties, prevent us from using technology that is essential to our products, and/or force us to discontinue selling our products.

The medical device industry in general has been characterized by extensive litigation and administrative proceedings regarding patent infringement and intellectual property rights. Our competitors hold a significant number of patents relating to oxygen therapy devices and products. Third parties have asserted and may in the future assert that we are employing their proprietary technology without authorization. For example, Separation Design Group IP Holdings, LLC (SDGIP) filed a lawsuit against us on

October 23, 2015 in the United States District Court for the Central District of California. SDGIP alleges that we willfully infringe U.S. Patent Nos. 8,894,751 and 9,199,055, both of which are titled "Ultra Rapid Cycle Portable Oxygen Concentrator." SDGIP also alleges misappropriation of trade secrets and breach of contract stemming from a meeting in September 2010. SDGIP seeks to recover damages (including compensatory and treble damages), costs and expenses (including attorneys' fees), pre-judgment and post-judgment interest, and other relief that the Court deems proper. SDGIP also seeks a permanent injunction against us. Additionally, CAIRE, Inc. (CAIRE) recently filed a lawsuit in the United States District Court for the Northern District of Georgia against us on September 12, 2016. CAIRE alleges that we infringe U.S. Patent No. 6,949,133, entitled "Portable Oxygen Concentrator." CAIRE alleges willful infringement and seeks damages, injunctive relief, pre-judgment and post-judgment interest, costs, and attorneys' fees. While we have and continue to vigorously contest both SDGIP's and CAIRE's claims, we cannot predict the outcome of either lawsuit. An adverse determination or protracted defense costs in the SDGIP and CAIRE lawsuits could have a material adverse effect on our business and operating results.

From time to time, we have also commenced litigation to enforce our intellectual property rights. For example, we previously pursued litigation against Inova Labs Inc. (a subsidiary of ResMed Inc.) for infringement of two of our patents seeking damages, injunctive relief, costs, and attorneys' fees. While we resolved our dispute with Inova Labs in June 2016, an adverse decision in any other legal action could limit our ability to assert our intellectual property rights, limit the value of our technology or otherwise negatively impact our business, financial condition and results of operations.

Monitoring unauthorized use of our intellectual property is difficult and costly. Unauthorized use of our intellectual property may have occurred or may occur in the future. Although we have taken steps to minimize the risk of this occurring, any such failure to identify unauthorized use and otherwise adequately protect our intellectual property would adversely affect our business. Moreover, if we are required to commence litigation, whether as a plaintiff or defendant as has occurred with Inova Labs, SDGIP, and CAIRE, not only will this be time-consuming, but we will also be forced to incur significant costs and divert our attention and efforts of our employees, which could, in turn, result in lower revenue and higher expenses.

We cannot provide assurance that our products or methods do not infringe or appear to infringe the patents or other intellectual property rights of third parties and if our business is successful, the possibility may increase that others will assert infringement claims against us whether valid or frivolous.

Determining whether a product infringes a patent involves complex legal and factual issues, defense costs and the outcome of a patent litigation action are often uncertain. We have not conducted an extensive search of patents issued or assigned to other parties, including our competitors, and no assurance can be given that patents containing claims covering or appear to cover our products, parts of our products, technology or methods do not exist, have not been filed or could not be filed or issued. Because of the number of patents issued and patent applications filed in our technical areas, our competitors or other parties may assert that our products and the methods we employ in the use of our products are covered by U.S. or foreign patents held by them. In addition, because patent applications can take many years to issue and because publication schedules for pending applications may vary by jurisdiction and some companies opt not to publish their patent applications, there may be applications now pending of which we are unaware and which may result in issued patents that our current or future products infringe or appear to infringe. Also, because the claims of published patent applications can change between publication and patent grant, there may be published patent applications that may ultimately issue with claims that we infringe. There could also be existing patents that one or more of our products or parts may infringe and of which we are unaware. As the number of competitors in the market for oxygen products and as the number of patents issued in this area grows, the possibility of patent infringement claims against us increases. In certain situations, we may determine that it is in our best interests to voluntarily challenge a party's products or patents in litigation or other proceedings, including patent reexaminations, or *inter partes* reviews. As a result, we may become involved in unwanted protracted litigation that could be costly, result in diversion of management's attention, require us to pay damages and/or licensing royalties and force us to discontinue selling our products.

Infringement and other intellectual property claims and proceedings brought against us, including the SDGIP and CAIRE lawsuits, whether successful or not, could result in substantial costs and harm to our reputation. Such claims and proceedings can also distract and divert management and key personnel from other tasks important to the success of the business. We cannot be certain that we will successfully defend against allegations of infringement of patents and intellectual property rights of others. In the event that we become subject to a patent infringement or other intellectual property lawsuit and if the other party's patents or other intellectual property were upheld as valid and enforceable and we were found to infringe the other party's patents or violate the terms of a license to which we are a party, we could be required to do one or more of the following:

- cease selling or using any of our products that incorporate the asserted intellectual property, which would adversely affect our revenue;
- pay damages for past use of the asserted intellectual property, which may be substantial;

- obtain a license from the holder of the asserted intellectual property, which license may not be available on reasonable royalty terms, if at all, and which could reduce profitability; and
- redesign or rename, in the case of trademark claims, our products to avoid infringing the intellectual property rights of third parties, which may not be possible and could be costly and time-consuming if it is possible to do so.

If we are unable to prevent unauthorized use or disclosure of trade secrets, unpatented know-how and other proprietary information, our ability to compete will be harmed.

We rely on a combination of trade secrets, copyrights, trademarks, confidentiality agreements and other contractual provisions and technical security measures to protect certain aspects of our technology, especially where we do not believe that patent protection is appropriate or obtainable. We require our employees and consultants to execute confidentiality agreements in connection with their employment or consulting relationships with us. We also require our employees and consultants to disclose and assign to us all inventions conceived during the term of their employment or engagement while using our property or that relate to our business. We also require our corporate partners, outside scientific collaborators and sponsored researchers, advisors and others with access to our confidential information to sign confidentiality agreements. We also have taken precautions to initiate reasonable safeguards to protect our information technology systems. However, these measures may not be adequate to safeguard our proprietary intellectual property and conflicts may, nonetheless, arise regarding ownership of inventions. Such conflicts may lead to the loss or impairment of our intellectual property or to expensive litigation to defend our rights against competitors who may be better funded and have superior resources. Our employees, consultants, contractors, outside clinical collaborators and other advisors may unintentionally or willfully disclose our confidential information to competitors. In addition, confidentiality agreements may be unenforceable or may not provide an adequate remedy in the event of unauthorized disclosure. Enforcing a claim that a third-party illegally obtained and is using our trade secrets is expensive and time-consuming, and the outcome is unpredictable. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our products that we consider proprietary, and in such cases we could not assert any trade secret rights against such party. As a result, other parties may be able to use our proprietary technology or information, and our ability to compete in the market would be harmed.

“Inogen,” “Inogen One,” “Inogen One G2,” “Inogen One G3,” “G4,” “Oxygenation,” “Live Life in Moments, not Minutes,” “Never Run Out of Oxygen,” “Oxygen Therapy on Your Terms,” “Oxygen.Anytime.Anywhere,” “Reclaim Your Independence,” “Intelligent Delivery Technology,” “Inogen At Home,” and the Inogen design are registered trademarks with the United States Patent and Trademark Office of Inogen, Inc. We own trademark registrations for the mark “Inogen” in Australia, Canada, South Korea, Mexico, Europe (European Union registration), and Japan. We own a trademark registration for the mark “□□□□□” in Japan. We own trademark registrations for the mark “Inogen One” in Australia, Canada, China, South Korea, Mexico, and Europe (European Union registration). We own a trademark registration for the mark “Satellite Conserver” in Canada. We own a trademark registration for the mark “Inogen At Home” in Europe (European Union Registration). We own an International Registration designating the European Union and the United Kingdom for the mark G4. Other service marks, trademarks, and trade names referred to in this Quarterly Report on Form 10-Q are the property of their respective owners.

We may be subject to damages resulting from claims that our employees or we have wrongfully used or disclosed alleged trade secrets of other companies.

Some of our employees were previously employed at other medical device companies focused on the development of oxygen therapy products, including our competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Even if we are successful in defending against these claims, litigation could result in substantial costs, damage to our reputation and be a distraction to management.

Risks related to being a public company

We will incur increased costs as a result of operating as a public company and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, especially now that we are no longer an “emerging growth company,” we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act of 2002 and rules enforced by the Public Companies Oversight Board (PCAOB) subsequently implemented by the SEC and the NASDAQ Global Select Market impose numerous requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Also, the Securities Exchange Act of 1934, as amended, or the Exchange Act,

requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results. Our management and other personnel will need to devote a substantial amount of time to compliance with these laws and regulations. These requirements have increased and will continue to increase our legal, accounting, external audit and financial compliance costs and have made and will continue to make some activities more time consuming and costly. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to incur substantial costs to maintain the same or similar coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or our board committees or as executive officers.

Overall, we estimate that our incremental costs resulting from operating as a public company, including compliance with these rules and regulations, may be between $1.5 million and $3.0 million per year. However, these rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies and public accounting firms are subject to PCAOB compliance audits. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

The Sarbanes-Oxley Act requires, among other things, that we assess and document the effectiveness of our internal control over financial reporting annually and the effectiveness of our disclosure controls and procedures quarterly. In particular, Section 404(a) of the Sarbanes-Oxley Act, or Section 404(a), requires us to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting. Section 404(b) of Sarbanes-Oxley Act, or Section 404(b), also requires our independent registered public accounting firm to attest to the effectiveness of our internal control over financial reporting. We have previously qualified as an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act") and have thus availed ourselves of an exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal controls over financial reporting under Section 404(b). However, we no longer qualify as an emerging growth company, and this exemption is no longer available to us. Our independent registered public accounting firm is therefore required to undertake an assessment of our internal control over financial reporting beginning with our Annual Report on Form 10-K for the period ended December 31, 2016, and the cost of our compliance with Section 404(b) will correspondingly increase. Our compliance with applicable provisions of Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues as we implement additional corporate governance practices and comply with reporting requirements.

Furthermore, investor perceptions of our company may suffer if deficiencies are found, and this could cause a decline in the market price of our stock. Irrespective of compliance with Section 404, any failure of our internal control over financial reporting could have a material adverse effect on our stated operating results and harm our reputation. If we are unable to implement these requirements effectively or efficiently, it could harm our operations, financial reporting, or financial results and could result in an adverse opinion on our internal controls from our independent registered public accounting firm.

Failure to maintain effective internal controls could cause our investors to lose confidence in us and adversely affect the market price of our common stock. If our internal controls are not effective, we may not be able to accurately report our financial results or prevent fraud.

Section 404 of the Sarbanes-Oxley Act, or Section 404, requires that we maintain internal control over financial reporting that meets applicable standards. We may err in the design, operation or documentation of our controls, and all internal control systems, no matter how well designed and operated, can provide only reasonable assurance that the objectives of the control system are met. Because there are inherent limitations in all control systems, there can be no absolute assurance that all control issues have been or will be detected. If we are unable, or are perceived as unable, to produce reliable financial reports due to internal control deficiencies, investors could lose confidence in our reported financial information and operating results, which could result in a negative market reaction.

We are required to disclose changes made in our internal controls and procedures on a quarterly basis. Additionally, beginning with our Annual Report on Form 10-K for the period ended December 31, 2016, our independent registered public accounting firm is required to attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. Our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. Our remediation efforts may not enable us to avoid a material weakness in the future. Additionally, to comply with the requirements of being a public company, we may need to undertake various actions, such as implementing new internal controls and procedures and hiring accounting or internal audit staff, which may adversely affect our operating results and financial condition.

We have reported material weaknesses in our internal control over financial reporting in the past. For example, as we disclosed in our Annual Report on Form 10-K for the period ended December 31, 2014, and our Quarterly Reports on Forms 10-Q for the periods ended March 31, 2015, June 30, 2015 and September 30, 2015, we identified a material weakness with respect to internal control over the review of sales order documentation supporting our direct-to-customer sales and rentals prior to revenue recognition. We commenced measures to remediate this material weakness during the first quarter of 2015, and remediation was completed as of December 31, 2015.

Although prior material weaknesses have been remediated, we cannot assure you that our internal controls will continue to operate properly or that our financial statements will be free from error. There may be undetected material weaknesses in our internal control over financial reporting, as a result of which we may not detect financial statement errors on a timely basis. Moreover, in the future we may implement new offerings and engage in business transactions, such as acquisitions, reorganizations or implementation of new information systems that could require us to develop and implement new controls and could negatively affect our internal control over financial reporting and result in material weaknesses.

If we identify new material weaknesses in our internal control over financial reporting, if we are unable to comply with the requirements of Section 404 in a timely manner, if we are unable to assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, we may be late with the filing of our periodic reports, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common stock could be negatively affected. As a result of such failures, we could also become subject to investigations by the stock exchange on which our securities are listed, the SEC, or other regulatory authorities, and become subject to litigation from investors and stockholders, which could harm our reputation, financial condition or divert financial and management resources from our core business.

Risks related to our common stock

We expect that our stock price will fluctuate significantly, you may have difficulty selling your shares, and you could lose all or part of your investment.

Our stock is currently traded on NASDAQ, but we can provide no assurance that we will be able to maintain an active trading market on NASDAQ or any other exchange in the future. If an active trading market does not develop, you may have difficulty selling any of our shares of common stock that you buy. In addition, the trading price of our common stock may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include:

- actual or anticipated quarterly variation in our results of operations or the results of our competitors;
- announcements of secondary offerings;
- announcements by us or our competitors of new commercial products, significant contracts, commercial relationships or capital commitments;
- issuance of new or changed securities analysts' reports or recommendations for our stock;
- developments or disputes concerning our intellectual property or other proprietary rights;
- commencement of, or our involvement in, litigation;
- market conditions in the oxygen therapy market;
- reimbursement or legislative changes in the oxygen therapy market;
- failure to complete significant sales;
- manufacturing disruptions that could occur if we were unable to successfully expand our production in our current or an alternative facility;
- any future sales of our common stock or other securities;
- any major change to the composition of our board of directors or management;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- the other factors described in this "Risk Factors" section; and
- general economic conditions and slow or negative growth of our markets.

The stock market in general and market prices for the securities of technology-based companies like ours in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. In several recent situations where the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and harm our operating results.

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

The trading market for our common stock will rely in part on the research and reports that equity research analysts publish about us and our business. We will not have any control of the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

Future sales of shares could cause our stock price to decline.

Our stock price could decline as a result of sales of a large number of shares of our common stock or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

As of June 30, 2017, one holder of approximately 3.5 million shares, or approximately 17.1%, of our outstanding shares, has rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We have also registered the offer and sale of all shares of common stock that we may issue under our equity compensation plans.

In addition, in the future, we may issue additional shares of common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement, and employee arrangements or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

Our directors, executive officers and principal stockholders will continue to have substantial control over us and could limit your ability to influence the outcome of key transactions, including changes of control.

As of June 30, 2017, our executive officers, directors and stockholders who owned more than 5% of our outstanding common stock and their respective affiliates beneficially owned or controlled approximately 49.6% of the outstanding shares of our common stock. Accordingly, these executive officers, directors and stockholders who owned more than 5% of our outstanding common stock and their respective affiliates, acting as a group, have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transactions. These stockholders may also delay or prevent a change of control of us, even if such a change of control would benefit our other stockholders. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, up to 10,000,000 shares of undesignated preferred stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;

- specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of the board of directors, or the Chief Executive Officer;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- establish that our board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered three year terms;
- provide that our directors may be removed only for cause;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- specify that no stockholder is permitted to cumulate votes at any election of directors; and
- require a super-majority of votes to amend certain of the above-mentioned provisions.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date, have contractual restrictions against paying cash dividends of more than $1 million in any fiscal year and currently intend to retain our future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

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

Unregistered Sales of Equity Securities

None.

Issuer Purchases of Equity Securities

We did not repurchase any shares of our common stock during the three or six months ended June 30, 2017 and June 30, 2016.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit Number	Description
31.1	Certification Pursuant to Exchange Act Rules 13a - 14(a) and 15d - 14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Executive Officer
31.2	Certification Pursuant to Exchange Act Rules 13a - 14(a) and 15d - 14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer
32.1(1)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Executive Officer
32.2(1)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Document

(1) The Certifications attached as Exhibits 32.1 and 32.2 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Inogen, 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 Quarterly Report on 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.

INOGEN, INC.

Dated: August 3, 2017

By: /s/ Scott Wilkinson
Scott Wilkinson
Chief Executive Officer
President
Director
(Principal Executive Officer)

Dated: August 3, 2017

By: /s/ Alison Bauerlein
Alison Bauerlein
Chief Financial Officer
Executive Vice President, Finance
Secretary and Treasurer
(Principal Financial and Accounting Officer)

Exhibit 31.1

Certification by the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Scott Wilkinson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Inogen, 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 3, 2017

By: /s/ Scott Wilkinson
Scott Wilkinson
Chief Executive Officer, President and Director
(Principal Executive Officer)

Exhibit 31.2

Certification by the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Alison Bauerlein, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Inogen, 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 3, 2017

By: /s/ Alison Bauerlein
Alison Bauerlein
Chief Financial Officer
Executive Vice President, Finance
Secretary and Treasurer
(Principal Financial Officer)

Exhibit 32.1

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

I, Scott Wilkinson, the chief executive officer of Inogen, Inc. (the "Company"), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Quarterly Report of the Company on Form 10-Q for the three months ended June 30, 2017 (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 3, 2017

By: /s/ Scott Wilkinson
Scott Wilkinson
Chief Executive Officer, President and Director

Exhibit 32.2

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

I, Alison Bauerlein, the chief financial officer of Inogen, Inc. (the "Company"), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Quarterly Report of the Company on Form 10-Q for the three months ended June 30, 2017 (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 3, 2017

By: /s/ Alison Bauerlein
Alison Bauerlein
Chief Financial Officer
Executive Vice President, Finance
Secretary and Treasurer