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

FORM 10-Q

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

For the quarterly period ended June 30, 2018

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 000-50194

HMS HOLDINGS CORP.
(Exact name of registrant as specified in its charter)

Delaware	**11-3656261**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
5615 High Point Drive, Irving, TX	**75038**
(Address of principal executive offices)	(Zip Code)

(214) 453-3000
(Registrant's Telephone Number, Including Area Code)

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

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

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

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐	Smaller reporting company ☐
	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 August 3, 2018, there were approximately 83,463,382 shares of the registrant's common stock (par value $0.01 per share) outstanding.

HMS HOLDINGS CORP. AND SUBSIDIARIES
QUARTERLY REPORT ON FORM 10-Q
FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2018
INDEX

		Page
Glossary of Terms and Abbreviations		3
PART I – FINANCIAL INFORMATION		
Item 1.	Financial Statements	6
	Consolidated Balance Sheets June 30, 2018 (unaudited) and December 31, 2017	6
	Consolidated Statements of Income Three and Six Months Ended June 30, 2018 and 2017 (unaudited)	7
	Consolidated Statement of Shareholders' Equity Six Months Ended June 30, 2018 (unaudited)	8
	Consolidated Statements of Cash Flows Six Months Ended June 30, 2018 and 2017 (unaudited)	9
	Notes to the Consolidated Financial Statements Three and Six Months Ended June 30, 2018 and 2017 (unaudited)	10
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	24
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	32
Item 4.	Controls and Procedures	32
PART II – OTHER INFORMATION		
Item 1.	Legal Proceedings	33
Item 1A.	Risk Factors	33
Item 6.	Exhibits	34
Signatures		36

Glossary of Terms and Abbreviations

Form 10-Q	HMS Holdings Corp. Quarterly Report on Form 10-Q For the Quarterly Period Ended June 30, 2018
2017 Form 10-K	HMS Holdings Corp. Annual Report on Form 10-K for the year ended December 31, 2017
ACA	Patient Protections and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act
ACO	Accountable Care Organization
ADR	Additional Documentation Request
ASC	Accounting Standards Codification
ASO	Administrative Service Only
ASU	Accounting Standards Update
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare & Medicaid Services
CMS NHE	CMS National Health Expenditures
COSO	Committee of Sponsoring Organizations of the Treadway Commission
Credit Agreement	The Amended and Restated Credit Agreement dated as of May 3, 2013, as amended by Amendment No. 1 to Amended and Restated Credit Agreement dated as of March 8, 2017, and as further amended by Amendment No. 2 to Amended and Restated Credit Agreement, dated as of December 19, 2017, by and among HMS Holdings Corp. the Guarantors party thereto, the Lenders party thereto and Citibank, N.A. as Administrative Agent
DRA	Deficit Reduction Act of 2005
DSO	Days Sales Outstanding
ERISA	Employment Retirement Income Security Act of 1974
Exchange Act	Securities Exchange Act of 1934, as amended
FASB	Financial Accounting Standards Board
HIPAA	Health Insurance Portability and Accountability Act of 1996
HITECH	Health Information Technology for Economic and Clinical Health Act
IRC	Internal Revenue Code
IRS	U.S Internal Revenue Service
LIBO Rate	Intercontinental Exchange London Interbank Offered Rate
MCO	Managed care organization
MMIS	Medicaid Management Information Systems
PBM	Pharmacy Benefit Manager
PHI	Protected health information
PI	Payment Integrity
PMPM	Per Member Per Month
PMPY	Per Member Per Year
R&D Credit	U.S. Research and Experimentation Tax Credit pursuant to IRC Section 41
RAC	Recovery Audit Contractor
RFP	Request for proposal
SEC	U.S. Securities and Exchange Commission
Securities Act	Securities Act of 1933, as amended
Section 199 Deduction	U.S. Production Activities Deduction pursuant to IRC Section 199
SG&A	Selling, general and administrative
TPL	Third-party liability
U.S. GAAP	United States Generally Accepted Accounting Principles
VHA	Veterans Health Administration
2011 HDI Plan	HDI Holdings, Inc. Amended 2011 Stock Option and Stock Issuance Plan
2006 Stock Plan	HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan, as amended by Amendment No. 1 to the HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan dated as of February 16, 2017
2016 Omnibus Plan	HMS Holdings Corp. 2016 Omnibus Incentive Plan
2011 HDI Plan	HDI Holdings, Inc. Amended 2011 Stock Option and Stock Issuance Plan
2017 Tax Act	Tax Cuts and Jobs Act of 2017
401(k) Plan	HMS Holdings Corp. 401(k) Plan

Cautionary Note Regarding Forward-Looking Statements

For purposes of this Form 10-Q, the terms "HMS," "Company," "we," "us," and "our" refer to HMS Holdings Corp. and its consolidated subsidiaries unless the context clearly indicates otherwise. Included in this Form 10-Q are "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. From time to time, we also provide forward-looking statements in other materials we release to the public, as well as oral forward-looking statements. Such statements relate to our current expectations, projections and assumptions about our business, the economy and future events or conditions. They do not relate strictly to historical or current facts.

We have tried to identify forward-looking statements by using words such as "aim," "anticipate," "believe," "estimate," "expect," "forecast," "future," "intend," "likely," "may," "plan," "project," "seek," "strategy," "target," "will," "would," "could," "should," and similar expressions and references to guidance, although some forward-looking statements may be expressed differently. These statements include, among other things, information concerning our future growth, business strategy, strategic or operational initiatives, our future operating or financial performance, our ability to invest in and utilize our data and analytics capabilities to expand our solutions and services, the benefits and synergies to be obtained from completed and future acquisitions, the future performance of companies we have acquired, the future effect of different accounting determinations or remediation activities, the sufficiency of our sources of funding for working capital, capital expenditures, acquisitions, stock repurchases, debt repayments and other matters, our future expenses, interest rates, effective tax rates and financial results, the impact of changes to U.S. healthcare legislation or healthcare spending affecting Medicare, Medicaid or other publicly funded or subsidized health programs, and other statements regarding our possible future actions, business plans, objectives and prospects.

Forward-looking statements are not guarantees and involve risks, uncertainties and assumptions that are difficult to predict. Actual results may differ materially from past results and forward-looking statements if known or unknown risks or uncertainties materialize, or if underlying assumptions prove inaccurate. These risks and uncertainties include, among other things:

- *our ability to execute our business plans or growth strategy;*
- *our ability to innovate, develop or implement new or enhanced solutions or services;*
- *the nature of investment and acquisition opportunities we are pursuing, and the successful execution of such investments and acquisitions;*
- *our ability to successfully integrate acquired businesses and realize synergies;*
- *variations in our results of operations;*
- *our ability to accurately forecast the revenue under our contracts and solutions;*
- *our ability to protect our systems from damage, interruption or breach, and to maintain effective information and technology systems and networks;*
- *our ability to protect our intellectual property rights, proprietary technology, information processes and know-how;*
- *significant competition relating to our solutions and services;*
- *our failure to maintain a high level of customer retention or the unexpected reduction in scope or termination of key contracts with major customers;*
- *customer dissatisfaction or our non-compliance with contractual provisions or regulatory requirements;*
- *our failure to meet performance standards triggering significant costs or liabilities under our contracts;*
- *our inability to manage our relationships with information and data sources and suppliers;*
- *our reliance on subcontractors and other third party providers and parties to perform services;*
- *our ability to continue to secure contracts and favorable contract terms through the competitive bidding process;*
- *pending or threatened litigation;*
- *unfavorable outcomes in legal proceedings;*
- *our success in attracting and retaining qualified employees and members of our management team;*

- *our ability to generate sufficient cash to cover our interest and principal payments under our credit facility, or to borrow or use credit;*
- *unexpected changes in tax laws, regulations or guidance and unexpected changes in our effective tax rate;*
- *unanticipated increases in the number or amount of claims for which we are self-insured;*
- *our ability to develop, implement and maintain effective internal control over financial reporting;*
- *changes in the U.S. healthcare environment or healthcare financing system, including regulatory, budgetary or political actions that affect healthcare spending or the practices and operations of healthcare organizations;*
- *our failure to comply with applicable laws and regulations governing individual privacy and information security or to protect such information from theft and misuse;*
- *our ability to comply with current and future legal and regulatory requirements;*
- *negative results of government or customer reviews, audits or investigations;*
- *state or federal limitations related to outsourcing of certain government programs or functions;*
- *restrictions on bidding or performing certain work due to perceived conflicts of interests;*
- *the market price of our common stock and lack of dividend payments; and*
- *anti-takeover provisions in our corporate governance documents.*

These and other risks are discussed under the headings "Part I, Item 1. Business," "Part I. Item 1A, Risk Factors," "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Part II, Item 7A. Quantitative and Qualitative Disclosures About Market Risk," of our 2017 Form 10-K and in other documents we file with the SEC.

Any forward-looking statements made by us in this Form 10-Q speak only as of the date on which they are made. We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. We caution readers not to place undue reliance upon any of these forward-looking statements. You are advised, however, to consult any further disclosures we make on related subjects in our Form 10-K, Form 10-Q and Form 8-K reports and our other filings with the SEC.

Market and Industry Data

This Form 10-Q contains market, industry and government data and forecasts that have been obtained from publicly available information, various industry publications and other published industry sources. We have not independently verified the information and cannot make any representation as to the accuracy or completeness of such information. None of the reports and other materials of third party sources referred to in this Form 10-Q were prepared for use in, or in connection with, this report.

Trademarks and Tradenames

We have a number of registered trademarks, including HMS®, as well as the corresponding HMS + logo design mark, HMS IntegritySource®, Eliza® and Essette®. These and other trademarks of ours appearing in this report are our property. Solely for convenience, trademarks and trade names of ours referred to in this Form 10-Q may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks and trade names. This report contains additional trade names and trademarks of other companies. We do not intend our use or display of other companies' trade names or trademarks to imply an endorsement or sponsorship of us by such companies, or any relationship with any of these companies.

PART I — FINANCIAL INFORMATION

Item 1. Financial Statements

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	June 30, 2018	December 31, 2017
Assets	(unaudited)	
Current assets:		
Cash and cash equivalents	$ 88,127	$ 83,313
Accounts receivable, net of allowance of $14,322 and $14,799, at June 30, 2018 and December 31, 2017, respectively	193,114	189,460
Prepaid expenses	16,526	16,589
Income tax receivable	7,216	1,892
Deferred financing costs, net	564	564
Other current assets	266	836
Total current assets	305,813	292,654
Property and equipment, net	93,369	98,581
Goodwill	487,617	487,617
Intangible assets, net	78,708	91,482
Deferred financing costs, net	1,955	2,237
Other assets	2,618	2,589
Total assets	$ 970,080	$ 975,160
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable, accrued expenses and other liabilities	$ 56,687	$ 61,900
Estimated liability for appeals	22,252	30,787
Total current liabilities	78,939	92,687
Long-term liabilities:		
Revolving credit facility	240,000	240,000
Net deferred tax liabilities	18,089	21,989
Deferred rent	4,539	4,852
Other liabilities	9,874	9,403
Total long-term liabilities	272,502	276,244
Total liabilities	351,441	368,931
Commitments and contingencies		
Shareholders' equity:		
Preferred stock -- $0.01 par value; 5,000,000 shares authorized; none issued	—	—
Common stock -- $0.01 par value; 175,000,000 shares authorized; 97,051,108 shares issued and 83,387,914 shares outstanding at June 30, 2018; 96,536,251 shares issued and 83,256,858 shares outstanding at December 31, 2017	970	965
Capital in excess of par value	382,630	368,721
Retained earnings	370,615	366,164
Treasury stock, at cost: 13,663,194 shares at June 30, 2018 and 13,279,393 shares at December 31, 2017	(135,576)	(129,621)
Total shareholders' equity	618,639	606,229
Total liabilities and shareholders' equity	$ 970,080	$ 975,160

See accompanying notes to the unaudited consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(in thousands, except per share amounts)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Revenue	$ 146,791	$ 133,313	$ 288,216	$ 247,046
Cost of services:				
Compensation	55,188	51,853	111,267	100,773
Information technology	14,240	11,281	26,503	21,064
Occupancy	4,014	4,230	8,397	7,777
Direct project expenses	10,908	10,101	20,991	20,544
Other operating expenses	7,051	6,562	13,616	13,765
Amortization of acquisition related software and intangible assets	9,621	7,372	17,753	13,658
Total cost of services	101,022	91,399	198,527	177,581
Selling, general and administrative expenses	26,532	27,553	58,530	51,161
Settlement expense	20,000	-	20,000	-
Total operating expenses	147,554	118,952	277,057	228,742
Operating (loss)/income	(763)	14,361	11,159	18,304
Interest expense	(3,034)	(2,339)	(5,682)	(4,625)
Interest income	188	33	308	188
(Loss)/income before income taxes	(3,609)	12,055	5,785	13,867
Income taxes	(242)	5,538	2,761	5,908
Net (loss)/income	$ (3,367)	$ 6,517	$ 3,024	$ 7,959
Basic income per common share:				
Net (loss)/income per common share -- basic	$ (0.04)	$ 0.08	$ 0.04	$ 0.10
Diluted income per common share:				
Net (loss)/income per common share -- diluted	$ (0.04)	$ 0.08	$ 0.04	$ 0.09
Weighted average shares:				
Basic	83,231	83,921	83,222	83,708
Diluted	83,231	85,826	84,837	85,534

See accompanying notes to the unaudited consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY
(in thousands, except share amounts)
(unaudited)

	Common Stock				Treasury Stock		
	# of Shares Issued	Par Value	Capital in Excess of Par Value	Retained Earnings	# of Shares	Amount	Total Shareholders' Equity
Balance at December 31, 2017	96,536,251	$ 965	$ 368,721	$ 366,164	13,279,393	$ (129,621)	$ 606,229
Adoption of accounting standard (Note 1 and 3)	-	-	-	1,427	-	-	1,427
Net income	-	-	-	3,024	-	-	3,024
Stock-based compensation expense	-	-	14,208	-	-	-	14,208
Purchase of treasury stock	-	-	-	-	383,801	(5,955)	(5,955)
Exercise of stock options	151,034	2	2,388	-	-	-	2,390
Vesting of restricted stock units, net of shares withheld for employee tax	363,823	3	(2,687)	-	-	-	(2,684)
Balance at June 30, 2018	97,051,108	$ 970	$ 382,630	$ 370,615	13,663,194	$ (135,576)	$ 618,639

See accompanying notes to the unaudited consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Six Months Ended June 30,	
	2018	2017
Operating activities:		
Net income	$ 3,024	$ 7,959
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization of property, equipment and software	16,758	12,927
Amortization of intangible assets	12,774	9,740
Amortization of deferred financing costs	282	1,042
Stock-based compensation expense	14,208	9,380
Deferred income taxes	(3,900)	1,265
Change in fair value of contingent consideration	-	500
Release of estimated liability for appeals	(8,436)	-
Changes in operating assets and liabilities:		
Accounts receivable	(3,654)	(9,039)
Prepaid expenses	63	149
Other current assets	570	526
Other assets	(29)	149
Income taxes receivable / (payable)	(5,324)	(6,180)
Accounts payable, accrued expenses and other liabilities	(2,546)	(8,196)
Estimated liability for appeals	(99)	518
Net cash provided by operating activities	23,691	20,740
Investing activities:		
Acquisition of a business, net of cash acquired	-	(171,174)
Purchases of property and equipment	(2,455)	(8,881)
Investment in capitalized software	(10,173)	(6,626)
Net cash used in investing activities	(12,628)	(186,681)
Financing activities:		
Proceeds from exercise of stock options	2,390	1,986
Payments of tax withholdings on behalf of employees for net-share settlement for stock-based compensation	(2,684)	(2,874)
Payments on capital lease obligations	-	(5)
Proceeds from credit facility	-	42,204
Purchases of treasury stock	(5,955)	-
Net cash (used in)/provided by financing activities	(6,249)	41,311
Net increase (decrease) in cash and cash equivalents	4,814	(124,630)
Cash and Cash Equivalents		
Cash and cash equivalents at beginning of year	83,313	175,999
Cash and cash equivalents at end of period	$ 88,127	$ 51,369
Supplemental disclosure of cash flow information:		
Cash paid for income taxes	$ 11,472	$ 10,656
Cash paid for interest	$ 4,916	$ 3,451
Supplemental disclosure of non-cash activities:		
Change in balance of accrued property and equipment purchases	$ 1,082	$ (1,313)

See accompanying notes to the unaudited consolidated financial statements.

1. Business and Summary of Significant Accounting Policies

(a) Business

HMS is a leading provider of cost containment solutions in the U.S. healthcare marketplace. We use innovative technology, extensive data services and powerful analytics to deliver coordination of benefits, payment integrity and care management and consumer engagement solutions to help healthcare payers improve financial performance and clinical outcomes. We provide coordination of benefits services to government and commercial healthcare payers and sponsors to ensure that the responsible party pays healthcare claims. Our payment integrity services ensure healthcare claims billed are accurate and appropriate, and our care management and consumer engagement technology helps risk-bearing organizations to better engage with and manage the care delivered to their members. Together these various services help customers recover erroneously paid amounts from liable third parties; prevent future improper payments; reduce fraud, waste and abuse; better manage the care their members receive; engage healthcare consumers to improve clinical outcomes while increasing member satisfaction and retention; and achieve regulatory compliance. We currently operate as one business segment with a single management team that reports to our Chief Executive Officer.

The accompanying consolidated financial statements and notes are unaudited. Accordingly, they do not include all of the information and notes required by U.S. GAAP for complete financial statements. These statements include all adjustments (which include only normal recurring adjustments, except as disclosed) that management considers necessary to present a fair statement of the Company's results of operations, financial position and cash flows. The results reported in these unaudited consolidated financial statements should not be regarded as necessarily indicative of results that may be expected for the entire year. It is suggested that these unaudited consolidated financial statements be read in conjunction with the Company's consolidated financial statements as of and for the year ended December 31, 2017 which were filed with the SEC as part of the 2017 Form 10-K. The consolidated balance sheet as of December 31, 2017 included herein was derived from audited financial statements, but does not include all disclosures required by U.S. GAAP.

The preparation of the Company's unaudited consolidated financial statements requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, primarily accounts receivable, intangible assets, fixed assets, accrued expenses, estimated liability for appeals, the disclosure of contingent liabilities at the date of the unaudited consolidated financial statements and the reported amounts of revenue and expenses during the reporting periods. The Company's actual results could differ from those estimates.

These unaudited consolidated financial statements include HMS accounts and transactions and those of the Company's wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

(b) Summary of Significant Accounting Policies

There have been no material changes to the Company's significant accounting policies that are referenced in the 2017 Form 10-K other than as described below with respect to revenue recognition.

Recently Adopted Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers* (Topic 606) ("ASU 2014-09"), which is the new comprehensive revenue recognition standard that supersedes all existing revenue recognition guidance under U.S. GAAP. The Company adopted ASU 2014-09 on January 1, 2018 as to all contracts using the modified retrospective method and the Company recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of retained earnings. The financial information for comparative prior periods has not been restated and continues to be reported under the accounting standards in effect for those periods. The effect of adopting ASU 2014-09 in the current annual reporting period as compared with the guidance that was in effect before the change is immaterial. The Company's internal control framework did not materially change, but existing internal controls were modified due to certain changes to business processes and systems to support the new revenue recognition standard as necessary. The Company continues to expect the impact of the adoption of the new standard to be immaterial to its net income and its internal control framework on an ongoing basis.

In August 2016, the FASB issued ASU No. 2016-15, *Statements of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). ASU 2016-15 clarifies where certain cash receipts and cash payments are presented and classified in the statement of cash flows. The amendments are effective for annual reporting periods beginning after December 15, 2017, and for interim reporting periods within such annual periods. The Company adopted this guidance on January 1, 2018. The adoption of this guidance did not have an effect on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805) – Clarifying the Definition of a Business* ("ASU 2017-01"). ASU 2017-01 finalizes previous proposals regarding shareholder concerns that the definition of a business is applied too broadly. The guidance assists entities with evaluating whether transactions should be accounted for as acquisitions of assets or of businesses. The amendments are effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The Company adopted this guidance on January 1, 2018. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation – Stock Compensation (Topic 718) – Scope of Modification Accounting,* ("ASU 2017-09"). ASU 2017-09 requires entities to apply modification accounting to changes made to a share-based payment award. The new guidance specifies that entities will apply modification accounting to changes to a share-based payment award only if any of the following are not the same immediately before and after the change: 1) The award's fair value (or calculated value or intrinsic value, if those measurement methods are used), 2) the award's vesting conditions, and 3) the award's classification as an equity or liability instrument. ASU 2017-09 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within such annual periods, with early adoption permitted. The Company adopted this guidance on January 1, 2018. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* ("ASU 2016-02"). ASU 2016-02 will require most lessees to recognize a majority of the company's leases on the balance sheet, which will increase reported assets and liabilities. ASU 2016-02 is effective for annual reporting periods beginning after December 15, 2018 including interim periods within such annual reporting periods with early adoption permitted. The Company has not early adopted this guidance. The Company developed a preliminary implementation plan and is reviewing historical lease agreements to quantify the impact of adoption. Depending on the results of the Company's review, there could be material changes to the Company's financial position and/or results of operations. The Company expects to complete the initial analysis of all historical agreements and the overall assessment process by the end of the third quarter of 2018 in anticipation of performing additional reviews and other implementation considerations in the fourth quarter of 2018.

In January 2017, the FASB issued ASU No. 2017-04, *Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"). This amendment simplifies the manner in which an entity is required to test for goodwill impairment by eliminating Step 2 from the goodwill impairment test. Step 2 measures goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. The amendment simplifies this approach by having the entity (1) perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, and (2) recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, with the understanding that the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The amendment is effective for public entities that are SEC filers prospectively for their annual, or any interim, goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted for all entities for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company is currently evaluating the impact on the Company's financial statements of adopting this guidance but this guidance is not expected to have a material impact on the Company's financial position, results of operations or internal control framework.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation – Stock Compensation (Topic 718) – Improvements to Nonemployee Share-Based Payment Accounting,* ("ASU 2018-07"). ASU 2018-07 requires entities to apply similar accounting for share-based payment transactions with non-employees as with share-based payment transactions with employees. ASU 2018-07 is effective for public entities for fiscal year beginning after December 15, 2018, including interim periods within that fiscal year. Early adoption is permitted. The Company is currently evaluating the impact on the Company's financial statements of adopting this guidance but this guidance is not expected to have a material impact on the Company's financial position, results of operations or internal control framework.

2. Fair Value of Financial Instruments

Financial instruments (principally cash and cash equivalents, accounts receivable, accounts payable and accrued expenses) are carried at cost, which approximates fair value due to the short-term maturity of these instruments. The Company's long-term credit facility is carried at cost, which, due to the variable interest rate associated with the revolving credit facility, approximates its fair value. The Company has no Level 1 or Level 2 financial instruments and there were no transfers between Level 1 or Level 2 financial instruments. Included in Other liabilities on the unaudited Consolidated Balance Sheets at June 30, 2018 is a $35,000 contingent consideration liability classified as Level 3 which remains unchanged from December 31, 2017. The liability is valued using a Monte Carlo simulation and includes unobservable inputs such as expected levels of revenues and discount rates. Changes in the unobservable inputs of this instrument could result in a significant change in the fair value measurement.

3. Revenue Recognition

The Company's revenue disaggregated by product for the three and six months ended June 30 is as follows *(in thousands)*:

	Three Months Ended June 30		Six Months Ended June 30	
	2018	2017	2018	2017
Coordination of benefits	$ 100,754	$ 98,454	$ 192,507	$ 186,946
Analytical services	46,037	34,859	95,709	60,100
Total	$ 146,791	$ 133,313	$ 288,216	$ 247,046

Coordination of benefits

Coordination of benefits revenue is derived from contracts with state governments and Medicaid managed care plans that typically span 3 to 5 years with the option to renew. Types of service contracts could include: (a) the identification of erroneously paid claims; (b) the delivery of verified commercial insurance coverage information; (c) the identification of paid claims where another third party is liable; and (d) the identification and enrollment of Medicaid members who have access to affordable employer insurance. Most of these types of service contracts contain multiple promises, all of which are not distinct within the context of the contract. Therefore, the promises represent a single, distinct performance obligation for the types of services we offer. Revenue derived from these performance obligations is largely based on variable consideration where, based on the number of claims or amount of findings the Company identified, a contingent or fixed transaction price/recovery percentage is allocated to each distinct performance obligation. The Company utilizes the expected value method to estimate the variable consideration related to the transaction price for its service contracts. Key inputs and assumptions in determining variable consideration includes identified pricing and expected recoveries and/or savings. The expected recoveries and/or savings are based on historical experience of information received from our customers. Revenue is recognized at a point in time when our customers realize economic benefits from our services when our services are completed. Generally, coordination of benefit contract payment terms are not standardized within the respective contract; however, payment is typically due on demand and there is a clear and distinct history of customers making consistent payments.

Analytical services

The Company's analytical services revenue consists mostly of payment integrity services but also care management and consumer engagement services.

Payment integrity services revenue is derived from contracts with federal and state governments, commercial health plans and other at-risk entities that can span several years with the option to renew. Types of service contracts could include: (a) services designed to ensure that healthcare payments are accurate and appropriate; and (b) the identification of over/(under)payments or inaccurate charges based on a review of medical records. Most of these types of service contracts contain multiple promises, all of which are not distinct within the context of the contract. Therefore, the promises represent a single, distinct performance obligation for the types of services we offer. Revenue derived from these performance obligations is largely based on variable consideration where, based on the number of claims or amount of findings the Company identified, a contingent or fixed transaction price/recovery percentage is allocated to each distinct performance obligation. The Company utilizes the expected value method to estimate the variable consideration related to the transaction price for its service contracts. Key inputs and assumptions in determining variable consideration includes identified pricing and expected recoveries and/or savings. The expected recoveries and/or savings are based on historical experience of information received from our customers. Revenue is recognized at a point in time when our customers realize economic benefits from our services when our services are completed. Generally, payment integrity contract payment terms are not standardized within the respective contract; however, payment is typically due on demand and there is a clear and distinct history of customers making consistent payments.

Care management and consumer engagement services revenue is derived from contracts with health plans and other risk-bearing entities that can span several years with the option to renew. Types of service contracts could include: (a) programs designed to improve member engagement; and (b) outreach services designed to improve clinical outcomes. Most of these types of service contracts contain multiple promises, all of which are not distinct within the context of the contract. Therefore, the promises represent a single, distinct performance obligation for the types of services we offer. Revenue derived from these services is largely based on consideration associated with prices per order/transfer and PMPM/PMPY fees. The Company believes the output method is a reasonable measure of progress for the satisfaction of our performance obligations, which are satisfied over time, as it provides a faithful depiction of (1) our performance toward complete satisfaction of the performance obligation under the contract and (2) the value transferred to the customer of the services performed under the contract. The Company has elected the right to the invoice practical expedient for recognition of revenue related to its performance obligations. Additionally, certain care management and consumer engagement services contracts have distinct performance obligations related to software license and implementation fees which have historically been recognized as revenue ratably over the life of the contract. However, upon adoption of ASC 606, revenue for software licenses is recognized at the beginning of the license period when control is transferred as the license is installed and revenue for implementation fees is recognized when control is transferred over time as the implementation is being performed. As the performance obligation is deemed to have been satisfied and control transferred to our customers for software licenses and implementation fees on or before December 31, 2017, the Company recorded a decrease to deferred revenue and an increase to opening retained earnings of $1.4 million as of January 1, 2018 for the cumulative impact of adopting ASC 606. A portion of the Company's care management and consumer engagement services are deferred and revenue is recognized over time. Deferred revenue of this nature was approximately $5.4 million and $6.4 million as of June 30, 2018 and December 31, 2017, respectively, and is included in Accounts payable, accrued expenses and other liabilities in the Consolidated Balance Sheets. Generally, care management and consumer engagement contract payment terms are stated within the contract and are due within an explicitly stated time period (e.g., 30, 45, 60 days) from the date of invoice.

Contract modifications are routine in nature and often done to account for changes in the contract specifications or requirements. In most instances, contract modifications are for services that are not distinct, and, therefore, modifications are accounted for as part of the existing contract.

4. Accounts Receivable and Accounts Receivable Allowance

The Company's accounts receivable, net, consisted of the following *(in thousands)*:

		June 30, 2018		December 31, 2017
Accounts receivable	$	207,436		$204,259
Allowance		(14,322)		(14,799)
Accounts receivable, net	$	193,114		$189,460

We record an accounts receivable allowance, based on historical patterns of billing adjustments, length of operating and collection cycle and customer negotiations, behaviors and payment patterns. Changes in these estimates are recorded to revenue in the period of change. A summary of the activity in the accounts receivable allowance was as follows *(in thousands)*:

		June 30, 2018		December 31, 2017
Balance--beginning of period	$	14,799	$	10,772
Provision		10,332		20,233
Charge-offs		(10,809)		(16,206)
Balance--end of period	$	14,322	$	14,799

5. Acquisition

On April 17, 2017, the Company completed the acquisition of 100% of the outstanding capital stock of Eliza Holding Corp. ("Eliza"), for a preliminary purchase price of $171.6 million funded with available liquidity of approximately 75% cash on hand and 25% from the Company's existing credit line.

The allocation of the purchase price to the fair value of the assets acquired and the liabilities assumed as of April 17, 2017, the effective date of the acquisition, is as follows (*in thousands*):

Cash and cash equivalents	$	435
Accounts receivable		8,902
Prepaid expenses		1,427
Property and equipment		1,146
Intangible assets		76,240
Goodwill		107,754
Other assets		63
Accounts payable		(2,620)
Deferred tax liability		(19,681)
Other liabilities		(2,057)
Total purchase price	**$**	**171,609**

The purchase price allocated to the intangibles acquired was as follows (*in thousands*):

	Useful Life		
Customer relationships	15 years	$	56,200
Intellectual property	6 years		19,600
Trade name	1.5 years		310
Restrictive covenants	1 year		130
Fair value of intangibles acquired		**$**	**76,240**

Acquisition costs recorded in the second quarter 2017 to selling, general and administrative expenses were as follows (*in thousands):*

Other operating expenses - consulting fees	$	3,515
Other operating expenses - legal fees		832
Other operating expenses - transaction costs		185
Acquisition-related costs	**$**	**4,532**

The financial results of Eliza have been included in the Company's consolidated financial statements since the date of acquisition.

6. Intangible Assets and Goodwill

Intangible assets consisted of the following (*in thousands, except for weighted average amortization period*):

	Gross Carrying Amount	**Accumulated Amortization**	**Net Carrying Amount**	**Weighted Average Amortization Period**
June 30, 2018				
Customer relationships	$ 156,790	$ (96,249)	$ 60,541	11.8 years
Trade names	16,246	(15,097)	1,149	0.5 years
Intellectual property	21,700	(4,733)	16,967	4.5 years
Restrictive covenants	263	(212)	51	1.1 years
Total	$ 194,999	$ (116,291)	$ 78,708	

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period
December 31, 2017				
Customer relationships	$ 159,290	$ (89,106)	$ 70,184	11.3 years
Trade names	16,246	(13,916)	2,330	1 year
Intellectual property	21,700	(2,874)	18,826	5.2 years
Restrictive covenants	263	(121)	142	1.3 years
Total	$ 197,499	$ (106,017)	$ 91,482	

Amortization expense of intangible assets is expected to approximate the following *(in thousands):*

Year ending December 31,	
2018	$ 11,579
2019	9,183
2020	7,664
2021	7,197
2022	7,197
Thereafter	35,888
Total	$ 78,708

For the three months ended June 30, 2018 and 2017, amortization expense related to intangible assets was $6.7 million and $4.5 million, respectively. For the six months ended June 30, 2018 and 2017, amortization expense related to intangible assets was $12.8 million and $9.7 million, respectively.

The Company assesses goodwill for impairment on an annual basis as of June 30th of each year or more frequently if an event occurs or changes in circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. Assessment of goodwill impairment is at the HMS Holdings Corp. entity level as the Company operates as a single reporting unit. The Company completed the annual impairment test as of June 30, 2018 electing to perform the first step of the goodwill impairment test by comparing the fair value of the reporting unit with its carrying value, including goodwill. In calculating the fair value of the reporting unit, the Company utilized a weighting across three commonly accepted valuation approaches: an income approach, a guideline public company approach and a merger and acquisition approach. The income approach to determining fair value computes projections of the cash flows that the reporting unit is expected to generate converted into a present value equivalent through discounting. Significant assumptions in the income approach include income projections, a discount rate and a terminal growth value which are all level 3 inputs. The income projections include assumptions for revenue and expense growth which are based on internally developed business plans and largely reflect recent historical revenue and expense trends. The discount rate was based on a risk free rate plus a beta adjusted equity risk premium and specific company risk premium. The terminal growth value is Company specific and was determined analyzing inputs such as historical inflation and the GDP growth rate. The guideline public company approach and merger and acquisition approach are based on pricing multiples observed for similar publicly traded companies or similar market companies that were sold. The results of the annual impairment assessment provide that the fair value of the reporting unit was significantly in excess of the Company's carrying value, including goodwill; therefore, no impairment was indicated and step two was not performed. If actual results are not consistent with our estimates or assumptions, the Company may be exposed to an impairment charge that could materially adversely impact our consolidated financial position and results of operations.

There were no impairment charges related to goodwill during the years ended December 31, 2017, 2016 or 2015. There were no changes in the carrying amount of goodwill for the six-months ended June 30, 2018.

7. Accounts Payable, Accrued Expenses and Other Liabilities

Accounts payable, accrued expenses and other liabilities consisted of the following *(in thousands)*:

	June 30, 2018	December 31, 2017
Accounts payable, trade	$ 10,741	$ 19,330
Accrued compensation and other	26,448	24,072
Accrued operating expenses	19,498	18,498
Total accounts payable, accrued expenses and other liabilities	$ 56,687	$ 61,900

8. Income Taxes

The Company's effective tax rate increased to 47.7% for the six months ended June 30, 2018 from 42.6% for the six months ended June 30, 2017. The effective rate for six months ended June 30, 2018 includes the discrete tax impact related to the settlement of the litigation described in Note 13, Commitments and Contingencies, interest on uncertain tax benefits and net stock compensation in addition to a net federal tax reform benefit comprised of a federal tax rate decrease, net of state impact, offset by tax increases for officer compensation deduction limits and loss of the domestic manufacturing deduction. For the six months ended June 30, 2018, the differences between the federal statutory rate and our effective tax rate are discrete tax expense related to the settlement of the litigation described in Note 13, Commitments and Contingencies, state taxes, equity compensation impacts, unrecognized tax benefits, including interest, officer compensation deduction limits, research and development tax credits, and other permanent differences.

The effective tax rate for the six months ended June 30, 2018 represents the Company's best estimate using information available to the Company as of August 6, 2018. The Company anticipates U.S. regulatory agencies will issue further regulations over the next nine months which may alter this estimate. The Company is still evaluating, among other things, the application of limitations for executive compensation related to contracts existing prior to November 2, 2017. The Company will refine its estimates to incorporate new or better information as it becomes available through the filing date of its 2017 U.S. income tax returns in the fourth quarter of 2018.

Included in Other Liabilities on the Consolidated Balance Sheets, are the total amount of unrecognized tax benefits of approximately $8.7 million and $8.2 million, as of June 30, 2018 and December 31, 2017, respectively, (net of the federal benefit for state issues) that, if recognized, would favorably affect the Company's future effective tax rate. Also included in Other Liabilities on the Consolidated Balance Sheets, are accrued liabilities for interest expense and penalties related to unrecognized tax benefits of $0.9 million and $0.6 million as of June 30, 2018 and December 31, 2017, respectively. HMS includes interest expense and penalties in the provision for income taxes in the unaudited Consolidated Statements of Income. The amount of interest expense (net of federal and state income tax benefits) and penalties in the unaudited Consolidated Statements of Income for the six months ended June 30, 2018 and 2017 was $0.3 million and an immaterial amount, respectively. The Company believes it is reasonably possible that the amount of unrecognized tax benefits may decrease by $1.9 million over the next twelve months, due to the expiration of the statute of limitations in federal and various state jurisdictions.

HMS files income tax returns with the U.S. Federal government and various state and local jurisdictions. HMS is no longer subject to U.S. Federal income tax examinations for years before 2012. The Company is currently under audit by the Internal Revenue Service for years 2013 and 2014 and no assessments have been received. HMS operates in a number of state and local jurisdictions. Accordingly, HMS is subject to state and local income tax examinations based on the various statutes of limitations in each jurisdiction. Previously recognized Texas refund claims are currently being examined by the state.

9. Estimated Liability For Appeals

Under the Company's contracts with certain commercial health plan customers and its Medicare RAC contracts with CMS (included within the Company's analytical services product revenue), providers have the right to appeal HMS claim findings and to pursue additional appeals if the initial appeal is found in favor of HMS's customer. The appeal process established under the Medicare RAC contract with CMS includes five levels of appeals, and resolution of appeals can take substantial time to resolve. HMS records a) a return obligation liability for findings which have been adjudicated in favor of providers and b) an estimated return obligation liability based on the amount of revenue that is subject to appeals and which are probable of being adjudicated in favor of providers following their successful appeal. The Company's estimate is based on the Company's historical experience. To the extent the amount to be returned to providers following a successful appeal exceeds or is less than the amount recorded, revenue in the applicable period would be reduced or increased by such amount. Any future changes to any of the Company's customer contracts, including modifications to the Medicare RAC contract, may require the Company to apply different assumptions that could materially affect both the Company's revenue and estimated liability for appeals in future periods.

The Company's original Medicare RAC contract with CMS expired on January 31, 2018. As a result of the contract expiration, the Company's contractual obligation with respect to any appeals resolved in favor of providers subsequent to the expiration date have ceased and therefore the Company released its estimated liability and increased revenue by $8.4 million during the first quarter of 2018. The Company continues to assess the remaining Medicare RAC liability to determine management's best estimate of liability for any findings which have been previously adjudicated prior to the expiration of the contract.

The total estimated liability for appeals balance of $22.3 million and $30.8 million as of June 30, 2018 and December 31, 2017, respectively, includes $19.4 million and $19.3 million, respectively, of Medicare RAC claim findings which have been adjudicated in favor of providers, and $0.0 million and $8.5 million, respectively, of the Company's estimate of the potential amount of Medicare RAC repayments that are probable of being adjudicated in favor of providers following a successful appeal. Additionally, the total estimated liability for appeals balance includes $2.9 million and $3.2 million related to commercial customers claim appeals. The provision included in the estimated liability for appeals is an offset to revenue in the Company's Consolidated Statements of Income.

A summary of the activity in the estimated liability for appeals related to the Company's original Medicare RAC contract was as follows *(in thousands)*:

	June 30, 2018
Balance--beginning of period	$ 8,544
Provision	-
Appeals found in providers favor	(108)
Release of liability	(8,436)
Balance--end of period	$ -

10. Credit Agreement

In December 2017, the Company entered into an amendment to its Credit Agreement, which, among other things, extended the maturity of its then existing $500 million revolving credit facility by five years to December 2022 (the "Amended Revolving Facility"). The availability of funds under the Amended Revolving Facility includes sublimits for (a) up to $50 million for the issuance of letters of credit and (b) up to $25 million for swingline loans. In addition, the Company may increase the commitments under the Amended Revolving Facility and/or add one or more incremental term loan facilities, provided that such incremental facilities do not exceed in the aggregate the sum of (i) the greater of $120 million and 100% of Consolidated EBITDA (as defined in the Credit Agreement) and (ii) an additional amount so long as our first lien leverage ratio (as defined in the Credit Agreement) on a pro forma basis is not greater than 3.00:1.00, subject to obtaining commitments from lenders therefor and meeting certain other conditions.

As of June 30, 2018 and December 31, 2017, the outstanding principal balance due on the Amended Revolving Facility was $240.0 million. No principal payments were made against the Company's Amended Revolving Facility during the six months ended June 30, 2018.

Borrowings under the Amended Revolving Facility bear interest at a rate equal to, at the Company's election (except with respect to swingline borrowings, which will accrue interest based only at the base rate), either:

- a base rate determined by reference to the greatest of (a) the prime or base commercial lending rate of the administrative agent as in effect on the relevant date, (b) the federal funds effective rate plus 0.50% and (c) the one-month LIBO Rate plus 1.00%, plus an interest margin ranging from 0.50% to 1.00% based on the Company's consolidated leverage ratio for the applicable period; or

- an adjusted LIBO Rate, equal to the LIBO Rate for the applicable interest period multiplied by the statutory reserve rate (equal to (x) one divided by (y) one minus the aggregate of the maximum reserve percentage (including any marginal, special, emergency or supplemental reserves) established by the Board of Governors of the Federal Reserve System of the United States), plus an interest margin ranging from 1.50% to 2.00% based on the Company's consolidated leverage ratio for the applicable period.

In addition to paying interest on the outstanding principal, the Company is required to pay unused commitment fees on the Amended Revolving Facility during the term of the Credit Agreement ranging from 0.375% to 0.250% per annum based on the Company's consolidated leverage ratio and letter of credit fees equal to 0.125% per annum on the aggregate face amount of each letter of credit, as well as customary agency fees.

The Amended Revolving Facility is secured, subject to certain customary carve-outs and exceptions, by a first priority lien and security interest in substantially all tangible and intangible assets of the Company and certain subsidiaries of the Company. The Amended Revolving Facility contains certain restrictive covenants, which affect, among other things, the ability of the Company and its subsidiaries to incur indebtedness, create liens, make investments, sell or otherwise dispose of assets, engage in mergers or consolidations with other entities, and pay dividends or repurchase stock. The Company is also required to comply, on a quarterly basis, with two financial covenants: (i) a minimum interest coverage ratio of 3:00:1:00, and (ii) a maximum consolidated leverage ratio of 4.75:1.00 through December 2019 and 4.25:1.00 from and after January 2020. The consolidated leverage ratio is subject to a step-up to 5.25:1.00 for four full consecutive fiscal quarters following a permitted acquisition or similar investment. As of June 30, 2018, the Company was in compliance with all terms of the Credit Agreement.

Interest expense and the commitment fees on the unused portion of the Company's revolving credit facility were as follows (*in thousands*):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Interest expense	$ 2,627	$ 1,469	$ 4,697	$ 2,843
Commitment fees	239	333	477	711

As of June 30, 2018 and December 31, 2017, the unamortized balance of deferred origination fees and debt issuance costs were $2.5 million and $2.8 million, respectively. For the six month periods ended June 30, 2018 and 2017, HMS amortized $0.3 million and $1.0 million, respectively, of interest expense related to the Company's deferred origination fees and debt issue costs.

Although HMS expects that operating cash flows will continue to be a primary source of liquidity for the Company's operating needs, the Amended Revolving Facility may be used for general corporate purposes, including, but not limited to acquisitions, if necessary.

11. Earnings Per Share

The following table reconciles the basic to diluted weighted average common shares outstanding using the treasury stock method *(in thousands, except per share amounts)*:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net income	$ (3,367)	$ 6,517	$ 3,024	$ 7,959
Weighted average common shares outstanding-basic	83,231	83,921	83,222	83,708
Plus: net effect of dilutive stock options and restricted stock units	-	1,905	1,615	1,826
Weighted average common shares outstanding-diluted	83,231	85,826	84,837	85,534
Net (loss)/income per common share-basic	$ (0.04)	$ 0.08	$ 0.04	$ 0.10
Net (loss)/income per common share-diluted	$ (0.04)	$ 0.08	$ 0.04	$ 0.09

For the three months ended June 30, 2018, the Company incurred a net loss; therefore, basic and dilutive earnings per share were the same and 2,552,862 stock options and restricted stock units representing 626,341 shares of common stock were excluded from consideration in the calculation of diluted net loss per share because the effect would have been anti-dilutive. For the three months ended June 30, 2017, 1,804,272 stock options and restricted stock units representing 51,836 shares of common stock were not included in the diluted earnings per share calculation because the effect would have been anti-dilutive.

For the six months ended June 30, 2018 and 2017, 2,738,783 and 1,888,257 stock options, respectively, were not included in the diluted earnings per share calculation because the effect would have been anti-dilutive. For the six months ended June 30, 2018 and 2017, restricted stock units representing 106,501 and 63,247 shares of common stock, respectively, were not included in the diluted earnings per share calculation because the effect would have been anti-dilutive.

12. Stock-Based Compensation

(a) Stock-Based Compensation Expense

Total stock-based compensation expense in the Company's unaudited Consolidated Statements of Income related to the Company's long-term incentive award plans was as follows *(in thousands)*:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Cost of services-compensation	$ 1,673	$ 1,462	$ 4,236	$ 3,503
Selling, general and administrative	3,041	2,532	9,972	5,877
Total	$ 4,714	$ 3,994	$ 14,208	$ 9,380

(b) Stock Options

Stock-based compensation expense related to stock options was approximately $2.1 million and $1.7 million for the three months ended June 30, 2018 and 2017, respectively. Stock-based compensation expense related to stock options was approximately $6.1 million and $3.9 million for the six months ended June 30, 2018 and 2017, respectively.

Presented below is a summary of stock option activity for the six months ended June 30, 2018 (*in thousands except for weighted average exercise price and weighted average remaining contractual terms*):

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms	Aggregate Intrinsic Value
Outstanding balance at December 31, 2017	5,554	$ 17.35		
Granted	1,010	19.58		
Exercised	(151)	15.81		
Forfeitures	(26)	16.43		
Expired	(27)	22.14		
Outstanding balance at June 30, 2018	6,360	17.78	5.37	26,785
Expected to vest at June 30, 2018	1,633	17.68	8.00	6,449
Exercisable at June 30, 2018	3,877	$ 17.87	3.72	16,929

During the three months ended June 30, 2018 and 2017, the Company issued 87,230 and 132,128 shares, respectively, of the Company's common stock upon the exercise of outstanding stock options and received proceeds of $2.2 million and $2.0 million, respectively. The total intrinsic value of stock options exercised during the three months ended June 30, 2018 and 2017 was $0.8 million and $0.6 million, respectively. During the six months ended June 30, 2018 and 2017, the Company issued 151,034 and 132,805 shares, respectively, of the Company's common stock upon the exercise of outstanding stock options and received proceeds of $2.4 million and $2.0 million, respectively. The total intrinsic value of stock options exercised during the six months ended June 30, 2018 and 2017 was $0.8 million and $0.6 million, respectively.

As of June 30, 2018, there was approximately $9.6 million of total unrecognized compensation cost related to stock options outstanding, which is expected to be recognized over a weighted average period of 2.3 years.

The weighted-average grant date fair value per share of the stock options granted during the six months ended June 30, 2018 and 2017 was $7.52 and $7.73, respectively. HMS estimated the fair value of each stock option grant on the date of grant using a Black-Scholes option pricing model and weighted–average assumptions set forth in the following table:

	Six Months Ended June 30,	
	2018	2017
Expected dividend yield	0%	0%
Risk-free interest rate	2.68%	1.74%
Expected volatility	42.43%	44.23%
Expected life (years)	6.00	5.00

The total tax benefits recognized on stock-based compensation for the three and six months ended June 30, 2018 and 2017 was $2.5 million and $3.6 million, respectively.

(c) Restricted Stock Units

Stock-based compensation expense related to restricted stock units was approximately $2.6 million and $2.2 million for the three months ended June 30, 2018 and 2017, respectively. Stock-based compensation expense related to restricted stock units was approximately $8.1 million and $5.5 million for the six months ended June 30, 2018 and 2017, respectively.

Presented below is a summary of restricted stock units activity for the six months ended June 30, 2018 *(in thousands, except for weighted average grant date fair value per unit):*

	Number of Units	Weighted Average Grant Date Fair Value per Unit
Outstanding balance at December 31, 2017	1,346	$ 17.65
Granted	761	16.72
Vesting of restricted stock units, net of units withheld for taxes	(364)	16.93
Units withheld for taxes	(161)	16.93
Forfeitures	(26)	16.89
Outstanding balance at June 30, 2018	1,556	$ 19.98

For the three months ended June 30, 2018 and 2017, HMS granted 62,259 and 536,023 restricted stock units, respectively, with an aggregate fair market value of $0.9 million and $10.2 million, respectively. For the six months ended June 30, 2018 and 2017, HMS granted 761,083 and 539,657 restricted stock units, respectively, with an aggregate fair market value of $12.7 million and $10.3 million, respectively.

As of June 30, 2018, 1,330,734 restricted stock units remained unvested and there was approximately $13.9 million of unrecognized compensation cost related to restricted stock units, which is expected to be recognized over a weighted average vesting period of 1.38 years.

13. Commitments and Contingencies

In July 2012, Dennis Demetre and Lori Lewis (the "Plaintiffs"), filed an action in the Supreme Court of the State of New York against HMS Holdings Corp., claiming an undetermined amount of damages alleging that various actions by HMS unlawfully deprived the Plaintiffs of the acquisition earn-out portion of the purchase price for Allied Management Group Special Investigation Unit ("AMG") under the applicable Stock Purchase Agreement (the "SPA") and that HMS had breached certain contractual provisions under the SPA. The Plaintiffs filed a second amended complaint with two causes of action for breach of contract and one cause of action for breach of implied covenant of good faith and fair dealing. HMS asserted a counterclaim against Plaintiffs for breach of contract based on contractual indemnification costs, including attorneys' fees arising out of the Company's defense of AMG in Kern Health Systems v. AMG, Dennis Demetre and Lori Lewis (the "California Action"), which are recoverable under the SPA. In June 2016, Kern Health Systems and AMG entered into a settlement agreement that resolved all claims in the California Action. In July 2017, the Court issued a decision on the Company's motion for partial summary judgment and granted the motion in part, dismissing one of Plaintiffs' breach of contract causes of action against HMS. On November 3, 2017, following a jury trial, a verdict was returned in favor of the Plaintiffs on a breach of contract claim, and the jury awarded $60 million in damages to the Plaintiffs. On March 14, 2018, the Court held a hearing on the Company's post-trial motion for an order granting it judgment notwithstanding the verdict or, alternatively, setting aside the jury's award of damages. On June 27, 2018, prior to the Court issuing a decision on the motion, the Company entered into a Settlement Agreement (the "Settlement Agreement") with the Plaintiffs, John Alfred Lewis and Christopher Brandon Lewis. Pursuant to the terms of the Settlement Agreement, the Company paid $20 million to resolve all matters in controversy pertaining to the lawsuit. On July 5, 2018, the Court entered an order to discontinue the lawsuit pursuant to the Stipulation of Discontinuance with Prejudice filed by the parties.

In February 2018, the Company received a Civil Investigative Demand ("CID") from the Texas Attorney General, purporting to investigate possible unspecified violations of the Texas Medicaid Fraud Prevention Act. The Company has provided certain documents and information in March 2018 in response to the CID and continues to cooperate with the government. HMS has not received any further requests for information in connection with this CID.

From time to time, HMS may be subject to investigations, legal proceedings and other disputes arising in the ordinary course of the Company's business, including but not limited to regulatory audits, billing and contractual disputes, employment-related matters and post-closing disputes related to acquisitions. Due to the Company's contractual relationships, including those with federal and state government entities, HMS's operations, billing and business practices are subject to scrutiny and audit by those entities and other multiple agencies and levels of government, as well as to frequent transitions and changes in the personnel responsible for oversight of the Company's contractual performance. HMS may have contractual disputes with its customers arising from differing interpretations of contractual provisions that define the Company's rights, obligations, scope of work or terms of payment, and with associated claims of liability for inaccurate or improper billing for reimbursement of contract fees, or for sanctions or damages for alleged performance deficiencies. Resolution of such disputes may involve litigation or may require that HMS accept some amount of loss or liability in order to avoid customer abrasion, negative marketplace perceptions and other disadvantageous results that could affect the Company's business, financial condition, results of operations and cash flows.

HMS records accruals for outstanding legal matters when it believes it is probable that a loss will be incurred and the amount can be reasonably estimated. The Company evaluates, on a quarterly basis, developments in legal matters that could affect the amount of any accrual and developments that would make a loss contingency both probable and reasonably estimable. If a loss contingency is not both probable and estimable, HMS does not establish an accrued liability.

14. Subsequent Events

In connection with the preparation of these unaudited Consolidated Financial Statements, an evaluation of subsequent events was performed through the date of filing and there were no events that have occurred that would require adjustments to the financial statements or disclosure.

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

The following Management's Discussion and Analysis is intended to help the reader understand the results of operations and financial condition of HMS. You should read this discussion and analysis in conjunction with the other sections of this Form 10-Q, including the Cautionary Note Regarding Forward-Looking Statements appearing prior to Part I and the unaudited Consolidated Financial Statements and Notes thereto in Part I, Item 1. The historical results set forth in Part I, Item 1 and Item 2 of this Form 10-Q should not be taken as necessarily indicative of our future operations or financial results.

Business Overview

HMS is a leading provider of cost containment solutions in the U.S. healthcare marketplace. Using innovative technology as well as extensive data services and powerful analytics, we deliver coordination of benefits, payment integrity, and care management and consumer engagement solutions through our operating subsidiaries to help healthcare payers improve financial performance and clinical outcomes. Together our various services help our customers recover improper payments; prevent future improper payments; reduce fraud, waste and abuse; better manage the care that their members receive; engage healthcare consumers to improve clinical outcomes and increase retention; and achieve regulatory compliance.

We serve state Medicaid programs, commercial health plans, federal government health agencies, government and private employers, CHIPs and other healthcare payers and sponsors. We also serve as a subcontractor for certain business outsourcing and technology firms. As of June 30, 2018, our customer base included the following:

- over 40 state Medicaid programs;
- approximately 325 health plans, including 23 of the top 25 health plans nationally (based on membership) in support of their multiple lines of business, including Medicaid managed care, Medicare Advantage and group and individual health;
- over 225 private employers;
- CMS, the Centers for Disease Control and Prevention, and the Department of Veterans Affairs; and
- PBMs, third-party administrators and other risk-bearing entities, including independent practice associations, hospital systems, ACOs and specialty care organizations.

Critical Accounting Policies and Estimates

Since the date of our 2017 Form 10-K, there have been no material changes to our critical accounting policies other than with respect to revenue recognition as described in Notes 1 and 3 to the unaudited Consolidated Financial Statements in Part I, Item 1 of this Form 10-Q. With respect to our accounting policies other than revenue recognition, refer to the discussion in our 2017 Form 10-K under "Critical Accounting Policies and Estimates" in Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and "Business and Summary of Significant Accounting Policies" in Note 1 to the Consolidated Financial Statements under Part II, Item 8.

RESULTS

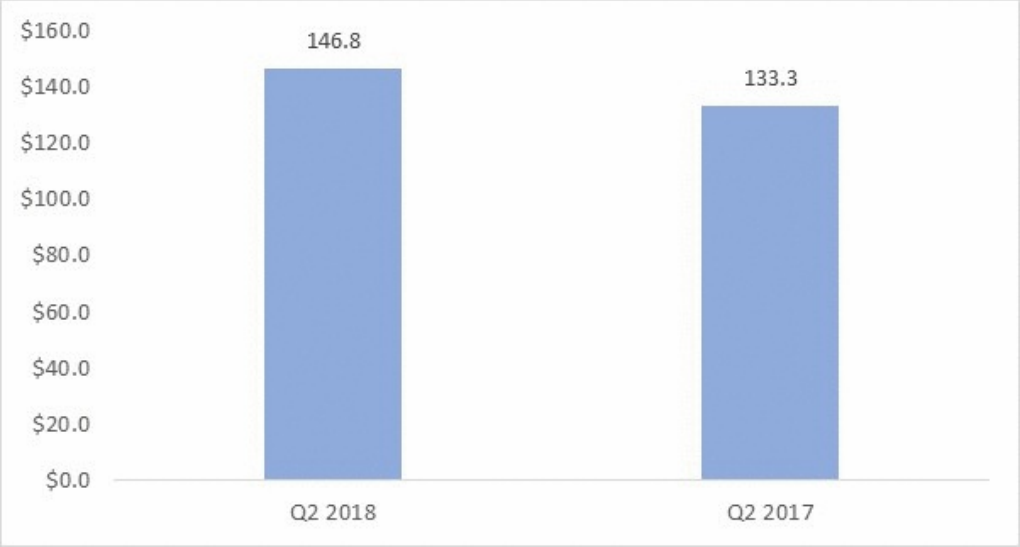
As of and for the three months ended June 30, 2018 and June 30, 2017

- Revenue of $146.8 million increased $13.5 million, or 10.1% over the same quarter in 2017; and
- Operating loss of $0.7 million (which includes a non-recurring $20 million settlement expense) was lower by $15.0 million as compared to operating income of $14.4 million in the same quarter prior year.

Comparison of Three Months Ended June 30, 2018 to June 30, 2017

dollars in millions	Three Months Ended June 30, 2018	2017	$ Change 2018 vs 2017	% Change
Revenue	$ 146.8	$ 133.3	$ 13.5	10.1%
Cost of Services :				
Compensation	55.2	51.9	3.3	6.4
Information technology	14.2	11.3	2.9	25.7
Occupancy	4.0	4.2	(0.2)	(4.8)
Direct project costs	10.9	10.1	0.8	7.9
Other operating costs	7.0	6.6	0.4	6.1
Amortization of acquisition related software and intangible assets	9.7	7.3	2.4	32.9
Total Cost of Services	101.0	91.4	9.6	10.5
Selling, general and administrative expenses	26.5	27.6	(1.1)	(4.0)
Settlement expense	20.0	-	20.0	-
Total Operating Expenses	147.5	119.0	28.5	23.9
Operating (loss)/income	(0.7)	14.3	(15.0)	(104.9)
Interest expense	(3.1)	(2.3)	(0.8)	34.8
Interest income	0.2	-	0.2	-
(Loss)/income before income taxes	(3.6)	12.0	(15.6)	(130.0)
Income taxes	(0.2)	5.5	(5.7)	(103.6)
Net (loss)/income	(3.4)	6.5	(9.9)	(152.3)%

Revenue (in millions)



Three Months Ended June 30 – 2018 vs. 2017
During the three months ended June 30, 2018, revenue was $146.8 million, an increase of $13.5 million or 10.1% compared to revenue of $133.3 million for the prior year quarter.

- By product:
  - Coordination of benefits revenue increased $2.3 million or 2.3% which was attributable to incremental services and yield increases provided to existing customers in our cost avoidance business.
  - Analytical services revenue increased by $11.2 million or 32.4%. Care management and consumer engagement revenue increased by $6.2 million or 72.1% which was mostly driven by growth in the Eliza business. Payment integrity revenue increased $2.6 million or 9.7% primarily due to increased demand from existing clients, yield enhancements and improvements in provider processes. Medicare RAC revenue also increased by $2.4 million period over period.

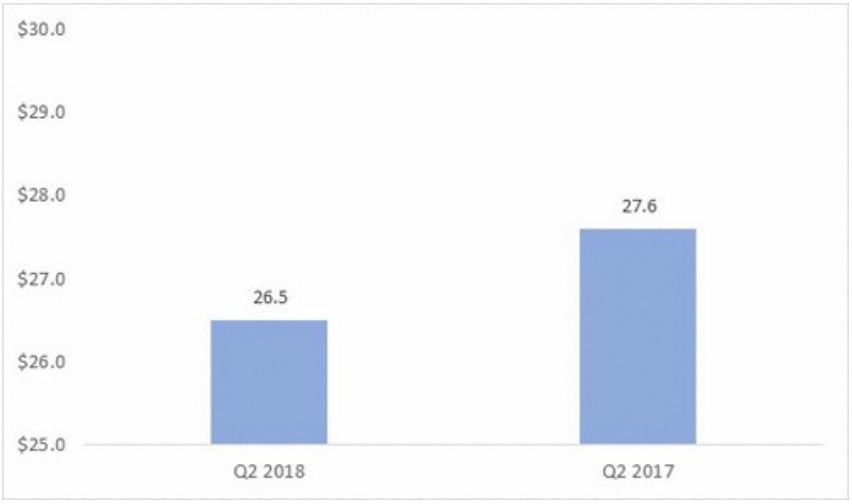
- By market:
  - Commercial health plan market revenue increased $11.1 million or 16.0% which was attributable to growth in the Eliza business and incremental services and yield increases provided to existing customers in our cost avoidance business.
  - Federal government market revenue increased $1.5 million or 25.0%.
  - State government market revenue grew by $0.9 million or 1.6%.

Total Cost of Services (in millions)

Three Months Ended June 30 – 2018 vs. 2017
During the three months ended June 30, 2018, total cost of services was $101.0 million, an increase of $9.6 million or 10.5% compared to $91.4 million for the prior year quarter.

- Compensation expense increased by $3.3 million due to increases in salaries, variable compensation and fringe benefits expenses.
- Information technology expenses increased by $2.9 million due to increases in amortization of internally developed software and software maintenance.
- Amortization of acquisition related software and intangible assets increased by $2.4 million.

Selling, General and Administrative expenses (in millions)


$30.0
$29.0
$28.0
$27.0
$26.0
$25.0
26.5
27.6
Q2 2018
Q2 2017

Three Months Ended June 30 – 2018 vs. 2017

During the three months ended June 30, 2018, SG&A expense was $26.5 million, a decrease of $1.1 million or (4.0%) compared to $27.6 million for the prior year quarter.

- The decrease relates to the net of several de minimis increases and decreases and is not specific to any one difference.

Income Taxes

Three Months Ended June 30 – 2018 vs. 2017

The Company's effective tax rate decreased to 6.7% for the three months ended June 30, 2018 compared to 45.9% for the three months ended June 30, 2017. The effective rate for the three months ended June 30, 2018 includes discrete tax expense related to the settlement of the litigation described in Note 13, Commitments and Contingencies, interest on uncertain tax benefits and net stock compensation in addition to a net federal tax reform benefit comprised of a federal tax rate decrease, net of state impact, offset by tax increases for officer compensation deduction limits and loss of the domestic manufacturing deduction. Excluding the above mentioned discrete tax expense and net federal tax reform benefit, our effective tax rate would approximate 37.9% for the three months ended June 30, 2018. For the three months ended June 30, 2018, the differences between the federal statutory rate and our effective tax rate are discrete tax expense related to the settlement, state taxes, equity compensation impacts, unrecognized tax benefits, including interest, officer compensation deduction limits, research and development tax credits, and other permanent differences.

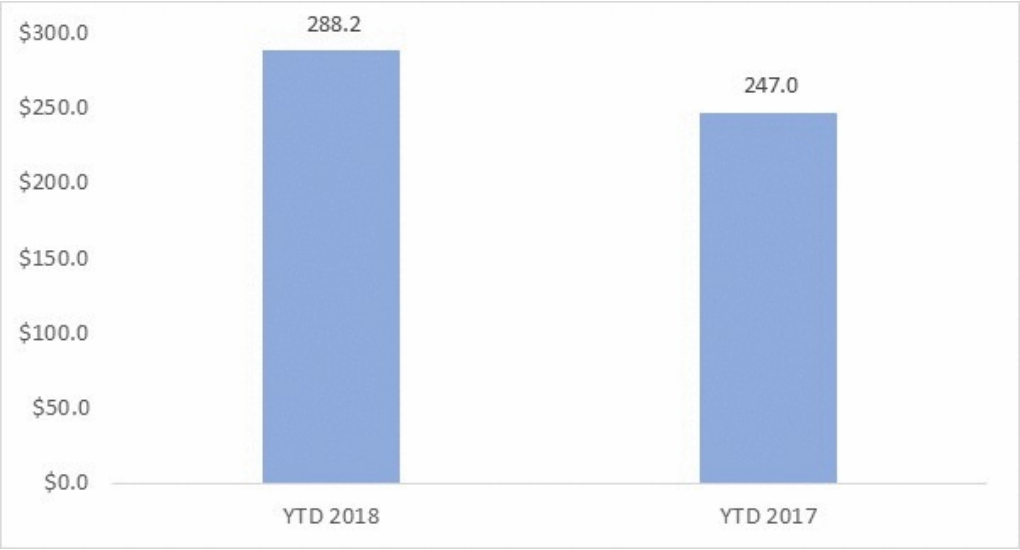
As of and for the six months ended June 30, 2018 and June 30, 2017

- Revenue of $288.2 million increased $41.2 million, or 16.7% over the same period in 2017;
- Operating income of $11.2 million (which includes a non-recurring $20 million settlement expense) was lower by $7.0 million as compared to the same period in 2017;
- Net income of $3.0 million (which includes a non-recurring $20 million settlement expense) decreased $4.9 million over the same period in 2017; and
- Year-to-date 2018 cash flow from operations was $23.7 million.

Comparison of Six Months Ended June 30, 2018 to June 30, 2017

dollars in millions	Six Months Ended June 30,		$ Change	% Change
	2018	2017	2018 vs 2017	
Revenue	$ 288.2	$ 247.0	$ 41.2	16.7%
Cost of Services :				
Compensation	111.3	100.8	10.5	10.4
Information technology	26.5	21.1	5.4	25.6
Occupancy	8.4	7.8	0.6	7.7
Direct project costs	21.0	20.5	0.5	2.4
Other operating costs	13.5	13.8	(0.3)	(2.2)
Amortization of acquisition related software and intangible assets	17.8	13.6	4.2	30.9
Total Cost of Services	198.5	177.6	20.9	11.8
Selling, general and administrative expenses	58.5	51.2	7.3	14.3
Settlement expense	20.0	-	20.0	-
Total Operating Expenses	277.0	228.8	48.2	21.1
Operating Income	11.2	18.2	(7.0)	(38.5)
Interest expense	(5.7)	(4.6)	(1.1)	23.9
Interest income	0.3	0.2	0.1	50.0
Income before income taxes	5.8	13.8	(8.0)	(58.0)
Income taxes	2.8	5.9	(3.1)	(52.5)
Net Income	$ 3.0	$ 7.9	$ (4.9)	(62.0)%

Revenue (in millions)



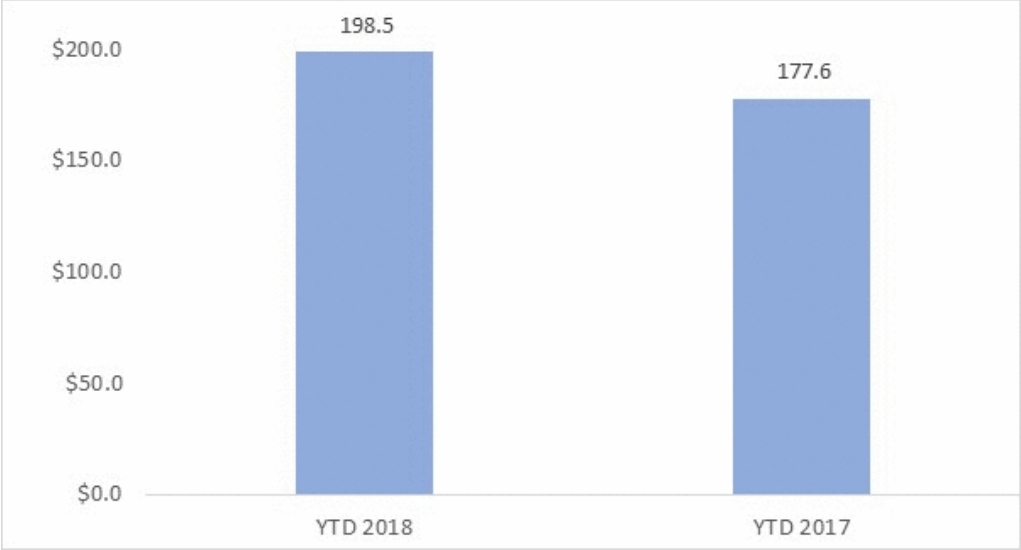
Six Months Ended June 30 – 2018 vs. 2017

During the six months ended June 30, 2018, revenue was $288.2 million, an increase of $41.2 million or 16.7% compared to revenue of $247.0 million for the prior year period.

- By product:
  - Coordination of benefits revenue increased $5.6 million or 3.0% which was attributable to incremental services and yield increases provided to existing customers in our cost avoidance business.
  - Analytical services revenue increased $35.6 million or 59.2%. The increase was primarily due to our Eliza subsidiary (acquired in April 2017) increasing revenue by $15.8 as compared to prior year. Also, Medicare RAC revenue increased by $12.1 million as compared to prior year, primarily due to an $8.4 million release of our Medicare RAC appeals liability due to contract expiration in the first quarter of the current year. Payment integrity revenue increased $6.9 million as compared to prior year primarily due to increased demand from existing clients, yield enhancements and improvements in provider processes.

- By market:
  - Commercial health plan market revenue increased $27.8 million or 22.3% which was attributable to growth in the Eliza subsidiary (acquired in April 2017) of $15.8 million and incremental services and yield increases provided to existing customers in our cost avoidance business.
  - Federal government market revenue increased $11.2 million or 99.1%, primarily due to an $8.4 million release of our Medicare RAC appeals liability due to contract expiration in the first quarter of the current year.
  - State government market revenue grew by $2.2 million or 2.0%.

Total Cost of Services (in millions)



Six Months Ended June 30 – 2018 vs. 2017

During the six months ended June 30, 2018, total cost of services was $198.5 million, an increase of $20.9 million or 11.8% compared to $177.6 million for the prior year period.

- Our Eliza subsidiary (acquired in April 2017) and its related compensation, information technology, occupancy and amortization of intangibles expenses represented $11.2 million of the increase.
- Excluding Eliza, compensation expense increased by $6.2 million, including variable compensation, salaries, fringe benefits expenses, and stock compensation and Information technology expense increased by $3.1 million relating to amortization of internally developed software and software maintenance.

Selling, General and Administrative expenses (in millions)

Six Months Ended June 30 – 2018 vs. 2017
During the six months ended June 30, 2018, SG&A expense was $58.5 million, an increase of $7.3 million or 14.3% compared to $51.2 million for the prior year period.

- Our Eliza subsidiary (acquired in April 2017) represented $3.2 million of the increase.
- Excluding Eliza, compensation expense increased by $7.1 million including variable compensation, salaries, fringe benefits, and stock compensation expense. Other expenses decreased by $2.5 million primarily relating to acquisition costs incurred in the prior period.

Income Taxes

Six Months Ended June 30 – 2018 vs. 2017
The Company's effective tax rate increased to 47.7% for the six months ended June 30, 2018 compared to 42.6% for the six months ended June 30, 2017. The effective rate for the six months ended June 30, 2018 includes discrete tax expense related to the settlement of the litigation described in Note 13, Commitments and Contingencies, interest on uncertain tax benefits and net stock compensation in addition to a net federal tax reform benefit comprised of a federal tax rate decrease, net of state impact, offset by tax increases for officer compensation deduction limits and loss of the domestic manufacturing deduction. Excluding the above mentioned discrete tax expense and net federal tax reform benefit, our effective tax rate would approximate 38.2% for the six months ended June 30, 2018. For the six months ended June 30, 2018, the differences between the federal statutory rate and our effective tax rate are state taxes, equity compensation impacts, unrecognized tax benefits, including interest, officer compensation deduction limits, research and development tax credits, and other permanent differences.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Liquidity and Capital Resources

The following tables should be read in conjunction with the unaudited Consolidated Financial Statements and Notes thereto in Part I, Item 1 of this Form 10-Q.

Our cash and cash equivalents, working capital and available borrowings under our credit facility (based upon the borrowing base and financial covenants in our Credit Agreement) were as follows *(in thousands)*:

	June 30, 2018	December 31, 2017
Cash and cash equivalents	$ 88,127	$ 83,313
Working capital	$ 226,874	$ 199,967
Available borrowings under credit facility	$ 254,600	$ 254,600

A summary of our cash flows was as follows *(in thousands)*:

	Six Months Ended June 30,	
	2018	2017
Net cash provided by operating activities	$ 23,691	$ 20,740
Net cash used in investing activities	(12,628)	(186,681)
Net cash (used in)/provided by financing activities	(6,249)	41,311
Net increase (decrease) in cash and cash equivalents	$ 4,814	$ (124,630)

Cash and cash equivalents at June 30, 2018 and net cash provided by operating activities for the six months ended June 30, 2018, included a non-recurring cash outflow of $20 million for the settlement expense.

Our principal source of cash has been our cash flow from operations and our $500 million five-year revolving credit facility. Other sources of cash include proceeds from the exercise of stock options and tax benefits associated with stock option exercises. The primary uses of cash are capital investments, acquisitions, compensation expenses, information technology, direct project costs, SG&A expenses, other expense and repurchases of our common stock.

We believe that expected cash flows from operations, available cash and cash equivalents, and funds available under our revolving credit facility will be sufficient to meet our liquidity requirements for the following year, which include:

- the working capital requirements of our operations;
- investments in our business;
- business development activities; and
- repurchases of common stock

Any projections of future earnings and cash flows are subject to substantial uncertainty. We may need to access debt and equity markets in the future if unforeseen costs or opportunities arise, to meet working capital requirements, fund acquisitions or repay our indebtedness under the Credit Agreement. If we need to obtain new debt or equity financing in the future, the terms and availability of such financing may be impacted by economic and financial market conditions as well as our financial condition and results of operations at the time we seek additional financing.

Cash Flows from Operating Activities

Net cash provided by operating activities for the six months ended June 30, 2018 was $23.7 million, an increase of $3.0 million as compared to net cash provided by operating activities of $20.7 million for the six months ended June 30, 2017. The increase in operating cash flow is primarily attributable to decreases in accounts payable, accounts receivable, and deferred income taxes net income. These were partially offset by the release of estimated liability for appeals and an increase in depreciation and amortization and stock compensation expense. Net cash provided by operating activities for the six months ended June 30, 2018 also included a non-recurring cash outflow of $20 million for the settlement expense.

Cash Flows from Investing Activities

Net cash used in investing activities for the six months ended June 30, 2018 was $12.6 million, a $174.2 million decrease compared to net cash used in investing activities of $186.7 million for the six months ended June 30, 2017. The decrease primarily related to the $171.2 million acquisition of Eliza in the prior year period.

Cash Flows from Financing Activities

Net cash (used in)/provided by financing activities for the six months ended June 30, 2018 was $6.2 million, a $47.5 million decrease compared to net cash provided by financing activities of $41.3 million for the six months ended June 30, 2017. The decrease is primarily related to proceeds from our revolving credit facility of $42.2 million in the prior year.

Contractual Obligations

There have been no material changes outside the ordinary course of business in our contractual obligations as presented in our 2017 Form 10-K.

Recently Issued Accounting Pronouncements

The information set forth under the caption “Recently Issued Accounting Pronouncements” in Note 1 to the unaudited Consolidated Financial Statements in Part I, Item 1 is incorporated herein by reference.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes to the market risks discussed in Item 7A to Part II of our 2017 Form 10-K.

Item 4. Controls and Procedures

We are responsible for maintaining disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) that are designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. 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, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by Rule 13a-15(b) under the Exchange Act, management, with the participation of our Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of our disclosure controls and procedures as of June 30, 2018. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective to provide reasonable assurance that their objectives were met as of the end of the period covered by this Form 10-Q.

There have been no changes in the Company's internal control over financial reporting identified in connection with the evaluation of our controls performed during the three months ended June 30, 2018, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

The information set forth under the caption “Commitments and Contingencies” in Note 13 to the unaudited Consolidated Financial Statements of this Form 10-Q is incorporated herein by reference.

Item 1A. Risk Factors

In addition to the information set forth in this Form 10-Q, the risks that are discussed in the 2017 Form 10-K, under the headings “Part I, Item 1. Business,” “Part I, Item 1A. Risk Factors” and “Part II, Item 7A. Quantitative and Qualitative Disclosures About Market Risk,” should be carefully considered as such risks could materially affect the Company’s business, financial condition or future results. There has been no material change in the Company’s risk factors from those described in the 2017 Form 10-K.

These risks are not the only risks facing the Company. Additional risks and uncertainties not currently known to the Company or that it currently deems to be immaterial also may have a material adverse effect on the Company’s business, financial condition or future results.

Item 6. Exhibits

The Exhibits include agreements to which the Company is a party or has a beneficial interest. The agreements have been filed to provide investors with information regarding their respective terms. The agreements are not intended to provide any other actual information about the Company or its business or operations. In particular, the assertions embodied in any representations, warranties, and covenants contained in the agreements may be subject to qualifications with respect to knowledge and materiality different from those applicable to investors and may be qualified by information in confidential disclosure schedules not included with the exhibits. These disclosure schedules may contain information that modifies, qualifies and creates exceptions to the representations, warranties and covenants set forth in the agreements. Moreover, certain representations, warranties, and covenants in the agreements may have been used for the purpose of allocating risk between parties, rather than establishing matters as facts. In addition, information concerning the subject matter of the representations, warranties and covenants may have changed after the date of the respective agreement, which subsequent information may or may not be fully reflected in the Company's public disclosures. Accordingly, investors should not rely on the representations, warranties and covenants in the agreements as characterizations of the actual state of facts about the Company or its business or operations on the date hereof.

Where an exhibit is filed by incorporation by reference to a previously filed registration statement or report, such registration statement or report is identified after the description of the exhibit.

Exhibit Number	Description
3.1	Conformed copy of Certificate of Incorporation of the Company, as amended through May 23, 2018
3.2	Second Amended and Restated Bylaws of HMS Holdings Corp. dated May 23, 2018 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on May 25, 2018)
10.1	Form of Indemnification Agreement†
10.2	Settlement Agreement, dated June 27, 2018, by and among Dennis Demetre, Lori Lynn Lewis Demetre, John Alfred Lewis, Christopher Brandon Lewis, and HMS Holdings Corp.
31.1	Rule 13a-14(a)/15d-14(a) Certification of the Principal Executive Officer of HMS Holdings Corp., as adopted pursuant to Section 302 of the Sarbanes- Oxley Act of 2002
31.2	Rule 13a-14(a)/15d-14(a) Certification of the Principal Financial Officer of HMS Holdings Corp., as adopted pursuant to Section 302 of the Sarbanes- Oxley Act of 2002
32.1	Section 1350 Certification of the Principal Executive Officer of HMS Holdings Corp., as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*

32.2	Section 1350 Certification of the Principal Financial Officer of HMS Holdings Corp., as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

† Indicates a management contract or compensatory plan, contract or arrangement

* The certifications attached hereto as Exhibit 32.1 and Exhibit 32.2 are furnished with this Form 10-Q and shall not be deemed "filed" by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 6, 2018

HMS HOLDINGS CORP.

By: /s/ William C. Lucia
William C. Lucia
President and Chief Executive Officer
(Principal Executive Officer)

By: /s/ Jeffrey S. Sherman
Jeffrey S. Sherman
Executive Vice President, Chief Financial Officer and Treasurer
(Principal Financial Officer)

Exhibit 3.1

CONFORMED COPY OF

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

HMS HOLDINGS CORP.

(Conformed copy to reflect amendments made through May 23, 2018.)

FIRST: The name of the Corporation is HMS Holdings Corp.

SECOND: The address of the Corporation's registered office in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle, 19801. The name of its registered agent at that address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is 180,000,000 shares, consisting of (i) 175,000,000 shares of Common Stock, $0.01 par value per share ("Common Stock"), and (ii) 5,000,000 shares of Preferred Stock, $0.01 par value per share ("Preferred Stock").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A COMMON STOCK.

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights of the holders of the Preferred Stock of any series as may be designated by the Board of Directors upon any issuance of the Preferred Stock of any series.

2. Voting. The holders of the Common Stock shall have voting rights at all meetings of stockholders, each such holder being entitled to one vote for each share thereof held by such holder; provided, however, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Certificate of Incorporation (which, as used herein, shall mean the certificate of incorporation of the Corporation, as amended from time to time, including the terms of any certificate of designations of any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon pursuant to this Certificate of Incorporation. There shall be no cumulative voting.

The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of the State of Delaware.

3. Dividends. Dividends may be declared and paid on the Common Stock from funds lawfully available therefor as and when determined by the Board of Directors and subject to any preferential dividend or other rights of any then outstanding Preferred Stock.

4. Liquidation. Upon the dissolution or liquidation of the Corporation, whether voluntary or involuntary, holders of Common Stock will be entitled to receive all assets of the Corporation available for distribution to its stockholders, subject to any preferential or other rights of any then outstanding Preferred Stock.

B PREFERRED STOCK.

Preferred Stock may be issued from time to time in one or more series, each of such series to have such terms as stated or expressed herein and in the resolution or resolutions providing for the issue of such series adopted by the Board of Directors of the Corporation as hereinafter provided. Any shares of Preferred Stock which may be redeemed, purchased or acquired by the Corporation may be reissued except as otherwise provided by law.

Authority is hereby expressly granted to the Board of Directors from time to time to issue the Preferred Stock in one or more series, and in connection with the creation of any such series, by adopting a resolution or resolutions providing for the issuance of the shares thereof and by filing a certificate of designations relating thereto in accordance with the General Corporation Law of the State of Delaware, to determine and fix the number of shares of such series and such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including without limitation thereof, dividend rights, conversion rights, redemption privileges and liquidation preferences, as shall be stated and expressed in such resolutions, all to the full extent now or hereafter permitted by the General Corporation Law of the State of Delaware. Without limiting the generality of the foregoing, the resolutions providing for issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to any other series of Preferred Stock to the extent permitted by law.

The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares then outstanding) by the affirmative vote of the holders of a majority of the voting power of the capital stock of the Corporation entitled to vote thereon, voting as a single class, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of the State of Delaware.

FIFTH: Except as otherwise provided herein, the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

SIXTH: In furtherance and not in limitation of the powers conferred upon it by the General Corporation Law of the State of Delaware, and subject to the terms of any series of Preferred Stock and stockholder approval when required, the Board of Directors shall have the power to adopt, amend, alter or repeal the By-laws of the Corporation by the affirmative vote of a majority of the directors present at any regular or special meeting of the Board of Directors at which a quorum is present. The stockholders may not adopt, amend, alter or repeal the By-laws of the Corporation, or adopt any provision inconsistent therewith, unless such action is approved, in addition to any other vote required by this Certificate of Incorporation or the By-laws, by the affirmative vote of the holders of a majority of the votes that all the stockholders would be entitled to cast in any annual election of directors or class of directors. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-laws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders a majority of the votes which all the stockholders would be entitled to cast in any annual election of directors or class of directors shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article SIXTH.

SEVENTH: Except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment or repeal. If the General Corporation Law of the State of Delaware is amended to permit further elimination or limitation of the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware as so amended.

EIGHTH: The Corporation shall provide indemnification as follows:

1. Actions, Suits and Proceedings Other than by or in the Right of the Corporation. The Corporation shall indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation) by reason of the fact that he or she is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan) (all such persons being referred to hereafter as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), liabilities, losses, judgments, fines (including excise taxes and penalties arising under the Employee Retirement Income Security Act of 1974), and amounts paid in settlement actually and reasonably incurred by or on behalf of Indemnitee in connection with such action, suit or proceeding and any appeal therefrom, if Indemnitee acted in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful.

2. Actions or Suits by or in the Right of the Corporation. The Corporation shall indemnify any Indemnitee who was or is a party to or threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that Indemnitee is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred by or on behalf of Indemnitee in connection with such action, suit or proceeding and any appeal therefrom, if Indemnitee acted in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the Corporation, except that no indemnification shall be made under this Section 2 in respect of any claim, issue or matter as to which Indemnitee shall have been adjudged to be liable to the Corporation, unless, and only to the extent, that the Court of Chancery of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of such liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnity for such expenses (including attorneys' fees) which the Court of Chancery of Delaware or such other court shall deem proper.

3. Indemnification for Expenses of Successful Party. Notwithstanding any other provisions of this Article EIGHTH, to the extent that an Indemnitee has been successful, on the merits or otherwise, in defense of any action, suit or proceeding referred to in Sections 1 and 2 of this Article EIGHTH, or in defense of any claim, issue or matter therein, or on appeal from any such action, suit or proceeding, Indemnitee shall be indemnified against all expenses (including attorneys' fees) actually and reasonably incurred by or on behalf of Indemnitee in connection therewith. Without limiting the foregoing, if any action, suit or proceeding is disposed of, on the merits or otherwise (including a disposition without prejudice), without (i) the disposition being adverse to Indemnitee, (ii) an adjudication that Indemnitee was liable to the Corporation, (iii) a plea of guilty or nolo contendere by Indemnitee, (iv) an adjudication that Indemnitee did not act in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Corporation, and (v) with respect to any criminal proceeding, an adjudication that Indemnitee had reasonable cause to believe his or her conduct was unlawful, Indemnitee shall be considered for the purposes hereof to have been wholly successful with respect thereto.

4. Notification and Defense of Claim. As a condition precedent to an Indemnitee's right to be indemnified, such Indemnitee must notify the Corporation in writing as soon as practicable of any action, suit, proceeding or investigation involving such Indemnitee for which indemnity will or could be sought. With respect to any action, suit, proceeding or investigation of which the Corporation is so notified, the Corporation will be entitled to participate therein at its own expense and/or to assume the defense thereof at its own expense, with legal counsel reasonably acceptable to Indemnitee. After notice from the Corporation to Indemnitee of its election so to assume such defense, the Corporation shall not be liable to Indemnitee for any legal or other expenses subsequently incurred by Indemnitee in connection with such action, suit, proceeding or investigation, other than as provided below in this Section 4. Indemnitee shall have the right to employ his or her own counsel in connection with such action, suit, proceeding or investigation, but the fees and expenses of such counsel incurred after notice from the Corporation of its assumption of the defense thereof shall be at the expense of Indemnitee unless (i) the employment of counsel by Indemnitee has been authorized by the Corporation, (ii) counsel to Indemnitee shall have reasonably concluded that there may be a conflict of interest or position on any significant issue between the Corporation and Indemnitee in the conduct of the defense of such action, suit, proceeding or investigation or (iii) the Corporation shall not in fact have employed counsel to assume the defense of such action, suit, proceeding or investigation, in each of which cases the fees and expenses of counsel for Indemnitee shall be at the expense of the Corporation, except as otherwise expressly provided by this Article EIGHTH. The Corporation shall not be entitled, without the consent of Indemnitee, to assume the defense of any claim brought by or in the right of the Corporation or as to which counsel for Indemnitee shall have reasonably made the conclusion provided for in clause (ii) above. The Corporation shall not be required to indemnify Indemnitee under this Article EIGHTH for any amounts paid in settlement of any action, suit, proceeding or investigation effected without its written consent. The Corporation shall not settle any action, suit, proceeding or investigation in any manner which would impose any penalty or limitation on Indemnitee without Indemnitee's written consent. Neither the Corporation nor Indemnitee will unreasonably withhold or delay its consent to any proposed settlement.

5. Advance of Expenses. Subject to the provisions of Section 6 of this Article EIGHTH, in the event of any threatened or pending action, suit, proceeding or investigation of which the Corporation receives notice under this Article EIGHTH, any expenses (including attorneys' fees) incurred by or on behalf of Indemnitee in defending an action, suit, proceeding or investigation or any appeal therefrom shall be paid by the Corporation in advance of the final disposition of such matter; provided, however, that the payment of such expenses incurred by or on behalf of Indemnitee in advance of the final disposition of such matter shall be made only upon receipt of an undertaking by or on behalf of Indemnitee to repay all amounts so advanced in the event that it shall ultimately be determined by final judicial decision from which there is no further right to appeal that Indemnitee is not entitled to be indemnified by the Corporation as authorized in this Article EIGHTH; and provided further that no such advancement of expenses shall be made under this Article EIGHTH if it is determined (in the manner described in Section 6) that (i) Indemnitee did not act in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the Corporation, or (ii) with respect to any criminal action or proceeding, Indemnitee had reasonable cause to believe his or her conduct was unlawful. Such undertaking shall be accepted without reference to the financial ability of Indemnitee to make such repayment.

6. Procedure for Indemnification and Advancement of Expenses. In order to obtain indemnification or advancement of expenses pursuant to Section 1, 2, 3 or 5 of this Article EIGHTH, an Indemnitee shall submit to the Corporation a written request. Any such advancement of expenses shall be made promptly, and in any event within 60 days after receipt by the Corporation of the written request of Indemnitee, unless (i) the Corporation has assumed the defense pursuant to Section 4 of this Article EIGHTH (and none of the circumstances described in Section 4 of this Article EIGHTH that would nonetheless entitle the Indemnitee to indemnification for the fees and expenses of separate counsel have occurred) or (ii) the Corporation determines within such 60-day period that Indemnitee did not meet the applicable standard of conduct set forth in Section 1, 2 or 5 of this Article EIGHTH, as the case may be. Any such indemnification, unless ordered by a court, shall be made with respect to requests under Section 1 or 2 only as authorized in the specific case upon a determination by the Corporation that the indemnification of Indemnitee is proper because Indemnitee has met the applicable standard of conduct set forth in Section 1 or 2, as the case may be. Such determination shall be made in each instance (a) by a majority vote of the directors of the Corporation consisting of persons who are not at that time parties to the action, suit or proceeding in question ("disinterested directors"), whether or not a quorum, (b) by a committee of disinterested directors designated by majority vote of disinterested directors, whether or not a quorum, (c) if there are no disinterested directors, or if the disinterested directors so direct, by independent legal counsel (who may, to the extent permitted by law, be regular legal counsel to the Corporation) in a written opinion, or (d) by the stockholders of the Corporation.

7. Remedies. The right to indemnification or advancement of expenses as granted by this Article EIGHTH shall be enforceable by Indemnitee in any court of competent jurisdiction. Neither the failure of the Corporation to have made a determination prior to the commencement of such action that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Corporation pursuant to Section 6 of this Article EIGHTH that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct. In any suit brought by Indemnitee to enforce a right to indemnification, or brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall have the burden of proving that Indemnitee is not entitled to be indemnified, or to such advancement of expenses, under this Article EIGHTH. Indemnitee's expenses (including attorneys' fees) reasonably incurred in connection with successfully establishing Indemnitee's right to indemnification, in whole or in part, in any such proceeding shall also be indemnified by the Corporation. Notwithstanding the foregoing, in any suit brought by Indemnitee to enforce a right to indemnification hereunder it shall be a defense that the Indemnitee has not met any applicable standard for indemnification set forth in the General Corporation Law of the State of Delaware.

8. Limitations. Notwithstanding anything to the contrary in this Article EIGHTH, except as set forth in Section 7 of this Article EIGHTH, the Corporation shall not indemnify an Indemnitee pursuant to this Article EIGHTH in connection with a proceeding (or part thereof) initiated by such Indemnitee unless the initiation thereof was approved by the Board of Directors of the Corporation. Notwithstanding anything to the contrary in this Article EIGHTH, the Corporation shall not indemnify an Indemnitee to the extent such Indemnitee is reimbursed from the proceeds of insurance, and in the event the Corporation makes any indemnification payments to an Indemnitee and such Indemnitee is subsequently reimbursed from the proceeds of insurance, such Indemnitee shall promptly refund indemnification payments to the Corporation to the extent of such insurance reimbursement.

9. Subsequent Amendment. No amendment, termination or repeal of this Article EIGHTH or of the relevant provisions of the General Corporation Law of the State of Delaware or any other applicable laws shall adversely affect or diminish in any way the rights of any Indemnitee to indemnification under the provisions hereof with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the final adoption of such amendment, termination or repeal.

10. Other Rights. The indemnification and advancement of expenses provided by this Article EIGHTH shall not be deemed exclusive of any other rights to which an Indemnitee seeking indemnification or advancement of expenses may be entitled under any law (common or statutory), agreement or vote of stockholders or disinterested directors or otherwise, both as to action in Indemnitee's official capacity and as to action in any other capacity while holding office for the Corporation, and shall continue as to an Indemnitee who has ceased to be a director or officer, and shall inure to the benefit of the estate, heirs, executors and administrators of Indemnitee. Nothing contained in this Article EIGHTH shall be deemed to prohibit, and the Corporation is specifically authorized to enter into, agreements with officers and directors providing indemnification rights and procedures different from those set forth in this Article EIGHTH. In addition, the Corporation may, to the extent authorized from time to time by its Board of Directors, grant indemnification rights to other employees or agents of the Corporation or other persons serving the Corporation and such rights may be equivalent to, or greater or less than, those set forth in this Article EIGHTH.

11. Partial Indemnification. If an Indemnitee is entitled under any provision of this Article EIGHTH to indemnification by the Corporation for some or a portion of the expenses (including attorneys' fees), liabilities, losses, judgments, fines (including excise taxes and penalties arising under the Employee Retirement Income Security Act of 1974) or amounts paid in settlement actually and reasonably incurred by or on behalf of Indemnitee in connection with any action, suit, proceeding or investigation and any appeal therefrom but not, however, for the total amount thereof, the Corporation shall nevertheless indemnify Indemnitee for the portion of such expenses (including attorneys' fees), liabilities, losses, judgments, fines (including excise taxes and penalties arising under the Employee Retirement Income Security Act of 1974) or amounts paid in settlement to which Indemnitee is entitled.

12. Insurance. The Corporation may purchase and maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan) against any expense, liability or loss incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the General Corporation Law of the State of Delaware.

13. Savings Clause. If this Article EIGHTH or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Corporation shall nevertheless indemnify each Indemnitee as to any expenses (including attorneys' fees), liabilities, losses, judgments, fines (including excise taxes and penalties arising under the Employee Retirement Income Security Act of 1974) and amounts paid in settlement in connection with any action, suit, proceeding or investigation, whether civil, criminal or administrative, including an action by or in the right of the Corporation, to the fullest extent permitted by any applicable portion of this Article EIGHTH that shall not have been invalidated and to the fullest extent permitted by applicable law.

14. Definitions. Terms used herein and defined in Section 145(h) and Section 145(i) of the General Corporation Law of the State of Delaware shall have the respective meanings assigned to such terms in such Section 145(h) and Section 145(i).

NINTH: This Article NINTH is inserted for the management of the business and for the conduct of the affairs of the Corporation.

1. General Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.

2. Number of Directors; Election of Directors. Subject to the rights of holders of any series of Preferred Stock to elect directors, the number of directors of the Corporation shall be established by the Board of Directors. Election of directors need not be by written ballot, except as and to the extent provided in the By-laws of the Corporation.

3. Terms of Office. Subject to the rights of holders of any series of Preferred Stock to elect directors, commencing with the annual meeting of stockholders held in 2019, each director, other than those who may be elected by the holders of any series of Preferred Stock, shall be elected annually by the stockholders entitled to vote thereon for a one-year term ending on the date of the next succeeding annual meeting of stockholders, *provided*, *however*, that any director elected or appointed prior to the 2019 annual meeting of stockholders shall complete the two-year term to which such director has been elected or appointed. The term for the class of directors elected at the 2017 annual meeting of stockholders shall expire at the 2019 annual meeting of stockholders and the term for the class of directors elected at the 2018 annual meeting of stockholders shall expire at the 2020 annual meeting of stockholders. The division of directors into classes shall terminate at the 2020 annual meeting of stockholders. The term of each director shall continue until the election and qualification of his or her successor or until his or her earlier death, resignation, retirement, disqualification or removal from office.

4. Quorum. The greater of (a) a majority of the directors at any time in office and (b) one-third of the number of directors fixed pursuant to Section 2 of this Article NINTH shall constitute a quorum of the Board of Directors. If at any meeting of the Board of Directors there shall be less than such a quorum, a majority of the directors present may adjourn the meeting from time to time without further notice other than announcement at the meeting, until a quorum shall be present.

5. Action at Meeting. Every act or decision done or made by a majority of the directors present at a meeting duly held at which a quorum is present shall be regarded as the act of the Board of Directors unless a greater number is required by law or by this Certificate of Incorporation.

6. Removal. Subject to the rights of holders of any series of Preferred Stock, directors of the Corporation may be removed with or without cause and only by the affirmative vote of the holders of a majority of the votes which all the stockholders would be entitled to cast in any election of directors. Any director may be removed for cause by a vote of the majority of directors present at a meeting duly held at which a quorum is present.

7. Vacancies. Subject to the rights of holders of any series of Preferred Stock, any vacancy or newly created directorship in the Board of Directors, however occurring, shall be filled only by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director and shall not be filled by the stockholders. In the event of any increase or decrease in the authorized number of directors at any time during which the Board is divided into classes: (a) each director then serving shall nevertheless continue as a director of the class of which he or she is a member until the expiration of his or her term or his or her earlier death, resignation, retirement, disqualification or removal from office; and (b) except to the extent that an increase or decrease in the authorized number of directors occurs in connection with the rights of holders of Preferred Stock to elect additional directors, the newly created or eliminated directorships resulting from any increase or decrease in the authorized number of directors shall be apportioned by the Board among the classes as nearly equal in number as the then total number of directors constituting the whole board of directors permits and the director who is chosen in the manner provided in the By-laws to fill such newly created directorship shall hold office until the expiration of his or her term or until his or her earlier death, resignation, retirement, disqualification or removal from office. A director who fills a vacancy not resulting from an increase in the authorized number of directors shall have the same remaining term as that of his or her predecessor.

8. Stockholder Nominations and Introduction of Business, Etc. Advance notice of stockholder nominations for election of directors and other business to be brought by stockholders before a meeting of stockholders shall be given in the manner provided by the By-laws of the Corporation.

9. Amendments to Article. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-laws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of a majority of the votes which all the stockholders would be entitled to cast in any annual election of directors shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article NINTH.

TENTH: Stockholders of the Corporation may not take any action by written consent in lieu of a meeting unless written consents of all of the votes which stockholders would be entitled to cast in any annual election of directors are received by the Corporation in accordance with the By-laws of the Corporation.

ELEVENTH: Special meetings of stockholders for any purpose or purposes may be called at any time by only the Board of Directors, the Chairman of the Board or the Chief Executive Officer in accordance with the By-laws of the Corporation. Business transacted at any special meeting of stockholders shall be limited to matters relating to the purpose or purposes stated in the notice of meeting. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-laws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of a majority of the votes which all the stockholders would be entitled to cast in any annual election of directors or class of directors shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article ELEVENTH.

IN WITNESS WHEREOF, the Corporation has caused this conformed copy of the Amended and Restated Certificate of Incorporation to be signed by its authorized officer this 23rd day of May, 2018.

By:	/s/ Meredith W. Bjorck
Name:	Meredith W. Bjorck
Title:	Executive Vice President, General Counsel and Corporate Secretary

Exhibit 10.1

INDEMNIFICATION AGREEMENT

THIS AGREEMENT (this "**Agreement**"), dated as of [●], is entered into by and between HMS Holdings Corp., a Delaware corporation (the "**Company**"), and [●] ("**Indemnitee**").

WHEREAS, it is essential to the Company to retain and attract as directors and officers the most capable persons available;

WHEREAS, Indemnitee is a director and/or officer of the Company;

WHEREAS, both the Company and Indemnitee recognize the increased risk of litigation and other claims currently being asserted against directors and officers of corporations; and

WHEREAS, in recognition of Indemnitee's need for substantial protection against personal liability in order to enhance Indemnitee's continued and effective service to the Company, and in order to induce Indemnitee to provide continued services to the Company as a director or officer, the Company wishes to provide in this Agreement for the indemnification of and the advancement of expenses to Indemnitee to the fullest extent (whether partial or complete) permitted by law and as set forth in this Agreement and for the coverage of Indemnitee under the Company's directors' and officers' liability insurance policies.

NOW, THEREFORE, in consideration of the above premises and of Indemnitee's continuing to serve as a director or officer of the Company and intending to be legally bound hereby, the parties agree as follows:

1. **Certain Definitions.** The following terms shall have the following meanings in this Agreement:

(a) "**Board**" means the Board of Directors of the Company.

(b) "**Change in Control**" means:

(i) any "person," as such term is defined in Section 3(a)(9) of the Securities Exchange Act of 1934 (the "**Exchange Act**"), as modified and used in Section 13(d) and 14(d) thereof (but not including (1) the Company or any of its subsidiaries, (2) a trustee or other fiduciary holding securities under an employee benefit plan of the Company or any of its subsidiaries, (3) an underwriter temporarily holding securities pursuant to an offering of such securities, or (4) a corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company) (hereinafter a "**Person**"), is or becomes the beneficial owner, as defined in Rule 13d-3 of the Exchange Act, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such Person any securities acquired directly from the Company or its affiliates, excluding an acquisition resulting from the exercise of a conversion or exchange privilege in respect of outstanding convertible or exchangeable securities) representing 50% or more of the combined voting power of the Company's then outstanding securities; or

(ii) during any period of two consecutive years beginning on the date hereof, individuals who at the beginning of such period constitute the Board and any new director (other than a director designated by a Person who has entered into any agreement with the Company to effect a transaction described in clause (i), (iii) or (iv) of this Section) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved (each such director, a "**Continuing Director**"), cease for any reason to constitute a majority thereof; or

(iii) the stockholders of the Company approve a merger or consolidation of the Company with any other corporation, other than (1) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving or acquiring entity), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, at least 50% of the combined voting power of the voting securities of the Company or such surviving or acquiring entity outstanding immediately after such merger or consolidation, or (2) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no Person acquires more than 50% of the combined voting power of the Company's then outstanding securities; or

(iv) the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets.

(c) "**Disinterested Director**" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(d) "**Enterprise**" shall mean the Company, any direct or indirect subsidiary of the Company, and any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that Indemnitee is or was serving at the express request of the Company as a director, officer, employee, agent or fiduciary.

(e) "**Expense Advance**" or an "**Advance**" shall have the meaning set forth in Section 2(c).

(f) "**Expenses**" means any reasonable expense, including without limitation, attorneys' fees, retainers, court costs, transcript costs, fees and expenses of experts (including without limitation accountants and other advisors), travel expenses, witness fees, duplicating costs, postage, delivery service fees, filing fees, and all other disbursements or expenses of the types typically paid or incurred in connection with investigating, defending, being a witness in, or participating (including on appeal), or responding to, or objecting to, a request to provide discovery, or preparing for any of the foregoing, or any appeal bond or its equivalent, in any Proceeding relating to any Indemnifiable Event, and any expenses of establishing a right to indemnification under any of Sections 2, 4 or 5, in each case, to the extent reasonable; provided, however, that Expenses shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against the Indemnitee.

(g) "**Indemnifiable Costs**" means any and all Expenses, liability or loss, judgments, fines and amounts paid in settlement and any interest, assessments, or other charges imposed thereon, and any federal, state, local, or foreign taxes imposed as a result of the actual or deemed receipt of any payments under this Agreement.

(h) "**Indemnifiable Event**" means any event or occurrence that takes place either prior to or after the execution of this Agreement, related to the fact that Indemnitee is or was a director or officer of the Company, or while a director is or was serving at the request of the Company as a director or officer of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise or related to anything done or not done by Indemnitee in any such capacity, whether or not the basis of the Proceeding is alleged action in an official capacity as a director or officer of the Company, or in any other capacity, as described above.

(i) "**Independent Counsel**" means a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past three years has been, retained to represent: (1) the Company or any of its subsidiaries or affiliates, (2) the Indemnitee or (3) any other party to the Proceeding giving rise to a claim for indemnification or Expense Advances hereunder, in any matter (other than with respect to matters relating to indemnification and advancement of expenses). No law firm or lawyer shall qualify to serve as Independent Counsel if that person would, under the applicable standards of professional conduct then prevailing, have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company shall select a law firm or lawyer to serve as Independent Counsel, subject to the consent of the Indemnitee, which consent shall not be unreasonably withheld.

(j) "**Organizational Documents**" means the Company's Amended and Restated Certificate of Incorporation and Second Amended and Restated Bylaws, each as they may be amended from time to time.

(k) "**Proceeding**" means any threatened, pending, or completed action, suit or proceeding, whether civil, criminal, internal, administrative or investigative that relates to an Indemnifiable Event.

(l) "**Reviewing Party**" shall have the meaning set forth in Section 3.

2. **Agreement to Indemnify**.

(a) General Agreement regarding Indemnification. In the event Indemnitee was, is, or becomes a party to or witness or other participant in, or is threatened to be made a party to or witness or other participant in, a Proceeding by reason of (or arising in part out of) an Indemnifiable Event, the Company shall indemnify Indemnitee from and against Indemnifiable Costs, to the fullest extent permitted by applicable law, as the same exists or may hereafter be amended or interpreted (but in the case of any such amendment or interpretation, only to the extent that such amendment or interpretation permits the Company to provide broader indemnification rights than were permitted prior thereto); provided, however, that the Company's commitment set forth in this Section 2(a) to indemnify the Indemnitee shall be subject to the limitations and procedural requirements set forth in this Agreement.

(b) Partial Indemnification. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of Indemnifiable Costs, but not, however, for the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion thereof to which Indemnitee is entitled.

(c) Advancement of Expenses. If so requested by Indemnitee, the Company shall advance to Indemnitee, to the fullest extent permitted by applicable law, any and all Expenses incurred by Indemnitee (an "**Expense Advance**" or an "**Advance**") within 21 calendar days after the receipt by the Company of a request from Indemnitee for an Advance, whether prior to or after final disposition of any Proceeding. As a condition to receiving Advances, Indemnitee shall submit an undertaking substantially in the form attached hereto as Exhibit A. Any request for an Expense Advance shall be accompanied by an itemization, in reasonable detail, of the Expenses for which advancement is sought; provided, however, that Indemnitee need not submit to the Company any information that counsel for Indemnitee deems is privileged and exempt from compulsory disclosure in any proceeding. Advances shall be made without regard to Indemnitee's ability to repay the Expenses. If Indemnitee has commenced legal proceedings in a court of competent jurisdiction in the State of Delaware to secure a determination that Indemnitee should be indemnified under applicable law, as provided in Section 4, any determination made by the Reviewing Party that Indemnitee would not be permitted to be indemnified under applicable law shall not be binding and Indemnitee shall not be required to reimburse the Company for any Expense Advance until a final judicial determination is made with respect thereto (as to which all rights of appeal therefrom have been exhausted or have lapsed). Indemnitee's obligation to reimburse the Company for Expense Advances shall be unsecured and no interest shall be charged thereon.

(d) Exception to Obligation to Indemnify and Advance Expenses. Notwithstanding anything in this Agreement to the contrary, Indemnitee shall not be entitled to indemnification or advancement pursuant to this Agreement in connection with any Proceeding initiated by Indemnitee against the Company or any director or officer of the Company unless (i) the Company has joined in or the Board has consented to the initiation of such Proceeding or (ii) the Proceeding is one to enforce indemnification rights under Section 5.

3. **Reviewing Party**.

(a) Definition of Reviewing Party. Other than as contemplated by Section 3(b), the person, persons or entity who shall determine whether Indemnitee is entitled to indemnification in the first instance (the "**Reviewing Party**") shall be (i) the Board acting by a majority vote of Disinterested Directors, even though less than a quorum, (ii) by a committee of Disinterested Directors designated by a majority vote of Disinterested Directors, even though less than a quorum, (iii) if there are no Disinterested Directors, or if the Disinterested Directors so direct, by Independent Counsel in a written determination to the Board, a copy of which shall be delivered to Indemnitee or (iv) if so directed by the Board or Disinterested Directors, by the stockholders of the Company.

(b) Reviewing Party Following Change in Control. Notwithstanding anything to the contrary, (i) after a Change in Control (other than a Change in Control approved by a majority of the Continuing Directors), the Reviewing Party shall be the Independent Counsel, (ii) with respect to all matters arising from such a Change in Control concerning the rights of Indemnitee to indemnity payments and Expense Advances under this Agreement or any other agreement or under applicable law or the Organizational Documents now or hereafter in effect relating to indemnification for Indemnifiable Events, the Company shall seek legal advice only from the Independent Counsel and (iii) such counsel, among other things, shall render its written opinion to the Company and Indemnitee as to whether and to what extent the Indemnitee should be permitted to be indemnified under applicable law. The Company agrees to pay the reasonable fees of the Independent Counsel and to indemnify fully such counsel against any and all expenses (including without limitation attorneys' fees), claims, liabilities, loss, and damages arising out of or relating to this Agreement or the engagement of Independent Counsel pursuant hereto.

4. **Indemnification Process and Appeal.**

(a) Indemnification Payment.

(i) The determination with respect to Indemnitee's entitlement to indemnification shall be made by the Reviewing Party not later than 30 days after receipt by the Company of a written demand on the Company for indemnification (which written demand shall include such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification); provided, however, that if the Reviewing Party is the stockholders of the Company, the 30 day time period shall be replaced with the following: (A) within 15 days after receipt by the Company of the request for such determination, the Board or the Disinterested Directors, if appropriate, resolve to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within 75 days after such receipt and such determination is made thereat, (B) a special meeting of stockholders is called within 15 days after such receipt for the purpose of making such determination, such meeting is held for such purpose within 60 days after having been so called and such determination is made thereat or (C) written consents of stockholders of the Company are obtained within 75 days after receipt by the Company of the request for such determination. The Reviewing Party making the determination with respect to Indemnitee's entitlement to indemnification shall notify Indemnitee of such written determination no later than two business days thereafter. If a determination shall have been made pursuant to Section 4(a) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding, absent (x) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's misstatement not materially misleading in connection with the application for indemnification or (y) a prohibition of such indemnification under applicable law. The Company shall be precluded from asserting in any judicial proceeding commenced that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement.

(ii) If the Reviewing Party shall not have made a written determination to the Company that Indemnitee is not entitled to indemnification within time limitation for such a determination set forth in Section 4(a)(i), the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification absent (x) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification or (y) a prohibition of such indemnification under applicable law. Indemnitee shall receive payment from the Company in accordance with this Agreement within 10 business days after the earlier of (x) the Reviewing Party making its determination with respect to Indemnitee's entitlement to indemnification and (y) the expiration of the time period specified in Section 4(a)(i).

(iii) Indemnitee shall cooperate with the Reviewing Party, including without limitation providing to Reviewing Party or its representatives upon reasonable advance request any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the Reviewing Party shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(b) Suit to Enforce Rights. If (x) payment of indemnification pursuant to Section 4(a)(ii) is not made within the period permitted for such payment by such section, (y) the Reviewing Party determines pursuant to Section 4(a) that Indemnitee is not entitled to indemnification under this Agreement, or (z) Indemnitee has not received advancement of Expenses within the time period permitted for such advancement by Section 2(c), then Indemnitee shall have the right to enforce the indemnification and advancement rights granted under this Agreement by commencing litigation in any court of competent jurisdiction in the State of Delaware seeking an initial determination by the court or challenging any determination by the Reviewing Party or any aspect thereof. The Company hereby consents to service of process and to appear in any such proceeding. Any determination by the Reviewing Party not challenged by the Indemnitee within six months of the date of the Reviewing Party's determination shall be binding on the Company and Indemnitee. In the event that a determination shall have been made by the Reviewing Party that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 4(b) shall be conducted in all respects as a de novo trial on the merits, and Indemnitee shall not be prejudiced by reason of the adverse determination under Section 4(a). In the event that Indemnitee, pursuant to this Section 4(b), seeks a judicial adjudication of his rights under, or to recover damages for breach of, this Agreement, or to recover under any directors' and officers' liability insurance policies maintained by the Company, the Company shall pay on his behalf, in advance, any and all Expenses actually and reasonably incurred by Indemnitee in such judicial adjudication, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of expenses or insurance recovery. The remedy provided for in this Section 4 shall be in addition to any other remedies available to Indemnitee in law or equity.

(c) Defense to Indemnification, Burden of Proof, and Presumptions.

(i) To the maximum extent permitted by applicable law in making a determination with respect to entitlement to indemnification (or payment of Expense Advances) hereunder, the Reviewing Party shall presume that an Indemnitee is entitled to indemnification (or payment of Expense Advances) under this Agreement, and the Company shall have the burden of proof to overcome that presumption in connection with the making by the Reviewing Party of any determination contrary to that presumption.

(ii) It shall be a defense to any action brought by Indemnitee against the Company to enforce this Agreement that it is not permissible under applicable law for the Company to indemnify Indemnitee for the amount claimed.

(iii) For purposes of this Agreement, the termination of any Proceeding by judgment, order, settlement (whether with or without court approval and whether with or without an admission of liability on the part of the Indemnitee), conviction, or upon a plea of nolo contendere, or its equivalent, shall not create a presumption that Indemnitee did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his conduct was unlawful or create a presumption that Indemnitee did not meet any particular standard of conduct or have any particular belief or that a court has determined that indemnification is not permitted by applicable law.

(iv) The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any Proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise in such Proceeding. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(v) For purposes of any determination under this Agreement, Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise, including without limitation financial statements, or on information supplied to Indemnitee by the directors or officers of the Enterprise in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with the reasonable care by the Enterprise. The provisions of this Section 4(c)(v) shall not be deemed to be exclusive or to limit in any way the other circumstances in which the Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement. Whether or not the foregoing provisions of this Section 4(c)(v) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(vi) The knowledge or actions, or failure to act, of any director, officer, agent or employee of the Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

5. **Indemnification for Expenses Incurred in Enforcing Rights.** The Company shall indemnify Indemnitee against any and all Expenses to the fullest extent permitted by law and, if requested by Indemnitee pursuant to the procedures set forth in Section 2(c), shall advance such Expenses to Indemnitee, that are incurred by Indemnitee in connection with any claim asserted against or action brought by Indemnitee for:

(i) enforcement of this Agreement;

(ii) indemnification of Indemnifiable Costs or Expense Advances by the Company under this Agreement or any other agreement or under applicable law or the Organizational Documents now or hereafter in effect relating to indemnification for Indemnifiable Events; or

(iii) recovery under directors' and officers' liability insurance policies maintained by the Company.

6. **Notification and Defense of Proceeding.**

(a) Notice. Promptly after receipt by Indemnitee of notice of the commencement of any Proceeding, Indemnitee will, if a claim in respect thereof is to be made against the Company under this Agreement, notify the Company of the commencement thereof. The failure to notify or promptly notify the Company shall not relieve the Company from any liability which it may have to the Indemnitee otherwise than under this Agreement, and shall not relieve the Company from liability hereunder except to the extent the Company has been prejudiced or as further provided in Section 6(c).

(b) Defense. With respect to any Proceeding as to which Indemnitee notifies the Company of the commencement thereof, the Company will be entitled to participate in the Proceeding at its own expense and except as otherwise provided below, to the extent the Company so wishes, it may assume the defense thereof with counsel selected by the Company. After notice from the Company to Indemnitee of its election to assume the defense of any Proceeding, the Company will not be liable to Indemnitee under this Agreement or otherwise for any Expenses subsequently incurred by Indemnitee in connection with the defense of such Proceeding other than reasonable costs of investigation or as otherwise provided below. Indemnitee shall have the right to employ separate counsel in such Proceeding, but all Expenses related thereto incurred after notice from the Company of its assumption of the defense shall be at Indemnitee's expense unless: (i) the employment of counsel by Indemnitee has been authorized by the Company, (ii) Indemnitee has reasonably determined, based on consultation with legal counsel, that there may be a conflict of interest between Indemnitee and the Company in the defense of the Proceeding, (iii) after a Change in Control, the employment of counsel by Indemnitee has been approved by the Independent Counsel, or (iv) the Company shall not within 60 calendar days (or sooner if the circumstances require) in fact have employed counsel to assume the defense of such Proceeding, in each of which case all Expenses of the Proceeding shall be borne by the Company. If the Company has selected counsel to represent Indemnitee and other current and former directors, officers or employees of the Company in the defense of a Proceeding, and a majority of such persons, including Indemnitee, reasonably object to such counsel selected by the Company pursuant to the first sentence of this Section 6(b), then such persons, including Indemnitee, shall be permitted to employ one additional counsel of their choice and the reasonable fees and expenses of such counsel shall be at the expense of the Company; provided, however, that such counsel shall be chosen from amongst the list of counsel, if any, approved by any company with which the Company obtains or maintains insurance. In the event separate counsel is retained by a group of persons including Indemnitee pursuant to this Section 6(b), the Company shall cooperate with such counsel with respect to the defense of the Proceeding, including without limitation making documents, witnesses and other reasonable information related to the defense available to such separate counsel pursuant to joint-defense agreements or confidentiality agreements, as appropriate. The Company shall not be entitled to assume the defense of any Proceeding brought by or on behalf of the Company or as to which Indemnitee shall have made the determination provided for in clause (ii) above.

(c) Settlement of Claims**.** The Company shall not be liable to indemnify Indemnitee under this Agreement or otherwise for any amounts paid in settlement of any Proceeding effected without the Company's written consent. The Company shall not settle any Proceeding in any manner that would impose any penalty or limitation on Indemnitee without Indemnitee's written consent. Neither the Company nor the Indemnitee will unreasonably withhold their consent to any proposed settlement. The Company shall not be liable to indemnify the Indemnitee under this Agreement with regard to any judicial award if the Company was not given a reasonable and timely opportunity, at its expense, to participate in the defense of such action; the Company's liability hereunder shall not be excused if participation in the Proceeding by the Company was barred by this Agreement.

7. **Non-Exclusivity.** The rights of Indemnitee hereunder shall be in addition to any other rights Indemnitee may have under the laws of the State of Delaware, the Organizational Documents, board resolution, applicable law, or otherwise. To the extent that a change in applicable law (whether by statute or judicial decision) permits greater indemnification by agreement than would be afforded currently under the Organizational Documents, board resolutions, applicable law, or this Agreement, it is the intent of the parties that Indemnitee enjoy by this Agreement the greater benefits so afforded by such change.

8. **Liability Insurance.** To the extent the Company maintains an insurance policy or policies providing directors' or officers' liability insurance, Indemnitee, if a director or officer of the Company, shall be covered by such policy or policies, in accordance with its or their terms.

9. **Amendment.** No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall operate as a waiver of any other provisions hereof (whether or not similar), nor shall such waiver constitute a continuing waiver. Except as specifically provided herein, no failure to exercise or any delay in exercising any right or remedy hereunder shall constitute a waiver thereof.

10. **Subrogation.** In the event of payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and shall do everything that may be necessary to secure such rights, including without limitation the execution of such documents necessary to enable the Company effectively to bring suit to enforce such rights.

11. **No Duplication of Payments.** The Company shall not be liable under this Agreement to make any payment in connection with any claim made against Indemnitee to the extent Indemnitee has otherwise actually received payment (whether under the Organizational Documents, any insurance policy, by law, or otherwise) of the amounts otherwise indemnifiable hereunder.

12. **Binding Effect.** This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors, assigns, including without limitation any direct or indirect successor by purchase, merger, consolidation, or otherwise to all or substantially all of the business or assets of the Company, spouses, heirs, and personal and legal representatives. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation, or otherwise) to all, substantially all, or a substantial part, of the business or assets of the Company, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place. This Agreement shall continue in effect regardless of whether Indemnitee continues to serve as a director or officer of the Company or of any other Enterprise at the Company's request.

13. **Severability.** If any provision (or portion thereof) of this Agreement shall be held by a court of competent jurisdiction to be invalid, void, or otherwise unenforceable, the remaining provisions shall remain enforceable to the fullest extent permitted by law. Furthermore, to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of this Agreement containing any provision held to be invalid, void, or otherwise unenforceable, that is not itself invalid, void, or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, void, or unenforceable.

14. **Governing Law.** This Agreement and all claims or causes of action (whether in contract or tort, in law or in equity, or granted by statute or otherwise) that may be based upon, arise out of or relate to this Agreement or the negotiation, execution, termination, validity, interpretation, construction, enforcement, performance or non-performance of this Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, without giving effect to any choice or conflict of law principles that would cause the application of the laws of any other jurisdiction.

15. **Entire Agreement**. Subject to Section 7 hereof, this Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written, and implied, between the parties hereto with respect to the subject matter hereof.

16. **No Bar Orders**. The Company shall not seek from a court, or agree to, a "bar order" which would have the effect of prohibiting or limiting the Indemnitee's rights to receive advancement of expenses under this Agreement.

17. **Jury Waiver**. EACH PARTY IRREVOCABLY AND UNCONDITIONALLY EXPRESSLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY ACTION, SUIT OR OTHER LEGAL PROCEEDING RELATING TO THIS AGREEMENT OR ANY RELATED CLAIM.

18. **Counterparts**. This Agreement may be executed in two or more counterparts (any of which may be delivered by facsimile or electronic transmission), each of which shall be an original, but all such counterparts shall together constitute but one and the same instrument.

19. **Interpretation**. The headings of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction hereof. Unless otherwise specified, all references in this Agreement to any "Section," paragraph, clause or other subdivision are to the corresponding section, paragraph, clause or subdivision of this Agreement

20. **Notices.** All notices, demands, and other communications required or permitted hereunder shall be made in writing and shall be deemed to have been duly given if delivered by hand, against receipt, or mailed, postage prepaid, certified or registered mail, return receipt requested, and addressed

to the Company at:

HMS Holdings Corp.
5615 High Point Drive
Irving, Texas 75038
Attn: Chief Financial Officer

and

HMS Holdings Corp.
5615 High Point Drive
Irving, Texas 75038
Attn: General Counsel

to Indemnitee at:

[●]
[●]

Notice of change of address shall be effective only when done in accordance with this Section. All notices complying with this Section shall be deemed to have been received on the date of delivery or on the third business day after mailing.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have duly executed and delivered this Agreement as of the day specified above.

COMPANY: HMS HOLDINGS CORP.

By: _____
Name:
Title:

INDEMNITEE: **[INDEMNITEE]**

_____

Exhibit A

REQUEST AND UNDERTAKING

HMS Holdings Corp.
5615 High Point Drive
Irving, Texas 75038
Attn: General Counsel

To Whom It May Concern:

I request, pursuant to Section 2(c) of the Indemnification Agreement, dated as of [●] (the "**Indemnification Agreement**"), between HMS Holdings Corp. (the "**Company**") and me, that the Company advance Expenses (as such term is defined in the Indemnification Agreement) incurred in connection with [*describe Proceeding*] (the "**Proceeding**").

I undertake and agree to repay to the Company any funds advanced to me or paid on my behalf if it shall ultimately be determined that I am not entitled to indemnification. I shall make any such repayment promptly following written notice of any such determination.

I agree that payment by the Company of my expenses in connection with the Proceeding in advance of the final disposition thereof shall not be deemed an admission by the Company that it shall ultimately be determined that I am entitled to indemnification.

_____
[Name]

Date: _____

Exhibit 10.2

SETTLEMENT AGREEMENT

This Settlement Agreement is entered into as of June 27, 2018, by and between Dennis Demetre ("Demetre"), Lori Lynn Lewis Demetre ("Lewis"), John Alfred Lewis, Christopher Brandon Lewis, and HMS Holdings Corp. ("HMS").

WITNESSETH

WHEREAS, Demetre, Lewis, John Alfred Lewis, Christopher Brandon Lewis, and HMS entered into a Stock Purchase Agreement for Allied Management Group – Special Investigation Unit, Inc. ("Agreement"), dated June 30, 2010, pursuant to which Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis sold their company, Allied Management Group – Special Investigation Unit, Inc. ("AMG"), to HMS for an up-front payment of $13 million plus potential contingent earn-out payments;

WHEREAS, Demetre and Lewis commenced an action against HMS on July 9, 2012, entitled *Demetre v. HMS Holdings Corp.*, No. 652381/2012, in New York State Supreme Court, County of New York concerning the earn-out payments, and on December 13, 2013, HMS asserted counterclaims against Demetre and Lewis (the "Litigation");

WHEREAS, the Litigation was tried in a jury trial from October 24, 2017, to November 3, 2017;

WHEREAS, the jury returned a verdict for Demetre and Lewis in the amount of $60 million in connection with the Litigation;

WHEREAS, HMS filed a Post-Trial Motion for Judgment as a Matter of Law, dated November 20, 2017, identifying issues with the verdict and asking that the verdict be vacated or reduced, which is currently pending;

WHEREAS, Demetre, Lewis, John Alfred Lewis, Christopher Brandon Lewis, and HMS wish to settle the disputes between and among them;

NOW, THEREFORE, Demetre, Lewis, John Alfred Lewis, Christopher Brandon Lewis, and HMS, intending to be legally bound, hereby agree that in consideration of the settlement of the disputes between the parties, as described below, and for such other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged:

1. Upon execution of this Settlement Agreement, counsel for Demetre and Lewis will execute and deliver to counsel for HMS a Stipulation of Discontinuance with prejudice and without costs to either party in the form attached hereto as Exhibit A. The Stipulation of Discontinuance will be held in escrow by HMS's counsel to be filed with the Court upon payment of the Settlement Amount as set forth in paragraph 2 of this Settlement Agreement.

2. Within ten (10) business days of the execution of this Settlement Agreement, HMS will pay Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis twenty million dollars ($20,000,000.00) (the "Settlement Amount"), to be divided amongst themselves as they may separately agree, by wire transfer to the following account:

Humphrey, Farrington & McClain, P.C. IOLTA Account
Account No. XXXXXXX
ABA No. XXXXXXXXX
Citizens Bank & Trust
7553 NW Barry Road, Kansas City, MO 64153

For avoidance of doubt, the parties agree and understand that the Settlement Amount includes a sum representing the balance of the remaining escrow funds (approximately $668,820) ("Escrow Funds") currently being held in escrow with JP Morgan Chase Bank, N.A. in Account Number XXXXXXXXXXXXXXX pursuant to the Escrow Agreement dated June 30, 2010 by and between Demetre, Lewis, John Alfred Lewis, Christopher Brandon Lewis and HMS, which shall be released to HMS. Upon execution of this Settlement Agreement, counsel for Demetre and Lewis will deliver to counsel for HMS written authorization in the form attached hereto as Exhibit B, executed by Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis, for the release of the Escrow Funds to HMS.

3. Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis on behalf of themselves and their respective past, present, and future companies, subsidiaries, and their present and former agents, advisors, accountants, attorneys, assignees, and representatives hereby release and absolutely and forever discharge HMS, as well as its past, present, and future companies, subsidiaries, and affiliates, and their respective present and former officers, directors, shareholders, employees, agents, advisors, accountants, attorneys, assignees, and representatives (referred to collectively as the "HMS Released Parties"), of and from any and all claims, demands, damages, debts, liabilities, judgments, accounts, loss of profits, loss of goodwill, loss of reputation, obligations, costs, expenses, actions, and causes of action of every kind and nature whatsoever, whether now known or unknown, suspected or unsuspected, choate or inchoate, which Demetre, Lewis, John Alfred Lewis, or Christopher Brandon Lewis now has, owns, or holds, or at any time heretofore ever had, owned, or held against any of them (referred to collectively as "Demetre-Lewis Claims") from the beginning of the world to the date hereof, including without limitation any Demetre-Lewis Claims which arise out of, relate to, or are based upon: (i) the performance or non-performance of the Agreement; and/or (ii) any of the events, acts, or conduct that are the subject of (or could have been the subject of) the Litigation; provided, however, that there shall be expressly excluded from this General Release any and all Demetre-Lewis Claims arising out of, relating to, or based upon this Settlement Agreement.

4. HMS, on behalf of itself and its respective past, present, and future parent companies, subsidiaries, and their present and former agents, advisors, accountants, attorneys, assignees, and representatives hereby releases and absolutely and forever discharges Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis, as well as their past, present, and future companies, subsidiaries, and affiliates, and their respective present and former officers, directors, shareholders, employees, agents, advisors, accountants, attorneys, assignees, and representatives (referred to collectively as the "Demetre-Lewis Released Parties"), of and from any and all claims, demands, damages, debts, liabilities, judgments, accounts, loss of profits, loss of goodwill, loss of reputation, obligations, costs, expenses, actions, and causes of action of every kind and nature whatsoever, whether now known or unknown, suspected or unsuspected, choate or inchoate, which HMS now has, owns, or holds, or at any time heretofore ever had, owned, or held against any of them (referred to collectively as "HMS Claims") from the beginning of the world to the date hereof, including without limitation any HMS Claims which arise out of, relate to, or are based upon: (i) the performance or non-performance of the Agreement; and/or (ii) any of the events, acts, or conduct that are the subject of (or could have been the subject of) the Litigation; provided, however, that there shall be expressly excluded from this General Release any and all HMS Claims arising out of, relating to, or based upon this Settlement Agreement.

5. It is the intention of the Parties that in executing this Settlement Agreement and receiving the consideration called for herein, the releases above shall be effective as a full and final accord and satisfaction and release of all claims, demands, or causes of action released herein. In furtherance of this intention, each Party acknowledges that it is familiar with and understands California Civil Code section 1542 and that it hereby waives the protection of California Civil Code section 1542, to the extent applicable, which provides as follows:

> "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR."

Each Party hereby waives and relinquishes all rights and benefits that it has or may have under California Civil Code section 1542, or the law of any other state or jurisdiction to the same or similar effect, to the full extent that it may lawfully waive all such rights and benefits pertaining to any of the claims, demands, or causes of action released herein.

6. Nothing in this Settlement Agreement shall be deemed or asserted to be an admission by Demetre, Lewis, John Alfred Lewis, Christopher Brandon Lewis, or HMS of any liability that is the subject of this Settlement Agreement or the Litigation, which liability is expressly denied.

7. This Settlement Agreement contains, and is intended to contain, a complete statement of the entire agreement and understanding of Demetre, Lewis, John Alfred Lewis, Christopher Brandon Lewis, and HMS with respect to the subject matter hereof, and supersedes all prior statements, representations, discussions, agreements, draft agreement, and undertakings, whether written or oral, express or implied, of any and every nature with respect thereto.

8. This Settlement Agreement cannot be amended, supplemented, or modified, nor may any provision hereof be waived, except by a written instrument executed by Demetre, Lewis, John Alfred Lewis, Christopher Brandon Lewis, and HMS.

9. Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis represent that they have kept and will keep every term of this Settlement Agreement strictly confidential and that they will not at any time hereafter disclose the existence of this Settlement Agreement, the underlying facts relating to the Litigation and their claims or causes of action, the fact that a settlement agreement was being discussed or considered, the substance or contents of this Settlement Agreement or the amount or fact of payment of money (collectively, the "Settlement Issues") to any person or persons, including, without limitation, current and former employees of the Demetre-Lewis Released Parties or HMS Released Parties, other than Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis's attorney(s), accountants, investment and financial advisors, and members of Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis's immediate family (collectively, "Confidants"), provided that such Confidants agree to and do maintain such Settlement Issues as confidential. If asked about the Litigation or Settlement Issues, Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis will state only that "We are pleased to have resolved this matter."

Notwithstanding the foregoing, subject to compliance with the provisions of paragraph 9 of this Settlement Agreement, Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis and their Confidants may disclose the Settlement Issues pursuant to court order, judicial or regulatory process, or subpoena, provided that Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis shall, to the extent permissible by law, notify HMS immediately upon learning of the order, process, or subpoena so that HMS may seek a protective order or other appropriate remedy, and Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis will cooperate fully with HMS to obtain such protective order or other appropriate remedy and otherwise lawfully resist disclosure of the information. If no such protective order or other remedy is obtained, Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis and their Confidants will disclose only that portion of the Settlement Issues which they are advised in writing by their legal counsel is legally required to be disclosed, and will use best efforts to ensure any such information so disclosed will be accorded confidential treatment.

Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis understand and acknowledge that the representations and commitments made by them in paragraph 9 of this Settlement Agreement are essential, material, and indispensable conditions of this Settlement Agreement, and that the settlement benefits provided for herein by HMS would not have been provided in the absence of these representations and commitments.

HMS represents that it has kept every term of this Settlement Agreement strictly confidential through the date it executes this Settlement Agreement. HMS may, however, disclose the Settlement Amount and related financial impact, accounting treatment and tax consequences of this Settlement Agreement as deemed advisable or as otherwise required by financial and public company reporting requirements such as U.S. Generally Accepted Accounting Standards ("GAAP"), the U.S. Securities & Exchange Commission rules and regulations, Public Company Accounting Oversight Board auditing standards, the Nasdaq Stock Market listing rules or similar rules, regulations and standards. If asked about the underlying facts relating to the Settlement Issues, HMS will state only that "We are pleased to have resolved this matter."

HMS may also disclose the Settlement Issues pursuant to court order, judicial or regulatory process, or subpoena, provided that HMS shall, to the extent permissible by law, notify Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis immediately upon learning of the order, process, or subpoena so that Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis may seek a protective order or other appropriate remedy, and HMS will cooperate fully with Demetre, Lewis, John Alfred Lewis, and Christopher Brandon Lewis to obtain such protective order or other appropriate remedy and otherwise lawfully resist disclosure of the information. Except as otherwise provided in this Settlement Agreement, HMS will disclose only that portion of the Settlement Issues which it is advised in writing by its legal counsel is legally required to be disclosed, and will use best efforts to ensure any such information so disclosed will be accorded confidential treatment.

10. Each Party represents and warrants to the other that neither it, nor any of its agents, representatives, attorneys, or any other person or entity, in order to induce any other Party to enter into this Settlement Agreement, has made any promise, assurance, representation, inducement, or warranty whatsoever, whether express, implied, or statutory, that is not specifically set forth in writing in this Settlement Agreement, and further acknowledges that this Settlement Agreement has not been entered into in reliance upon any promise, assurance, representation, inducement, or warranty not expressly set forth in writing in this Settlement Agreement.

11. Each Party represents and warrants to the other that it has read and understands this Settlement Agreement, and that this Settlement Agreement is executed voluntarily and without duress or undue influence on the part of or on behalf of the other Parties hereto. The Parties hereby acknowledge that they have been represented or have had the opportunity to be represented in the negotiations and preparation of this Settlement Agreement by counsel of their own choice and that they are fully aware of the contents of this Settlement Agreement and of the legal effect of each and every provision herein. Each Party shall bear its own costs and attorneys' fees with respect to this Settlement Agreement.

12. The Parties expressly agree that there are no third-party beneficiaries to this Settlement Agreement other than the Parties and the releasees mentioned in paragraphs 3 and 4 of this Settlement Agreement and that nothing herein, express or implied, is intended to or shall confer upon any other person any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Settlement Agreement.

13. This Settlement Agreement shall be interpreted and construed in accordance with the laws of the State of New York.

14. All disputes, controversies, or differences between the Parties arising out of, relating to, or based upon this Settlement Agreement, or the breach thereof, shall be filed in New York State Supreme Court, New York County.

15. The rules of construction that an agreement be construed against the drafting party shall not be applied in interpreting this Settlement Agreement.

16. Should any part, term, or provision of this Settlement Agreement be declared or determined by any court or other tribunal of appropriate jurisdiction to be invalid or unenforceable, any such invalid or unenforceable part, term, or provision shall be deemed stricken and severed from this Settlement Agreement only to the extent necessary to make such part, term, or provision lawful and enforceable, and any and all of the other terms of the Settlement Agreement shall remain in full force and effect to the fullest extent permitted by law.

17. This Settlement Agreement may be executed in identical counterparts with the same force and effect as if all signatures were set forth in a single instrument.

IN WITNESS WHEREOF, Demetre, Lewis, John Alfred Lewis, Christopher Brandon Lewis, and HMS have caused this Settlement Agreement to be executed on their behalf by their duly authorized representatives, on the day and year set forth opposite each of their signatures hereto.

DENNIS DEMETRE

Dated: 6/27/18 /s/ Dennis Demetre

LORI LEWIS

Dated: 6/27/18 /s/ Lori Lewis

JOHN ALFRED LEWIS

Dated: 6/27/18 /s/ John Alfred Lewis

CHRISTOPHER BRANDON LEWIS

Dated: 6/27/18

/s/ Christopher Brandon Lewis

HMS HOLDINGS CORP.

Dated: 6/27/18

/s/ William C. Lucia

BY: WILLIAM C. LUCIA
PRESIDENT AND CHIEF EXECUTIVE OFFICER

Exhibit A

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

DENNIS DEMETRE and LORI LEWIS,		
Plaintiffs,	:	Index No. 652381/2012
	:	Hon. Saliann Scarpulla
- against -	:	
HMS HOLDINGS CORP.,	:	
Defendant.	:	

STIPULATION OF DISCONTINUANCE WITH PREJUDICE

Pursuant to Rule 3217(b) of the Civil Practice Law and Rules of the State of New York, Plaintiffs Dennis Demetre and Lori Lewis and Defendant HMS Holdings Corp. (collectively, the "Parties"), by and through their undersigned counsel, hereby stipulate and agree that the Parties have amicably resolved their differences and that the above-referenced proceeding shall be discontinued, with prejudice, and without costs to any of the Parties as against another. None of the Parties is an infant, incompetent person for whom a committee has been appointed, or conservatee and no person, not a Party, has an interest in the subject matter of the action.

It is further stipulated and agreed that the verdict entered by the jury in this proceeding on November 3, 2017, will be vacated and dissolved and will have no force or effect.

Dated: June _____, 2018
New York, NY

By: _____

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Jack A. Gordan
KENT, BEATTY & GORDON, LLP
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New York, New York 10036
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Attorneys for Plaintiffs Dennis Demetre & Lori Lewis.

By: _____

David J. Lender
Gregory Silbert
WEIL, GOTSHAL & MANGES LLP
767 Fifth Avenue
New York, NY 10153
Telephone: (212) 310-8000
Facsimile: (212) 310-8007

Attorneys for Defendant
HMS Holdings Corp.

SO ORDERED:

_____
Hon. Saliann Scarpulla, J.S.C.

Exhibit B

June ____, 2018

JP Morgan Chase Bank, N.A.
Treasury Services
4 New York Plaza, 21st Floor
New York, NY 10004
Attention: Li Hom / Joan King-Francois

RE: Escrow Agreement dated June 30, 2010, by and between HMS Holdings Corp. and Dennis Demetre, Lori Lewis, John Alfred Lewis and Christopher Brandon Lewis

Dear Ms. Hom and Ms. King-Francois:

Pursuant to the Escrow Agreement referenced above, JP Morgan Chase Bank is currently holding funds in Account Number XXXXXXXXXXXXXXX (the "Escrow Account"). The parties to the Escrow Agreement hereby direct JP Morgan Chase Bank to release the remaining balance of the funds, including all accrued and unpaid interest, in the Escrow Account to HMS Holdings Corp. in accordance with the standing settlement instructions stated in Sections 11(a) and (b) of the Escrow Agreement. Please direct any questions or concerns to the following attorneys for the parties:

David J. Lender
Weil, Gotshal & Manges LLP
767 Fifth Avenue
New York, NY 10153
Telephone: (212) 310-8000
Attorney for HMS Holdings Corp.

William L. Carr
White, Graham, Buckley & Carr
19049 E. Valley View Parkway, Suite C
Independence, MO 64055
Telephone: (816) 373-9080
Attorney for Demetre/Lewis

Thank you for your prompt attention to this matter.

/s/ Jeffrey S. Sherman
HMS Holdings Corp.
By: Jeffrey S. Sherman
Executive Vice President,
Chief Financial Officer, and Treasurer

Dennis Demetre

Lori Lewis

Christopher Brandon Lewis

John Alfred Lewis

Exhibit 31.1

Certification

I, William C. Lucia, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of HMS Holdings Corp.;

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.

Date: August 6, 2018

William C. Lucia
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

Certification

I, Jeffrey S. Sherman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of HMS Holdings Corp.;

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.

Date: August 6, 2018

Jeffrey S. Sherman
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

Certification Pursuant To 18 U.S.C. Section 1350 As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report of HMS Holdings Corp. (the "*Company*") on Form 10-Q for the period ended June 30, 2018 as filed with the Securities and Exchange Commission (the "*Report*"), I, William C. Lucia, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

William C. Lucia
Chief Executive Officer
(Principal Executive Officer)

August 6, 2018

Exhibit 32.2

Certification Pursuant To 18 U.S.C. Section 1350 As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report of HMS Holdings Corp. (the "*Company*") on Form 10-Q for the period ended June 30, 2018 as filed with the Securities and Exchange Commission (the "*Report*"), I, Jeffrey S. Sherman, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

Jeffrey S. Sherman
Chief Financial Officer
(Principal Financial Officer)

August 6, 2018