

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

Mail Stop 4561

September 15, 2017

Jeffrey Sherman Chief Financial Officer HMS Holdings Corp. 5615 High Point Drive Irving, TX 75038

Re: HMS Holdings Corp.

Form 10-K for the Fiscal Year Ended December 31, 2016

Filed June 6, 2017

Form 10-Q for the Quarterly Period Ended June 30, 2017

Filed August 7, 2017 File No. 000-50194

Dear Mr. Sherman:

We have reviewed your August 24, 2017 response to our comment letter and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our August 11, 2017 letter.

Form 10-Q for the Quarterly Period Ended June 30, 2017

Notes to the Consolidated Financial Statements

Note 2. Business Combinations, page 13

1. We note your response to prior comment 2. Please help us better understand how you determined the 36-year period over which the acquired customer relationships are expected to contribute directly or indirectly to your future cash flows. Tell us in more detail about the attrition analysis of the customer relationships acquired including, but not limited to, the historical length of Eliza's relationships and rates of attrition with its

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customers. Also tell us how contractual renewals and other extensions were considered in your analysis. Describe your own historical experience renewing or extending similar arrangements and how it affected your analysis and what, if any, market participant assumptions were considered and incorporated into your conclusion. In this regard, we note from your disclosures on page 15 that the useful lives of customer relationships acquired in prior periods range from five to ten years and on page 5 of your Form 10-K for the fiscal year ended December 31, 2016, that most of your contracts have terms ranging from three to five years, including renewal terms at the option of the customer. We also note that you amortize the customer relationships using the straight-line method rather than an accelerated method. Please tell us why you believe this method reflects the pattern in which the economic benefits are consumed or explain why you cannot reliably determine the patter. Refer to ASC 350-30-35-6.

You may contact Mengyao Lu, Staff Accountant at (202) 551-7271 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3226 with any other questions.

Sincerely,

/s/ Craig D. Wilson

Craig D. Wilson Sr. Asst. Chief Accountant Office of Information Technologies and Services