

June 23, 2010

William C. Lucia
Chief Executive Officer
HMS Holdings Corp.
401 Park Avenue South
New York, NY 10016

**Re: HMS Holdings Corp.
Form 10-K For the Year Ended December 31, 2009
Filed February 26, 2010
File No. 000-50194**

Dear Mr. Lucia:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Business Overview, page 24

1. Consider expanding the overview section to describe in greater detail the known trends and uncertainties that will have, or are reasonably likely to have, an impact on your liquidity, capital resources or results of operations. For example, consider discussing your future acquisition strategy and how you plan to target opportunities that could result from healthcare reform that you discuss on page 6.

Operating Results, pages 26 and 28

2. We note instances where two or more sources of a material change have been identified, without quantifying the amount that each source contributed to the change. Please

quantify each source that contributed to a material change within revenues and discuss the amount attributable to acquisitions versus organic growth. See Item 303(a)(3)(iii) of Regulation S-K and Section III.D of SEC Release No. 33-6835. For example, you state that the increase in revenues for the year ended December 31, 2009 reflects the organic growth in existing client accounts, the addition of new clients, including those gained through acquisitions, and changes in the yield and scope of client projects. Please quantify the contribution of each of these material changes and disclose the portion of the revenues that is attributable to acquisitions compared to organic growth.

Part III, page 35

General

3. Each Item in Part III of your Form 10-K states that you are incorporating by reference from your definitive proxy statement the required disclosure, but you have not clearly identified, by caption or otherwise, the material incorporated by reference as required by Exchange Act Rule 12b-23(b). In future Forms 10-K, please ensure that your Part III disclosure identifies by title the section of your definitive proxy statement from which you are incorporating by reference the required disclosure, or otherwise clearly identifies the material incorporated by reference.

Item 10. Directors, Executive Officers and Corporate Governance (Incorporated by reference from the definitive proxy statement filed on April 30, 2010)

Board Leadership and Role in Risk Oversight, page 12

4. You state that the Compensation Committee considers risks associated with the elements of the company's compensation programs but do not indicate whether your compensation policies and practices are or are not reasonably likely to have an adverse effect on your company. Please clarify in your response letter your conclusion in this respect and tell us the process you undertook to reach that conclusion.

Our Board of Directors, page 18

5. We note that that Galen D. Powers will not be standing for re-election for director at the 2010 annual meeting and that you have not nominated another director nominee for this position. Please clarify whether you are planning to decrease the number of directors on the board from ten to nine.

Information Concerning Executive Directors, page 26

6. It appears that you have named only four executive officers including your chief executive officer, former chief executive officer, and chief financial officer. Please tell us how you determined that the other individuals listed on the company's website under

“Management,” including the Executive Vice President of Operations, are not executive officers within the definition of “executive officer” in Rule 405 under the Securities Act and Rule 402(a)(3) of Regulation S-K. Rule 405 defines an executive officer as the president, any vice president in charge of a principal business unit, division or function (such as sales, administration or finance), any other officer who performs a policy making function or any other person who performs similar policy making functions for the company. If you concluded that these individuals are not executive officers, tell us how you concluded that they were not significant employees whose information is required to be disclosed under Item 401(c) of Regulation S-K. Item 401(c) requires the disclosure of any person who is not an executive officer but who make or are expected to make significant contributions to the business of the company.

Item 11. Executive Compensation (Incorporated by reference from the definitive proxy statement filed on April 30, 2010)

Compensation Discussion and Analysis, page 27

7. You disclose that the Compensation Committee engages in competitive benchmarking and that it recognized that Mr. Lucia’s salary was “below the median of the 2009 Peer Group.” In future filings, where you rely on benchmarking, please disclose in quantitative terms how total compensation, and the relevant elements thereof, compared to the benchmark. See Item 402(b)(2)(xiv) of Regulation S-K.

Long-Term Incentive Compensation, page 31

8. You disclose that the Compensation Committee considered individual contributions of the named executive officers in addition to “several objective factors” in determining long term incentive awards, but that there was no fixed or mathematical weighting applied to the individual achievements. Please clarify whether the committee applied a fixed or mathematical weighting to the “objective factors” identified in your filing.

Exhibits

9. We are unable to locate your employment letter agreements for two of your named executive officers -- Walter Hosp, Chief Financial Officer, and John Schmid, Vice President of Human Resources. Please advise.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

William C. Lucia
HMS Holdings Corp.
June 23, 2010
Page 4

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Jan Woo, Staff Attorney, at (202) 551-3453 if you have any questions. If you require further assistance you may me at (202) 551-3730.

Sincerely,

Barbara C. Jacobs
Assistant Director