

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

July 20, 2011

Via Email
Paul S. Viviano
Chief Executive Officer
Alliance Healthcare Services, Inc.
100 Bayview Circle, Suite 400
Newport Beach, CA 92660

Re: Alliance Healthcare Services, Inc.

Form 10-K for Fiscal Year Ended December 31, 2010

Filed March 14, 2011 File No. 001-16609

Dear Mr. Viviano:

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.

Form 10-K

Consolidated Financial Statements

Notes to Consolidated Financial Statements

4. Share-Based Payment

Stock Options and Awards, page 83

1. We note that you continue to use the simplified method to determine the expected term of stock option grants. Based on the passage of time, it would appear that you have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term of your stock option grants. Please provide us with a detailed discussion of your basis to continue to utilize the simplified method in determining the

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expected term of you stock option grants. Please refer to the guidance in SAB Topic 14-D2 and FASB ASC 718.

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.

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 Blaise Rhodes at (202) 551-3774 or Angela Halac at (202) 551-3398 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/Tia Jenkins

Tia Jenkins Senior Assistant Chief Accountant Office of Beverages, Apparel and Health care Services