



DIVISION OF
CORPORATION FINANCE

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

October 30, 2013

Via E-Mail

Mr. Larry Buckelew
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 the Year Ended December 31, 2012
Filed March 15, 2013
File No. 001-16609**

Dear Mr. Buckelew:

We have reviewed your filing and have the following comment. 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 comment applies 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 this comment, we may have additional comments.

Form 10-K for the Year Ended December 31, 2012
Management's Discussion and Analysis of Financial Condition and Results of Operations, page 36

Critical Accounting Policies, page 46

Goodwill and Long-Lived Assets, page 47

1. We note you allocate goodwill and intangible assets with indefinite lives to three reporting units, which are aggregated into the Imaging and Radiation Oncology segments. Considering your net losses and impairment charges during the periods reported and significance of goodwill and intangible assets with indefinite lives, to enhance investor's understanding regarding your recent impairment testing of goodwill and intangible assets with indefinite lives, please provide us with and confirm that you will disclose in future filings the following:
 - Clarify what you consider a reporting unit and your basis;

- Clarify how many reporting units, if any, were considered at risk of impairment (i.e. in step one of the impairment test, the reporting unit has a fair value that is not substantially in excess of its carrying value);
- For any at risk reporting unit, provide us with (i) the percentage by which fair value exceeded carrying value as of the date of the most recent test, (ii) the amount of goodwill and intangible assets with indefinite lives allocated to the reporting unit, (iii) a description of the methods and key assumptions used and how the key assumptions were determined, (iv) a discussion of the degree of uncertainty associated with the key assumptions (i.e. the discussion regarding uncertainty should provide specifics to the extent possible (e.g., the valuation model assumes recovery from a business downturn within a defined period of time)), and (v) a description of potential events and/or changes in circumstances that could reasonably be expected to negatively affect the key assumptions.

Financial Statements, page 51

Note 16-Investments in Unconsolidated Investees, page 84

2. Please demonstrate to us that audited financial statements pursuant to Rule 3-09 of Regulation S-X were not required for any of your unconsolidated investees for the year ended December 31, 2012. Provide all calculations and assumptions as applicable.

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.

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In responding to our comment, 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 Jamie Kessel, Staff Accountant, at 202-551-3727 or Raj Rajan, Senior Staff Accountant, at 202-551-3388 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/Tia L. Jenkins

Tia L. Jenkins
Senior Assistant Chief Accountant
Office of Beverages, Apparel, and
Mining