Mail Stop 4561 Via Fax (816) 474-1742

May 28, 2010

Marc Naughton Executive Vice President, Senior VP and Chief Financial Officer Cerner Corporation 2800 Rockcreek Parkway Kansas City, MO 64117

Re: Cerner Corporation

Form 10-K for the Fiscal Year Ended January 2, 2010

Filed on February 22, 2010

File No. 000-15386

Dear Mr. Naughton:

We have reviewed the above-referenced filing and have the following comment. We have no further comment on your response letter dated May 14, 2010 in connection with the above-referenced filing.

<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u> (Incorporated by Reference to Definitive Proxy Statement Filed April 16, 2010)

Compensation Discussion and Analysis, page 14

Performance-Based Cash Incentive Compensation, page 16

1. You disclose that the named executive officers would earn up to 25% of the targeted cash bonus amount based on individual performance ratings. Please expand your disclosure to provide additional detail regarding the individual performance objectives used to determine bonus awards for each of your named executive officers. Include an analysis of how the individual performance ratings contributed to actual compensation for each of the named executed officers. See Item 402(b)(2)(vii) of Regulation S-K.

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Marc Naughton Cerner Corporation May 28, 2010 Page 2

You may contact Jan Woo, Staff Attorney, at (202) 551-3453 if you have any questions. If you need further assistance, you may contact me at (202) 551-3462.

Sincerely,

Mark P. Shuman Legal Branch Chief