



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3720

November 9, 2017

Vivian Lopez-Blanco
Chief Financial Officer
MEDNAX, Inc.
1301 Concord Terrace
Sunrise, Florida 33323

**Re: MEDNAX, Inc.
Form 10-K for Fiscal Year Ended December 31, 2016
Filed February 10, 2017
Response Dated October 20, 2017
File No. 001-12111**

Dear Ms. Lopez-Blanco:

We have reviewed your October 20, 2017 response to our comment letter and have the following comments.

Please respond to these comments 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 comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

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

Segment Reporting, page 73

1. We note, in your response to comment 1, you indicate that your board of directors is provided a “summary of net revenue and gross profit by service line for the most recently completed fiscal quarter as compared to the prior year period with explanations for relevant variances.” We further note that the margins of your major service lines (radiology, anesthesia, and neonatology) were discussed in your recent earnings call, which may indicate that financial information at the service line level is used in managing your business. Please address the following:
 - Describe for us the key operating performance metrics provided to the CODM, including those related to the MNMG service lines if separately provided, and indicate whether they are also provided to the board.

- Tell us why your CODM doesn't use the "Supplementary information presented to him that includes a summary of same-unit revenue by service line as well as a summary of payor mix for the consolidated Company along with key operating performance metrics" to allocate resources and assess performance.
 - Explain why the board receives financial information by service line (including explanation for variances), at a level below your identified operating segments under ASC 280. In this regard, it appears that the level at which financial information is provided to the board may be indicative of how management views and manages the business and may constitute the operating segments.
 - Tell us how Mr. Clark's target cash bonus and long-term incentive awards are calculated --- whether they are based on the operating performance of MNMG as a whole or on some basis which factors separate performance levels for the Neonatology, Anesthesiology and other service lines (apart from the Company's consolidated operating performance as applicable).
2. In your response, you indicate that your segment managers are accountable to the CODM for certain key performance indicators including revenue, operating income and EBITDA. Your CODM receives a statement of income for each operating segment on a quarterly and year-to-date basis with comparisons against budget and prior year along with "key operating performance metrics" on a supplemental basis. You also indicate that your Board of Directors (which includes your CEO) receives a summary of net revenue and gross profit by service line on a quarterly basis with comparisons to the prior year and explanations for relevant variances. Finally, in your November 1, 2017 third quarter earnings call, your CEO discusses growth initiatives for radiology and in response to analyst questions, your CFO and CEO address EBITDA margins for various service lines including radiology. Considering these factors, please tell us how you determined that aggregation of your physician services, radiology services and management services operating segments is consistent with the objectives and principles of segment reporting as outlined in ASC 280-10-10-1. In particular, please address how the aggregation of your operating segments helps financial statement users make more informed judgements about the company as a whole, better understand your different types of business activities, the different economic environments in which you operate, your historical performance and prospects for future net cash flows.
3. Please show us how you performed an analysis of the three quantitative thresholds in ASC 280-10-50-12 and determined that none of your operating segments should be separately disclosed for the years ended December 31, 2016, December 30, 2015 or for the nine months ended September 30, 2017.

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You may contact Kathryn Jacobson, Senior Staff Accountant, at (202) 551-3365 or Robert S. Littlepage, Accountant Branch Chief, at (202) 551-3361 or me at (202) 551-3810 with any questions.

Sincerely,

/s/ Robert S. Littlepage, for

Carlos Pacho
Senior Assistant Chief Accountant
AD Office 11 – Telecommunications