

Mail Stop 4561

July 23, 2007

Jonathan Bush
Chief Executive Officer
athenahealth, Inc.
311 Arsenal Street
Watertown, MA 02472

**Re: athenahealth, Inc.
Registration Statement on Form S-1
Filed June 22, 2007
File No. 333-143998**

Dear Mr. Bush:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with additional information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

For purposes of this comment letter, we refer to the pagination in a courtesy copy of your Form S-1 filed on June 22, 2007 that was provided to us by counsel.

General

1. We note that you have requested confidential treatment for portions of some of the exhibits to the registration statement. We will provide comments on your request in a separate letter. We will not be in a position to declare the registration statement effective until we have resolved all comments on the application for confidential treatment.
2. Please provide us with copies of all graphics, maps, photographs, and related captions or other artwork including logos that you intend to use in the prospectus.
3. Please provide us with highlighted copies of any study or report that you cite or on which you rely. For example, we note that you refer on pages 1 and 54 to a study or report by the U.S. Centers for Medicare and Medicaid Services, on page 60 to a study or report by KLAS Enterprises, and on page 76 to a benchmarking study by Axiom. Confirm that the industry reports or studies that you rely on were not prepared for you and that you did not compensate the party that prepared these reports or studies. Alternatively, please file the experts' consent as exhibits to the registration statement.
4. Throughout the document, you refer to your "off-shore partner" (e.g., pages 2, 57, and 64), as well as your "off-shore partners" (e.g., pages 25 and 58). Please clarify the number of "off-shore partners" you have and describe your relationship with each of them.
5. Please provide independent, third-party support for comparative factual assertions and industry data used in your disclosure. Clearly mark the location of the information you believe is supportive of the statement referenced. We note the following examples:
 - "Our services have enabled our clients to achieve first pass claim resolution rates of 93% on average compared to an industry average we estimate to be 70%."
 - "We estimate that the market for revenue and clinical cycle management solutions has grown to over \$27 billion."
 - "We believe we have the largest and most comprehensive payer rules database in the United States."
 - "[M]edical offices typically stop seeking reimbursement and write off associated receivables for up to 10% of their medical claims."
 - "We estimate that our athenaCollector client base represents less than two percent of the U.S. addressable market for revenue cycle management."
 - "We estimate that total annual physician office expenditures in the United States...exceed \$18 billion...."
 - "[E]mployee clinic turnover in physician offices averages 10-25% annually...."

6. We note your use of the term “leading” throughout the document. For instance, on pages 1, 37 and 54, you note that you are a “leading provider of Internet-based business services for physician practices.” Please revise to clarify the measure you are using to determine your leadership position and provide us with current industry data that supports these assertions. In providing support, clearly mark the location of the information you believe is supportive of the statement referenced.

Prospectus Summary, page 1

7. Please revise this section to note how your service fees are generated (e.g. flat fee or by transaction). Also, please note if it varies by product or by customer. Refer to your disclosure on page 37.
8. The prospectus summary contains a lot of jargon and technical terms that may be difficult to understand for investors who are not familiar with your business. We note the following examples in the Overview section alone:
 - web-native software
 - payer knowledge-base
 - integrated back-office service operations
 - revenue cycle management service
 - clinical cycle management service
 - first pass claim resolution

Please eliminate industry jargon from the forepart of your prospectus. Instead, explain these concepts in concrete, everyday language. If you must use industry terms, please explain the meaning of the terms the first time they are used. See Rule 421(d)(2)(ii) of Regulation C.

The Offering, page 5

9. You state that you will not receive any of the proceeds from the sale of shares by your CEO. Currently, it is not clear whether your CEO is the only selling stockholder. Please revise or advise.

Risk Factors, page 8

10. Please avoid using generic conclusions such as “adversely affect our business,” “could harm our business,” or similar language when describing a risk’s effects. For example, you indicate on page 12 that “Failure to manage [your] rapid growth effectively could harm [your] business.” Replace this, and similar language, with specific disclosure of how you, your business, financial condition and results of operations would be affected by the facts you describe.

If participants in our channel marketing and sales lead programs do not maintain appropriate relationships with potential clients..., page 11

11. We note your disclosure of the risk of misconduct by third parties with respect to prospective clients. Please tell us whether you have experienced this risk. If so, please revise your risk factors to describe the failure and the impact on your business. Similarly, please tell us whether you have experienced the risk you describe on page 12 with respect to third-party service providers not fulfilling their contractual obligations or discontinuing services.

If we are required to collect sales and use taxes..., page 13

12. Please expand your disclosure to put this risk in context for investors. Are there any states besides Ohio where this is a known issue? In how many states where you do business might this issue arise?

If our security measures are breached or fail and unauthorized access is obtained to a client's data..., page 17

13. Please tell us whether you have experienced this risk. If so, please revise your risk factors to describe the failure and the impact on your business. Similarly, please tell us whether you have experienced the risk you describe on page 25 with respect to the potential for embezzlement, identity theft, or other similar illegal behavior by your employees.

If equity research analysts do not publish research or reports about our business or if they issue unfavorable commentary..., page 27

14. Please revise to explain how the risk affects your business, in particular, or the securities being offered. Refer to Item 503(c) of Regulation S-K.

Use of Proceeds, page 30

15. It appears that you plan to use approximately \$28.2 million of the net proceeds to repay certain debt. Besides that, you state that you have not allocated any specific portion of the proceeds to any particular purpose. Please revise to discuss the principal reasons for the offering, besides the repayment of certain debt. Refer to Item 504 of Regulation S-K.

Capitalization, page 32

16. We note that the total capitalization includes the warrant liability, yet it was not shown as a separate line item in your capitalization table. Please tell us the basis for excluding this line item and including it in your total capitalization or revise accordingly.

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

Overview, page 37

17. Consider expanding your "Overview" to include management's perspective on the business. Consider using this section to provide an executive level overview of the company to provide context for the remainder of the MD&A discussion. Consider addressing the material operations, risks and challenges facing your company and how is management dealing with these issues. Also consider discussing the performance indicators (financial and non-financial) that management uses to manage/assess your business and that would be material to investors. Refer to Release 33-8350 on our website at www.sec.gov.

Operating Expense, page 38

18. Refer to the discussion of direct operating expense in the first paragraph. Please revise to state management's expectations regarding the service costs associated with athenaClinicals.
19. Refer to the discussion of research and development expense. Please revise to clarify the last sentence of this paragraph. Currently, the reference to "implementation of commercial clients next year" is not clear.

Critical Accounting Policies

Stock-Based Compensation, page 40

20. Your disclosure of critical accounting policies lacks any quantitative analysis to provide the reader with insight to the sensitivity certain estimates may have to changes in assumptions and the related impact on your financial condition and results of operations. For example, it appears that changes in assumptions for the purpose of recording stock-based compensation could have a material impact on expenses. Please revise your disclosure accordingly. Refer to SEC Release 33-8350.
21. For each of the grants made during the quarters presented in the table on page 41, revise the table to disclose the fair value of your common stock as well as the intrinsic value, if any, per option. In addition, please discuss the significant factors contributing to the difference between the fair value of the underlying common stock for your recent grants and the estimated initial public offering price.

Consolidated Results of Operations, page 44

22. If there are two or more sources of a material change, quantify the amount of change that was due to each of the factors or events identified. See Section III. D of Release 33-6835.

We note, for example, that the increase in your 2007 business services revenue was “primarily due to the expansion of [your] client base and growth in related collections made on behalf of [your] existing clients.” To the extent practicable, please quantify the amount of change attributed to each of these factors.

Liquidity and Capital Resources, page 50

23. Please revise your discussion of cash flow from operating activities to discuss the underlying drivers impacting the changes in working capital. Simply identifying items that are apparent from the statement of cash flows does not provide a sufficient basis to analyze your cash flow from operating activities. Refer to SEC Release 33-8350.
24. We note the fourth full paragraph on page 51, which discusses liquidity on a short-term basis. Please expand your disclosure to also discuss liquidity on a long-term (greater than 12 months) basis. Refer to Instruction 5 to Item 303(a) of Regulation S-K.

Credit Facilities, page 52

25. We note disclosure in the risk factors (page 15) that your loan agreements require you to meet specified minimum financial measurements. Please expand your liquidity discussion to disclose and quantify these financial covenants and state whether you are currently in compliance. In addition, we note that borrowings under the revolving loan are limited by your outstanding accounts receivable balance. Please revise to quantify the amounts of those limits.

Business, page 54

26. Please describe the development of your business (including subsidiaries) during the past five years, pursuant to Item 101(a) of Regulation S-K.
27. Please revise to provide the disclosure required by Item 101(c)(iv) for the software licenses referenced in the risk factors on page 19. Also provide the disclosure required by Item 101(c)(xi) for company-sponsored research and development.
28. Please revise to discuss any material dependence on third-party suppliers and state whether you could obtain similar goods and services at comparable rates from other suppliers. We note disclosure in your risk factors that you depend upon third-party service providers for important processing functions (page 12), as well as for band-width and data center support (page 19). If you are materially dependent on any of these service providers, please revise to so state and file any agreements with these providers as exhibits.

Our Strategy, page 58

29. Refer to the second bullet point on page 59. If material, expand your disclosure regarding

the additional service offerings to provide the information required by Item 101(c)(ii).

Sales and Marketing, page 62

30. We note that you expect to spend “substantial resources” in expanding your network of physician clients. Please revise to quantify this amount and describe in more detail how you will apply these resources to expand your network of clients.

Channel Relationships, page 62

31. Please revise to clarify whether channel relationships, individually or in the aggregate, are material to your business. If known, please quantify the amount of your sales attributed to these relationships and the amount generated by your direct sales force.
32. Please revise to discuss how you will compensate PSS for distribution of your products. Discuss in more detail how the exclusivity provision in the PSS agreement will affect your channel relationships with other organizations and whether the exclusivity provision includes products or services other than athenaClinicals and athenaCollector. Also, please disclose the expiration date of the PSS agreement and indicate whether either party has the right to terminate the agreement prior to its expiration.

Technology, Development, and Operations, page 63

33. Please revise to describe in more detail the nature of your operations in India. In addition, please provide financial information about all geographic areas where you do business, or cross-reference to such information, pursuant to Item 101(d) of Regulation S-K.

Competition, page 64

34. Please disclose the competitive position of your company, as required by Item 101(c)(x) of Regulation S-K.

Government Regulation, page 65

35. It appears that your business is subject to a myriad of federal and state laws in the United States, as well as additional regulations by the government in India. In your discussion, please clarify the material portions of your business, if any, that may be subject to renegotiation of profits or termination of contracts or subcontracts at the election of the Government. Please refer to Item 101(c)(ix) of Regulation S-K.

Intellectual Property, page 69

36. Please revise to disclose the status of your six patent applications. Also, please disclose whether you have any registered trademarks. We note that you rely on trademark laws, among other things, to protect your brand.

Directors, Executive Officers and Key Employees, page 71

37. On page 73, please state where James L. Mann was employed from 2002 – present. Refer to Item 401(e) of Regulation S-K.

Compensation Discussion and Analysis, page 75

38. The emphasis of your CD&A should be an analysis of the elements and levels of compensation paid to the NEOs. Throughout your CD&A and as to each compensation element, you should provide an analysis of how you arrived at and why you paid each of the particular levels and forms of compensation for 2006. For example, on page 77, you provide an analysis of how you arrived at Mr. MacDonald's base salary; however, you do not include a similar analysis for the other NEOs. In addition, with respect to salary increases, you state that you do not use a specific formula to determine increases, but rather, base them on a review of "achievement of specific objectives..., an assessment of their professional objectives," etc. In your CD&A, you should analyze how the Committee's consideration of these factors resulted in the amounts paid for each element and how that compared to other benchmarks considered.
39. Throughout the CD&A, you identify factors considered in determining compensation as "including" or "in part." Please revise to disclose all factors considered in determining compensation amounts and omit terms that suggest you have not disclosed all factors.

Base Salary, page 77

40. We note the disclosure indicating that the Chief Executive Officers makes recommendations to help determine salary increases for the NEOs. Please discuss in greater detail the role of Mr. Bush in determining salary increases for the NEOs. We note your statement on page 74 that none of your executive officers serves as a member of the compensation committee or other committee serving an equivalent function. We also note Mr. Bush's involvement in the determination of executive officers' long-term stock-based compensation (page 80). Please provide more robust disclosure about Mr. Bush's involvement in determining each element of compensation for the NEOs. Please also advise us as to whether Mr. Bush has any input regarding his own salary increases, granting of stock options, or any other form of his own compensation.

41. Please disclose the specific bases for each individual's salary increase. Disclose how each person's performance was measured under the factors identified at the beginning of this section and how the specific percentage increase correlates to those measurements.

Annual Cash Incentives, page 77

42. We note your statement on page 78 that you did not disclose specific targets because "components of the corporate scorecard contain highly sensitive data such as targeted revenue growth and service operation results." Please provide us with a more detailed analysis of how disclosure of this information would result in competitive harm. Specifically address the confidential nature of this information in light of the fact that you are required to disclose financial information such as gross margin, revenue, and EBITDA. To the extent you continue to omit specific targets, please disclose how difficult it will be for the executives or how likely it will be for the registrant to achieve the target goals. Please see Instruction 4 to Item 402(b) of Regulation S-K.
43. Please identify the individual and corporate measures set by your CEO "in his discretion" that were used to determine Messrs. Byers and Nolin's bonuses. Alternatively, tell us why you believe that disclosure of such information would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b). You should also analyze how the consideration of these factors resulted in the amounts paid for each element.
44. Please explain in more detail how Mr. Bush's annual cash incentive compensation will be "based on" EBITDA.
45. Please revise to discuss why you will use different components of the corporate scorecard to determine annual bonuses for the four NEOs other than Mr. Bush. Explain why each measurement is appropriate for each individual officer.

Long-term Stock-Based Compensation, page 79

46. We note the table on page 80 showing the number of options granted on March 15, 2007. Please discuss in more detail why each individual received a different number of options, considering that the same factors were taken into account by the compensation committee in awarding options.
47. Please revise to explain in more detail how you are "attentive" to the number of shares associated with equity grants. Disclose any quantitative limits that you consider in granting stock-based compensation.
48. Please revise your discussion of individual performance to quantify each of the quantitative factors and to explain how you measure the qualitative factors.

Employment Agreements and Change of Control Arrangements, page 81

49. Please disclose the exercise price for the one-time option bonuses available under the terms of the employment agreements.

Summary Compensation Table, page 86

50. Please disclose the amount of the “additional bonus” paid in 2006 to compensate Mr. MacDonald for his cost associated with the timing of his transition to athenahealth. We note the discussion of this bonus on page 78.

Director Compensation, page 92

51. Please revise to describe the material terms of the new compensation policy for non-employee directors that you intend to adopt upon completion of this filing.

Principal and Selling Stockholders, page 95

52. Please revise footnote (4) to identify the natural persons that hold voting and investment power over the shares held by the Draper entities.
53. Please identify all selling shareholders who are registered broker-dealers or affiliates of broker dealers. Additionally, tell us if the broker-dealer received the securities as underwriting compensation. Please note that a registration statement registering the resale of shares being offered by broker-dealers must identify the broker dealers as underwriters if the shares were not issued as underwriting compensation.

Consolidated Financial Statements

Consolidated Balance Sheets, page F-3

54. We note that upon consummation of the offering, all outstanding preferred stock will convert into 21,531,457 shares of common stock. Tell us what consideration was given to presenting pro forma balance sheet information, as appropriate, to reflect changes in capitalization at the effectiveness or close of the IPO.

Note 2 – Summary of Significant Accounting Policies, page F-7

Warrant Liability, page F-10

55. We note that effective January 1, 2006, the Company changed its method of accounting for warrants issued for redeemable securities upon the adoption of FSP 150-5. Considering that the guidance in FSP 150-5 should generally be applied to the first reporting period beginning after June 30, 2005, please tell us why the FSP was not adopted at an earlier date.

Part II

Recent Sales of Unregistered Securities, page II-3

56. For each sale of securities made in reliance upon the exemption provided by Section 4(2), please state the facts relied upon to make this exemption available.
57. Please revise to disclose the type and amount of consideration you received for all warrants and options described in this section. Refer to Item 701(c) of Regulation S-K.
58. Refer to the last sentence on page II-3. Please revise to discuss the option exercises in more detail, including the number of shares issued upon exercise of the options.

Exhibits

59. Please file the legal opinion with your next amendment or provide us with a draft legal opinion to review. We must review your legal opinion and all other remaining exhibits before the registration statement is declared effective, and we may have additional comments.

* * *

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Jonathan Bush
athenahealth, Inc.
July 23, 2007
Page 13

You may contact Rachel Zablow at (202) 551-3428 or Cicely LaMothe, Accounting Branch Chief, at (202) 551-3413 if you have questions regarding comments on the financial statements and related matters. Please contact Angela McHale at (202) 551-3402 or me at (202) 551-3780 with any other questions.

Sincerely,

Karen J. Garnett
Assistant Director

cc: Via Facsimile (877) 767-8438
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