UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-8 **REGISTRATION STATEMENT**

UNDER THE SECURITIES ACT OF 1933

MEDNAX, INC.

(Exact name of registrant as specified in its charter)

Florida (State or other jurisdiction of incorporation or organization)

26-3667538 (IRS Employer Identification Number)

1301 Concord Terrace Sunrise, Florida 33323-2825 (Address of Principal Executive Offices)

Mednax, Inc. 2008 Incentive Compensation Plan (Full title of the Plan)

Thomas W. Hawkins, Esq. Senior Vice President, **General Counsel and Secretary** Mednax, Inc. 1301 Concord Terrace Sunrise, Florida 33323-2825 (Name and address of agent for service)

Copies to: Ira N. Rosner, Esq. Greenberg Traurig, P.A. 1221 Brickell Avenue Miami, Florida 33131 (305) 579-0844

(954) 384-0175

Telephone number, including area code, of agent for service

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer Smaller reporting company

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 to the registration statement on Form S-8, Registration No. 333-151272 (the "Registration Statement"), pertaining to the 2008 Incentive Compensation Plan of Pediatrix Medical Group, Inc., a Florida corporation (the "Predecessor Registrant"), is being filed pursuant to Rule 414 under the Securities Act of 1933, as amended (the "Securities Act"), by Mednax, Inc., a Florida corporation (sometimes referred to herein as "we", "our", or the "Registrant"), the successor issuer to the Predecessor Registrant, to reflect the completion of a holding company formation transaction that established the Predecessor Registrant as a wholly owned subsidiary of the Registrant (the "Reorganization").

The Reorganization was implemented by merging PMG Merger Sub, Inc., a Florida corporation ("PMG Merger Sub"), which at the time was a wholly owned subsidiary of the Registrant, with and into the Predecessor Registrant (the "Merger"), with the Predecessor Registrant being the surviving corporation (the "Merger"). The Merger was effected in accordance with Section 607.11045 of the Florida Business Corporation Act, as amended, and became effective at 11:59 p.m. on December 31, 2008. Pursuant to the Merger, each issued and outstanding share of common stock, par value \$0.01 per share, and attached preferred share purchase right, of the Predecessor Registrant was converted into one share of common stock, par value \$0.01 per share, and attached preferred share purchase right, of the Registrant.

In accordance with Rule 414, the Registrant, as the successor issuer, hereby expressly adopts the Registration Statement as its own registration statement for all purposes of the Securities Act and the Securities Exchange Act of 1934, as amended (the "Exchange Act").

PART I. INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information specified by Items 1 and 2 of Part I of Form S-8 is omitted from this filing in accordance with the provisions of Rule 428 of the Securities Act, and the introductory Note to Part I of Form S-8.

The documents containing the information specified in Part I of Form S-8 will be sent or given to participating employees as specified by Rule 428(b) of the Securities Act. Such documents and the documents incorporated by reference herein pursuant to Item 3 of Part II hereof, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II. INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed with the Securities and Exchange Commission, are hereby incorporated by reference into this registration statement:

- (a) The Predecessor Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2007;
- (b) The Predecessor Registrant's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2008, June 30, 2008 and September 30, 2008;
- (c) The Predecessor Registrant's Current Reports on Form 8-K filed on January 17, 2008, March 28, 2008, April 7, 2008, May 27, 2008, August 22, 2008, September 4, 2008 and November 5, 2008, and our Current Report on Form 8-K filed on January 2, 2009 (not including any information furnished under Items 2.02, 7.01 or 9.01 of any such Form 8-K);
- (d) The Predecessor Registrant's Proxy Statements on Schedule 14A filed on April 7, 2008 and August 22, 2008;
- (e) The description of our common stock contained in the Predecessor Registrant's Registration Statement on Form 8-A (Registration No. 001-12111) filed with the Securities and Exchange Commission on September 4, 1996 and any amendments to such Registration Statement filed subsequently thereto, including all amendments or reports filed for the purpose of updating such description; and
- (f) The description of the rights to purchase our Series A Junior Participating Preferred Stock contained in the Predecessor Registrant's Registration Statement on Form 8-A (Registration No. 001-12111) filed with the Securities and Exchange Commission on December 18, 2008 and any amendments to such Registration Statement filed subsequently thereto, including any amendments or reports filed for the purpose of updating such description.

In addition, all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (not including any information furnished under Items 2.02, 7.01 or 9.01 of Form 8-K, which information is not incorporated by reference herein) prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, will be deemed to be incorporated herein by reference and to be a part of this registration statement from the date of filing of such documents. Any statement contained in a document incorporated herein by reference will be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained herein, or in a subsequently filed document incorporated herein by reference, modifies or supersedes the statement. Any statement modified or superseded will not be deemed, except as modified or superseded, to constitute a part of this registration statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

The validity of the securities being registered hereunder is being passed upon for us by Greenberg Traurig, P.A., Miami, Florida. Cesar Alvarez, the Chief Executive Officer of Greenberg Traurig, P.A., is one of our directors. As of January 2, 2009, Mr. Alvarez beneficially owns 10,000 shares and options to acquire 76,002 shares of our common stock, of which 63,556 are currently, or within 60 days of such date will be, exercisable.

Item 6. Indemnification of Directors and Officers.

The Florida Business Corporation Act permits a corporation to indemnify the following persons (using a case-by-case determination) against liabilities arising in the following circumstances:

(i) any person who was or is party to any proceeding by reason of his or her service as a director, officer, employee or agent of the corporation; or

(ii) any person serving in such capacity, at the request of the corporation, for another corporation or business entity.

To be indemnified, a person seeking indemnification must have acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation. With respect to any criminal action or proceeding, such person must have had no reasonable cause to believe his or her conduct was unlawful. Under Florida law the corporation can indemnify such a person who is a party to any proceeding by or in the right of the corporation against expenses and amounts paid in settlement which were actually and reasonably incurred in connection with the defense or settlement of the proceeding. Such indemnification may not exceed the board of directors' estimated expense of litigating the matter to a conclusion. No indemnification shall be made in respect of any issue as to which such person shall have been adjudged to be liable unless, and only to the extent that, a court shall determine, in view of all circumstances, that such person is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper.

Under the Florida Business Corporation Act, indemnification for expenses actually and reasonably incurred in the defense of any proceeding is mandatory to the extent that a director, officer, employee or agent is successful in such defense. Florida law also allows a corporation to provide any other or further indemnification or advancement of expenses to its directors, officers, employees or agents; however such indemnification or advancement of expenses may not extend to situations where a final adjudication establishes that such person's actions, or omissions to act, were material to the cause of action so adjudicated and constitute:

(i) a criminal violation, unless such person had reasonable cause to believe his conduct was lawful or had no reasonable cause to believe his conduct was unlawful;

(ii) a transaction from which such person derived an improper personal benefit;

(iii) in the case of a director, a circumstance under which the director would be liable for authorizing an improper distribution; or

(iv) willful misconduct or conscious disregard for the best interests of the corporation in a proceeding by or in the right of the corporation to procure a judgment in its favor, or in a proceeding by or in the right of a shareholder.

The amended and restated articles of incorporation of the registrant provide that the registrant shall indemnify and may advance expenses to its officers and directors to the fullest extent permitted by the current law. The registrant has secured insurance covering the registrant and its directors and officers and those of its principal subsidiaries and affiliate companies against certain liabilities.

The registrant has entered into indemnification agreements with each member of its board of directors and its executive officers. The indemnification agreements require, among other things, that the registrant indemnify to the fullest extent permitted by law and advance to each indemnified director and executive officer all related expenses, subject to reimbursement if it is subsequently determined that indemnification is not permitted. Under the indemnification agreements, the registrant must also indemnify and advance all expenses incurred by an indemnified director or executive officer seeking to enforce his or her rights under the indemnification agreements and purchase and generally maintain in effect directors' and officers' liability insurance during the term,

and for a period of five years following the termination, of each director's and executive officer's employment. Although the indemnification agreements offer substantially the same scope of coverage afforded by law, they provide greater assurance to directors and executive officers that indemnification will be available, because, as contracts, they cannot be modified unilaterally in the future by the board of directors or the stockholders to eliminate the rights they provide.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits

See "Exhibit Index" on page II-6 below.

Item 9. Undertakings

(a) The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent not more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in this registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act (and, where applicable, each

filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement on Form S-8 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Sunrise, State of Florida on this 2nd day of January, 2009.

MEDNAX, INC.

By: /s/ Roger J. Medel, M.D.

Roger J. Medel, M.D. Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below hereby appoints Thomas W. Hawkins and Karl B. Wagner his true and lawful attorney-in-fact with authority to execute in the name of each such person, and to file with the Securities and Exchange Commission, together with any exhibits thereto and other documents therewith, any and all amendments (including without limitation post-effective amendments) to this registration statement necessary or advisable to enable the registrant to comply with the Securities Act of 1933, as amended, and any rules, regulations and requirements of the Securities and Exchange Commission in respect thereof, which amendments may make such other changes in the registration statement as the aforesaid attorney-in-fact executing the same deems appropriate. Pursuant to the requirements of the Act, this Post-Effective Amendment No. 1 to the Registration Statement on Form S-8 has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Cesar L. Alvarez Cesar L. Alvarez	Chairman of the Board	January 2, 2009
/s/ Roger J. Medel, M.D. Roger J. Medel, M.D.	Chief Executive Officer and Director	January 2, 2009
/s/ Karl B. Wagner Karl B. Wagner	Chief Financial Officer and Principal Accounting Officer	January 2, 2009
/s/ Waldemar A. Carlo, M.D. Waldemar A. Carlo, M.D.	Director	January 2, 2009
/s/ Michael B. Fernandez Michael B. Fernandez	Director	January 2, 2009
/s/ Roger K. Freeman, M.D. Roger K. Freeman, M.D.	Director	January 2, 2009
/s/ Paul G. Gabos Paul G. Gabos	Director	January 2, 2009
/s/ Dany Garcia Dany Garcia	Director	January 2, 2009
/s/ Pascal J. Goldschmidt, M.D. Pascal J. Goldschmidt, M.D.	Director	January 2, 2009
/s/ Manuel Kadre Manuel Kadre	Director	January 2, 2009
/s/ Enrique J. Sosa, Ph.D. Enrique J. Sosa, Ph.D.	Director	January 2, 2009
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EXHIBIT INDEX

- Exhibit
NumberDescription4.1Articles of Amendment Designating Series A Junior Participating Preferred Stock of Mednax, Inc. (incorporated by reference to Exhibit 3.2 to the
Registrant's Current Report on Form 8-K dated January 2, 2009).4.2Amended and Restated Preferred Share Purchase Rights Plan, dated as of December 29, 2008, by and between Mednax, Inc. and Computershare
Trust Company, N.A., as rights agent, including the form of Articles of Designations of Series A Junior Participating Preferred Stock and the form of
Rights Certificate (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K dated January 2, 2009).5.1Opinion of Greenberg Traurig, P.A.
- 10.1 First Amendment, dated December 29, 2008, to Pediatrix Medical Group, Inc. 2008 Incentive Compensation Plan (incorporated by reference to Exhibit 10.9 to the Registrant's Current Report on Form 8-K dated January 2, 2009).
- 23.1 Consent of PricewaterhouseCoopers LLP
- 23.2 Consent of Greenberg Traurig, P.A. (contained in its opinion filed as Exhibit 5.1 hereto)
- 24.1 Power of Attorney (contained on the signature pages of this Registration Statement)

Mednax, Inc. 1301 Concord Terrace Sunrise, Florida 33323-2825

Re: Post-Effective Amendment No. 1 to Registration Statement on Form S-8 for the Pediatrix Medical Group, Inc. 2008 Incentive Compensation Plan (the "Predecessor Plan")

Ladies and Gentlemen:

On or about the date hereof, Mednax, Inc., a Florida corporation (the "Company"), is filing with the Securities and Exchange Commission (the "Commission") a Post-Effective Amendment No. 1 (the "Post-Effective Amendment") to the Registration Statement on Form S-8, Registration No. 333-151272 (the "Registration Statement"), under the Securities Act of 1933, as amended (the "Act"), originally filed by Pediatrix Medical Group, Inc., a Florida corporation (the "Predecessor Registrant").

The Company became the successor to the Predecessor Registrant on December 31, 2008 for purposes of Rule 414 under the Act as a result of the merger (the "Merger") of the Predecessor Registrant with the Company's wholly owned subsidiary, PMG Merger Sub, Inc., a Florida corporation ("Merger Sub"), with the Predecessor Registrant being the surviving corporation. The Merger became effective at 11:59 p.m. on December 31, 2008, at which time the separate corporate existence of Merger Sub ceased and the Predecessor Registrant became a direct, wholly owned subsidiary of the Company. In connection with the Merger, the Company assumed and adopted the Predecessor Plan and as a result, shares of Mednax Common Stock (as defined below) are issuable pursuant thereto.

The Registration Statement, as amended by the Post-Effective Amendment, relates to the offering and sale by the Company of an aggregate of 6,000,000 shares of the Company's Common Stock, par value \$0.01 per share (together with attached rights to purchase the Company's Series A Junior Participating Preferred Stock, "Mednax Common Stock"), under the Mednax, Inc. 2008 Incentive Compensation Plan (the "Plan"). We have acted as counsel to the Company in connection with the preparation and filing of the Post-Effective Amendment.

In connection therewith, we have examined and relied upon the original or a copy, certified to our satisfaction, of (i) the Amended and Restated Articles of Incorporation and Amended and Restated Bylaws of the Company, each as amended to the date hereof; (ii) records of corporate proceedings of the Company related to the Plan; (iii) the Registration Statement and exhibits thereto; and (iv) such other documents and instruments as we have deemed necessary for the expression of the opinions herein contained. In making the foregoing examinations, we have assumed the genuineness of all signatures and the authenticity of all documents submitted to us as originals, and the conformity to original documents of all documents submitted to us as certified or photocopies. As to various questions of fact material to this opinion, we have relied, to the extent we deemed reasonably appropriate, upon representations of officers or directors of the Company and upon documents, records and instruments furnished to us by the Company, without independently checking or verifying the accuracy of such documents, records and instruments.

Based upon the foregoing examination, we are of the opinion that assuming that (i) the Company maintains an adequate number of authorized and unissued shares of Mednax Common Stock available for issuance pursuant to the Plan and (ii) the consideration required to be paid in connection with the issuance and sale of shares of Mednax Common Stock issued pursuant to the Plan is actually received by the Company as provided in the Plan, the shares of Mednax Common Stock issued pursuant to the Plan and nonassessable.

This opinion is rendered only to you and is solely for your benefit in connection with the transactions covered hereby. This opinion may not be relied upon by you for any other purpose, or furnished to, quoted to or relied upon by any other person, firm or corporation for any purpose, without our prior written consent.

We hereby consent to the filing of this opinion as an exhibit to the Post-Effective Amendment. In giving such consent, we do not admit that we come within the category of persons whose consent is required by Section 7 of the Act or the rules and regulations of the Commission thereunder.

Sincerely,

GREENBERG TRAURIG, P.A.

/s/ Ira N. Rosner

By: Ira N. Rosner

CONSENT OF INDEPENDENT REGISTERED CERTIFIED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 28, 2008, relating to the financial statements, financial statement schedule, and the effectiveness of internal control over financial reporting, which appears in Pediatrix Medical Group, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP Tampa, Florida January 2, 2009