SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

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CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) of the SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): February 6, 2008

AtriCure, Inc.

(Exact name of registrant as specified in charter)

Delaware (State or other jurisdiction of incorporation) 000-51470 (Commission File Number) 34-1940305 (IRS Employer Identification No.)

6033 Schumacher Park Drive West Chester, OH (Address of principal executive offices)

45069 (Zip Code)

Registrant's telephone number, including area code: (513) 755-4100

Not Applicable (Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.02. Departure of Directors or Principal Officers; Election of Directors; Appointment of Principal Officers.

On February 6, 2008, the Board of Directors of AtriCure, Inc. ("the Company") appointed Mark A. Collar as a director of the Company, effective February 6, 2008, to serve until the 2008 annual meeting of stockholders of the Company.

In connection with his appointment, Mr. Collar has been granted the same compensation as other non-employee directors, including an option to purchase 50,000 shares of the Company's common stock and an option to purchase 10,000 shares of the Company's common at each annual meeting of stockholders, provided he has been a director for at least six months. These options have been and will be granted at an exercise price equal to the fair market value on the date of grant. The initial option grant has a term of ten years and vests one-fourth on each anniversary of the date of grant. Subsequent option grants generally have a three-year vesting schedule. Mr. Collar will receive an annual retainer of \$20,000 plus \$1,500 for each in-person meeting attended and \$500 for participation in a meeting via telephone. If Mr. Collar serves on a Committee, as a non-chairperson member, he will also receive \$750 for each in-person meeting attended and \$350 for participation in a Committee meeting via telephone. Additionally, he will be entitled to reimbursement for all out-of-pocket expenses related to his services as a director.

The Company issued a press release on February 7, 2008 announcing Mr. Collar's appointment, a copy of which is furnished as Exhibit 99.1.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

No. Description

99.1 Press Release of AtriCure, Inc. dated as of February 7, 2008.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ATRICURE, INC.

By: /s/ Julie A. Piton

Julie A. Piton

Vice President and Chief Financial Officer

Dated: February 7, 2008

EXHIBIT LIST

Description
Press Release of AtriCure, Inc. dated as of February 7, 2008. No. 99.1



Contact:

AtriCure, Inc.
Julie A. Piton
Vice President and Chief Financial Officer
(513) 755-4561
jpiton@atricure.com

Press Release

AtriCure Appoints Mark A. Collar to its Board of Directors

WEST CHESTER, Ohio – February 7, 2008 – AtriCure, Inc. (Nasdaq: ATRC), a medical device company and a leader in cardiac surgical ablation products, announced today the appointment of Mark A. Collar to the Company's Board of Directors. Mr. Collar recently retired from a distinguished career with The Procter & Gamble Company, including recently serving as President of the Global Pharmaceuticals and Personal Health business.

"We are pleased to add Mark to the Board of Directors of AtriCure," said Richard Johnston, Chairman of the Board of AtriCure, Inc. "We welcome Mark and his extensive, broad-based business experience to our board, specifically, his experience in the life sciences sector. We believe Mark will immediately contribute and bring value to AtriCure."

Mr. Collar, 54, joined Procter & Gamble in 1975 as a sales representative and assumed roles of progressive responsibility within their Health & Personal Care, Beauty Care, New Business Development, and Personal Health Care Products divisions. Mr. Collar moved to the Pharmaceuticals division in 1994 and was named President of Global Pharmaceuticals in 2002.

Mr. Collar is currently the Chairman of the Third Frontier Advisory Board, which provides direction for the state's 10 year \$1.6 billion investment in high tech research, innovation, and company formation. He is also Vice Chairman and a Member of the Executive Committee for BioOhio, Inc., a non-profit organization which promotes the acceleration and growth of life science companies in Ohio. Further, Mr. Collar is a Trustee and Member of the Executive Committee for the Health Alliance, a leading hospital group serving the greater Cincinnati area.

About AtriCure, Inc.

AtriCure, Inc. is a medical device company and a leader in developing, manufacturing and selling innovative cardiac surgical ablation systems designed to create precise lesions, or scars, in cardiac, or heart, tissue. Medical journals have described the adoption by leading cardiothoracic surgeons of the AtriCure Isolator® bipolar ablation system as a treatment alternative during open-heart surgical procedures to create lesions in cardiac tissue to block the abnormal electrical impulses that cause atrial fibrillation, or AF, a rapid, irregular quivering of the upper chambers of the heart. Additionally, medical journals and leading cardiothoracic surgeons have described the AtriCure Isolator® system as a promising treatment alternative for patients who may be candidates for sole-therapy minimally invasive procedures. AF affects more than 2.5 million Americans and predisposes them to a five-fold increased risk of stroke.

The FDA has cleared the AtriCure Isolator® bipolar ablation system, including the new Isolator SynergyTM ablation clamps and the AtriCure multifunctional bipolar Pen, for the ablation, or destruction, of cardiac tissues during surgical procedures. Additionally, the FDA has cleared the AtriCure Pen for temporary pacing, sensing, stimulating and recording during the evaluation of cardiac arrhythmias. To date, the FDA has not cleared or approved AtriCure's products for the treatment of AF. AtriCure's left atrial appendage clip system has not been approved for commercial use. It is currently being used in clinical evaluations in Europe.