CERNER CORP /MO/ Form SC 13G/A February 27, 2008 SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 Schedule 13G Under the Securities Exchange Act of 1934 (Amendment No.:6)* Name of issuer: CERNER CORP Title of Class of Securities: Common Stock **CUSIP** Number: 156782104 Date of Event Which Requires Filing of this Statement: December 31, 2007 Check the appropriate box to designate the rule pursuant to which this Schedule is filed: (X) Rule 13d-1(b) () Rule 13d-1(c) () Rule 13d-1(d)

^{*}The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

| The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities |
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| Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the |
| Act (however, see the Notes). |

(Continued on the following page(s))

13G CUSIP No.: 156782104 1. NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON VANGUARD SPECIALIZED FUNDS - VANGUARD HEALTH CARE FUND 23-2439149 2. CHECK THE APPROPRIATE [LINE] IF A MEMBER OF A GROUP $B.\underline{X}$ A. 3. SEC USE ONLY 4. CITIZENSHIP OF PLACE OF ORGANIZATION Delaware (For questions 5-8, report the number of shares beneficially owned by each reporting person with:) 5. SOLE VOTING POWER

4,000,000

| IV |
|--|
| 12. TYPE OF REPORTING PERSON |
| 5.00% |
| 11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 |
| |
| N/A |
| 10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES |
| 4,000,000 |
| 9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |
| 8. SHARED DISPOSITIVE POWER |
| 7. SOLE DISPOSITIVE POWER |
| 6. SHARED VOTING POWER |

SECURITIES AND EXCHANGE COMMISSION

| SECURITES AND EXCHANGE COMMIS | 331014 | |
|--|--------|------------|
| Washington, D.C. 20549 | | |
| SCHEDULE 13G | | |
| Under the Securities Act of 1934 | | |
| | | |
| Check the following [line] if a fee is being paid with this statement | N/A | |
| Item 1(a) - Name of Issuer: | | |
| CERNER CORP | | |
| Item 1(b) - Address of Issuer's Principal Executive Offices: | | |
| 2800 ROCKCREEK PARKWAY | | |
| DROP 1624 | | |
| KANSAS CITY, MO 64117 | | |
| Item 2(a) - Name of Person Filing: | | |
| VANGUARD SPECIALIZED FUNDS - VANGUARD HEALTH CARE FUND | | 23-2439149 |
| <u>Item 2(b) – Address of Principal Business Office or, if none, residence</u> : | | |
| 100 Vanguard Blvd. | | |
| Malvern, PA 19355 | | |

| Item 2(c) – Citizenship: |
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| Delaware |
| Item 2(d) - Title of Class of Securities: |
| Common Stock |
| Item 2(e) - CUSIP Number |
| 156782104 |
| Item 3 - Type of Filing: |
| This statement is being filed pursuant to Rule 13d-1. Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). |
| Item 4 - Ownership: |
| (a) Amount Beneficially Owned: |
| 4,000,000 |
| (b) Percent of Class: |
| 5.00% |

| (c) Number of shares as to which such person has: |
|--|
| (i) sole power to vote or direct to vote: 4,000,000 |
| (ii) shared power to vote or direct to vote: |
| (iii) sole power to dispose of or to direct the disposition of: |
| (iv) shared power to dispose or to direct the disposition of: |
| Item 5 - Ownership of Five Percent or Less of a Class: |
| Not Applicable |
| Item 6 - Ownership of More Than Five Percent on Behalf of Another Person: |
| Not applicable |
| Item 7 - Identification and Classification of the Subsidiary Which Acquired The Security Being Reported on by the Parent Holding Company |
| Not applicable |
| Item 8 - Identification and Classification of Members of Group: |
| Not applicable |
| Item 9 - Notice of Dissolution of Group: |
| Not applicable |
| Item 10 - Certification: |

| By signing below I certify than, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of |
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| business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such |
| securities and were not acquired in connection with or as a participant in any transaction having such purpose or effect. |

| Si | gnature |
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After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: 2-27-2008

By/s/ Arthur S. Gabinet

Arthur S. Gabinet

Assistant Secretary