

SELECT MEDICAL HOLDINGS CORP  
 Form 4  
 December 19, 2012

**FORM 4** UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
 Washington, D.C. 20549

OMB APPROVAL  
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
 DENICOLA ANTHONY J

2. Issuer Name and Ticker or Trading Symbol  
 SELECT MEDICAL HOLDINGS CORP [SEM]

5. Relationship of Reporting Person(s) to Issuer  
 (Check all applicable)

(Last) (First) (Middle)  
 C/O WELSH, CARSON,  
 ANDERSON & STOWE, 320 PARK  
 AVENUE, SUITE 2500

3. Date of Earliest Transaction  
 (Month/Day/Year)  
 12/18/2012

\_\_\_\_ Director  
 \_\_\_\_ Officer (give title below)  
 10% Owner  
 \_\_\_\_ Other (specify below)

(Street)  
 NEW YORK, NY 10022

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 Form filed by One Reporting Person  
 Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
Common Stock	12/18/2012		J <sup>(1)</sup>	4,785,554 D	49,579,050	I	By Welsh, Carson, Anderson & Stowe IX, L.P. <sup>(2)</sup>
Common Stock	12/18/2012		J <sup>(1)</sup>	214,446 D	2,221,694	I	By WCAS Capital Partners IV, L.P. <sup>(2)</sup>
	12/18/2012		J <sup>(1)</sup>	35,799 A	191,590	D	

Common  
Stock

Common Stock	12/18/2012	J <sup>(1)</sup>	3,062	A	Ⓛ	3,445	I	By deNicola Holdings LP <sup>(3)</sup>
Common Stock	12/18/2012	J <sup>(1)</sup>	201	A	Ⓛ	417	I	By trusts <sup>(4)</sup>

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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(9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Nu Deriv Secur Bene Own Follo Repo Trans (Instr
						Date Exercisable	Expiration Date	Title	Amount or Number of Shares
						Code	V (A) (D)		

## Reporting Owners

### Reporting Owner Name / Address

### Relationships

Director 10% Owner Officer Other

DENICOLA ANTHONY J  
C/O WELSH, CARSON, ANDERSON & STOWE  
320 PARK AVENUE, SUITE 2500  
NEW YORK, NY 10022

X

## Signatures

/s/David Mintz,  
Attorney-in-Fact 12/18/2012

\_\_Signature of Reporting Person

Date

## Explanation of Responses:

\* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

(1) In kind distribution of shares by Welsh, Carson, Anderson & Stowe IX, L.P. and WCAS Capital Partners IV, L.P. pro rata to their respective partners.

The Reporting Person is a managing member of the respective sole general partners of Welsh, Carson, Anderson & Stowe IX, L.P. and WCAS Capital Partners IV, L.P. Pursuant to Instruction (4)(b)(iv) of Form 4, the Reporting Person has elected to report as indirectly

(2) beneficially owned the entire number of securities beneficially owned by each such entity. The Reporting Person disclaims beneficial ownership of any securities, and any proceeds thereof, that exceed his pecuniary interest therein and/or that are not actually distributed to him.

(3) The Reporting Person disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.

(4) Aggregate of shares held in three separate trusts for the benefit of the Reporting Person's children. The Reporting Person disclaims beneficial ownership of such shares.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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