

AMERICAN SHARED HOSPITAL SERVICES
 Form 424B3
 September 21, 2015

PROSPECTUS SUPPLEMENT NO. 1 Filed Pursuant to Rule 424(b)(3)
 (to Prospectus dated June 12, 2015) File No. 333-204593

890,000 Shares

AMERICAN SHARED HOSPITAL SERVICES

Common Shares

This prospectus supplement amends our prospectus dated June 12, 2015 (the “**Prospectus**”). You should read this prospectus supplement together with the Prospectus since the information contained herein supplements the information contained in the Prospectus.

Under the caption “Selling Shareholders” of the Prospectus, the table of selling shareholders should include the following selling shareholders in place of Raymond C. Stachowiak to reflect a scrivener’s error and a subsequent transfer of shares from RCS Investments Inc. to Stachowiak Equity Fund, LLC in connection with Mr. Stachowiak’s personal financial planning. The table of selling shareholders is hereby updated through the date of this prospectus supplement to reflect the foregoing.

The amount and information set forth in the table below are based upon information provided to us by the selling shareholder or his representative as of September 1, 2015. The percentage of beneficial ownership for the following table is based on 5,364,147 common shares outstanding as of August 1, 2015.

| Name of Beneficial Owner | Shares Beneficially Owned Prior to the Offering | | Number of Shares Offered Including Common Shares Underlying the Warrant | Shares Beneficially Owned After the Offering | |
|--|---|---------|---|--|---------|
| | Number | Percent | | Number | Percent |
| Stachowiak Equity Fund, LLC ⁽¹⁾ | 400,000 | 7.5% | 400,000 | 0 | 0% |
| RCS Investments Inc. ⁽²⁾ | 255,500 ⁽³⁾ | 4.7% | 200,000 ⁽³⁾ | 55,500 | 1.0% |

⁽¹⁾ Mr. Raymond C. Stachowiak is a director of our company and has voting and investment control over the common shares through certain family trusts for which he or his spouse serve as sole trustees.

(2)Mr. Stachowiak is the sole officer and director of RCS Investments Inc.

(3)Includes 100,000 common shares underlying certain warrants that become exercisable on October 22, 2015.

The date of this prospectus supplement is September 18, 2015.