

NORTHSTAR HEALTHCARE INCOME, INC.
SUPPLEMENT NO. 14 DATED DECEMBER 2, 2015
TO THE PROSPECTUS DATED FEBRUARY 6, 2015

This Supplement No. 14 supplements, and should be read in conjunction with, our prospectus dated February 6, 2015, as supplemented by Supplement No. 11 dated August 19, 2015, Supplement No. 12 dated September 14, 2015 and Supplement No. 13 dated November 12, 2015. Defined terms used in this Supplement shall have the meaning given to them in the prospectus unless the context otherwise requires. The purpose of this Supplement No. 14 is to disclose:

- the status of our current public offering; and
- our completion of a joint venture investment.

Status of Our Current Public Offering

Following the completion of our \$1.1 billion initial public offering of common stock, we commenced our follow-on public offering of \$700.0 million in shares of common stock on February 6, 2015, of which up to \$500.0 million in shares are being offered pursuant to our primary offering and up to \$200.0 million in shares are being offered pursuant to our distribution reinvestment plan, or DRP. We refer to our primary offering and our DRP collectively as our offering. In November 2015, our board of directors authorized the reallocation of shares available to be offered pursuant to our DRP to our primary offering.

As of November 30, 2015, we received and accepted subscriptions in our offering for 55.0 million shares, or \$557.4 million, including 0.3 million shares, or \$2.6 million, sold to NorthStar Realty Finance Corp. As of November 30, 2015, \$142.6 million remains available for sale pursuant to our offering, including the amount offered pursuant to our DRP that may be reallocated to our primary offering. Our primary offering is expected to terminate on the date on which the maximum offering has been issued, which may occur as early as December 21, 2015. However, our board of directors may determine to terminate our primary offering at any time.

Completion of a Joint Venture Investment

On December 1, 2015, we, through a joint venture with Griffin-American Healthcare REIT III, Inc., or GAHR, completed our acquisition of Trilogy Investors, LLC, or Trilogy, pursuant to the equity purchase agreement, or the purchase agreement, dated as of September 11, 2015 among Trilogy, Trilogy Holdings, LP, Trilogy Holdings LLC, Trilogy Holdings Corporation, and the other sellers party thereto, which we refer to collectively as the sellers, and Trilogy Real Estate Investment Trust, or the purchaser. Pursuant to the purchase agreement, the purchaser, a joint venture indirectly owned 30% by us and indirectly owned 70% by GAHR, or the joint venture, acquired approximately 96% of the outstanding equity interests of Trilogy based on a total equity value for Trilogy of \$1.125 billion, subject to certain closing adjustments set forth in the purchase agreement, or the acquisition, while certain members of Trilogy's pre-closing management team retained approximately 4% of the outstanding equity interests of Trilogy. We invested approximately \$202 million of equity with proceeds from our public offerings of common stock.

Trilogy owns and/or leases 97 facilities, most of which are integrated senior healthcare campuses offering a range of care, including assisted living, memory care, independent living and skilled nursing services, with over 10,000 beds across Indiana, Ohio, Kentucky and Michigan, as well as an ancillary pharmacy business and an ancillary therapy business that provide services to the facilities and third parties. At the closing of the acquisition, Trilogy's facilities and ancillary services businesses will be managed by an eligible independent contractor owned by certain members of Trilogy's pre-closing management team, pursuant to management agreements with 20-year terms, subject to certain potential extension options in favor of Trilogy, under a "RIDEA" structure. We believe that the facilities are suitable for their intended purpose and are adequately covered by insurance. These properties compete for tenants and residents with a number of properties providing comparable services in their respective markets, whose relative performance, along with other factors, could impact the future operating results of the portfolio. We have no plans for any material renovations, improvements or development with respect to the portfolio, except in accordance with planned budgets.

We and GAHR hold our interests in Trilogy through the joint venture, which holds all of the common shares of the purchaser and serves as the purchaser's sole trustee. Pursuant to the limited liability company agreement of the joint venture, or the JV agreement, which was entered into concurrently with the execution of the purchase agreement, GAHR will act as the manager of the joint venture and is generally responsible for the day-to-day affairs of the joint venture, subject to certain limitations

or exceptions therein, including our right to consent to certain significant decisions. The JV agreement also contains provisions relating to GAHR's and our obligations and rights with respect to funding the joint venture, and customary forced sale and other liquidity rights. Distributions of capital or other proceeds generally will be made pro rata in proportion to each member's respective ownership interest in the joint venture. GAHR is sponsored by American Healthcare Investors, LLC, an entity in which our sponsor and vice chairman own an approximate 43% interest and 12% interest, respectively.

In connection with the acquisition, certain indirect subsidiaries of Trilogy, which we refer to as the borrowers, entered into a \$300 million senior secured revolving credit facility with KeyBank National Association, as administrative agent, and the lenders party thereto from time to time, which we refer to as the revolving credit facility, with a floating interest rate based on, at the borrowers' option, an adjusted LIBOR rate plus an applicable margin of 4.25% or an alternate base rate plus an applicable margin of 3.25% and a term of four years (subject to a one year extension option or termination in accordance with the terms of the revolving credit facility). On December 1, 2015, the borrowers drew down \$270 million under the revolving credit facility, the proceeds of which were used to refinance certain existing indebtedness. In addition, the purchaser assumed approximately \$230 million of existing indebtedness in connection with the acquisition, including approximately \$204 million in aggregate principal amount outstanding under loans insured by the U.S. Department of Housing and Urban Development with fixed interest rates ranging from 2.45% to 4.14% and remaining terms ranging from 29 years to 34 years.