

Supplement dated July 31, 2017 to
Prospectus dated May 1, 2017

This supplement contains information which amends, supplements or modifies certain information contained in the Prospectus of HMS Income Fund, Inc. (the "Company") dated May 1,2017 (as supplemented and amended from time to time, the "Prospectus"). This supplement is part of, and should be read in conjunction with, the Prospectus. The Prospectus has been filed with the Securities and Exchange Commission and is available at www.sec.gov or by calling (888) 446-3773. Capitalized terms used in this supplement have the same meanings as in the Prospectus, unless otherwise stated herein.

You should carefully consider the "Risk Factors" beginning on page 28 of the Prospectus before you decide to invest.

This supplement updates the Prospectus to reflect the Company's entry into a conditional income incentive fee waiver agreement with the Advisers.

This supplement amends the Prospectus as follows:

PROSPECTUS SUMMARY

This supplement replaces the third paragraph of the section entitled "Prospectus Summary-Management and Incentive Fee Waiver," as amended, beginning on page 12 of the Prospectus with the following:

We and our Advisers have entered into five conditional income incentive fee waiver agreements (the "2016-2017 Conditional Income Incentive Fee Waiver Agreements") on May 9, 2016, October 7, 2016, December 13, 2016, April 24, 2017 and July 26, 2017, respectively, pursuant to which, for a period from January 1, 2016 through June 30, 2017, our Advisers would waive the "subordinated incentive fee on income," as such term is defined in the Investment Advisory Agreement, upon the occurrence of any event that, in our Advisers' sole discretion, causes such waiver to be deemed necessary. The 2016-2017 Conditional Income Incentive Fee Waiver Agreements may require us to repay our Advisers for previously waived reimbursement of Expense Support Payments or waived base management fees or incentive fees under certain circumstances. The previously waived fees are potentially subject to repayment by us, if at all, within a period not to exceed three years from the date of each respective fee waiver. Thus, in any quarter where a surplus exists, that surplus will be available, subject to approval of the board of directors, to reimburse waived fees and Expense Support Payments as follows:

- 1. First, to reimburse Expense Support Payments, beginning with the earliest year eligible for reimbursement; and
- Second, to reimburse all waived fees, beginning with the earliest year eligible for reimbursement.

DISTRIBUTIONS

This supplement replaces the second paragraph of the section entitled "Distributions" as amended, beginning on page 49 of the Prospectus with the following:

Our distributions may exceed our earnings, especially during the period before we have substantially invested the stock offering proceeds. As a result, a portion of the distributions we make may represent a return of capital for U.S. federal income tax purposes. Stockholders will not recognize tax on a distribution consisting of a return of capital; however, the tax basis of shares must be reduced by the amount of any return of capital distributions. Any return of capital will result in an increase in the amount of any taxable gain (or a reduction in any deductible loss) on a subsequent disposition of such shares. In order to avoid distributions that are determined to represent a return of capital for U.S. federal income tax purposes, our Advisers have, at times, agreed to waive certain base management and incentive fees and administrative expenses. Our Advisers agreed to waive subordinated incentive fees on income through June 30, 2017. There is currently no waiver of management fees in place. See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview — Base Management Fee and Incentive Fee, Administrative Services Expense Waiver and Expense Support and Conditional Reimbursement Agreement."

INVESTMENT ADVISORY AND ADMINISTRATIVE SERVICES AGREEMENT

This supplement replaces the fourth paragraph of the section entitled "Investment Advisory and Administrative Services Agreement-Management and Incentive Fee Waiver," as amended, beginning on page 107 of the Prospectus with the following:

We and our Advisers have entered into the 2016-2017 Conditional Income Incentive Fee Waiver Agreements, pursuant to which, for a period from January 1, 2016 through June 30, 2017, our Advisers would waive the "subordinated incentive fee on income," as such term is defined in the Investment Advisory Agreement, upon the occurrence of any event that, in our Advisers' sole discretion, causes such waiver to be deemed necessary. The 2016-2017 Conditional Income Incentive Fee Waiver Agreements may require us to repay our Advisers for previously waived reimbursement of Expense Support Payments or waived base management fees or incentive fees under certain circumstances. The previously waived fees are potentially subject to repayment by us, if at all, within a period not to exceed three years from the date of each respective fee waiver. Thus, in any quarter where a surplus exists, that surplus will be available, subject to approval of the board of directors, to reimburse waived fees and Expense Support Payments as follows:

- 1. First, to reimburse Expense Support Payments, beginning with the earliest year eligible for reimbursement; and
- 2. Second, to reimburse all waived fees, beginning with the earliest year eligible for reimbursement.