

Management Discussion and Analysis

As of and for the Six Months Ended June 30, 2018 and 2017



UNAUDITED MANAGEMENT DISCUSSION AND ANALYSIS AS OF AND FOR THE SIX MONTHS ENDED JUNE 30, 2018 AND 2017

Henry Ford Health System and its affiliates' (the System) Management's Discussion and Analysis (MD&A) is intended to provide a high-level overview of the consolidated financial performance for the six months ended June 30, 2018, with comparable prior year information, including operational highlights. This document includes certain forward-looking comments based on management's beliefs; actual results could differ materially. This document should be read in conjunction with the unaudited consolidated financial statements as of and for the six months ended June 30, 2018.

It is management's intention to regularly provide an MD&A in conjunction with the public release of unaudited quarterly and audited annual statements. The intent is to provide current and prospective bondholders and other interested parties with a better understanding of the System's consolidated financial and operational performance. It is also management's intention to maintain robust communications including investor calls or posting investor presentations.

Organizational Overview

The System is a Baldrige award-winning, integrated, academic health system that includes both extensive provider assets and insurance operations. The System offers differentiated capabilities, as well as strong focus on population health, value based care, and disease management.

The System has an integrated hospital and employed physician model with an extensive integrated provider network, including:

- Five acute hospitals and two psychiatric hospitals geographically distributed, including Henry Ford Hospital, an internationally known academic referral center.
- More than 1,500 employed physicians and scientists, primarily through the Henry Ford Medical Group, a mature and long established integrated group practice.
- A pluralistic physician model, leveraged through the System's physician-led clinically integrated networks called the Henry Ford Physician Network and Jackson Health Network.
- A diversified ambulatory network with more than 70 medical and health centers, behavioral health clinics, a substance abuse facility, home-based care, pharmacy, eye care, and other retail services.

- Strong market share, brand and differentiation within southeastern and south-central Michigan, as well as a statewide, national, and international reputation resulting in substantial referral volume.
- A substantial role in teaching health professionals, complemented by a significant research and discovery function.

In addition to extensive provider assets, the System also has three decades of experience managing pre-payment arrangements through Health Alliance Plan of Michigan (HAP). HAP has products for every market segment and serves more than 554,000 members through six distinct lines of business: group insured commercial, Medicare Advantage (the oldest plan in southeast Michigan), Medicaid, self-funded, network leasing, and individual coverage. HAP also has substantial Administrative Services Only capabilities.

Given its history and assets, the System is uniquely positioned to succeed in a pay-for-value environment.

Summary of Operating Results

The System reported consolidated excess of revenues over expenses before unusual items of \$36.4 million for the six months ended June 30, 2018, on consolidated revenues of \$2.9 billion, providing a margin of 1.3%. This was unfavorable to consolidated excess of revenues over expenses before unusual items of \$66.1 million on consolidated revenues of \$3.0 billion, providing a margin of 2.2%, reported for the six months ended June 30, 2017. Although System performance declined consolidated net patient service revenue experienced strong growth which was offset by decreased investment income and HAP premium revenues primarily due to lower enrollment which relates to the elimination of selected HAP contracts. The decrease in health care premium revenue was partially offset by a decrease in health care provider expenses.

The System launched the "System Redesign & Transformation" program with the goal of achieving increased value by deploying projects targeting population health, greater integration across the care continuum, improved access for customers, and enhanced corporate and support services.

Revenue Trends

As a fully integrated health system, total consolidated unrestricted revenue was \$2.9 billion for the six months ended June 30, 2018, down \$70.2 million or 2.4% from the six months ended June 30, 2018. The System recognized consolidated net patient service revenue of \$1.8 billion and consolidated healthcare premium revenue of \$973.0 million for the six months ended June 30, 2018. Consolidated revenues associated with healthcare services provided by the System to members of its capitated insurance products are included in premium revenue. Consolidated net patient service revenue reflects amounts recognized from all other payers and patients.

Consolidated net patient service revenue increased \$140.6 million or 8.7% for the six months ended June 30, 2018 compared to the six months ended June 30, 2017. This was primarily due to increased outpatient volume, expanded specialty and ambulatory pharmacy activities, and an increased all payor case mix index.

Health care premium revenue decreased \$192.9 million or 16.5% for the six months ended June 30, 2018 compared to the six months ended June 30, 2017. This was primarily due to a decline in membership as a result of the elimination of certain HAP contracts, a change in the mix of members, and the elimination of the HAP star rating payment which has been regained for 2019.

Investment income decreased \$46.4 million or 98.4% for the six months ended June 30, 2018 compared to the six months ended June 30, 2017. This was primarily due to the current market conditions and the System's election, effective October 1, 2017, to transfer its investments previously accounted for as available-for-sale securities to trading securities. This change resulted in \$20.7 million of unrealized losses for the six months ended June 30, 2018 recorded in investment income that would have previously been recorded in the statement of changes in net assets had the change not been made.

Other income increased \$28.4 million or 19.5% for the six months ended June 30, 2018 compared to the six months ended June 30, 2017. This was primarily due to increased contract pharmacy revenue and income from net assets released from restrictions.

Expense Trends

Consolidated total expenses decreased by \$40.5 million or 1.4%, for the six months ended June 30, 2018 compared to the six months ended June 30, 2017. Following are explanations for the most significant variances.

Consolidated salaries, wages, and employee benefits increased by \$55.8 million or 4.7% for the six months ended June 30, 2018 compared to the six months ended June 30, 2017. This was primarily due to the salary increases implemented in September 2017.

Consolidated health care provider expense decreased by \$155.1 million or 22.1% for the six months ended June 30, 2018 compared to the six months ended June 30, 2017, primarily due to the lower membership levels.

Consolidated supplies expense increased \$19.4 million or 4.1% for the six months ended June 30, 2018 compared to the six months ended June 30, 2017 driven by pharmacy expense related to expanded ambulatory and specialty pharmacy activities.

Uncompensated Care and Community Benefits

The System expended \$228.0 million on uncompensated care for the six months ended June 30, 2018, compared to \$205.7 million in the prior year. The increase is attributed to increased unreimbursed Medicare and Medicaid cost related to volume growth and governmental payment constraints. The improvements in the cash collections in 2017 combined with an increase in previously reserved for insured patients resulted in a decrease in charity care at cost. The System's total cost of uncompensated care as a proportion of consolidated net patient revenue approximated 12.9% and 12.7% at June 30, 2018 and 2017, respectively.

On January 1, 2018, the System adopted the Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers (Topic 606)" ("ASU 2014-09"). The primary change was a change in the presentation of the

provision for bad debts, which relates to self-pay patients and amounts due from patients with insurance for co-pays and deductibles. Under the ASU, the majority of what was previously classified as provision for bad debts is now reflected as implicit price concessions and therefore a direct reduction to patient service revenue. As a result, the System recorded approximately \$49.4 million of implicit price concessions for the six months ended June 30, 2018. Bad debt expense for the six months ended June 30, 2018 was not material to the consolidated financial statements.

Consistent with expectations resulting from the Affordable Care Act, there were fewer patients without health insurance coverage due to expanded coverage through the subsidized health insurance exchanges and Michigan Medicaid expansion. However, there has been a corresponding growth in Medicaid patient volume, where payment rates do not fully cover the cost of care. In addition, a large number of patients are finding that they now have insurance coverage with deductibles and copayments that are beyond their ability to pay.

Given its mission, the System also had substantial unreimbursed costs for health professional education, research and other community services, which are also important components of overall Community Benefit expenditures.

Balance Sheet

The System maintains a strong balance sheet. Total System days cash (inclusive of insurance operations) at June 30, 2018, totaled 124.8 days compared to 122.2 days at December 31, 2017. Total System days cash is lower than some health systems due to the substantial size of the insurance segment and the amount of capitation revenue and operating expenses for medical services. If days cash was calculated only using expenses of the provider segment for the denominator, days cash would be a much stronger 167.7 days at June 30, 2018 and 173.5 days at December 31, 2017.

Historically the Foundation assets included in the total System days cash calculation were reduced for hedge and private equity funds. The System has reviewed this practice and determined, based on industry standards, that effective March 31, 2018, the Foundation assets will no longer be reduced for hedge and private equity funds.

Investment Performance

The System maintains significant operating investments including cash and cash equivalents, short-term investments, and long-term investments. Consolidated investment income recognized during the six months ended June 30, 2018 was \$0.8 million compared to \$47.1 million recognized during the six months ended June 30, 2017. The decrease in consolidated investment income is consistent with market returns on the underlying securities in these funds. In addition, the 2018 statement of operations includes both realized and unrealized investment gains and losses on trading investments from the six months ended June 30, 2018, whereas unrealized investment gains and losses for available-for-sale securities were included in the statement of changes in net assets for the six months ended June 30, 2017.

Effective October 1, 2017 the System elected to transfer its investments previously accounted for as available-for-sale securities to trading securities. The System determined that the trading

securities category is more appropriate based on its new investment strategies and policies and all System assets are now be accounted for as trading securities. As a result, all unrealized gains and losses are included in the excess of revenue over expenses from consolidated operations.

Second Quarter Strategic Developments and Additional Highlights

The System continues to have a strong leadership team, which includes both long tenured executives and other seasoned leaders who have joined more recently. Second quarter highlights include:

- Robin S. Damschroder, MHSA, FACHE, was appointed Executive Vice President and Chief Financial Officer effective August 3, 2018. Since December 11, 2017, Ms. Damschroder had been serving as Interim Executive Vice President and Chief Financial Officer. Ms. Damschroder has served the community as a proven health care leader for more than 27 years, including senior executive roles in Southeast Michigan with St. Joseph Mercy Health System (Trinity Health) and The University of Michigan Health System. Robin has demonstrated experience in operational growth, implementation of large strategic capital projects, and improved health system performance in large, complex organizations. Equally important, she has proven experience leading change, integration efforts, and innovation in value-based contracting.
- J. Douglas Clark was appointed Interim Senior Vice President of Finance effective June 15, 2018. In this role he is responsible for Financial Reporting & Accounting; Financial Planning & Analysis; Tax Services; Reimbursement; and Decision Support Services. Prior to this appointment, he served as Vice President of Business Integrity and Chief Compliance Officer for the System for more than a decade.
- Mary Jane Vogt was appointed Interim Senior Vice President, Development, effective April
 1, 2018. She is a seasoned development professional with a successful track record of
 working in non-profit organizations for more than 20 years. Prior to the interim
 appointment, she was the Vice President of Major Gifts and Regional Philanthropy.
- For the sixth consecutive year, William Conway, M.D., Chief Operating Officer of the Henry Ford Medical Group, was among *Modern Healthcare* magazine's 50 most influential physician executives and leaders.
- Mark Coticchia, System Vice President and Chief Innovation Officer, has been named one
 of the top 30 chief innovation officers in health care by Health Data Management magazine.
- Betty A. Chu, M.D., MBA, Chief Medical Officer and Vice President of Medical Affairs, Henry Ford West Bloomfield Hospital, will serve one year as president of the Michigan State Medical Society.
- Benjamin Movsas, M.D., Chair, Department of Radiation Oncology, Henry Ford Cancer Institute, has been named President-Elect of the American Radium Society (ARS). His oneyear term as President-Elect began in May 2018. He will assume the role of ARS President in Spring 2019.

- Lisa A. Newman, M.D., MPH, Director of the Breast Cancer Program at the Henry Ford Cancer Institute, was named a 2018 Top Blacks in Healthcare award recipient by BlackDoctor.org and The George Washington University Milken Institute School of Public Health.
- Joanna Pease, D.O., Vice President of Medical Affairs and Chief Medical Officer at Henry Ford Macomb Hospitals, was honored with the Walter F. Patenge Medal of Public Service from Michigan State University's College of Osteopathic Medicine.
- Jack Rock, M.D., Vice Chair of Education for the Department of Neurosurgery, and Director of Neurosurgery's Resident Program at Henry Ford Hospital, has received the American Association of Neurologic Surgery's Humanitarian Award.
- Jason M. Schwalb, M.D., A.A.N.S., F.A.C.S., Surgical Director of the Henry Ford Comprehensive Epilepsy Center at Henry Ford Health System, has been elected president of the American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint Section on Pain.
- Terri Kline, President and Chief Executive Officer of Health Alliance Plan, Lynn Torossian, President and Chief Executive Officer of Henry Ford West Bloomfield Hospital, Eleanor Walker, M.D., Division Director of Breast Services at the Henry Ford Cancer Institute, and Dee Dee Wang, M.D., Director of Structural Heart Imagery at Henry Ford's Center for Structural Heart Diseases, were honored among the 35 Notable Women in Health Care by Crain's Detroit Business.

The System is nationally and internationally recognized for its innovation and excellence. The following are awards received and unique achievements during the second quarter:

- The System recently announced its first ever "Direct to Employer" healthcare contract. The innovative agreement with General Motors (GM) will deliver both healthcare management and wellness services to salaried GM employees and their families throughout Southeast Michigan. This option will be available during open enrollment this fall to nearly 24,000 GM salaried employees and their families, with coverage commencing in 2019. The new "Connected Care" plan option will provide enrolled GM employees access to more than 3,000 providers from an expansion network of primary care and specialty care doctors spanning the communities where GM employees live. GM employees who chose this option will receive a comprehensive range of health care services including primary care, more than 40 specialties, behavioral health services, hospitalization and emergency care as needed, as well as pharmacy and other services.
- The System celebrated a major milestone in the construction of its new \$155 million destination facility for the Henry Ford Cancer Institute. This spring's "topping off" ceremony marked the completion of the steel construction phase for the Brigitte Harris Cancer Pavilion expected to open in 2020. The facility is backed by a \$20 million donation from Detroit philanthropist and businessman, Mort Harris, in honor of his late wife Brigitte. The Brigitte Harris Cancer Pavilion is part of a 300-acre expansion and neighborhood revitalization and development initiative.

- The System announced plans to build a new \$38 million, two-story, 83,000 square foot medical center in Oakland County. The medical center will offer primary care and women's health initially, as well as a walk-in clinic, pharmacy, OptimEyes and other retail services, and will add a number of specialty services in the future. Construction on the new facility is expected to begin by the end of this year with the opening set for the fall of 2019.
- Henry Ford Maplegrove Center, a premier, nationally recognized substance abuse center in Southeast Michigan, announced the completion of the first phase of a major renovation and a new program coming this fall to reduce the readmission rates of individuals battling opioid addiction. The \$3.2 million, year-long renovation involved remodeling three patient lounges, cafeteria, and meeting spaces. The current 62-bed facility was redesigned to include 20 private patient rooms for a soon to open extended stay program, one of only a few medically supervised extended recovery programs in the state. Construction on Phase II is slated to begin this fall. A significant portion of the renovations were made through philanthropic contributions from longtime Maplegrove supporters, Benson Ford and Wendy and Bill Powers.
- Henry Ford Hospital is one of 17 U.S. trial sites using a catheter-based procedure approved in Europe to repair a leaky mitral heart valve. Henry Ford Hospital's Center for Structural Heart Disease, led by pioneering cardiologist William W. O'Neill, M.D., performed the first CardioBand procedure in Michigan on May 31. The hospital is the only system in Michigan involved in the U.S. trial and one of a couple in the midwestern United States. CardioBand is an alternative to surgical mitral valve repairs doctors have been doing for years for patients with functional mitral valve regurgitation.
- Becker's Healthcare released the 2018 edition of "100 great hospitals in America" which
 included Henry Ford Hospital. The hospitals included on this list have been recognized
 nationally for excellence in clinical care, patient outcomes, and staff and physician
 satisfaction.
- Henry Ford Hospital is one of only three hospitals in Michigan designated as a Care Center by the Pulmonary Fibrosis Foundation (PFF). The designation means Henry Ford Hospital is part of the PFF's national Care Center Network, which has 60 sites in 30 states.