Disclosure Report

For the Six Months Ended December 31, 2019

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VANDERBILT UNIVERSITY MEDICAL CENTER

NOTICE relating to:

THE HEALTH AND EDUCATIONAL
FACILITIES BOARD OF THE
METROPOLITAN GOVERNMENT OF
NASHVILLE AND DAVIDSON COUNTY,
TENNESSEE REVENUE BONDS
(VANDERBILT UNIVERSITY MEDICAL
CENTER) SERIES 2016A

THE HEALTH AND EDUCATIONAL FACILITIES BOARD OF THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY, TENNESSEE TAXABLE REVENUE BONDS (VANDERBILT UNIVERSITY MEDICAL CENTER) SERIES 2016B

THE HEALTH AND EDUCATIONAL
FACILITIES BOARD OF THE
METROPOLITAN GOVERNMENT OF
NASHVILLE AND DAVIDSON COUNTY,
TENNESSEE TAXABLE REVENUE NOTE
(VANDERBILT UNIVERSITY MEDICAL
CENTER) SERIES 2016D

THE HEALTH AND EDUCATIONAL
FACILITIES BOARD OF THE
METROPOLITAN GOVERNMENT OF
NASHVILLE AND DAVIDSON COUNTY,
TENNESSEE REVENUE BONDS
(VANDERBILT UNIVERSITY MEDICAL
CENTER) SERIES 2017A

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ATTENTION

This document is marked with a dated date of December 31, 2019, and reflects information only as of that date. Readers are cautioned not to assume that any information has been updated beyond the dated date except as to any portion of the document that expressly states that it constitutes an update concerning specific recent events occurring after the dated date of the document. Any information contained in the portion of the document indicated to concern recent events speaks only as of its date. We expressly disclaim any duty to provide an update of any information contained in this document.

The information contained in this document may include "forward looking statements" by using forward looking words such as "may," "will," "should," "expects," "believes," "anticipates," "estimates," or others. You are cautioned that forward looking statements are subject to a variety of uncertainties that could cause actual results to differ from the projected results. Those risks and uncertainties include general economic and business conditions, receipt of funding grants, and various other factors which are beyond our control.

Because we cannot predict all factors that may affect future decisions, actions, events, or financial circumstances, what actually happens may be different from what we include in forward looking statements.

ORGANIZATION

Vanderbilt University Medical Center ("VUMC") is a Tennessee not-for-profit corporation incorporated in March of 2015 to operate an academic medical center including a comprehensive research, teaching, and patient care health system (the "Medical Center"). Until April 29, 2016, the Medical Center operated as a unit within Vanderbilt University ("the University" or "VU"), as a part of the University's administrative structure, with the same governing board, legal, financial, and other shared services. VUMC began operations effective April 30, 2016, following the closing of the sale of the Medical Center by the University (the "Acquisition").

VUMC owns and operates three hospitals located on the main campus of the University in Nashville, Tennessee: Vanderbilt University Adult Hospital ("VUAH"), Monroe Carell Junior Children's Hospital at Vanderbilt ("MCJCHV"), and Vanderbilt Psychiatric Hospital ("VPH"). In addition, VUMC partially owns Vanderbilt Stallworth Rehabilitation Hospital ("VSRH"), also located on the main campus of the University, through a joint venture with Encompass Health Corp. in which VUMC holds a 50% interest, which includes a 1% interest held by Vanderbilt Health Services, LLC, ("VHS"), a VUMC wholly owned subsidiary. Effective August 1, 2019, VUMC acquired a fourth hospital from Community Health Systems, Inc.: Tennova Healthcare – Lebanon, now known as Vanderbilt Wilson County Hospital ("VWCH"). VUAH, MCJCHV, VPH, and VWCH are licensed for 1,336 beds, and VSRH is licensed for 80 beds.

VUMC consists of two major operating divisions and an administrative overhead division. The operating divisions include the Clinical Enterprise and Academic Enterprise divisions. The administrative overhead division is referred to as Medical Center Administration ("MCA").

The Clinical Enterprise division includes the professional clinical practice revenues and related expenses of Vanderbilt Medical Group ("VMG"), and technical revenues and associated expenses for the operation of VUMC's hospitals and clinic facilities, including VUAH, MCJCHV, VPH, and VWCH. The Clinical Enterprise also includes VHS.

- VUAH is a quaternary care teaching hospital licensed for 680 acute care and specialty beds.
 VUAH, a Level I trauma center, provides advanced patient care and serves as a key site for medical education and clinical research conducted by physician faculty.
 VUAH includes a comprehensive burn center, the Vanderbilt Transplant Center, the Vanderbilt Heart and Vascular Institute, and the Vanderbilt Ingram Cancer Center.
- MCJCHV is a pediatric quaternary care teaching hospital licensed for 305 beds (144 acute and specialty, 65 pediatric intensive care, and 96 neonatal intensive care). MCJCHV is the region's only full-service pediatric hospital, with over 30 pediatric specialties. MCJCHV serves as a site for medical education and clinical research conducted by pediatric physician faculty, houses the only Level IV neonatal intensive care center and the only Level 1 pediatric trauma center within the region, and is a regional referral center for extracorporeal membrane oxygenation (heart and lung failure).
- VPH is a psychiatric hospital licensed for 106 beds and provides both inpatient and outpatient partial hospitalization psychiatric services to both adult and adolescent patients. Also, VPH provides psychiatric assessment services, adult intensive outpatient programs, and neuromodulation procedures through electroconvulsive therapy and transcranial magnetic stimulation.
- VWCH is a two-campus facility licensed for 245 beds and is a substantial provider of both inpatient and outpatient medical services in Lebanon, Tennessee. VWCH also includes an accredited chest pain center, a stroke center, and a comprehensive weight loss center.

- VMG is the practice group of physicians and advanced practice nurses employed by VUMC, most of whom have faculty appointments from the University, who perform billable professional medical services. VMG is not a separate legal entity. VMG has a board which consists of the VUMC clinical service chiefs, who also serve as clinical department chairs. Under the oversight of VUMC executive leadership, VMG sets professional practice standards, bylaws, policies, and procedures. VUMC bills for services rendered by VMG clinicians in both inpatient and outpatient locations. Collected fees derive a component of each VMG clinician's compensation. VMG includes nationally recognized physicians whose expertise spans the spectrum from primary care to the most specialized quaternary discipline. The entire clinical faculty is "board certified" or eligible for board certification. All staff members are re-credentialed every two years by the National Committee for Quality Assurance standards. All specialties and subspecialties currently recognized by the various national specialty boards are represented on the clinical faculty.
- VHS serves as a holding company for 16 health care related subsidiaries and joint ventures owned with various entities, including, but not limited to, VSRH and the Vanderbilt Health Affiliated Network ("VHAN"). VHS operations primarily consist of community physician practices, walk-in and retail health clinics, imaging services, outpatient surgery centers, radiation oncology centers, a home health care agency, a home infusion and respiratory service, an affiliated health network, accountable care organizations, and a rehabilitation hospital. These subsidiaries include clinics managed in multiple outpatient locations throughout middle Tennessee and southwestern Kentucky.
- Health Professional Solutions, LLC ("HPS") is a holding company that holds interest in
 five VUMC subsidiaries that engage in or support various health care activities in order to
 improve the quality and availability of health care services in the community. These
 subsidiaries include businesses focused on pharmacy, supply chain, and clinically
 integrated support services.

The Academic Enterprise division includes all clinically-related research, research-support activities, and faculty endeavors supporting post-graduate training programs. A significant funding source for VUMC's research has historically been the federal government. Federal funding is received from the Department of Health and Human Services, the National Institutes of Health, the Department of Defense, NASA, and other federal agencies. Sponsored research awards, including multiple-year grants and contracts from government sources, foundations, associations, and corporations signify future research commitments. Also, core activities supporting research, including advanced computing and grant administration, are included in this division.

As mentioned above and throughout this document, VUMC acquired the Medical Center and its operations from the University in the Acquisition. For the purpose of funding the Acquisition and other capital projects, VUMC entered into certain debt agreements. Certain of these debt agreements contain required disclosures which outline annual and quarterly reporting requirements. In addition, certain of these debt agreements require notices of the occurrence of significant events which include but are not limited to delinquencies, bond calls, rating changes, bankruptcies, and mergers or acquisitions.

Certain amounts in the Fiscal 2019 financial statements and certain financial ratios have been reclassified to conform to their Fiscal 2020 presentation. Several of these changes are a result of recently issued accounting guidance.

The VUMC fiscal year end is June 30. The information contained in this document represents the unaudited consolidated results of operations of VUMC as of and for the six months ended December 31, 2019.

SUMMARY OF OPERATING AND UTILIZATION DATA

Licensed Beds

As of December 31, 2019, VUMC's facilities have 1,336 beds approved for operation, of which 1,226 were fully staffed, with 94 operating rooms. As of December 31, 2018, VUMC's facilities had 1,051 beds approved for operation, of which 1,037 were fully staffed, with 82 operating rooms. These beds are primarily located at VUAH, MCJCHV, VPH, and VWCH. VSRH is operated within a separate joint venture entity, which is currently owned 50% by VUMC. Counting VSRH beds, managed beds at Williamson Medical Center Inpatient Children's Unit, operated observation beds, and bassinet beds, total beds as of December 31, 2019 and 2018, equates to 1,574 and 1,275, respectively.

VUMC Beds (Licensed, Observation, JV, Managed)

Licensed Beds	FY 2020	FY 2019
Licensed-Bed Category Type		
Adult Medical Surgical	781	637
Adult Obstetric	64	50
Adult Clinical Research Center	5	5
Pediatric Medical/Surgical	144	129
Pediatric Neonatal Intensive Care	96	96
Pediatric Intensive Care	65	42
Psychiatric Care	155	92
Rehabilitation	26	
Total Licensed Beds as of December 31, 2019 and 2018	1,336	1,051
Observation, JV, and Managed Beds and Bassinets		
Current Observation/Extended Recovery Beds	93	93
Current Bassinets	49	35
Stallworth Rehabilitation Hospital Beds (JV) ⁽¹⁾	80	80
MCJCHV at Williamson Medical Center Inpatient and Observation Unit (Managed) (2)	16	16
Total Observation, JV, and Managed Beds and Bassinets		
as of September 30, 2019 and 2018	238	224
Total Licensed, Observation, JV, and Managed Beds and Bassinets		
as of December 31, 2019 and 2018	1,574	1,275

⁽¹⁾ Represents 80 beds in joint venture with VSRH.

VUMC Research Revenues

VUMC receives revenues from research grants which are both federally and non-federally sponsored. The Department of Health and Human Services, the National Institutes of Health, the Department of Defense, NASA, and other federal agencies supported over 70% of the research expenditures conducted by VUMC as of December 31, 2019 and 2018. The breakdown of direct research revenues is as follows for the six months ended December 31, 2019 and 2018 (\$ in thousands):

Source	FY 2020	FY 2019
Federal	\$ 149,308	\$ 137,954
Non-Federal	55,651	46,379
Total	\$ 204,959	\$ 184,333

⁽²⁾ Represents 12 licensed beds and four observation beds managed by VUMC within Williamson Medical Center, Franklin, TN.

Capital Cash Flows

Capital expenditures for the six months ended December 31, 2019 and 2018, were \$146 million and \$89 million, respectively. The FY 2020 period primarily includes the VWCH acquisition as well as construction of tangible assets associated with hospital and clinic expansions within the adult and pediatric enterprises. The FY 2019 expenditures primarily relate to construction of tangible assets associated with the adult and children's hospital expansions.

Utilization

VUMC's overall functional occupancy rate, excluding VWCH, was 98.5% and 92.5% during the six months ended December 31, 2019 and 2018, respectively, (functional occupancy rate calculated as inpatient days plus observation days in inpatient units divided by total licensed beds, less research, labor & delivery, and double rooms used as singles). The average number of inpatients in the hospital at midnight census, excluding VWCH, was 993 and 955 at December 31, 2019 and 2018, respectively. Thus, VUMC has continued to operate at or above the theoretical optimal occupancy of 85% when total utilization of capacity is measured. Utilization statistics of the hospitals and clinics for the six months ended December 31, 2019 and 2018, are as follows:

	FY 2020	FY 2019
Licensed beds ⁽¹⁾	1,336	1,051
Hospital inpatient days (2)	191,620	175,749
Hospital discharges	35,127	32,215
Average length of stay in days ⁽²⁾	5.5	5.5
Average occupancy level (licensed beds) ⁽²⁾⁽³⁾	91.8%	90.9%
Surgical operations ⁽⁴⁾	32,618	29,078
Ambulatory visits ⁽⁵⁾	1,288,517	1,204,792
Emergency visits	69,993	56,395

⁽¹⁾ Excludes nursery bassinets and 80 joint venture beds at Vanderbilt-Stallworth Rehabilitation Hospital.

⁽²⁾ Includes nursery and psychiatric hospital; does not include the observation patients.

⁽³⁾ Average occupancy level, excluding VWCH, calculated as inpatient days and observation patients, divided by total licensed beds multiplied by the number of days in the period. Average occupancy level including VWCH staffed beds of 137 is 86.3%.

⁽⁴⁾ Excludes surgical operations performed by VUMC-employed physicians at separate surgery centers that are partially owned by a VUMC subsidiary.

⁽⁵⁾ Includes visits related to VHS joint ventures.

VUMC Inpatient Acuity

Across all inpatients, VUMC's inpatient acuity is measured by case mix index ("CMI"). VUMC's total CMI and CMI for Medicare patients for the six months ended December 31, 2019 and 2018, are presented below:

	FY 2020	FY 2019
Total CMI ⁽¹⁾	2.18	2.15
Medicare CMI ⁽¹⁾	2.35	2.34

(1) Excludes normal newborns and VWCH.

During the six months ended December 31, 2019 and 2018, ambulatory visits at the Medical Center totaled 1,124,307 and 1,042,209, respectively (excluding ambulatory visits from VHS joint ventures). While the majority of the VMG adult and children's ambulatory practice is located in VUAH on the main campus, VUMC health care services are offered outside the main campus, with approximately 51% and 48% of outpatient visits at off-campus locations during the six months ended December 31, 2019 and 2018, respectively.

VUMC Payor Mix

The Medical Center receives payment on behalf of most of its patients from a number of third parties, including Blue Cross and other private insurers, the federal government through Medicare, and the federal and state governments through Medicaid. TennCare, the State's managed care plan operating under a Section 1115 Medicaid demonstration waiver from the federal government, provides the majority of Medicaid revenues. The remaining Medicaid revenues are from Medicaid patients who live outside of the State. Blue Cross, one of VUMC's largest payors represented 20% of total gross patient service revenue (based on total gross patient service revenue, including professional fee revenue) for the six months ended December 31, 2019 and 2018.

The revenues attributable to Blue Cross are presented in the other third-party payors category in the following table, which sets forth the sources of gross amounts of patient service revenue as well as gross amounts of patient service revenue net of explicit and implicit price concessions for the six months ended December 31, 2019 and 2018, respectively:

	12/31/19	12/31/19
Payor Mix ⁽¹⁾	Gross	Net
Other Third-Party Payors, Primarily Commercial Carriers ⁽²⁾	46.8%	64.2%
Medicare/Managed Medicare	31.6%	23.1%
TennCare/Medicaid	17.1%	12.1%
Uninsured (self-pay)	4.5%	0.6%
Total	100.0%	100.0%

⁽¹⁾ Includes VWCH.

⁽²⁾ Includes commercial indemnity and other patient service programs provided under contractual arrangements.

Payor Mix	12/31/18 Gross	12/31/18 Net
Other Third-Party Payors, Primarily Commercial Carriers ⁽¹⁾	45.6%	62.8%
Medicare/Managed Medicare	32.2%	19.7%
TennCare/Medicaid	18.1%	16.9%
Uninsured (self-pay)	4.1%	0.6%
Total	100.0%	100.0%

⁽¹⁾ Includes commercial indemnity and other patient service programs provided under contractual arrangements.

VUMC's major commercial managed care contracts are multi-year agreements, typically three to four years with automatic annual escalators. Commercial contracts reimburse the facility on case rates with stop loss provisions for inpatient medical/surgical services and fee schedules for outpatient services. VPH is reimbursed on per diems. VUMC has no agreements based on full risk or capitation reimbursement. Three major commercial contracts utilize performance on quality metrics as a basis for a portion of the annual escalators. Over 76% of VUMC's payments for healthcare services are covered under contracted rates. Termination dates for the most material contracts are presented in the below table.

The following table details payments received from VUMC's largest commercial contracts as a percentage of total net patient revenue for the six months ended December 31, 2019 and 2018, as well as the respective contract renewal date.

Commercial Contract Payments as a Percentage of Total Net Patient Revenue

	Total Payments as of 12/31/19 ⁽¹⁾	Total Payments as of 12/31/18 ⁽¹⁾	Termination Dates
Aetna	7.2%	8.0%	12/31/2021
BlueCross ⁽²⁾	30.8%	29.5%	12/31/2023
CIGNA ⁽²⁾	8.4%	8.8%	9/30/2020
Humana ⁽²⁾	1.2%	0.8%	10/31/2020
United	8.5%	7.9%	7/31/2021
Total as a % of total net patient revenue	56.1%	55.0%	

⁽¹⁾ Represents cash payments received for discharges that occurred during the six months ended December 31, 2019 and 2018, respectively. Excludes professional fee billing.

Medicare Advantage contracts represented approximately \$113.6 million and \$105.8 million in net revenue or 6.7% and 6.9% of Hospital and Clinic net revenue for the six months ended December 31, 2019 and 2018, respectively, and have renewal dates ranging from October 31, 2020 through July 31, 2021.

If not renegotiated by either party, contract renews indefinitely.
 Note: Does not include behavioral or dental service contracts.

SUMMARY OF FINANCIAL DATA

Cash and Investments

The VUMC Board of Directors (the "Board") approves the investment policy, while VUMC management is responsible for appointing and removing investment managers, monitoring asset allocation within the policy guidelines, and other ongoing oversight of the investment portfolio. VUMC utilizes external investment advisors to provide professional investment analysis and guidance to assist in evaluating the performance of the funds. As the risk profile of VUMC matures, VUMC management anticipates undertaking modest additional risk, through asset allocation adjustments, in order to improve long-term investment returns. The table below summarizes VUMC's investment allocation as of December 31, 2019, including working capital.

Summary of Cash and Investments Asset Allocation As of December 31, 2019

	Working Capital	Unrestricted and Restricted Investments ⁽¹⁾	Self- Insurance Trust	Total
Cash & Cash Equivalents	69%	1%	0%	42%
Short-Term Investments	15%	0%	0%	9%
Equity Investments	0%	26%	34%	10%
Hedged Equity Investments	0%	12%	13%	5%
Fixed Income Investments	15%	34%	32%	22%
Hedged Debt Investments	0%	18%	10%	7%
Other Marketable Alternatives (2)	0%	6%	7%	2%
Non-Marketable Investments	0%	0%	0%	0%
Project Funds at Bond Trustee	0%	0%	0%	0%
Restricted Cash & Cash Equivalents	1%	0%	4%	1%
SERP	0%	1%	0%	1%
Split Interest Trusts	0%	2%	0%	1%
	100%	100%	100%	100%

⁽¹⁾ Includes permanent endowment funds of \$47.2 million.

⁽²⁾ Includes REITs and commodities.

The following table sets forth VUMC unrestricted cash and investments and days cash on hand as of December 31, 2019 and 2018. This financial information is provided for informational purposes only and is not necessarily, and should not be assumed to be, an indication of the results that will be achieved in the future (\$\frac{s}{in}\$ thousands):

Summary of Unrestricted Cash and Cash Equivalents

	FY 2020		FY 2019	
Cash and cash equivalents ⁽¹⁾	\$	546,294	\$	509,970
Less: restricted cash and cash equivalents included above		(38,248)		(27,309)
Less: restricted pending donor gifts included above		(2,934)		(1,211)
Total unrestricted cash and cash equivalents	\$	505,112	\$	481,450
Unrestricted investments ⁽²⁾		622,837		496,584
Total unrestricted cash and investments	\$	1,127,949	\$	978,034
Average daily operating expenses ⁽³⁾	\$	12,432	\$	11,209
Days cash on hand ⁽⁴⁾		90.7		87.3

⁽¹⁾ Cash and cash equivalents, as reported on the unaudited balance sheet, are composed of assets that are or may be readily converted to cash.

⁽²⁾ Unrestricted investments may be comprised of U.S. small, mid and larger capitalization stocks, international stocks, intermediate term fixed income securities, mutual funds, exchange traded funds, hedge funds, real estate and private equity and generally may be liquidated within four business days or less.

⁽³⁾ Average daily operating expenses include all VUMC financial flows to the University. This excludes the principal payments on the Subordinated Promissory Note, which is now held by a 3rd party.

⁽⁴⁾ Unrestricted cash and investments divided by average daily operating expenses (excluding depreciation and amortization) for the Six months then ended.

Debt Service Coverage

The following tables set forth, for the six months ended December 31, 2019 and 2018, VUMC's income available for debt service, and indicates the extent to which such income available for debt service would provide coverage for maximum annual and annual debt service on all long-term debt (\$ in thousands):

As of December 31, 2019

	<u> </u>	Actual	Annualize d		
Excess of revenues over expenses ⁽¹⁾	\$	127,155	\$	254,310	
Unrealized gains on investments (2)		(8,191)		(16,382)	
Unrealized loss on interest rate swap, net of cash settlements		5,823		11,646	
Depreciation and amortization		59,111		118,222	
Interest		28,970		57,940	
Income available to pay debt service	\$	212,868	\$	425,736	
Maximum annual debt service			\$	96,077	
Maximum annual debt service coverage ⁽³⁾				4.4x	
Annual debt service (Scheduled) ⁽⁴⁾			\$	66,966	
Annual debt service coverage (Scheduled) ⁽⁵⁾				6.4x	

- (1) Excludes gifts, grants, bequests, donations, or contributions, to the extent specifically restricted by the donor to a particular purpose inconsistent with their use for the payment of debt service and includes all VUMC financial flows to the University as presented in the most recent offering statement, excluding the principal payments on the Subordinated Promissory Note.
- (2) Unrealized (gains)/losses on endowed assets are excluded due to restrictions on uses which are inconsistent with their use for the payment of debt service.
- (3) Maximum annual debt service coverage consists of estimated annual income available to pay debt service divided by maximum annual debt service, excluding debt service related to operating leases.
- (4) Represents actual debt service scheduled for the fiscal year, excluding debt service related to operating leases. Actual payments during the fiscal year approximate smoothed debt service.
- (5) Annual debt service coverage consists of estimated annual income available to pay debt service divided by annual debt service, excluding debt service related to operating leases.

As of December 31, 2018

	 Actual	An	nualize d
Excess of revenues over expenses ⁽¹⁾	\$ 62,572	\$	125,144
Unrealized gains on investments ⁽²⁾	34,478		68,956
Unrealized gain on interest rate swap, net of cash settlements	3,555		7,110
Depreciation and amortization	51,358		102,716
Interest	 31,072		62,144
Income available to pay debt service	\$ 183,035	\$	366,070
Maximum annual debt service		\$	98,495
Maximum annual debt service coverage ⁽³⁾			3.7x
Annual debt service (Scheduled) ⁽⁴⁾		\$	64,639
Annual debt service coverage (Scheduled) ⁽⁵⁾			5.7x

⁽¹⁾ Excludes gifts, grants, bequests, donations, or contributions, to the extent specifically restricted by the donor to a particular purpose inconsistent with their use for the payment of debt service and includes all VUMC financial flows to the University as presented in the most recent offering statement, excluding the principal payments on the Subordinated Promissory Note.

⁽²⁾ Unrealized (gains)/losses on endowed assets are excluded due to restrictions on uses which are inconsistent with their use for the payment of debt service.

⁽³⁾ Maximum annual debt service coverage consists of estimated annual income available to pay debt service divided by maximum annual debt service, excluding debt service related to operating leases.

⁽⁴⁾ Represents smoothed debt service scheduled for the fiscal year, excluding debt service related to operating leases. Actual payments during the fiscal year are equal to smoothed debt service.

⁽⁵⁾ Annual debt service coverage consists of estimated annual income available to pay debt service divided by annual debt service, excluding debt service related to operating leases.

Capitalization Ratios

The following table provides VUMC's capitalization ratios as of and for the six months ended December 31, 2019 and 2018, (\$ in thousands):

]	FY 2020]	FY 2019
Long-term debt ⁽¹⁾	\$	1,464,751	\$	1,428,314
Net assets without donor restrictions		1,189,882		878,838
Total capitalization	\$	2,654,633	\$	2,307,152
Ratio of long-term debt to capitalization (%)		55.2%		61.9%
EBIDA	\$	430,472	\$	290,002
Ratio debt to total EBIDA ⁽²⁾		3.4x		4.9x
Total unrestricted cash and investments	\$	1,127,949	\$	978,034
Ratio cash to debt (%) ⁽³⁾		77.0%		68.5%

⁽¹⁾ Total outstanding long-term debt, including current maturities, excluding the Subordinate Promissory Note and operating lease liabilities.

Interest Rate Exchange Agreements

VUMC uses interest rate exchange agreements as part of its debt portfolio management strategy. These agreements do not include collateral pledging requirements. Information regarding the current interest rate exchange agreements, including mandatory termination provisions, is as follows (\$ in thousands):

Description	Notional Amount	Rate Paid	Rate Received	Maturity	Fair Value
Fixed-payer interest			68% of one-		
rate agreement	\$ 75,000	4.12%	month LIBOR	4/29/2021	\$ 35,569
Fixed-payer interest			68% of one-		
rate agreement	\$ 75,000	4.18%	month LIBOR	4/29/2023	36,072
					\$ 71,641

⁽²⁾ Total outstanding long-term debt divided by total EBIDA, which includes realized gains from sale of assets incurred in the normal course of operations, investment income (all gains), unrestricted gifts or restricted gifts released from restrictions (spent on the purpose), unrealized gain or loss on interest rate swap, and equity earnings in unconsolidated organizations.

(3) Unrestricted cash and investments divided by long-term debt, which includes unrestricted cash and cash equivalents and unrestricted

investments.

Existing Lease Agreements

VUMC leases certain property and equipment under leases with terms ranging from two to twenty years. In addition, VUMC is the lessee in a 99 year ground lease with Vanderbilt University. VUMC classifies these leases as operating leases. The following schedule represents our annual commitments of minimum rentals on non-cancelable operating leases by fiscal year (\$ in thousands):

	Equipment		Property		Ground Lease			Total
2020	\$	36,940	\$	51,473	\$	\$ 19,440		107,853
2021		25,052		47,736		19,440		92,228
2022		12,947		41,166		19,440		73,553
2023		5,547		37,803		19,440		62,790
2024		850		35,850		19,440		56,140
Thereafter		54		182,249		1,749,600		1,931,903
Total	\$	81,390	\$	396,277	\$	1,846,800	\$	2,324,467

MANAGEMENT DISCUSSION AND ANALYSIS

FY20 YTD operating earnings before interest, depreciation and amortization (operating EBIDA) of \$188 million was \$31 million greater than FY19 YTD operating EBIDA of \$156 million. The increase in operating EBIDA was driven by a \$257 million increase in operating revenue, partially offset by a \$225 million increase in operating expenses, excluding interest, depreciation and amortization. FY20 YTD operating results of \$100 million was \$26 million greater than FY19 operating results of \$74 million. YTD excess of revenues over expenses was \$127 million which is \$64 million greater than FY19 YTD excess of revenues over expenses of \$63 million. The increase is due to an increase of \$39 million in non-operating income in addition to the increase in operating income mentioned above.

The primary drivers of the \$39 million increase in non-operating income were favorable investment income of \$38M driven by market performance and an increase in gift income of \$2M. This increase was partially offset by unfavorable mark to market adjustments of the interest rate exchange agreements' obligations, net of settlements, of \$2 million. The increase in the unfavorable mark to market adjustments of the interest rate exchange agreements obligation is due to unfavorable interest rate changes compared to the prior year.

Revenues

FY20 YTD operating revenue increased approximately \$257 million, or 12%, to \$2,428 million from \$2,171 million a year earlier. The primary driver of the increase in revenues was a \$216 million, or 12%, increase in patient service revenue to \$2,076 million from \$1,860 million a year earlier. The remaining increase is driven by increases in academic and research revenue, driven by increased grant and contract income and other operating revenue of \$28 million and \$13 million, respectively.

Expenses

FY20 YTD expense increased approximately \$231 million, or 11%, to \$2,328 million from \$2,097 million a year earlier. The primary drivers were increases in salaries, wages and benefits of \$90M and supplies and drugs of \$83M. The increase in these expenses is primarily due to increased staffing, drug, and supply needs to meet additional demand associated with higher patient service revenue and margin. Drug expense has increased primarily due to the ongoing introduction of sophisticated new pharmaceutical compounds, which VUMC, as a leading academic medical center provides to our quaternary patients.

Balance Sheet / Cash Flow

FY20 YTD net assets increased by approximately \$152 million primarily due to excess of revenues over expenses and donor-restricted contributions, net of those released from restrictions of approximately \$127 million and \$25 million, respectively. Cash and cash equivalents decreased by approximately \$28 million which was primarily due to \$146 million expended on the construction of certain long-lived assets, a decrease in accounts payable of \$45M, and an increase in accounts receivable of \$37M, partially offset by EBIDA of \$188 million.

We adopted the new lease accounting guidance that resulted in an asset, net of straight-line impact, and obligation of \$742 million, net of \$18 million of straight-line contra asset, and \$760 million, respectively. The impact to the income statement was not material.

Conclusion

Our YTD FY20 operating results reflect our focus on increasing patient volumes while continuing to tightly manage our variable and fixed costs, evidenced by the fact that expenses grew at a rate of 11% while revenue and patient revenue both grew at 12%. The balance sheet remained stable with moderate growth in accounts receivable due to volume as we continue to maintain our days sales outstanding while growing our net revenue per day.

CONSOLIDATED BALANCE SHEET AS OF DECEMBER 31, 2019 AND JUNE 30, 2018 (\$ in thousands)

Decen 20		June 30, 2019
Assets	(Unaudited)	
Current assets:		
Cash and cash equivalents	\$ 546,294	\$ 574,748
Current investments	115,645	115,941
Patient accounts receivable	519,020	482,485
Grants and contracts receivable	57,685	58,750
Inventories	85,596	75,407
Other current assets	88,312	89,311
Total current assets	1,412,552	1,396,642
Restricted cash	12,524	11,938
Noncurrent investments	507,192	491,047
Noncurrent investments limited as to use	107,979	103,609
Property, plant, and equipment, net	1,460,221	1,395,095
Operating lease assets	722,069	-
Other noncurrent assets	53,025	48,067
Total assets	\$ 4,275,562	\$ 3,446,398
Liabilities and Net Assets Current liabilities:		
Current installments of long-term debt	\$ 10,058	\$ 8,568
Accounts payable and other accrued expenses	238,202	304,188
Estimated payables under third-party programs	236,202	24,877
Accrued compensation and benefits	207,441	214,382
Current portion of operating lease liabilities	66,698	214,362
Current portion of deferred revenue	15,877	14,965
Current portion of defended revenue Current portion of medical malpractice self-insurance reserves	12,012	12,012
Total current liabilities	572,555	578,992
Long-term debt, net of current installments	1,536,776	1,506,877
Noncurrent portion of operating lease liabilities	670,210	1,500,677
Fair value of interest rate exchange agreements	71,641	67,901
Noncurrent portion of medical malpractice self-insurance reserves	44,716	44,328
Noncurrent portion of deferred revenue	6,241	7,773
Other noncurrent liabilities	7,530	26,345
Total liabilities	2,909,669	2,232,216
Net assets		
Net assets without donor restrictions controlled by		
Vanderbilt University Medical Center	1,181,413	1,050,509
Net assets without donor restrictions related to		
noncontrolling interests	8,469	7,776
Total net assets without donor restrictions	1,189,882	1,058,285
Net assets with donor restrictions	176,011	155,897
Total net assets	1,365,893	1,214,182
Total liabilities and net assets	\$ 4,275,562	\$ 3,446,398

CONSOLIDATED STATEMENT OF OPERATIONS FOR THE SIX MONTHS ENDED DECEMBER 31, 2019 AND 2018 (\$ in thousands)

Six Months	Ended
December	r 31

	December 31,			
		2019		2018
Operating revenues				
Patient service revenue	\$	2,076,332	\$	1,860,255
Academic and research revenue		270,149		242,396
Other operating revenue		81,148		68,165
Total operating revenues		2,427,629		2,170,816
Operating expenses				
Salaries, wages, and benefits		1,216,193		1,126,251
Supplies and drugs		513,966		430,607
Facilities and equipment		136,201		129,377
Services and other		373,457		328,260
Depreciation and amortization		59,111		51,358
Interest		28,970		31,072
Total operating expenses		2,327,898		2,096,925
Income from operations		99,731		73,891
Nonoperating revenues and expenses				
Income from investments		24,558		(13,513)
Gift income		8,272		6,155
Earnings of unconsolidated organizations		2,982		1,425
Unrealized (loss) gain on interest rate exchange agreements,				
net of cash settlements		(5,823)		(3,555)
Total nonoperating revenues and expenses		29,989		(9,488)
Excess of revenues over expenses		129,720		64,403
Excess of revenues over expenses attributable				
to noncontrolling interests		(2,565)		(1,831)
Excess of revenues over expenses attributable to VUMC		127,155		62,572
Other changes in net assets without donor restrictions				
Change in noncontrolling interest's net assets		693		1,897
Net asset reclassification		(558)		880
Net assets released from restriction for capital		3,449		-
Other changes		858		284
Total changes in net assets without donor restrictions	\$	131,597	\$	65,633

CONSOLIDATED STATEMENT OF CHANGES IN NET ASSETS FOR THE SIX MONTHS ENDED DECEMBER 31, 2019 AND 2018 (\$ in thousands)

	Six Months Ended December 31,			
		2019		2018
Net assets without donor restrictions Net assets without donor restrictions at the beginning of the period	\$	1,058,285	\$	813,205
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Excess of revenues over expenses		127,155		62,572
Change in noncontrolling interest's net assets Net asset reclassification		693		1,897
		(558) 3,449		880
Net assets released from restriction for capital Other changes		3, 44 9 858		284
Change in net assets without donor restrictions		131,597		65,633
Net assets without donor restrictions at the end	-	131,377		05,055
of the period	\$	1,189,882	\$	878,838
Net assets with donor restrictions Net assets with donor restrictions at the beginning of the period	\$	155,897	\$	114,425
Contributions		25,269		16,997
Restricted investment income		2,344		(947)
Net assets released from restrictions for operations		(4,611)		(3,149)
Net asset reclassification		558		(880)
Net assets released from restriction for capital		(3,449)		-
Other changes		3		
Change in net assets with donor restrictions		20,114		12,021
Net assets with donor restrictions at the end				
of the period	\$	176,011	\$	126,446
Total net assets				
Beginning of the period	\$	1,214,182	\$	927,630
Change in total net assets		151,711		77,654
End of the period	\$	1,365,893	\$	1,005,284

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE SIX MONTHS ENDED DECEMBER 31, 2019 AND 2018 (\$ in thousands)

Six Months Ended December 31,

	 2019	 2018
Cash flows from operating activities		
Change in total net assets	\$ 151,711	\$ 77,654
Adjustments to reconcile change in total net assets to net cash		
provided by operating activities:		
Depreciation and amortization	59,111	51,358
Amortization of debt issuance costs, and original issue premium and discount	572	7
Loss on disposal of assets	907	46
Undistributed equity in earnings of equity method affiliates	(3,026)	(1,039)
Net realized and unrealized gain on investments	(13,980)	24,614
Purchases of trading securities	(127,329)	(119,633)
Sales of trading securities	121,786	111,020
Unrealized loss on interest rate exchange agreements	3,740	1,602
Restricted contributions for endowments and property, plant, and equipment	(8,439)	(9,524)
(Decrease) increase in cash due to changes in:		
Patient accounts receivable	(36,535)	(2,671)
Accounts payable and other accrued expenses	(44,511)	(21,457)
Other assets and other liabilities, net	 (23,069)	 (23,512)
Net cash provided by operating activities	 80,938	 88,465
Cash flows from investing activities	 	
Purchase of property, plant, and equipment	(145,675)	(88,844)
Purchases of long-term securities	(85,837)	(132,296)
Sales and maturities of long-term securities	85,141	104,293
Proceeds on sale of property, plant, and equipment	5	220
Net cash used in investing activities	(146,366)	(116,627)
Cash flows from financing activities		
Proceeds from is suance of long-term debt	163,600	-
Debt issuance costs	(737)	-
Repayment of long-term debt	(130,570)	(2,500)
Principal payments under finance lease obligations	(1,300)	(786)
Restricted contributions for endowments and property, plant,	8,439	9,524
and equipment		
(Distributions) proceeds to noncontrolling interests	 (1,872)	 66
Net cash provided by financing activities	 37,560	 6,304
Net change in cash, cash equivalents, and restricted cash	(27,868)	(21,858)
Cash, cash equivalents, and restricted cash		
Beginning of the period	 586,686	578,165
End of the period	\$ 558,818	\$ 556,307