

Investor Report Continuing Disclosure

For the year ending December 31, 2022

University Hospitals Health System, Inc.



University Hospitals

The Science of Health. The Art of Compassion.



Any statements contained in this report that are not purely historical are forward-looking statements, including statements of the Obligated Group and Consolidated System's expectations, hopes and intentions, or strategies regarding the future. The forward-looking statements herein are necessarily based on various assumptions and estimates that are inherently subject to various risks and uncertainties, including risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in social, economic, business, industry, market, legal and regulatory circumstances and conditions and actions taken or omitted to be taken by third parties, including customers, suppliers, business partners and competitors, and legislative, judicial and other governmental authorities and officials. Assumptions relating to the foregoing involve judgments with respect to, among other things, future economic, competitive and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and, therefore, there can be no assurance that the forward-looking statements contained in this report would prove to be accurate. Readers should therefore not place undue reliance on forward-looking statements. All forward-looking statements included in this report are based on information available to the Obligated Group and Consolidated System on the date hereof, and University Hospitals assumes no obligation to update any such forward-looking statements.

All information other than Management's Discussion and Analysis, except where noted, is based on information as of and for the year ended December 31, 2022.

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System Highlights

University Hospitals Health System, Inc. d/b/a/ University Hospitals (the “Parent”), together with its affiliates and subsidiaries (the “System” and/or “UH”), is an integrated health care system that serves patients throughout the Northeast Ohio region. The System comprises both nonprofit and for-profit entities and provides the full range of medical and surgical specialties covering patient needs from infancy to elder care. In addition to delivering quality patient care, the System serves as a teaching facility for physicians, nurses and ancillary medical personnel. The System’s extensive clinical research programs continue to improve the understanding of disease and enhance patient care.

The System serves the needs of patients through an integrated network of 21 hospital locations (including 5 joint ventures), more than 50 health centers and outpatient facilities, and over 200 physician offices in 16 counties throughout northern Ohio. Please see the “Organizational Structure” section of this report for further details on the System’s recent member substitution of Lake Hospital System, Inc. that occurred on April 16, 2021.

The System’s flagship quaternary care, academic medical center, University Hospitals Cleveland Medical Center (“UHCMC”), is affiliated¹ with the Case Western Reserve University (“CWRU”) School of Medicine, NEOMED, Oxford University and the Technion Israel Institute of Technology. The main campus includes the UH Rainbow Babies & Children’s Hospital (“Rainbow”), ranked among the top children’s hospitals in the nation; UH MacDonald Women’s Hospital (“McDonald Women’s”), Ohio’s only hospital for women; and UH Seidman Cancer Center (“Seidman”), part of the National Cancer Institute (NCI)-designated Case Comprehensive Cancer Center.

UH is home to some of the most prestigious clinical and research programs in the nation, with a total collaborative research portfolio of \$177 million and more than 3,400 active clinical trials and research studies underway. UHCMC is perennially among the highest performers in national ranking surveys, including “America’s Best Hospitals” from U.S. News & World Report. UH is also home to 19 clinical care delivery and research institutes. UH is one of the largest employers in Northeast Ohio with more than 30,000 employees.

Specific highlights of the System include²:

<ul style="list-style-type: none">• 1,052 bed Academic Medical Center, including 92 beds and 52 nursery bassinets at UH MacDonald Women’s Hospital; 244 beds at UH Rainbow Babies & Children’s Hospital; and 120 beds at UH Seidman Cancer Center• 12 Community Medical Center locations, comprising 1,954 registered beds• 50+ health centers• 5 joint ventures	<ul style="list-style-type: none">• U.S. News & World Report ³ ranked UHCMC in the top 50 nationally in four adult specialties. Rainbow Babies & Children’s Hospital earned national rankings by U.S. News & World Report in 9 out of 10 children’s specialties.• 19 clinical care delivery and research institutes• Total assets of \$6.7 billion as of December 31, 2022.• Revenue of \$5.4 billion for fiscal year 2022.
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¹ In February 2021, UHCMC established a new 10 year affiliation agreement with Case Western Reserve University.

² Highlights are as of or for the year ended December 31, 2022.

³ U.S. News & World Report evaluates data on nearly 5,000 hospitals in 16 adult specialties, 9 adult procedures and conditions and 10 pediatric specialties. Information listed is as of the most recent release date.

Notable Developments

AHA Names University Hospitals 2022 Leader in Quality

In July 2022, the American Hospital Association (“AHA”), the premier national trade association, representing more than 5,000 hospitals and health systems, announced that University Hospitals is the 2022 winner of its most prestigious honor – the Quest for Quality Prize.

A multi-disciplinary committee of health care quality and patient safety experts selected UH for exemplary achievements related to data-driven quality and safety improvements, developing innovative strategies to deliver equitable care, and establishing effective strategies to share quality and safety improvement across the System and with other health care organizations.

AHA specifically recognized UH for its approach to quality, safety and equity, as well as embedding it into the UH culture from the board level to the unit level and across the System. They also applauded UH for its Zero Harm initiative and training all caregivers on the importance of believing that harm is preventable. They also acknowledged UH for transferring knowledge, tools and best practices throughout the organization by sharing data, events, concerns and opportunities, as well as fostering a ‘speak up’ culture.

Additionally, AHA applauded UH for establishing connections with the communities it serves and its mantra that “the community is our patient.” AHA thinks the UH Rainbow Babies & Children’s Ahuja Center for Women and Children could serve as a national example of a new, innovative and effective model of patient, family and community support. The committee also viewed UH as an excellent example of a learning organization. AHA highlighted UH’s efforts around justice, equity, diversity and inclusion, applauding UH’s Food for Life Markets and other non-traditional health care initiatives aimed at improving workforce opportunity and health equity in habitually marginalized communities.

UH previously won the AHA’s top award, then known as the AHA-McKesson Quest for Quality Prize, in 2012.

UH Named to Modern Healthcare’s 2022 Class of Top Diversity Leaders

As our work continues to eliminate health care disparities and inequities in patient care, our community and our workplace, University Hospitals received two notable awards that validate our progress.

For the second consecutive year, Modern Healthcare has named University Hospitals to its Class of Top Diversity Leaders. UH was among nine organizations nationwide selected for our commitment to addressing social determinants of health and improving access to equitable health care and services.

In October 2022, Celina Cunanan, UH Chief Diversity, Equity & Belonging Officer, was named a Crain’s Cleveland Business Notable Executive in DEI (“diversity, equity, and inclusion”). Under her leadership and through the work of the Office of Community Impact, Equity, Diversity, and Inclusion, UH is a leader in unifying our community and assuring success to the highest-quality care for all.

Journey to Medicare Break-Even

The new economic, staffing and payer mix reality demands a health system that is flexible, resilient and can prosper under a Medicare payment structure across all care delivered for all patients. As such, UH has embarked on a program to immediately reduce actionable expenses, grow revenues, and develop a model that allows us to bend the System’s cost curve. This journey to Medicare Break-Even (“MBE”) is

Notable Developments

not a traditional cost-cutting exercise. Rather, it represents a change to how care is provided and designs a structure that will deliver the best value to patients and payers while operating within an evolving health care market. This project began in August 2022 and has delivered significant reductions, in excess of \$250 million, in fixed and indirect costs while delivering the highest quality of patient care. For more information, refer to the *Management Discussion and Analysis*” section of this report herein. MBE has become a key component of the UH Strategic Financial Plan.

Realignment of Services – UH Regional Hospitals

In response to a growing national workforce shortage in health care, UH completed the consolidation of most inpatient services and staff from UH Regional Hospitals (UH Bedford and UH Richmond medical centers) to other larger UH hospitals nearby. Plans to transition inpatient behavioral health patients from UH Richmond remain under development.

UH also consolidated labor & delivery from UH Portage Medical Center to UH Geauga Medical Center to optimize staffing productivity and investments. Extraordinary measures had been required for some time to assure and maintain around-the-clock pediatric physician coverage. UH Portage will continue to offer comprehensive women and children’s services including OB/GYN physician and midwife care, GYN surgical, and breastfeeding and lactation services; only deliveries will consolidate to UH Geauga.

Planning for further realignment and rationalization of services to address workforce and expense challenges began in the second half of 2022 as part of the system’s Medicare Break-Even initiative. This effort includes the engagement of an independent advisory firm to support the analysis of patient volumes, staffing and community needs.

Forbes Names UH One of America’s Best Large Employers in 2023

For the second consecutive year, Forbes recognized University Hospitals as one of America’s Best Large Employers, where we earned the #1 spot among all health systems in Ohio.

UH also ranked #6 in Ohio and #81 in the nation, which is a testament to the culture and sense of belonging our 30,000 caregivers have worked so hard to create.

Importantly, this recognition serves as proof our caregivers have compassionately cared for each other during the most daunting challenges faced by our industry.

This prestigious award is presented by Forbes and Statista Inc., the world-leading statistics portal and industry ranking provider. They selected the large employer honorees based on an anonymous survey of people working for companies across 25 industry sectors, employing at least 5,000 people in their U.S. operations. Respondents evaluated the companies in terms of their willingness to recommend their employers to friends or family as well as a number of other characteristics, including working conditions, development opportunities and company image. Participants also assessed other employers in their respective industries that stood out either positively or negatively.

Similar to last year, health care companies once again were heavily represented among the honorees, accentuating the competitive landscape from which we stood out.

Notable Developments

UH Named for the 11th Time as One of the World's Most Ethical Companies® by Ethisphere

University Hospitals has once again been recognized by Ethisphere, a global leader in defining and advancing the standards of ethical business practices, as one of the 2023 World's Most Ethical Companies.

This is the eleventh year UH has received this recognition and is one of only seven honorees in the health care providers' category. In 2023, 135 honorees were recognized spanning 19 countries and 46 industries.

The World's Most Ethical Companies award is based on an objective assessment of each organization's culture, environmental and social practices, ethics and compliance activities, governance, diversity, and initiatives to support a strong value chain. The process serves as an operating framework to capture and codify the leading practices of organizations across industries and around the globe.

UH highlighted several programs to Ethisphere in order to demonstrate our commitment to integrity and social responsibility. Our Compliance and Ethics Week saw a 30 percent increase in attendance over the previous year, leveraging both virtual and in-person events to reinforce our commitment to integrity and ethical practices. We expanded our Compliance Champions, a liaison program promoting compliant and ethical culture by broadening frontline resources to highlight such messaging and programming. We implemented micro-trainings, a series of short trainings on a range of topics to support informed employees empowered to follow policies and do the right thing year round. Currently, over 150 Compliance Champions participate in the program.

And we promote our Speak Up Culture, in which caregivers across the health system are encouraged to speak up if they see something that strikes them as wrong, without fear of retaliation. At its core, UH promotes a culture based on values and ethics. That culture is supported by a robust compliance and ethics program committed to continuous improvement.

UH Brand Ranked #25 in the World

A leading brand valuation consultancy, Brand Finance, recently completed a global assessment of the most reputable Academic Medical Centers (AMCs). University Hospitals Cleveland Medical Center ranked #25 in the world and #10 in the U.S for AMCs associated with a comprehensive health system. The study surveyed more than 2,500 health care professionals and evaluated more than 30 metrics for over 500 AMCs in over 40 countries. In addition, in terms of familiarity among doctors, UH Cleveland Medical Center ranked among the Top 10 globally.

UH Lake Health Investment

In February 2023, University Hospitals announced it is investing \$25.5 million in UH Lake West and TriPoint medical centers and aligning key services to ensure the highest quality of care for Lake County residents. Enhancements to be completed this year include expanding services at UH Lake West and renovating the birthing center at UH TriPoint. The investments build on UH's promise to expand and enhance services when Lake Health officially joined the System in April 2021. Since the acquisition, UH has spent \$95 million in support of IT integration, routine capital, strategic capital, and other strategic initiatives.

These important modernizations and upgrades are a result of the UH acquisition, and build upon UH's agreement to bring investments that will benefit the community, including enhancements to facilities,

Notable Developments

equipment and services. The \$23.7 million modernization project at UH Lake West over the next few years will include:

- A completely new hybrid cardiac and vascular lab for UH Harrington Heart & Vascular Institute.
- A high-complexity endoscopy/bronchoscopy suite for UH Digestive Health Institute.
- Renovation of the surgery waiting room and expansion of surgery areas such as pre-op and recovery, with two new elevators for surgical patient transfer.
- Relocation of hospital administration for easier access by visitors.

This is the first major renovation at UH Lake West since 2005, and will help continue its transformation into a high-acuity hospital since the UH acquisition. In alignment with providing high-acuity care, UH Lake West was recently designated a provisional Level III Trauma Center – making it the only trauma center between Lake County and the Pennsylvania border. UH pursued this designation as a top priority in order to expand its regional trauma network.

Later this year, with a \$1.8 million investment, the birthing center at UH TriPoint Medical Center will be completely renovated and a Neonatal Intensive Care Unit (NICU) will be added. All 14 labor and delivery suites and two C-section suites will be included in the renovation project. In addition, four Level 2 NICU suites will be added, with the potential to expand in the future. While all NICUs care for babies who need specialty care, Level 2 NICUs provide advanced care for babies born prematurely who are recovering from more serious health problems.

UH's commitment to Lake County will continue beyond 2023 with an additional phase in the UH Lake West modernization project, including a \$24.7 million refresh of patient rooms in both the Intensive Care Unit and on the medical/surgical floors, as well as expansion of the Post-Anesthesia Care Unit (PACU) in the Surgery Department.

Extension of the Cleveland Browns Partnership

In February 2023, UH and the Cleveland Browns announced an extension of their partnership for UH to serve as the Official Health Care Partner of the team. Since 2014, UH has worked in concert with the Browns to provide a comprehensive, innovative and scientific-based approach to caring for Browns players, staff members and their families while also emphasizing investments in and improvements for the Northeast Ohio community.

UH has developed a transdisciplinary sports medicine team that addresses Browns players' medical, training and overall health care needs as a foundation for long-term health. As team physicians, UH Drusinsky Sports Medicine Institute specialists have a highly integrated relationship with players and coaches to assist the team's athletic training staff on the sidelines during practices and games, and to execute scientific approaches to overall health, fitness, performance and injury prevention.

UH's collaboration on groundbreaking medical approaches improves the well-being of each player and enhances our care of all patients. While our goal has always been to provide the Browns with the most comprehensive, world-class health care program in the NFL, we are also partners in extending that care and support to our community.

UH is a key contributor each summer to Cleveland Browns Youth Football Camps and an associate partner of the Browns HELMETS program, which awards Ohio area youth and high school football programs with

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new Xenith football helmets. Additionally, UH Seidman Cancer Center partners with the Browns every October to help raise cancer awareness and encourage early detection through the NFL's "Crucial Catch: Intercept Cancer" campaign. And as part of an NFL grant program, UH and the Browns fund full-time certified athletic trainers to care for all student athletes at Cleveland Metropolitan School District's James Ford Rhodes and John Hay High Schools.

This continued partnership not only extends UH's care for the Browns, but enriches Northeast Ohio's access to world class medical expertise, technology and preventive care. This relationship is a win-win for all our patients, from pee-wee to pro.

Chief Operating Officer UH System

Paul R. Hinchey, MD, MBA, has been named Chief Operating Officer and as such will chair the System's Executive Operating Council to ensure current initiatives remain well-coordinated. See Dr. Hinchey's biography in the "*Leadership*" section of this report herein.

President UH Cleveland Medical Center

Stathis Antoniadis, MPH, FABC, has been named the new President of University Hospitals Cleveland Medical Center. Dr. Antoniadis joins UH from Lahey Hospital & Medical Center, Burlington, Massachusetts, where he most recently served as Chief Operating Officer. In his new role with UH, Stathis will report to Paul R. Hinchey, MD, MBA, Chief Operating Officer.

New Affiliation Agreement

University Hospitals and Northeast Ohio Medical University (NEOMED) have announced a new affiliation agreement that broadens collaboration and expands clinical opportunities for students.

The agreement expands an affiliation that began in 2012 and has included clinical rotations for NEOMED students enrolled in its Colleges of Medicine and Pharmacy, and among various specialties such as Emergency Medicine, Family Medicine, Ob-Gyn, Pediatrics, Psychiatry and Surgery. UH also supports programs in NEOMED's College of Graduate Studies including its Master of Medical Science in Anesthesia and Master of Leadership in Health Systems Science.

Accreditation Process Transition

To more closely align with our quest for quality and Zero Harm principles, UH transitioned its process for accreditation from The Joint Commission (TJC) to Det Norske Veritas (DNV) for the majority of its locations. As an organization, DNV has issued more than 75,000 certifications across the globe, and they have accredited more than 650 hospitals since they began focusing on health care in 2008.

DNV standards mirror the Centers for Medicare & Medicaid Services' Conditions of Participation, and their reviews allow for ISO 9001 certification. ISO certification is considered the highest standard for quality and safety. DNV's annual review cycle, as opposed to TJC's three-year cycle, also will ensure UH stays current on quality standards and will dramatically increase our level of survey readiness. The transition will be implemented in a multi-phased approach. The first phase will include all hospitals as well as ambulatory clinics billed under a hospital CMS provider number. The second phase will include acute care disease-specific certification programs (e.g. stroke designations, cardiac care and orthopedic care). This

Notable Developments

transition will not impact UH Home Health; UH labs; UH North Ridgeville Health Center or our physician offices. We expect all hospitals to be DNV surveyed by the end of November 2022. At no time will a UH accredited entity be without an accreditation status.

Epic implementation

The System is implementing a new integrated Epic Electronic Health Record (“EHR”). Transition to the new Epic EHR began in March 2023 with conversion for all System facilities at the end of the third quarter of 2023. Project related activities continue into 2024. Capital and operating costs are expected to exceed \$600 million with the project being on time and on budget. Capital and operating spend through March 31, 2023 is \$222M and \$38M, respectively.

The new Epic EHR will introduce a streamlined and integrated record that will increase seamless access to the System, ensure coding compliance and collections accuracy, enhance caregivers’ satisfaction with the EHR and aid in scientific research and discovery. As noted above, the investment in the new Epic EHR exceeds \$600 million and the payback period on a conservative basis is just under five years once fully implemented. Annual financial benefits are greater than \$100 million once fully implemented. This new Epic EHR solution will consolidate more than 15 systems that currently drive the majority of the UH patient care experience. This system consolidation to an integrated EHR will enhance UH’s ability to deliver enterprise analytics and allow UH to more efficiently take advantage of the many artificial intelligence (AI) predictive models that are being proposed as the System moves into the future. The project kick off was in fall of 2021 and the first of two ‘go lives’ was in March 2023. The second and larger ‘go live’ is scheduled for September 30, 2023. Once the migration to the new Epic integrated EHR system is complete, the organization will track benefits resulting from this new system to ensure benefits are achieved for UH patients, caregivers and mission.

UH’s Zero Harm Initiative

University Hospitals (UH) realized the need for a new narrative around quality and value. The System aligned around a purpose of maximizing value, defined as the quality and experience of care divided by the annual cost of care. UH developed a framework for making defects in value visible. Defects in value are any decision, process or organizational structure that results in a decrease in quality or experience or an increase in costs without off-setting benefits. UH developed a list of key principles as well as a checklist for eliminating such defects.

To enhance clinicians and managers evaluation of utilization rates, patient cohorts, and provider performance, UH leverages a robust reporting platform inclusive of various dashboards which integrate claims, electronic medical record (EMR) and scheduling data to make defects in value visible to clinicians. With these capabilities, the System can monitor performance and provide real-time feedback to eliminate defects in value.

UH’s Clinical Risk Management department, based in the Quality Institute, handles patient safety issues, clinical risk identification, investigation, evaluation, analysis, monitoring and prevention in clinical areas. PASS Reports (“Patient Advocacy & Shared Stories”), were created and are now utilized to report safety events or to report possible sources of error that could lead to safety events in the future. In addition, a Just Culture Task Force was established to evaluate and reinforce the System’s Just Culture and PASS Reporting. The task force serves to improve transparency, engage front-line staff throughout the process-improvement continuum, enhance PASS report usability, and more.

Notable Developments

COVID-19 Pandemic

The System experienced a surge of COVID-19 Omicron variant patients beginning in December 2021 and continuing into the second quarter 2022. The System reached its highest census of COVID patients since the start of the pandemic in January 2022. Resulting from this surge, the System electively reduced non-essential procedures in certain locations to preserve capacity to treat the surge of COVID patients while maintaining its high standards of quality and safety in patient care. Impacts from the pandemic include, but are not limited to; i) a reduction of activity and revenue in some of the most profitable business lines, ii) shortage of nursing staff and other front-line caregivers resulting from various factors related to the pandemic, iii) use of higher cost sources of labor contributing to much higher labor costs, and iv) continued costs related directly to the unique nature of the pandemic.

University Hospitals, as well as a large number of other hospitals in the region and across the nation, is facing an economic downturn that began with a resurgence of COVID-19 cases earlier this year and has been compounded by several other factors, such as supply chain issues, record-high inflation and an unprecedented workforce shortage. These have made 2022 one of the most financially difficult years for health systems in the U.S.

Adding to these challenges are shifting demographics in Northeast Ohio, resulting in a higher percentage of patients on Medicare and Medicaid, federal insurance programs which have not kept pace with the rising costs of care.

Pension Risk Transfer

University Hospitals entered into a transaction to transfer the remaining liability for certain of its retirees under its defined benefit pension plan to an insurance company. This transaction removed \$251 million of pension liability and involved an outlay of \$243 million in cash from the System's pension plan assets, thereby creating a \$10 million gain for the UH pension plan in Q4 2022.

Management's Discussion and Analysis

Key Metrics

The table below illustrates key financial metrics for the System for the years ended December 31, 2022, 2021, and 2020. For purposes of Management's Discussion and Analysis, information reported for the 2021 year includes Lake and its subsidiaries as of April 1, 2021 and classifies Lake and Beachwood as community medical centers.

Financial Highlights - Unaudited \$ in thousands				% Change 2022 vs. 2021
	FY 2022	FY 2021 (3)	FY 2020	
Operating revenue	\$ 5,407,107	\$ 5,338,397	\$ 4,479,554	1.3%
Operating expenses as adjusted (2)	\$ 5,618,241	\$ 5,195,852	\$ 4,448,371	8.1%
Operating margin as adjusted (2)	(\$211,134) -3.9%	\$142,545 2.7%	\$31,183 0.7%	-248.1%
Adjusted Operating EBITDA (1)	\$50,322	\$412,292	\$282,755	-87.8%
Total unrestricted liquidity	\$ 2,249,532	\$ 2,948,622	\$ 2,398,304	-23.7%
Days of cash on hand	152	215	206	-29.3%
Cash-to-Debt	1.3	1.7	1.6	-23.5%
Total debt	\$ 1,778,099	\$ 1,740,436	\$ 1,503,224	2.2%
Debt-to-capitalization	43.6%	39.8%	43.4%	3.8
Debt-to-Adjusted Operating EBITDA (1)	35.3	4.2	5.3	740.5%
(1) Defined as operating income/(loss) adding back interest expense, depreciation and amortization expense, and non-recurring/non-standard items.				
(2) This measure of operating margin is not consistent with GAAP and excludes certain non-recurring items.				
(3) Includes Lake as of April 1, 2021.				

The System experienced a \$211 million operating loss as adjusted for the year ended December 31, 2022. While the System reported operating revenue of \$5.4 billion, an increase of \$69 million (1.3%) over the same period in 2021, growth in operating expenses as adjusted outpaced that of revenue, growing to \$5.6 billion, an increase of \$422 million (8.1%) during this same period. The growth in revenue was primarily driven by Lake's revenue of \$466 million (29.2%), which includes twelve months of revenue in 2022 vs. nine months in 2021 (see footnote 3 in table above), and that of the Home Care service line \$67 million (52.6%), represented by the specialty pharmacy business unit. The increase in expenses was driven primarily by extreme increases in labor costs (\$271 million or 9.4%), and continued price increases in patient care supplies (\$101 million or 9.0%), related to supply chain issues. For further details, see the "Financial Review" section of this report herein. The System reported an adjusted non-GAAP operating margin of -3.9% for fiscal year 2022 and adjusted non-GAAP EBITDA of \$50 million, down 87.8% over the prior year both resulting primarily from the increase in operating expenses outpacing revenue growth as discussed previously.

For the year ended December 31, 2022, the System realized a drop in overall unrestricted liquidity of \$699 million, reporting a days of cash on hand ratio of 152 days. This resulted primarily from pension funding, capital spending, investment performance, and recoupment of advanced government funding. Both leverage ratios, debt-to-capitalization and debt-to-adjusted operating EBITDA increased to 43.6% and 35.3% from 39.8% and 4.2, respectively due primarily to the decline in net assets without donor restrictions (\$328 million). For further details related to these financial metrics, please refer to the "Financial Ratios" section of this report.

Management's Discussion and Analysis

Key Metrics

UH System Response to Recent Operating Challenges

Through the first six months of 2022, the System intermittently postponed non-essential procedures and temporarily closed select hospital inpatient units for short periods of time in response to continued staffing challenges. See the *"Notable Developments"* section of this report herein. To address the staffing challenges, System leadership has enacted several initiatives designed to i) improve the distribution of surgical cases across many System hospitals and outpatient surgery centers, which is expected to relieve pressure on the caregivers in certain hospitals, improve throughput, increase capacity with existing staff, and provide care more efficiently, ii) review compensation and develop new programs for overtime, critical staffing and agency contracts, and iii) re-engineer the care deployment model that optimizes skill mix. These initiatives are expected to produce positive results over time and System leadership continues to monitor and manage them on a daily basis. For example, UH's Enterprise Staffing Services ("ESS") solution has recently evolved into a centralized float pool of employed nurses to help UH facilities fill nurse staffing gaps. ESS has provided the System the ability to retain and recruit nurses who otherwise would prefer outside agency employment, thereby lowering its inpatient nursing vacancy rate from 41% to 29.7%. For more information, refer to the *Human Capital: Caregiver*" section of this report herein.

Furthermore, the System is reviewing all discretionary expenses and capital projects to identify opportunities for reduction.

As indicated previously, the MBE project was initiated in the third quarter of 2022. This program identified and enacted significant savings across the administrative functions of the System. Specifically, the System reduced operating expenses in excess of \$250 million through a combination of labor and non-labor savings. A total of 450 budgeted administrative positions were eliminated in 2022, including 117 positions from reductions in force.

Through the first quarter 2023, UH outperformed its budget, an early indication of improved performance related to MBE.

Management's Discussion and Analysis

Patient Activity

Adjusted Discharges

Adjusted discharges are a calculated statistic commonly utilized in health care to capture inpatient and outpatient activity based upon the relationship of inpatient and outpatient gross charges. Illustrated in the table below are the trends in adjusted discharges for the System, Academic Medical Center (UHCMC), and Community Medical Centers for the years ended December 31, 2022, 2021, and 2020, and includes Lake as of April 1, 2021.

<u>Adjusted Discharges</u> <i>Unaudited</i>	<u>For the Years Ended December 31st</u>			<u>% Change</u> <u>2022 vs. 2021</u>
	<u>2022⁽²⁾</u>	<u>2021⁽¹⁾</u>	<u>2020</u>	
Academic Medical Center	78,765	80,490	71,392	-2.1%
Community Medical Centers	188,164	186,825	146,883	0.7%
Total all Medical Centers	266,929	267,315	218,275	-0.1%

(1) Includes Lake as of April 1, 2021

(2) UHRH Richmond and Bedford campuses closed on of August 12, 2022

Adjusted discharges for the System declined 0.1% through the end of fiscal year 2022 as compared to the same period in 2021. This minimal decline can be attributed to the closure of the UHRH Richmond and Bedford campuses as the remaining medical centers reported an increase of 2.3%. This increase was driven primarily at Geauga and Lake of 7.7% and 4.4%, respectively. As stated previously in this report, both inpatient and outpatient volumes were materially impacted by the surge of COVID-19 Omicron variant patients, particularly in January and February 2022 resulting in the curtailment of non-essential surgical procedures and temporary closure of certain nursing units. Staffing challenges continue to impact the System, forcing intermittent reductions in activity.

Patients in Beds

The table below presents the trends in general inpatient activity and patients in beds for the System, Academic Medical Center (UHCMC), and Community Medical Centers for the years ended December 31, 2022, 2021, and 2020, and includes Lake as of April 1, 2021.

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Management's Discussion and Analysis

Patient Activity

Inpatient Activity				
For the Years Ended December 31st				
<i>Unaudited</i>				
Patients in Beds	2022 ⁽²⁾	2021 ⁽¹⁾	2020	% Change 2022 vs. 2021
Discharges				
Academic Medical Center	39,530	40,834	36,953	-3.2%
Community Medical Centers	66,039	66,615	51,490	-0.9%
Total all Medical Centers	105,569	107,449	88,443	-1.7%
Observations				
Academic Medical Center	5,535	7,081	7,141	-21.8%
Community Medical Centers	20,246	23,838	17,129	-15.1%
Total all Medical Centers	25,781	30,919	24,270	-16.6%
Inpatient Surgeries				
Academic Medical Center	11,594	12,763	12,692	-9.2%
Community Medical Centers	14,960	14,237	13,105	5.1%
Total all Medical Centers	26,554	27,000	25,797	-1.7%
Case Mix Index - All Payor Acute				
Academic Medical Center	2.06	2.05	2.06	0.5%
Community Medical Centers	1.60	1.59	1.55	0.6%
Total all Medical Centers	1.78	1.77	1.76	0.6%
(1) Includes Lake as of April 1, 2021				
(2) UHRH Richmond and Bedford campuses closed on of August 12, 2022				

The System reported a 1.7% decline in discharge volumes for fiscal year 2022 as compared to the same period in the prior year. The Community Medical Centers decline of 0.9% was driven by the closure of the UHRH Richmond and Bedford campuses, offset by the addition of Lake which accounted for 20.1% of the Community Medical Centers total discharges. On a same store basis, excluding Richmond and Bedford, the Community Medical Centers reported a decrease of 2.5%, with most reporting declines, led by Elyria's decline of 9.8%. Declines at the other facilities were offset by increases experienced at St. John, Samaritan, and Ahuja of 6.1%, 3.8%, and 0.5%. Declines in surgeries continue to be driven by deliberate actions taken to reduce capacity by closing ORs and shifting volume from the Academic Medical Center to the Community Medical Centers. The reduction in capacity resulted from an extreme shortage of nursing and other front-line caregivers. While the System reported an overall decline in inpatient surgeries of 1.7%, not all medical centers experienced declines. Ahuja, Parma, Samaritan, and St. John reported increases of 18.7%, 11.2%, 5.3%, and 3.0%, respectively, noting the closure of the UHRH Richmond and Bedford campuses contributed to the increase at Ahuja. Lake and Beachwood represented 19.7% of Community Medical Center inpatient surgeries, noting this represents twelve months in FY 2022 compared to only nine months in FY 2021. The System is continuing to experience a shift of surgeries to the outpatient setting from the inpatient side. As noted above, staffing shortages continue to contribute to the need to redirect and reduce inpatient surgeries. The case mix index for the System and the Academic Medical Center remained consistent through the end of 2022 at 1.78 and 2.06, respectively. Staffing shortages are the primary factor in the decline in surgical volume. The System has enacted strategies to i) improve the recruitment process, ii) better retain existing staff, and iii) address the problems caused by nurse Agency and Travelers. Please refer to the "Human Capital: UH Caregivers" section of this report herein for further details.

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Management's Discussion and Analysis

Patient Activity

Outpatient Activity

Included in the table below are the trends in outpatient activity for the System, Academic Medical Center, and Community Medical Centers for the years ended December 31, 2022, 2021, and 2020, and includes Lake as of April 1, 2021.

For the Years Ended December 31 st				
Outpatient Activity	2022 ⁽²⁾	2021 ⁽¹⁾	2020	% Change 2022 vs. 2021
<i>Unaudited</i>				
Outpatient Surgeries				
Academic Medical Center	21,633	21,461	18,913	0.8%
Community Medical Centers	74,667	75,391	54,614	-1.0%
Total all Medical Centers	96,300	96,852	73,527	-0.6%
Outpatient Procedures				
Academic Medical Center	2,917,874	2,968,895	2,643,861	-1.7%
Community Medical Centers	5,494,978	5,664,632	4,137,093	-3.0%
UH Laboratory Services	4,519,484	4,202,208	3,254,466	7.6%
Total System	12,932,336	12,835,735	10,035,420	0.8%
ED Visits				
Academic Medical Center	93,463	94,319	88,106	-0.9%
Community Medical Centers	325,676	333,867	275,418	-2.5%
Total all Medical Centers	419,139	428,186	363,524	-2.1%
(1) Includes Lake as of April 1, 2021				
(2) UHRH Richmond and Bedford campuses closed on of August 12, 2022				

Outpatient surgeries at the Academic Medical Center experienced a slight increase at 0.8% for the year ended December 31, 2022 as compared to the same period in the prior year. Same store Community Medical Centers, excluding the UHRH Richmond and Bedford campuses, reported an increase 1.1%, driven by increases at Geneva, Portage, Samaritan, and Ahuja of 26.1%, 10.2%, 4.1%, and 3.3%, respectively. Geneva's atypical increase was driven by increased market demand with coverage provided by outlying UH surgeons. Lake and Beachwood represented 13.1% of total outpatient surgeries reported in 2022 for the System in the table above, noting this represents twelve months in FY 2022 compared to only nine months in FY 2021.

The System reported an increase in outpatient procedures of 0.8% over the prior period. While the System's laboratory services business line, UH Laboratory Services, reported a 7.6% increase in outpatient procedures through the end of fiscal year 2022 as compared to the same period in 2021, same store medical centers reported an overall decline of 1.4%. The System is shifting certain lab procedures from the hospital setting to UHLSF, significantly impacting volumes in both business units. In addition to lab services, Lake and Beachwood were also driving factors to the 0.8% System increase contributing 11.0% of the System's total outpatient procedure volume and 25.9% of the Community Medical Center's. The Community Medical Centers, excluding the UHRH Richmond and Bedford campuses, reported a decline of 5.9% through the end of the fourth quarter 2022, again noting the shift of certain lab procedures from the hospital setting to UHLSF.

The Emergency Departments of UH reported combined volume decreases of 2.1% remaining through the year ended December 31, 2022 as compared to the same period in 2021. While approximately half of the

Management's Discussion and Analysis

Patient Activity

medical centers reported increases in ED volume, the medical centers on a same store basis experienced a 4.6% decrease. The decrease was driven primarily by declines at Portage (6.6%), Samaritan (6.4%), Elyria (4.2%), Conneaut (1.3%), and the Academic Medical Center (0.9%), inclusive of the closure of UHRH Richmond and Bedford campuses. While the Community Medical Centers volume was positively impacted by the addition of Lake, contributing 17.1% of the total, the closure of Richmond and Bedford negatively impacted volumes, resulting in an overall decline of 2.5%. Same store Community Medical Centers, excluding Richmond and Bedford, reported an increase of 1.1% driven by strong increases at Geneva, St. John, Ahuja, and Geauga, 23.8%, 5.8%, 4.6%, and 4.5%, respectively. It should be noted, the growth at Geneva is primarily driven by the closure of Lake's free standing ED located in Madison. Seven free-standing emergency departments "FSED's" were closed during the pandemic and remain closed as of December 31, 2022. The urgent care businesses associated with these facilities remain open.

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The table below sets forth the net operating (loss)/income and net operating (loss)/income as adjusted for the System for the years ended December 31, 2022, 2021, and 2020, and includes Lake as of April 1, 2021.

Net Operating (Loss)/Income - Unaudited				2022 vs. 2021	
<i>\$ in thousands</i>	FY 2022	FY 2021 (1)	FY 2020	\$ Change	% Change
Net operating (loss)/income	(\$302,089)	\$104,501	\$54,655	(\$406,590)	-389.1%
Non-recurring special charges (2)	28,183	15,263	(23,472)	12,920	-84.6%
Accelerated depreciation (3)	62,772	22,781	-	39,991	100.0%
Net operating (loss)/income as adjusted	(211,134)	142,545	31,183	(353,679)	-248.1%
Operating margin as adjusted	-3.9%	2.7%	0.7%		

(1) Includes Lake as of April 1, 2021

(2) Includes non-recurring items related to severance, post-closing operations of UHRH Richmond and Bedford campuses, and the Epic EMR conversion

(3) Includes depreciation expense related to the write-off of assets pertaining to the closure of the UHRH Richmond and Bedford campuses and accelerated write-off of legacy EMR prior to EPIC install

The System reported an adjusted net operating loss of \$211 million for fiscal year 2022, a decline of \$354 million from the \$143 million adjusted net operating income reported for the same period in 2021. This adjusted measure represents the operating margin, excluding non-recurring charges and accelerated depreciation, which management believes is a better representation of the ongoing operations of the System. As noted in the chart above, accelerated depreciation relates to the write-off of UH's legacy electronic medical record ("EMR") prior to installing the new EMR, Epic (\$41 million) and charges relating to the write-off of assets pertaining to the closure of the UHRH Richmond and Bedford campuses (\$22 million). Non-recurring items include severance (\$5 million) related to the MBE initiative discussed earlier in this report, post-closure operations of the UHRH Richmond and Bedford campuses (\$15 million), and Epic conversion costs (\$15 million), offset by insurance recoveries (\$7 million). As previously stated, the decline in operating income is primarily driven by reductions of inpatient surgeries coupled with increased labor costs and increased costs for patient care supplies described in further detail below.

The table below sets forth the operating revenue and net patient service revenue per adjusted discharge for the System for the years ended December 31, 2022, 2021, and 2020, and includes Lake as of April 1, 2021.

Consolidated System - Unaudited				2022 vs. 2021	
<i>\$ in thousands</i>	FY 2022	FY 2021 (2)	FY 2020	\$ Change	% Change
Operating Revenue					
Net patient service revenue	\$ 5,058,417	\$ 4,938,316	\$ 4,058,340	\$120,101	2.4%
Other	348,690	400,081	421,214	(51,391)	-12.8%
Total operating revenue	5,407,107	5,338,397	4,479,554	68,710	1.3%
Key Statistics					
Net patient service revenue per adjusted discharge (1)	15.00	14.87	14.69	0.13	0.9%
Case mix index (all-payor acute)	1.78	1.77	1.76	0.01	0.3%
Total employed physicians	1,929	1,892	1,769	37	2.0%
Net patient service revenue from employed physicians	798,029	775,567	674,353	22,462	2.9%

(1) Includes Medical Centers only

(2) Includes Lake as of April 1, 2021

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While the System reported an overall net operating loss through the end of fiscal year 2022, it continued to experience a positive trend in operating revenue, driven by a \$120 million increase (2.4%) in net patient service revenue as compared to the prior period. This was driven primarily by the full-year impact of Lake in FY2022 which accounted for \$87 million (72.5%) of the increase⁴ followed by St. John at \$23 million (19.0%) of the increase. Inclusive of St. John but excluding the UHRH campuses that closed, same store Community Medical Centers revenue increased \$51 million (3.7%). The UHMG physician group reported growth in net patient service revenue of \$22 million (6.2%), while the UHMP physician group reported relatively flat net patient service revenue of \$0.4 million (0.1%). As noted in the financial highlights section above, the Home Care business unit experienced a \$67 million (53.1%) increase in net patient service revenue primarily driven from growth in the System's specialty pharmacy and infusion service lines of 21.9% and 126%, respectively. Cleveland Medical Center experienced a decline in net patient revenue of \$28 million (1.3%) resulting from lower surgical volume and acuity. The System reported a reduction in Commercial payor mix in favor of government payors to the aging population in Northeast Ohio, and continued to benefit from increased revenue related to the cessation of sequestration (2% Medicare cut) although it is acknowledged that sequestration is getting phased back in, which reduced Medicare reimbursement beginning July 2022. The cessation of the sequestration cut added \$25 million to net patient service revenue for fiscal year 2022, remaining relatively consistent from the amount recognized in the prior period. Medicare revenue will be adversely impacted from sequestration going forward.

The System reported other revenue of \$349 million for the year ended December 31, 2022, declining \$51 million (16.0%) from the \$400 million reported for the same period in 2021. The physician groups, UHMG and UHMP, reported combined growth in other revenue of \$42 million (24.0%) over the prior period. Other revenue also included COVID-19 funding, specifically, FEMA reimbursement of \$28 million vs. \$7 million in the prior period. This was offset by a decline in CARES Act revenue related to \$100 million recognized in FY 2021 that did not repeat in 2022. Also reported in other revenue is the System's share of income from operations and investment earnings of the joint venture with Southwest General Medical Center. For its share of Southwest's business, the System reported a \$6 million net operating loss coupled with a \$19 million investment loss in FY2022 as compared to \$6 million net operating income and \$7 million of investment gain reported in FY2021. This \$38 million net change from FY2021 to FY2022 was a significant driver of the System's \$51 million decline.

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⁴ Includes twelve months of Lake revenue in 2022 vs. nine months in 2021 (see footnote 1 in table above),

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Financial Review

The table below sets forth the total operating expense, total labor costs, and key statistics for the System for the years ended December 31, 2022, 2021, and 2020, and includes Lake as of April 1, 2021.

Consolidated System - Unaudited				2022 vs. 2021	
\$ in thousands	FY 2022	FY 2021 (3)	FY 2020	\$ Change	% Change
Operating Expense					
Labor costs	\$3,151,102	\$2,880,165	\$2,494,271	\$270,937	9.4%
Purchased services	376,940	326,271	278,843	50,669	15.5%
Patient care supplies	1,227,548	1,126,313	935,119	101,235	9.0%
Other supplies	50,496	43,858	44,577	6,638	15.1%
Insurance	62,159	97,338	57,282	(35,179)	-36.1%
Other	518,325	467,220	386,707	51,105	10.9%
Depreciation and amortization	273,228	235,345	198,634	37,883	16.1%
Non-cash interest for the sale of future revenue	3,582	2,696	908	886	32.9%
Interest	47,418	54,487	52,030	(7,069)	-13.0%
Recoveries in excess of insurance	(6,894)	(750)	(26,053)	(6,144)	819.2%
Special Charges	5,292	953	2,581	4,339	455.3%
Total operating expenses	5,709,196	5,233,896	4,424,899	475,300	9.1%
Key Statistics					
Labor costs per adjusted discharge (1)	\$6.19	\$5.49	\$5.69	\$0.70	12.8%
Labor costs as percentage of total operating revenue	58.3%	54.0%	55.7%	4.30	8.0%
Total FTE Count	30,895	30,348	27,576	547	1.8%
Patient care supplies as percentage of total operating revenue	22.7%	21.1%	20.9%	1.60	7.6%
Average length of stay - acute only	4.80	4.42	4.72	0.38	8.6%
Case-mix-index	1.78	1.77	1.76	0.01	0.6%
Total operating expense per adjusted discharge (1)	15.81	14.20	14.73	1.61	11.3%
Capital spending \$	374,200	242,658	220,765	131,542	54.2%
Capital spending ratio (2)	1.37	1.03	1.11	0.34	33.0%
(1) Includes Medical Centers only					
(2) Defined as total cash flows from the acquisition of property, plant and equipment divided by depreciation and amortization expense					
(3) Includes Lake as of April 1, 2021					

The System reported total operating expenses of \$5.7 billion for the year ended December 31, 2022, up \$475 million (9.1%) from the level reported for the same period in 2021. While Lake represented 29.7% (\$141 million) of the \$475 million increase, System same store expenses increased 6.8% (\$334 million) as compared to the prior period. In addition to Lake, the growth was also driven by increased labor costs, purchased services, and patient care supplies of \$271 million, \$51 million, and \$101 million, respectively. Further details are provided throughout the remainder of this section.

The growth in labor cost for the System of \$271 million (9.4%) was driven primarily at the medical centers with the Academic Medical Center reporting increase of \$107 million (14.0%), same store Community Medical Centers, excluding the UHRH closed campuses, an increase of \$78 million (15.5%), and Lake an increase of \$35 million which represents 12.9% of the total \$271 million increase. The System experienced increased premium labor for overtime resulting from staff shortages directly affecting patient care, and the impact of temporary labor initiatives to address critical staffing related to open positions and staffing shortages. Agency labor for FY 2022 was \$177 million, an increase of \$121 million (218%), vs. FY 2021. System labor costs per adjusted discharge increased 12.8%, illustrating the overall stress on labor costs during FY 2022 as compared to FY 2021.

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The System's patient care supply costs continued to increase during 2022, up \$101 million (9.0%) for the year ended December 31, 2022 as compared to the same period in 2021. Lake represented \$35 million, or 34.3% of the total increase noting the prior period included only nine months of Lake results vs. twelve months in 2022. System same store patient care supplies as a percentage of total operating revenue increased to 22.9% from the 21.4% reported for the same period in 2021. The Home Care business unit contributed heavily to this increase experiencing a \$50 million increase (47.8%) driven primarily by pharmaceuticals related to the specialty pharmacy service line. This increase is related to per-unit supply cost inflation and the growth in the Specialty Pharmacy business as noted above. Specialty Pharmacy supply costs are offset with growth in revenue. Representing a diversified stream of revenue, the System has been growing the Specialty Pharmacy line of business rapidly over the past 3 years with revenues exceeding \$200 million annually.

Depreciation expense increased to \$273 million, up \$38 million (16.1%) for FY 2022 as compared to the FY 2021. Lake entities reported an increase in depreciation expense of \$2 million during the current period, while System same store reported an increase of \$36 million (16.4%). Included in depreciation expense is \$41 million associated with accelerated depreciation related to the decision to install the Epic electronic medical record system and sunset the existing legacy system through 2023 in addition to depreciation expense for the write-off of \$22 million of assets, related to the closure of the UHRH Richmond and Bedford campuses. For the year ended December 31, 2022, capital spending was impacted by the implementation of Epic, the Ahuja Phase II project (see "*Organizational Structure*" section of this report herein, and the addition of Lake therefore increasing over the same period in 2021, \$132 million (54.2%) with the capital spending ratio also increasing by 0.34 to 1.37.

Insurance expense was reported at \$62 million for the year ended December 31, 2022, representing a decline of \$35 million (36.1%) as compared to the same period in 2021. Certain insurance charges were recognized in 2021 that did not repeat in 2022. See the *Risk Management* section of this report for further information.

The System's interest expense declined \$7 million during FY 2022 as compared to the same period in 2021. The SIFMA index average rate (upon which certain variable rate UH debt is priced) increased to 1.21% for the year ended December 31, 2022 as compared to an average rate of 0.05% for the same period in 2021. In April 2022, the System restructured three fixed payer interest rate swaps which included selling a one-time option, partial termination, and removal of a mandatory termination provision. These three transactions resulted in combined net cash flow to UH of \$5 million which was recorded as a reduction to interest expense during the second quarter 2022. While interest rates rose during the current period, the impact of UH interest rate swaps and the effect of the Series 2021 refunding bonds served to reduce interest costs overall for FY 2022.

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Management's Discussion and Analysis

Ratios

The table below sets forth the Consolidated System's liquidity position (cash and board designated investments) for the years ended December 31, 2022, 2021, and 2020, and includes Lake as of April 1, 2021.

Liquidity Position - Consolidated System

\$ in Thousands

	(UNAUDITED)		
	Actual 31-Dec-22	Actual 31-Dec-21	Actual 31-Dec-20
Cash and cash equivalents	\$224,195	\$691,177	\$825,899
Unrestricted investments	2,025,337	2,257,445	1,572,405
Total cash and unrestricted investments	2,249,532	2,948,622	2,398,304
Operating expenses	5,709,196	5,233,896	4,424,899
Less: Depreciation, amortization, non-recurring items	304,993	238,244	176,070
Cash expenses (a)	\$5,404,203	\$4,995,652	\$4,248,829
Days of cash on hand	152	215	206

(a) Cash expenses are calculated as operating expenses less depreciation, amortization, non-cash interest, and non-recurring items.

The System reported 152 days cash on hand as of December 31, 2022, a decrease of 63 days from the level reported at December 31, 2021. The \$699 million (23.7%) decrease in unrestricted cash and investments is primarily due to the decline in cash and cash equivalents of \$467 million (67.6%). Material factors impacting cash and unrestricted investments include i) declines in unrestricted investments (\$232 million), ii) capital spending (\$374 million), iii) recoupment of CMS advances made as a component of pandemic relief (\$209 million), iv) repayment of FICA deferral that was also a component of pandemic relief (\$36 million), and v) repayment of joint venture related debt inherited from the acquisition of Lake (\$19 million).

The Obligated Group's liquidity position (cash and unrestricted investments) for the years ended December 31, 2022, 2021, and 2020 is displayed in the table below:

Liquidity Position - Obligated Group (b)

\$ in Thousands

	(UNAUDITED)		
	Actual 31-Dec-22	Actual 31-Dec-21	Actual 31-Dec-20
Cash and cash equivalents	\$208,055	\$656,427	\$820,259
Unrestricted investments	1,933,857	2,175,380	1,489,604
Total cash and unrestricted investments	2,141,912	2,831,807	2,309,863
Operating expenses (c)	3,925,175	3,299,293	2,875,809
Less: Depreciation, amortization, non-recurring items	274,610	198,363	149,515
Cash expenses (a)	\$3,650,565	\$3,100,930	\$2,726,294
Days of cash on hand	214	333	309

(a) Cash expenses are calculated as operating expenses less depreciation, amortization, non-cash interest, and non-recurring items.

(b) Lake became a member of the Obligated Group on October 13, 2021. UH Regionals became a member of the Obligated Group on February 1, 2022.

(c) Operating expenses for the current period include adjustments to corporate allocations from the Parent to Obligated Group members totaling \$27 million. While prior periods were not adjusted, the result would have been an increase to operating expenses of \$25 million and \$11 million, respectively, for the years ended December 31, 2021 and 2020.

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For the year ended December 31, 2022, the Obligated Group had 214 days of cash on hand as compared to 333 days of cash on hand for the year ended December 31, 2021. The Obligated Group has a covenant in its Master Trust Indenture that requires it to maintain a minimum of 90 days of cash on hand. The Obligated Group was in compliance with this covenant for the years ended December 31, 2022, 2021, and 2020.

During 2022, adjustments were made to corporate allocations from the Parent to UHCMC, the Academic Medical Center, a member of the Obligated Group. This adjustment represented an increase to purchased services for UHCMC of \$27 million, thereby increasing operating expenses for the Obligated Group \$27 million, for the year ended December 31, 2022. In turn, the non-obligated group, through Home Care and UHMG, experienced a net decrease in purchased services for the same amount, \$27 million for the year ended December 31, 2022. Total operating expenses for the consolidated system remain unchanged at \$5.7 billion.

Unrestricted investments for the System and Obligated Group depicted above include alternative investments of private equity, hedge funds, private real estate, long/short equity, commodities, and distressed debt limited partnerships. Some of the limited partnership investments require management to make estimates of fair market value. Also, some of these investments contain contractual liquidity constraints; however, recognized secondary markets often exist for these alternative investments.

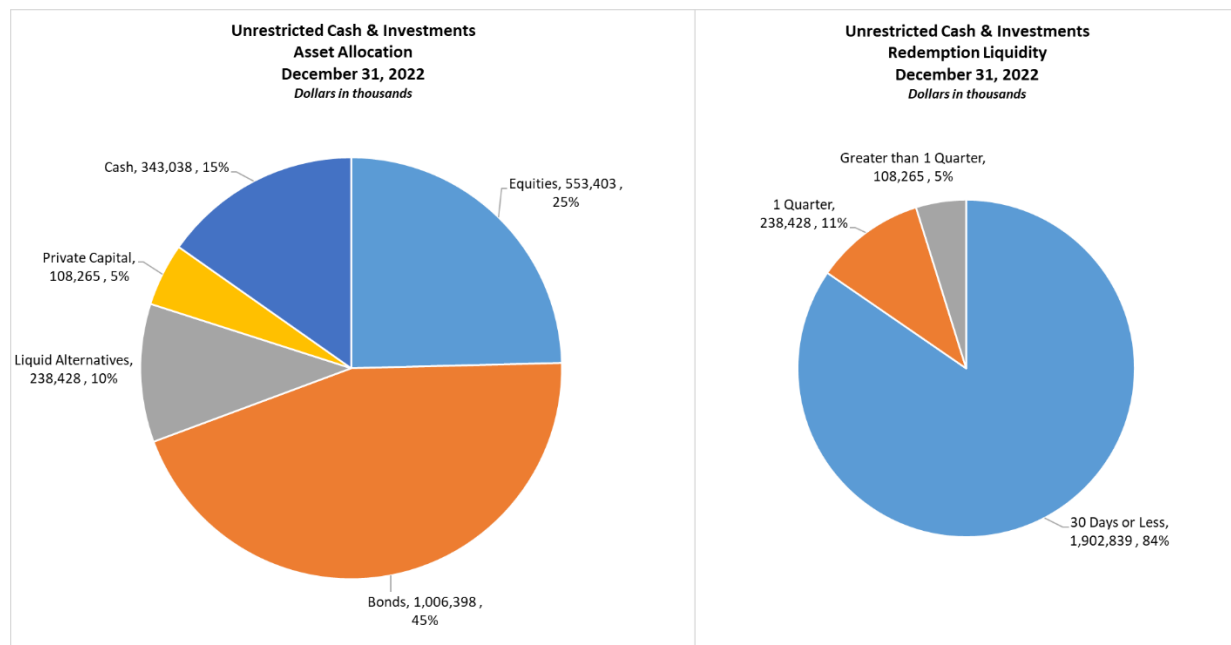
Alternative investments included in unrestricted investments totaled \$347 million at December 31, 2022, relatively flat from the \$362 million reported at December 31, 2021. The System manages two distinct investment pools organized by the purpose for which they serve. A "Protection Pool" is utilized to preserve balance sheet liquidity, even during times of severe market declines, and an "Opportunity Pool" for which longer term investments are invested in less liquid and potentially higher returning alternative asset classes. This structure exists to improve unrestricted liquidity and provide for protection of unrestricted investments from market volatility.

The charts below display the asset allocation and liquidity structure of the unrestricted cash and investments that comprise the days cash on hand ratio, and illustrate the liquidity redemption periods and safety of the investments at December 31, 2022.

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Management's Discussion and Analysis

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The table below sets forth the System's leverage position (debt-to-unrestricted capitalization) at December 31, 2022, 2021, and 2020, and includes Lake as of April 1, 2021.

Leverage Position - Consolidated System \$ in Thousands

	(UNAUDITED)		
	Actual 31-Dec-22	Actual 31-Dec-21	Actual 31-Dec-20
Current installments of long-term debt	\$7,645	\$17,663	\$6,407
Revolving credit borrowing	60,000	-	-
Long-term debt, less current installments	1,710,454	1,722,773	1,496,817
Total debt	1,778,099	1,740,436	1,503,224
Net assets without donor restrictions	2,300,507	2,628,332	1,958,872
Total unrestricted capitalization	4,078,606	\$4,368,768	\$3,462,096
Debt-to-unrestricted capitalization	43.6%	39.8%	43.4%

The System's debt-to-unrestricted capitalization ratio at December 31, 2022 increased to 43.6% from the level of 39.8% reported at December 31, 2021. The increase occurred due to increased debt of \$38 million, and a decrease in net assets without donor restrictions of \$328 million (12.5%). The decrease in net assets without donor restrictions reflects the net operating and unrestricted investment losses reported for FY 2022 previously discussed in the "Financial Review" section above.

The Consolidated System's maximum annual debt service ("MADS") coverage for the years ended December 31, 2022, 2021, and 2020, is presented in the table below and includes Lake as of April 1, 2021.

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Debt Service 'MADS' Coverage (a) - Consolidated System

\$ in Thousands

	(UNAUDITED)		
	Actual 31-Dec-22	Actual 31-Dec-21	Actual 31-Dec-20
Income available to cover debt service (b)	85,368	592,186	307,162
MADS	101,992	96,711	83,915
MADS Coverage (x-times)	0.8	6.1	3.7

(a) MADS = the maximum annual debt service requirement defined as the largest amount of principal and interest payments and other debt service on all long-term indebtedness of the Obligated Group coming due in any subsequent fiscal year, calculated as described in the Master Trust Indenture.

(b) Defined as net income/(loss) excluding depreciation, amortization, interest/non-cash interest, and non-recurring items.

MADS coverage for the System declined to 0.8 times for the year ended December 31, 2022 as compared to 6.1 times reported for the year ended December 31, 2021. Income available to cover debt service at December 31, 2022 decreased \$507 million (85.6%) driven primarily by the negative operating margin. For purposes of this calculation, non-operating income of \$218 million related to the member substitution of Lake was excluded for the year ended December 31, 2021.

MADS Coverage for the prior periods have been restated to be consistent with the current period related to the inclusion of recurring expenses and exclusion of non-recurring expenses. The impact of this change was a 0.2 decline from the 6.3 previously reported for the year ended December 31, 2021, and an increase of 0.3 from the 3.4 previously reported for the year ended December 31, 2020.

The table below sets forth the maximum annual debt service coverage for the Obligated Group for the years ended December 31, 2022, 2021, and 2020.

Debt Service 'MADS' Coverage (a) - Obligated Group (c)(d)

\$ in Thousands

	(UNAUDITED)		
	Actual 31-Dec-22	Actual 31-Dec-21	Actual 31-Dec-20
Income available to cover debt service (b)	339,281	715,390	470,576
MADS	101,992	96,711	83,915
MADS Coverage (x-times)	3.3	7.4	5.6

(a) MADS = the maximum annual debt service requirement defined as the largest amount of principal and interest payments and other debt service on all long-term indebtedness of the Obligated Group coming due in any subsequent fiscal year, calculated as described in the Master Trust Indenture.

(b) Defined as net income excluding depreciation, amortization, interest/non-cash interest, and non-recurring items.

(c) Lake became a member of the Obligated Group on October 13, 2021 and UH Regionals became a member of the Obligated Group on February 1, 2022.

(d) Operating expenses for the current period include adjustments to corporate allocations from the Parent to Obligated Group members totaling \$27 million. While prior periods were not adjusted, the result would have been an increase to operating expenses of \$25 million and \$11 million, respectively, for the years ended December 31, 2021 and 2020.

MADS coverage decreased to 3.3 for the year ended December 31, 2022 from the 7.4 level reported at December 31, 2021. For purposes of this calculation, non-operating income of \$218 million related to the member substitution of Lake was excluded for the year ended December 31, 2021. The Obligated Group has a rate covenant in its Master Trust Indenture that requires it to maintain a minimum of 1.20x annual debt service coverage. For the purposes of the covenant measure, annual debt service is used instead of

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MADS. The Obligated Group was in compliance with annual debt service coverage for the years ended December 31, 2022, 2021, and 2020.

MADS Coverage for the prior periods have been restated to be consistent with the current period related to the inclusion of recurring expenses and exclusion of non-recurring expenses. The impact of this change was a 0.2 decline from the 7.6 previously reported for the year ended December 31, 2021, and an increase of 0.2 from the 5.4 previously reported for the year ended December 31, 2020.

For fiscal year 2022, annual debt service is significantly lower than the MADS used for this calculation. As noted above, during 2022, adjustments were made to corporate allocations from the Parent to UHCMC, the Academic Medical Center, a member of the Obligated Group. Please refer to the Obligated Group's *"liquidity position"* in this section of the report herein for further information.

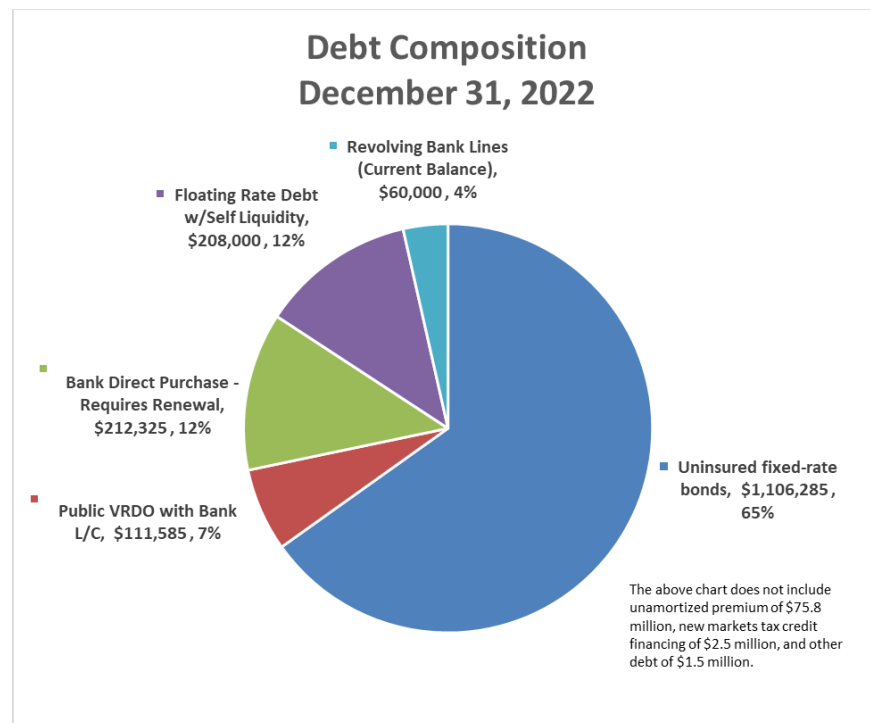
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Management's Discussion and Analysis

Outstanding Debt

Overall Debt Structure

The table and chart below display the System's debt composition at December 31, 2022. This percentage remained the same from the level reported at December 31, 2021. Furthermore, the System continues to monitor its outstanding debt portfolio with a view towards taking advantage of market opportunities and maintains flexibly to take advantage of strategic opportunities.



The table below displays the Obligated Group's overall debt related to bank credit renewal risk at December 31, 2022.

Summary of Revenue Bond Renewals

As of December 31, 2022



(\$ in thousands)

<u>Renewal Date</u>	<u>Total Outstanding</u>	<u>% of Total Bank Debt</u>
2023	\$ 61,585	19.0%
2026	\$ 50,000	15.4%
2027	\$ 46,915	14.5%
2030	\$ 127,010	39.2%
2031	\$ 38,400	11.9%
	<u>\$ 323,910</u>	<u>100.0%</u>

Credit Ratings

Currently, the System is rated by Moody's Investors Service ("Moody's") and Standard & Poor's ("S&P"). On September 21, 2021, Moody's affirmed the System's A2 rating with a Stable Outlook and on January 18, 2023, S&P affirmed the System's A rating with a Stable Outlook. Such ratings reflect only the views of such organizations and any desired explanations of the significance of such ratings should be obtained from the rating agencies furnishing such ratings.

Generally, the credit rating agencies describe their ratings as an overall assessment of an organization's ability to honor its financial obligations. Higher credit ratings indicate a lower probability of default. According to the rating agencies, the rating analysis considers not only debt instruments and financial performance, but the organization as a whole. A general summary of the rating scales used by Moody's and S&P are presented below.

Rating Scales ⁽¹⁾			
Category			
Moody's ⁽²⁾	S&P ⁽³⁾	Grade	Risk
Aaa	AAA	premium	minimal
Aa	AA		
A A2	A A		
Baa	BBB		
Ba	BB		
B	B		
Caa	CCC	extremely poor	high/default
Ca	CC		
C	C		

(1) Rating scales are presented in a condensed format for illustrative purposes

(2) Range within a category is distinguished by a 1, 2, or 3, 1 being higher

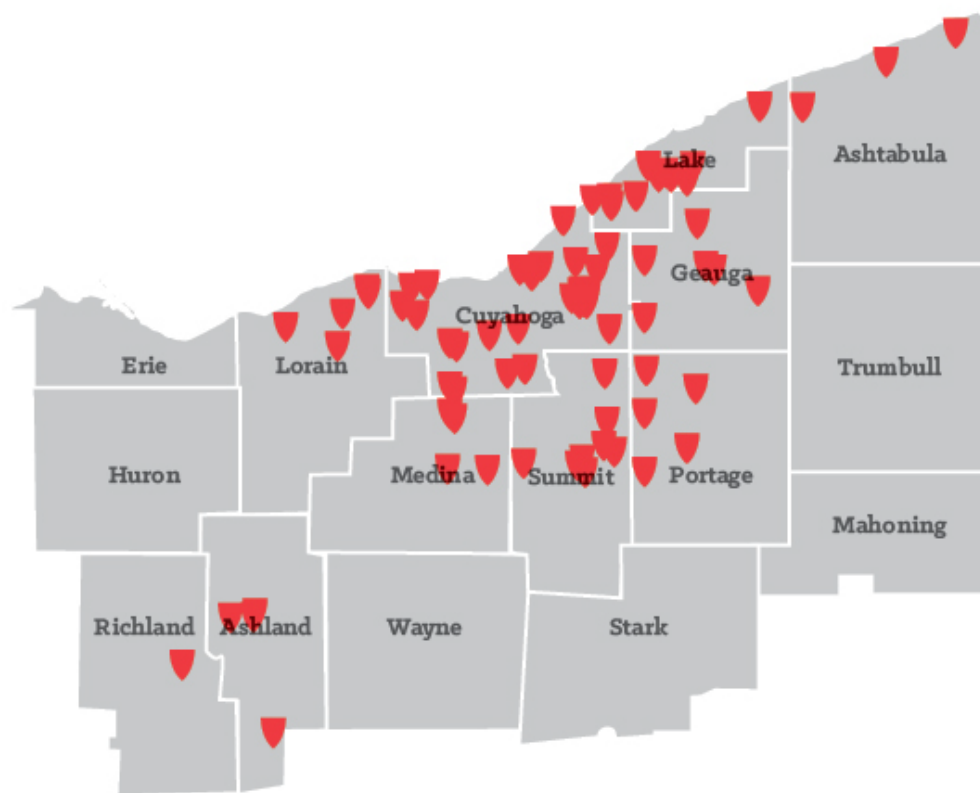
Source: Moody's Rating Scale and Definitions

(3) + or - indicates relative placement within a category, + being higher

Source: S&P Global Ratings Definitions

Service Area and Market Share

The System has broad presence throughout Northeast Ohio. The map below illustrates the breadth of the System's service area through its hospitals, outpatient health centers and joint ventures.



University Hospitals Medical and Health Centers and Joint Ventures

Ashland

UH Samaritan Medical Center

UH Baney Road Health Center
UH Samaritan Health Center
UH Kettering Health Center

Ashtabula

UH Conneaut Medical Center
UH Geneva Medical Center

UH Ashtabula Health Center

Cuyahoga

UH Ahuja Medical Center
UH Beachwood Medical Center
UH Cleveland Medical Center
UH Parma Medical Center
UH St. John Medical Center

UH Broadview Heights Health Center
UH Euclid Health Center
UH Foley ElderHealth Center
UH Independence Health Center
UH Landerbrook Health Center
UH Mayfield Village Health Center
UH Minoff Health Center at Chagrin Highlands
UH North Olmsted Health Center

UH Otis Moss Jr. Health Center
UH Rainbow Babies & Children's Ahuja Center for Women & Children
UH St. John Health Center
UH Solon Health Center
UH Suburban Health Center
UH Wellpointe Health Center
UH Westlake Health Center

Highland Springs Hospital
UH Rehabilitation Hospital
Southwest General Hospital
Strongsville Medical Center

Gauga

UH Geauga Medical Center

UH Bainbridge Health Center
UH Chardon Health Center
UH Chesterland Health Center
UH Evans Middlefield Health Center
UH Geauga Health Center

Lorain

UH Elyria Medical Center

UH Avon Health Center
UH Amherst Health Center
UH Perrico Health Center
UH Sheffield Health Center

UH Avon Rehabilitation Hospital

Lake

UH Lake West Medical Center
UH TriPoint Medical Center

UH Brunner Sanden Deltrick Wellness Center
UH Concord Health Center
UH Lake Continuing Care Center
UH Lake SOM Health Center
UH Madison Health Center
UH Mentor Health Center
UH Mentor Hopkins Health Center
UH Willowick Health Center

Medina

UH Medina Health Center
UH Sharon Health Center

Southwest General
Brunswick Medical Center

Portage

UH Portage Medical Center

UH Aurora Health Center
UH Kent Health Center
UH Mantua Health Center
UH Streetsboro Health Center

Richland

UH Samaritan Richland Health Center

Summit

UH Cuyahoga Falls Health Center
UH Fairlawn Health Center
UH Hudson Health Center
UH Twinsburg Health Center

Western Reserve Hospital
Western Reserve Hospital Urgent Care

Service Area and Market Share

The approximately 4.0 million population of the Northeast Ohio market is expected to decline slightly through 2025. However, there are significant population shifts occurring throughout the 16 county market with some ZIP codes declining and other ZIP codes growing (Lake, Lorain, Medina, and Summit Counties). An anticipated growth shift in the aging local population, especially the 65+ age group, could result in greater demand for health care services.

The System has a broad presence throughout its 8 county primary service area and its 16 county secondary service area in the Northeast Ohio market with its 21 hospital locations (including 5 joint ventures) and over 50 major health centers and outpatient centers. UH is continuing to invest financial resources in ZIP codes where the population is growing and where it manages Accountable Care Organization (“ACO”) lives, which number approximately 600,000.

The System’s primary competitors are The Cleveland Clinic (which now includes Akron General Health System and Mercy Canton), Ohio Health, MetroHealth Medical Center, Bon Secours (includes Mercy Health), and Summa Health System. Over the past 20 years, the Northeast Ohio market has been characterized by rapid consolidation among health care providers through mergers or other forms of affiliation. The System’s discharge market share for the nine months ended September 30, 2022⁵ was 35.4% for the eight county primary market area. The System’s discharge market share remained consistent compared to the same period in 2021.

For the year ended December 31, 2022, the System increased its market share in total surgeries based on data from the local Center for Health Affairs.

⁵ The most current available information is presented. Source: Ohio Hospital Association.

Organizational Structure

UH SYSTEM PROFILE

2022 Revenues

	Principal Business	Registered Beds (a)	\$ in thousands	% of Total
Members of the Obligated Group				
University Hospitals Health System	Parent Holding Corp.	-	\$45,004	0.8%
University Hospitals Cleveland Medical Center	Academic Medical Center	1,052	2,384,231	44.1%
University Hospitals Ahuja Medical Center	Community Medical Center	144	251,053	4.6%
University Hospitals Elyria Medical Center	Community Medical Center	287	212,352	3.9%
UH Regional Hospitals - Geauga campus (d)	Community Medical Center	215	234,229	4.3%
University Hospitals Parma Medical Center	Community Medical Center	287	193,741	3.6%
University Hospitals St. John Medical Center	Community Medical Center	143	218,522	4.0%
Lake Hospital System, Inc.	Community Medical Center	413	379,622	7.0%
Intercompany eliminations		-	(11,338)	-0.1%
Subtotal - Obligated Group		2,541	3,907,416	72.2%
Other University Hospitals Affiliates				
University Hospitals Portage Medical Center	Community Medical Center	267	172,701	3.2%
University Hospitals Samaritan Medical Center	Community Medical Center	124	93,684	1.7%
University Hospitals Geneva Medical Center	Community Medical Center	25	64,049	1.2%
University Hospitals Conneaut Medical Center	Community Medical Center	25	31,143	0.6%
University Hospitals Beachwood Medical Center	Community Medical Center	24	50,270	0.9%
University Hospitals Medical Practices	Physician Practices	-	478,940	8.9%
University Hospitals Medical Group	Physician Faculty	-	501,139	9.3%
University Hospitals Home Care Services	Home Care Services	-	195,396	3.6%
University Hospitals Laboratory Services Foundation	Laboratory Services	-	65,875	1.2%
Other University Hospitals Affiliates and eliminations		-	(153,506)	-2.8%
Subtotal - Non-obligated Affiliates and Eliminations		465	1,499,691	27.8%
Total Consolidated System		3,006	5,407,107	100.0%
Joint Venture Hospitals				
Southwest General Health Center (b), (c)	Medical Center	368	382,940	66.5%
UH Rehabilitation Hospitals - Avon and Beachwood (c)	Inpatient Rehabilitation Services	100	9,818	1.7%
Western Reserve Hospital (c)	Medical Center	245	161,702	28.1%
Highland Springs (c)	Inpatient/Outpatient Rehabilitation Services	72	21,268	3.7%
Total Joint Ventures		785	575,728	100.0%

(a) Beds set forth in this column refer to registered beds. The utilization statistics and occupancy percentages are based on staffed beds. For the year ended December 31, 2022, the Obligated Group maintained 2,161 staffed beds.

(b) Represents a partnering agreement whereby the Parent shares in 50% of the net income of Southwest, excluding certain items as outlined in the agreement, but has no specified ownership interest.

(c) Represents 100% of the Joint Venture Hospitals revenue. The Parent reports its equity share in the Joint Venture Hospitals in other revenue included above in "Other University Hospitals Affiliates and eliminations". To be presented consistently, all Joint Ventures' operating revenues shown above exclude investment income.

(d) On February 1, 2022, University Hospitals Geauga Medical Center was merged into UH Regional Hospitals. Effective February 1, 2022, UH Regional Hospitals became a member of the UH Obligated Group. Effective July 1, 2022, UH Regional Hospitals Bedford and Richmond campuses were closed. Please refer to the "Obligated Group" section of this report for further details.

The organizational structure presented above is intended to provide only a basic outline of the System's structure and the principal business lines of the Parent, its affiliates, and the Obligated Group and, thus, does not include certain other legal entities that operate under the System.

Obligated Group

The Obligated Group currently comprises the Parent and seven of its operating subsidiaries (collectively, the "Members"). The Members are jointly and severally liable on the taxable and tax-exempt long-term debt incurred by such Members from time to time primarily for the acquisition, building and equipping of the hospital facilities operated by the Members. The Members are also jointly and severally liable on interest rate swaps and revolving credit and other credit facilities entered into with various credit providers. All obligations of the Obligated Group are secured by Master Notes issued under a Master

Organizational Structure

Trust Indenture (the “Master Indenture”) that provides security on an equal shared basis for all holders of Master Notes. As of February 1, 2022, the members of the Obligated Group included the Parent, UHCMC, University Hospitals Ahuja Medical Center, Inc. (“Ahuja”), UH Regional Hospitals (“UH Regionals”, and formerly known as Hospitals Geauga Medical Center), EMH Regional Medical Center d/b/a University Hospitals Elyria Medical Center (“Elyria”), The Parma Community General Hospital Association d/b/a University Hospitals Parma Medical Center (“Parma”), University Hospitals St. John Medical Center (“St. John”), and Lake Hospital System, Inc. (“Lake”). On a combined basis, the Obligated Group generated 72% of the total consolidated revenues of the System through the year ended December 31, 2022.

University Hospitals

The Parent was originally founded in 1940 under the corporate name of “University Hospitals of Cleveland” in connection with the consolidation of four existing hospitals whose origins had extended as far back as 1866. As part of a corporate reorganization in January 1988, the Parent underwent a change of business name to University Hospitals Health System, Inc.

In 1993, in response to developments in the health care market both locally and nationally, the Parent developed a strategy to transition from a traditional, single-site, academic medical center into a regional, integrated health care system that provides, together with its Joint Venture Hospitals (as defined below), care to patients throughout Northeast Ohio.

University Hospitals Cleveland Medical Center

The Parent is the sole corporate member of UHCMC, which is located within the University Circle area of Cleveland, Ohio. UHCMC is an Ohio nonprofit corporation that has been recognized by the Internal Revenue Service as an organization described in Section 501(c)(3) of the Internal Revenue Code.

UHCMC is the System’s 1,052 bed, academic medical center, referred to as “main campus,” which serves as an anchor location for the rest of the System. Main campus serves as home to UH Rainbow Babies & Children’s Hospital (“Rainbow”), UH Seidman Cancer Center (“Seidman”) and UH MacDonald Women’s Hospital (“MacDonald Women’s”). Collectively, these institutions provide primary through quaternary health care services, with specialized services in pediatric medicine, cancer care, women’s health, dermatology, genetics, geriatrics, orthopedics, otolaryngology, surgery, plastic and reconstructive surgery, psychiatry, radiation oncology, sports medicine, rehabilitation services, laboratory services and diagnostic imaging.

For over 50 years, UHCMC has been affiliated with CWRU, providing the academic environment and resources that enable both institutions to recruit outstanding physicians and to promote their careers as clinicians, educators and researchers. For the year ended December 31, 2022, collaborative research funding totaled \$174⁶ million, with \$89 million in total sponsored research funding to CWRU, including NIH grants awarded at UHCMC; and \$85 million in total sponsored research funding to UHCMC, including industry-sponsored clinical trials. UH Cleveland Medical Center is also affiliated with Northeast Ohio Medical University (NEOMED), Oxford University and Technion Israel Institute of Technology.

UHCMC ranks among America’s Best Hospitals for advanced care, according to U.S. News & World Report. For 2022-23, UHCMC ranked in the nation’s Top 50 in four specialties: Cardiology & Heart Surgery; Ear,

⁶ Total research excludes research funding to CWRU Basic Sciences.

Organizational Structure

Nose & Throat; Geriatrics; and Neurology & Neurosurgery. Its Cancer; Gastroenterology and GI Surgery, and Urology specialties were designated as high-performing. U.S. News also named UHCMC as high-performing for 16 common adult procedures and conditions.

UHCMC operates a Level I trauma center as awarded by the American College of Surgeons (ACS), indicating UHCMC provides comprehensive care according to nationally recognized ACS standards for every aspect of injury care. In addition to the Level I center at UHCMC, Rainbow is the region's only Level I trauma center for children and adolescents.

The community hospital network and physician providers integrate with UHCMC, providing medical care in the communities where many patients reside. Additional value is garnered from having a consistent level of care, sharing of best practices, uniform operating systems, combined purchasing power, and back-office shared services that leverage economies of scale and ultimately reduce costs for our patients.

UH Rainbow Babies & Children's Hospital

University Hospitals Rainbow Babies & Children's features a full-service flagship children's hospital and pediatric academic medical center on the UH main campus in University Circle and a pediatric network of primary care practices, emergency, urgent care and outpatient surgery centers and specialty care clinics blanketing NE Ohio.

An affiliate of Case Western Reserve University School of Medicine and the only Level I Pediatric Trauma Center in northern Ohio, UH Rainbow Babies & Children's Hospital offers novel therapies, advanced technologies and clinical discoveries to children long before they are available nationwide. Our pediatric specialists – all of whom also serve on the faculty at the School of Medicine – are engaged in today's most advanced clinical research and are widely regarded as the best in the nation – and in some specialties, the best in the world.

UH Rainbow clinical experts in 16 medical and 12 surgical subspecialties provide nationally ranked care not available at other institutions in the region, including the Angie Fowler Adolescent and Young Adult Cancer Institute, the Congenital Heart Collaborative and Northeast Ohio's most advanced maternal/fetal medicine and neonatology services.

Medical specialties at UH Rainbow include: Allergy/Immunology & Rheumatology; Cardiology; Child & Adolescent Psychiatry; Critical Care Medicine; Developmental Behavioral Pediatrics & Psychology; Emergency Medicine; Diabetes, Endocrinology & Metabolism; Gastroenterology, Hepatology & Nutrition; General Pediatrics & Adolescent Medicine; Hematology & Oncology; Infectious Diseases; Neonatology; Nephrology; Neurology & Epilepsy; Pulmonology and Sports Medicine.

Surgical specialties at UH Rainbow include: Anesthesiology; Cardiothoracic; Dental & Oral Surgery; Neurosurgery; Ophthalmology; Maxillofacial Surgery; Orthopedics; Otolaryngology; Pediatric Surgery; Plastic & Reconstructive Surgery; Trauma and Urology.

Ranked #10 in neonatology by US News & World Report, UH Rainbow neonatologists collaborate with maternal fetal medicine and other specialists to provide the most advanced, comprehensive care available for mom and baby under one roof. Our neonatologists are leading efforts to reduce preterm births and infant mortality rates through innovative programs and groundbreaking research.

Organizational Structure

The Angie Fowler Adolescent & Young Adult Cancer Institute, integrated with UH Seidman Cancer Center, is internationally recognized for basic, clinical and translational research, ensuring patients have access to the most advanced therapies first, including being the first program in Ohio to offer patients access to proton therapy. The Center for Pediatric Immunotherapy at Angie's Institute was established to leverage the power of immunotherapy, which is showing great promise in treating childhood cancers and reducing side effects. We are taking breakthrough research discoveries and speeding up development through on-site manufacturing to bring new, life-extending treatments to our patients – quickly and efficiently.

UH Rainbow is a leader in pediatric pulmonology advancing care and improving outcomes for patients with cystic fibrosis, asthma, newborn lung disease, apnea and other respiratory conditions. Pioneering physicians established one of the nation's first cystic fibrosis centers in the 1960s and today the LeRoy Mathews Cystic Fibrosis Center is a leading center for clinical trials. Our physician-scientists are translating discoveries into vital new therapies every day – such as new drugs aimed at improving gene and protein function in CF patients.

The Rainbow Care Network, extending beyond UH main campus, includes inpatient care, pediatric emergency medicine services and specialty procedures at UH St. John Medical Center. In addition, the network features more than 205 pediatric and family medicine primary care providers at 85 locations. The network also includes pediatric specialty care, outpatient surgery, neonatal care, urgent care and pediatric emergency services at numerous facilities that span 16 counties across Northeast Ohio.

U.S. News & World Report magazine recognized UH Rainbow Babies & Children's Hospital in their 2022-23 Best Children's Hospitals rankings placing it among the nation's top 50 children's hospitals in nine of ten pediatric specialty categories for which they provide rankings: Cancer; Cardiology & Heart Surgery; Diabetes & Endocrinology; Gastroenterology & GI Surgery; Nephrology; Neonatology; Orthopedics; Pulmonology; and Urology. Rainbow has ranked in the U.S. News & World Report's Best Children's Hospital survey every year since the ranking's inception in 1991.

UH Rainbow Babies & Children's offers a unique model of care in the heart of Cleveland at the UH Rainbow Ahuja Center for Women & Children. This center applies evidence-based research to address social, economic and environmental factors that influence health by integrating medical care with behavioral and social sciences. In doing so, UH Rainbow aims to close the healthcare disparity gap prevalent in many urban communities. The center provides an oasis of health care, education and support for families in Cleveland's vibrant Midtown neighborhood. Brought together in one convenient location - a 40,000-square-foot, three-story urban center – are OB/GYN, pediatric primary care and adolescent health services, integrated mental and behavioral health services, nutrition education and counseling, full-service vision clinic, dental screening/cleaning, legal aid and compounding pharmacy. In addition to education and advocacy at its core mission, the center is also a primary training site for the next generation of pediatric and OB/GYN clinicians.

UH Seidman Cancer Center

Seidman is the region's only freestanding cancer hospital, with 120 registered beds, dedicated exclusively to the prevention, diagnosis and treatment of cancer while researching new and innovative treatment options through clinical trials. Given the complexity of cancer care today and the rapid rate at which new information emerges, Seidman provides 14 cancer-specific teams, each of which focuses on determining integrated care plans tailored to patients' needs.

Organizational Structure

Established, proven treatments such as radiation and chemotherapy, along with leading edge therapies, such as proton therapy, stem cell therapy, immunotherapy and genomic medicine, are considered when appropriate as part of the total treatment strategy.

In addition, Seidman offers access to a wide range of evidence-based therapies to meet patients' emotional and spiritual needs, such as meditation, stress reduction, nutrition counseling, exercise programs and music and art therapies.

Seidman's nationally recognized physicians specialize and subspecialize in specific modalities, including: brain tumor and neuro-oncology; breast cancer; skin cancer; gastrointestinal oncology; genitourinary cancer; gynecologic cancer; head and neck cancer; sarcomas, bone and soft tissue cancers; thoracic oncology; and pediatric oncology.

Seidman is part of the National Cancer Institute (NCI)-designated Case Comprehensive Cancer Center, one of 53 centers nationally and one of a small handful to earn an 'exceptional' rating by the NCI. Seidman is also a member of the NCI's Experimental Therapeutics Clinical Trials Network, bringing the newest drugs to patients in early-phase clinical trials. At Seidman, patients have the opportunity to take part in more than 400 clinical trials of new therapies. The System is the first in the region to offer highly sensitive digital breast tomosynthesis and 3-D mammography; cancer detection is up to 60 percent higher compared to traditional mammography. Fast Breast MRI is the latest specialized tool for finding difficult-to-detect cancers in women with dense breast tissue. Use of genomic tumor testing and a biorepository for tissue and blood samples are helping to provide personalized care and new treatment options for breast cancer.

Like Rainbow, Seidman extends beyond the walls of the main campus location within the University Circle area. Seidman services are now provided at 16 community-based locations.

UH MacDonald Women's Hospital

MacDonald Women's is Ohio's only hospital dedicated solely to women's health offering comprehensive care and the latest medical advancements through a dedicated, multidisciplinary team of experts in maternal fetal medicine, obstetrics and gynecology, female pelvic medicine and reconstructive surgery, gynecologic oncology, reproductive endocrinology and infertility, reproductive behavioral health, minimally invasive gynecologic surgery and midwifery.

Specialty programs at MacDonald Women's include: Bleeding Disorders; Centering Pregnancy; Family Planning Center; Preconception Planning Clinic; Center for Diabetes in Pregnancy; Pregnancy Diabetes Boot Camp; Sexual Function & Vulvovaginal Health Center; Menopause Clinic; Centering Parenting; Adolescent Polycystic Ovary Syndrome Clinic; Pediatric & Adolescent Gynecology Clinic; UH Fertility Center; and a Sickle Cell Gynecology Clinic.

Obligated Group Community Hospitals

UH Ahuja Medical Center

Ahuja is located in Cuyahoga County, approximately 9 miles southeast of the UH main campus in Beachwood. As of December 31, 2022, the campus has 144 beds, and offers comprehensive patient-centered care, a wide range of inpatient and outpatient services and expert pediatric services. Ahuja provides medical, surgical and other diagnostic services for patients that customarily are provided by acute care hospitals.

Organizational Structure

State-of-the-art technology allow patients to obtain highly acute services, such as open heart surgery, in a community hospital setting. Ahuja also accommodates a vast range of neurosurgery for brain tumors, aneurysms, complex spine issues and strokes. A full range of outpatient services including surgery, cardiac catheterization, interventional radiology, and emergency services for both adult and pediatric patients are available. Imaging services include a 256 slice CT as well as a 3Tesla open MRI. Ahuja manages satellite imaging services in neighboring cities of Solon, Aurora and Fairlawn, and operates an urgent care center in Twinsburg.

Ahuja celebrated its 10-year anniversary in 2021, and since opening in 2011, has embraced innovation and redefined the meaning of community hospital. In 2019, the UH System announced its plans to launch a \$236 million expansion of Ahuja to accommodate changing demographics, service needs and technologies.

Ahuja Phase 2 will add nearly 300,000 square feet of space to care for our community, including a 216,000 sq. ft. hospital tower addition and a 78,000 sq. ft. sports medicine complex, which expands the medical center by more than 68 percent. With a market shift from inpatient to outpatient, the project will provide an expanded observation unit, to serve the growing number of patients who can be treated and released the same day, and a new short stay unit, less than 24 hours, dedicated to patients who need less than 24 hours of care in the ambulatory surgical center. The environmentally sustainable design will feature many of the same characteristics as the existing hospital, with bright, airy spaces, healthy food choices, healing gardens, and community wellness and health education spaces.

Construction is currently underway and the project is on budget, and Ahuja Phase 2 will officially open in June 2023, paving the way for a number of new health and wellness areas:

- **Women & Newborn:** A family-focused home for expectant mothers and newborns, the Steve and Loree Potash Women & Newborn Center will include maternal-fetal health services, labor and delivery, a Rainbow Babies & Children's neonatal intensive care unit and family gathering spaces. It is estimated that the Potash Women & Newborn Center at Ahuja will deliver approximately 2,400 babies annually.
- **Breast Health:** Empowering patients through comprehensive care, the Breast Health Center will deliver the full spectrum of services, from preventive and wellness care to breast cancer treatment.
- **Sports Medicine:** Delivering unmatched care for every athlete, the world-class Drusinsky Family Sports Medicine Complex will feature a sports performance center, outpatient rehabilitation space, a sports walk-in clinic and dedicated high-tech imaging. In its first year, the complex expects to serve more than 1,350 sports performance patients.
- **Men's Health:** Motivating men to prioritize their health through prevention and wellness care, the innovative Cutler Center for Men will deliver a full range of coordinated services, ranging from preventive to specialty care.
- **Emergency and Short-Stay:** Delivering expert care in the moments you need it most, the Ahuja Emergency Department will be expanded and add Level II trauma care to accommodate a predicted 20 percent increase in ER visits; a new Short-Stay Unity, as noted above, will provide dedicated observation services.

Organizational Structure

- Service Expansion: Growing surgical, endoscopic, imaging and dialytic services, Phase 2 will promote same-day care, allowing patients to recover from the comfort and safety of home.

UH Elyria Medical Center

Elyria is located in Lorain County, approximately 30 miles west of the UH main campus. Elyria is a Level III trauma center. At December 31, 2022, Elyria had a total of 287 registered beds. Elyria offers an array of clinical services, from general medical, surgery and emergency services to comprehensive cardiovascular and orthopedic programs. In addition, Elyria provides an inpatient behavioral health unit (psychiatric center) for medical, adult and geriatric patients. A full range of outpatient services including surgery, cardiac and pulmonary rehabilitation, cardiac catheterization, electrophysiology, occupational medicine and wound care are available.

UH Regional Hospitals (added to the Obligated Group effective February 1, 2022)

Effective February 1, 2022, the Parent merged University Hospitals Geauga Medical Center into UH Regional Hospitals ("UHRH"). In addition, on July 14, 2022, the System announced that inpatient, surgical and emergency services at UH Regionals Bedford and Richmond campuses would be moved to other UH east market facilities effective August 12, 2022. Please see the "Notable Developments" section of this report for further details. The resulting entity now comprises one campus location, UHRH-Gauga, located in Chardon, Ohio, principally serving Geauga County, eastern Cuyahoga County, and Lake County. UHRH-Gauga is located approximately 30 miles east of the UH main campus. UHRH-Gauga is the only full service hospital in Geauga County. UHRH-Gauga provides medical, surgical, and other professional services for adult and pediatric patients that customarily are provided by acute care hospitals. In addition, UHRH-Gauga houses an inpatient psychiatric and behavioral health unit. A full range of outpatient services are available, including surgery, pain management, cardiac catheterization as well as adult and pediatric emergency services.

UH Parma Medical Center

Parma is located in Cuyahoga County approximately 15 miles southwest of the UH main campus. The Parma campus consists of the hospital, four medical office buildings, an outpatient center and cancer center. The hospital, a Level III Trauma Center, consisted of 287 registered beds at December 31, 2022. Parma provides medical, surgical, and other professional services for patients that customarily are provided by acute care hospitals, as well as medical and radiation oncology, cardiac catheterizations, complex heart and vascular surgeries and an acute rehabilitation unit. Parma provides a full range of outpatient services including surgery, pain management, wound care, sleep studies and cardiac rehabilitation. In addition, child care for employees and members of the community is also provided.

UH St. John Medical Center

St. John is located in western Cuyahoga County, approximately 20 miles west of the UH main campus. St. John provides services primarily to residents of western Cuyahoga and eastern Lorain Counties. At December 31, 2022, the hospital had 143 registered beds. St. John is a general acute care hospital providing medical, surgical and obstetrical care, as well as other professional services for adult and pediatric patients. In addition, St. John provides a wide range of outpatient services including outpatient surgery, pain management, advanced wound care services, cardiac catheterization, rehabilitation services, and women's health services. St. John provides emergency services for both pediatric and adult patients, with a Level III trauma center and pediatric emergency specialists.

Organizational Structure

Lake Hospital System, Inc. (Added to the Obligated Group effective October 13, 2021)

On December 17, 2020, the Parent entered into a member substitution agreement with Lake Hospital System, Inc. d/b/a Lake Health (“Lake”). On April 16, 2021, the Parent became the sole member of Lake, thereby making Lake a wholly-owned, nonprofit subsidiary of the Parent. Lake, a 413 bed system, located in Concord, Ohio, approximately 30 miles northeast of UHCMC, operates TriPoint Medical Center, located in Concord, Ohio, and Lake West Medical Center, located in Willoughby, Ohio, amongst other wholly-owned and joint venture clinical operations principally serving the communities of Lake County, eastern Cuyahoga County, northern Geauga County, and Ashtabula County.

Lake had previously issued long-term debt under a master trust indenture, and Lake was the sole member of the obligated group under that master trust indenture. As of October 13, 2021, (i) all obligations of Lake Health that are secured by master notes issued under the Lake master trust indenture have been fully paid or defeased using proceeds of the Series 2021 Bonds and other credit facilities, (ii) the Lake master trust indenture was terminated and (iii) Lake was added as a Member of the UH Obligated Group under the UH Master Trust Indenture.

Non-Obligated Group Community Hospitals

The community hospitals not obligated under the System’s Master Indenture include UH Conneaut Medical Center (“Conneaut”), located in Conneaut, Ohio, principally serving Ashtabula County, UH Geneva Medical Center (“Geneva”), located in Geneva, Ohio, principally serving eastern Lake and western Ashtabula Counties, UH Portage Medical Center (“Portage”), located in Ravenna, Ohio, principally serving Portage County, and UH Samaritan Medical Center (“Samaritan”), located in Ashland, Ohio, principally serving Ashland and Richland counties. Geneva and Conneaut are designated as Critical Access Hospitals under the Medicare program.

On December 28, 2021, UHHI purchased the 25% unit ownership interest in New Manna CLG, LLC d/b/a Beachwood Medical Center (“BMC” and/or “Beachwood”) held by Manna Isle Healthcare II, LLC, a Delaware limited liability company. At the close of this transaction, BMC became a wholly-owned subsidiary of the System. BMC is a full-service acute care hospital located in Beachwood, OH that specializes in orthopedics, urology, spine, and pain management.

Non-Obligated Group Physician Organizations

University Hospitals Medical Group, Inc. (“UHMG”) is a wholly-owned, nonprofit subsidiary of the Parent. UHMG constitutes the academic medicine business of the System involving physicians and other providers that teach, conduct research and practice medicine including many physicians holding faculty appointments with the CWRU School of Medicine. As of December 31, 2022, UHMG employed 1,133 providers.

University Primary Care Practices, Inc. d/b/a University Hospitals Medical Practices (“UHMP”), is a wholly-owned, for-profit subsidiary of the Parent. Greater than 50% of the patient activity at the System’s medical centers and diagnostic units can be attributed to UHMP. As of December 31, 2022, UHMP employed 708 providers.

Organizational Structure

Joint Ventures and Affiliations

UH enters into joint ventures and affiliations to (i) enhance access to and promote delivery of high-quality health care services in the communities it serves, (ii) leverage operational and clinical expertise offered from outside of the System to benefit UH patients, and (iii) obtain increased operational efficiencies and cost reductions. Notable examples of joint venture and affiliation activity for UH are described in this section.

Southwest General Health Center (“Southwest”) and the Parent participate in a Partnering Agreement. Southwest operates a comprehensive, acute care hospital in Middleburg Heights, Ohio, employs physicians through an affiliated nonprofit corporation, and owns and operates urgent care centers, outpatient facilities and other integrated health care services. As of December 31, 2022, Southwest had a total of 368 registered beds. Through the Partnering Agreement, the parties have affiliated to enhance the quality of care available in the Southwest service areas through joint investment, strategic planning, marketing, public relations, health care delivery and purchasing efforts.

LifePoint Health (“LifePoint”) and the System participated in joint ventures that collectively own two 50-bed freestanding comprehensive inpatient rehabilitation facilities (“IRF”), University Hospitals Rehabilitation Hospital (“UH Rehab”) in Beachwood, Ohio and UH Avon Rehabilitation Hospital (“UH Avon Rehab”) in Avon, Ohio. UH Rehab opened in 2013 and UH Avon Rehab opened in 2016. Both hospitals provide comprehensive IRF clinical services, and each includes a dedicated brain injury unit and a specialized stroke program.

The Parent is one of the two largest members of the nine-member Medical Center Company (“MCCo”) which is located adjacent to the main campus of UHCMC. MCCo was organized as a nonprofit Ohio corporation in 1932 to provide or arrange for various utility services, including electricity, chilled water and steam, for members of nonprofit institutions in the University Circle area of Cleveland. All of UHCMC’s energy needs are met through MCCo at what the Obligated Group considers below market rates.

The relationship between UHCMC and its academic partner affiliate, CWRU, dates back over 50 years. In February 2021, UHHS, UHCMC and CWRU entered into a new 10-year affiliation agreement. Please see the “Research and Innovation” section of this report for further details.

Pursuant to an affiliation agreement entered into on June 1, 2015 by and between UHCMC and Nationwide Children’s Hospital in Columbus, Ohio (“Nationwide”), UHCMC and Nationwide formed “The Congenital Heart Collaborative”, an affiliation providing comprehensive pediatric cardiac and cardiothoracic surgery services to pediatric and adult congenital patients in Northeast Ohio.

Effective August 28, 2020, UH entered into a joint venture with ValueHealth, LLC, and on November 1 2022, UH broke ground on the UH Amherst Beaver Creek (UHABC) Surgery Center, a joint venture with ValueHealth and key local physicians. UHABC Surgery Center is a health campus that will include a state-of-the-art ambulatory surgery center and a medical office building and will provide medical and surgical specialty services and other ancillary services close to home for Lorain County residents. The ambulatory surgery center, which will create 20 to 25 new jobs, is expected to welcome patients in the first quarter of 2024.

Human Capital: UH Caregivers

Employees (Caregivers)

As of December 31, 2022, UH employed 22,888 full-time employees. An additional 3,793 people were employed on a part-time basis and 4,214 were considered “pro re nata” (PRN) personnel, which means people who are called into work on an “as needed” basis. These positions are often in the fields of nursing, but can also be in other health care professions such as x-ray technicians or respiratory therapists. In total, there were 30,895 people deemed employees of UH as of December 31, 2022. Of these, 1,218 were residents and/or fellows and 7,102 were nurses. Employed physicians totaled 1,929, including 1,133 employed by UHMG, 708 by UHMP, and 88 by Lake Health.

UH’s Enterprise Staffing Services (“ESS”), formed over 20 years ago to centralize the System’s management of agency contracts, has recently evolved into a centralized float pool of employed nurses to help UH facilities fill nurse staffing gaps. Currently, ESS has 231 full-time, part-time and PRN registered nurses (200+ full-time) who live in 98 different zip codes. On a daily basis, the centralized ESS office assesses staffing needs across the System and assigns nurses based on those needs. ESS has provided the System the ability to retain and recruit nurses who otherwise would prefer outside agency employment, thereby lowering its inpatient nursing vacancy rate from 41% to 29.7%.

None of UH’s employees are represented by any union for purposes of collective bargaining except for nurses at Geneva who are members of the Ohio Nurses Association. UH’s management has developed a strategy to recruit and retain nurses in the current competitive labor market.

Diversity, Equity & Inclusion Initiatives

During the past year, few issues dominated the national conversation more than racism. UH has joined the City of Cleveland in denouncing racism as a public health crisis. UH is committed to elevating awareness and eliminating health care disparities. The System’s efforts have been recognized by Modern Healthcare, naming UH to their Class of Top Diversity Leaders for two consecutive years (2021 and 2022) for its emerging work toward creating a true sense of belonging for UH caregivers and the patients we serve. UH is building an inclusive, encouraging, and caring culture that involves several initiatives, notably:

- Cultural insight and unconscious bias training for caregivers and leaders
- Satcher Clerkships for underrepresented minority medical students
- Creating Department Equity Officers and convening a Diversity, Equity and Inclusion (DEI) council to lead strategies for increasing the number of minority physicians
- Forging partnerships with non-profit health initiatives to promote wellness in all communities
- Launching numerous workforce development programs
- Establishing Health Scholars as a pipeline for high school students interested in the medical field
- Creating leadership development programs
- Assessing minority hiring, compensation, and advancement in partnership with HR
- Designating Minority and Women business spend for the Ahuja Phase 2 construction
- Creating 38 caregiver focus groups to gather insights into developing future initiatives
- Holding monthly Lunch & Learn virtual and interactive discussions around issues important to LGBTQ+, Latino, AAPI, Black and women caregivers.
- Adding gender identity and preferred pronouns as optional fields in patient intake charts

Human Capital: UH Caregivers

Nursing Shortage

Health care chief executive officers across the nation have identified a shortage of nursing professionals as the industry's greatest challenge. UH has an extraordinary nursing community, but the System is impacted similarly as other organizations by the demand for nurses and the limited number of applicants for crucial caregiver roles.

The COVID-19 pandemic and its stress on frontline caregivers accelerated the shortage of nurses known to be coming. Many complex causes beyond the pandemic have contributed to the situation today.

First among these causes is that the number of nursing school graduates is not keeping up with retirements. Many want to become nurses, but schools turn away thousands of applicants for lack of in-class and clinical capacity. Another issue is declining retention among nurses who work in hospital settings. Some have left nursing at hospitals to move into ambulatory centers and practices that often offer a less stressful environment. Others changed fields entirely or retired as thousands of nurses have aged out of the workforce. Some nurses who are flexible have joined travel nursing agencies, which pay a high hourly rate to fill an increasing number of urgently needed, temporary positions at hospitals. UH is also in competition with hospitals in Florida, California and other destination locations that are willing to pay attractive relocation packages. It is especially concerning that first-year nurses are leaving their positions in record numbers. Coming into the field during the pandemic, their experience has not been what they expected.

UH has implemented multi-faceted strategies to retain nurses as well as develop and attract the next generation of nurses to care for our patients in Northeast Ohio. Examples include:

- Expanding flexibility in hours and shifts, including “weekend only” shifts for nurses who prefer those – including nurses just starting their careers at UH.
- Fostering deeper dialogues with nurses to engage them in decisions about their work environment. One UH nursing team is devoted solely to nurse retention; another’s focus is “Incorporating Supporting Technology,” to streamline work flows and decrease non-value added tasks for nurses – for example, through virtual monitoring and automatic uploading of vital signs.
- Building stronger relationships with nursing schools in the region, and working more closely with them to place their graduates in UH nursing positions. Hired a total of 571 new RN graduates in 2022, a 24% increase from the prior year. Also increased number of undergrad nursing students to more than 4,500 across the system.
- Collaborating with Lorain County Community College to launch a UH PCNA to LPN, Earn to Learn apprenticeship.
- Providing incentives to pursue specialty nursing certification, as well as access to free continuing nurse education offerings and other professional development opportunities.
- Providing new training and tools through the UH Nurse Leader Center for enhancing leadership skills and mentoring opportunities that support career growth and advancement.
- Enhancing nursing compensation, including a performance-based career advancement program, market adjustments and supplemental pay.

UH Strategy

In 2021, UH developed a new strategic plan that focuses on unifying the System as one UH. “As one” means working together to fully leverage the talents and resources UH has assembled. In this way, UH will continue to lead in what is most meaningful to its patients and differentiates the System: personalized, compassionate care; medical discovery and breakthroughs; high-quality, affordable care; and being the hometown team that is solely dedicated to the communities of Northeast Ohio. This plan involves investing in six Core Capabilities that are interrelated and, when working together, will drive success.






- A Culture of Trust... Inspire and develop talented caregivers who excel in building trust.
- Scientific Discovery...Advance the science of health as a learning, caring organization through innovation, scientific discovery and teaching.
- Patient First...Attract, provide access to and retain patients and consumers who seek a seamless, trusted relationship with UH caregivers.
- Exceptional Care...Continuously improve UH care delivery outcomes, total experience and cost of care.
- Partnerships...Be the partner of choice for independent physicians and other health care players by creating and sharing value together.
- Mission Investment...Grow investment in the UH mission and community.

Clinical Care Delivery



Culture of Trust

The above, illustrates the System's six capabilities, focusing on "what" UH is doing. The System's Core Values, shown below, focus on "how" employees fulfill the UH mission. These are designed to guide through change and growth and define the culture of UH and shape our behaviors as caregivers:

-  **Service Excellence:** We deliver the best outcomes, service, and value with the highest quality through a continuous quest for excellence and seeking ways to improve the health of those who count on us.
-  **Integrity:** We have a shared commitment to do what is right and adhere to the highest standards of ethics and personal responsibility to earn the trust of our caregivers and community.
-  **Compassion:** We have genuine concern for our patients and each other while treating everyone with respect and empathy.
-  **Belonging:** We value the contributions of all caregivers, and are committed to building an inclusive, encouraging and caring culture where all can thrive.
-  **Trust:** We depend upon our caregivers' character, reliability and judgement.

Building a culture of trust also includes other system initiatives such as diversity, equity and inclusion programming; making UH a great place to work and furthering employee value proposition; establishing a professionalism advocacy committee that sets caregiver standards; and developing the UH workforce.

Scientific Discovery

As a next-generation health system dedicated to accelerating discovery, innovation, and translation of scientific breakthroughs, UH addresses unmet clinical and social needs to enhance the lives of our patients, our community and the world. By focusing on this capability, UH aims to improve health care outcomes by using evidence-based practices and give hope to patients who believe they had exhausted all options; Create a competitive advantage by attracting new patients seeking cutting-edge care, such as new drugs, devices and cell therapies; Enhance the differentiation of our health system; and attract health care leaders, researchers, innovators, industry partners and trainees. For further details, refer to the "Research and Innovation" section of this report herein.

Patient First

The System's goal is to attract, provide access to, and retain patients who seek a seamless, trusted relationship with UH caregivers. Putting the "Patient First" requires improving patient access, engagement and experience by increasing marketing investment; expanding use of scheduling, billing/payment and CRM tools; and meeting patients where they are by delivering virtual care.

Clinical Care Delivery

Exceptional Care

Leveraging this capability means continuously improving UH care delivery outcomes, total experience and cost of care. Initiatives in support of this goal include the System's Zero Harm campaign; enhancing the Centers of Excellence model; optimizing Systems Operations Center; and deploying innovative technology.

Partnerships

UH's goal is to be the partner of choice for independent physicians and other health care players by creating and sharing value together. These capability-building initiatives include growing an ambulatory surgery center network and expanding physician relationships through joint ventures; strengthening outreach, relationship-building and analytics in order to enhance relationships and engagement with independent physicians; enhancing Center of Excellence offerings to third parties; and collaborating with third parties to enhance patient care offerings.

Mission Investment

The capability around Mission Investment focuses on driving profit, which can be reinvested in capital and the UH workforce; elevating philanthropy as a key source of funding to support the UH mission; and deploying a bi-directional, data-driven, Community Health Investment strategy that allocates resources where needs are greatest. This new plan emphasizes focus in three areas, building on UH's previous Community Benefit work:

- Anchor & Social Venture Investments – large scale, place-based initiatives by “anchor institutions” such as UH, that have the ability to catalyze change in the regions where they are located.
- Regional Community Health Investments – in interventions stemming from the System's community health needs assessments in the seven counties where UH medical centers are located.
- Social Service Investment – leveraging the power of the System's 30,000+ caregivers to make a difference in the communities through volunteerism and board service; and strategically targeting community contributions and investments to more closely align with UH clinical and community health inventions.

For further details, please see refer to the “*Community Benefit*” section of this report herein.

As One/Systemness

UH aims to shape the future of health care by embracing new operational models that leverage UH strengths as a health system to provide the best outcomes and experiences for UH patients while keeping the cost of health care affordable. As such, UH is implementing a Systems of Care operational structure that empowers market and system-wide collaboration to deliver patient-centered, efficient and coordinated care. To advance this objective, the System established the East, West, South and Academic markets and have aligned the management teams around this operational framework to facilitate better clinical integration and enhance the System's ability to deliver the right services at the right access points with a focus on high-value care and patient experience. In addition, UH also re-organized the community hospital board structure to coincide with this same market organizational structure.

Clinical Care Delivery

Accountable Care

Accountable Care Organizations (ACOs) are a key component in population health management. An ACO works with providers, members and payors to reduce medical costs while improving the patient experience and quality of care. UH first started an ACO in 2010 to better manage the cost and quality of care for its own self-insured employee medical plan. Recognizing the value it could potentially provide to the community, UH expanded its ACO to commercially-insured, Medicare and Medicaid populations. Today, the UH ACO covers approximately 600,000 members and beneficiaries. The UH ACO manages 22 value based programs through contracts with various payors in addition to managing Comprehensive Primary Care (“CPC”) participation in various Medicaid Managed Care Plans. Fiscal year performance results are typically available at the later part of the following fiscal year. UH’s top performing contracts, for the most recently available performance period, FY 2021, provided \$26 million of benefit to the System, recognized in FY 2022.

Population Health is also managed through outreach services in the community. UH Otis Moss Jr. Community & Health Center (the “Center”) in Cleveland’s Fairfax neighborhood provides patient care with a particular focus on at-risk individuals. The Center offers family medicine and social services and referrals to other health care professionals.

The UH Rainbow Center for Women & Children is located in Cleveland’s MidTown neighborhood. The Center demonstrates UH’s commitment to improve access to care, addressing many of the social factors that affect health, and integrating resources. Services include: pediatric and adolescent primary care; prenatal and gynecology services; childbirth and parenting classes; dental and vision care; integrated behavioral and mental health services; nutrition programs; on-site pharmacy and WIC office; and medical-legal services.

UH Institutes

Nineteen clinical care delivery and research institutes bring highly trained subspecialists from different disciplines together to collaborate on the best treatment for patients. Institutes also promote evidence-based standards of care and the sharing of best practices.

- UH Behavioral Health Institute – provides a comprehensive continuum of care for mental health services. Patients with mental illness or addictive disorders need various levels of services at different times in the healing journey. Via a multi-pronged approach, UH provides patients and their family members with many options for seeking care, including options to “get better”, “stay better”, and “stay well”.
- UH Diagnostic Institute – aligns the UH Departments of Pathology, Radiology and Genetics. The Institute’s focus centers on evolving a robust technology platform integrating digital images, pathology and genetics clinical data, creating an integrated diagnostic tool.
- UH Digestive Health Institute – focuses on the prevention, diagnosis and treatment of digestive and liver diseases. Centers of Excellence within the Institute include: Esophageal & Swallowing; Consultative Gastroenterology & Gastrointestinal Surgery; Inflammatory Bowel Disease Diagnosis and Treatment; Nutritional Health & Bariatric Surgery; Pancreas & Pancreatic Surgery; Hepatology and Liver Surgery; and Colon Cancer Prevention & Colorectal Surgery.
- UH Ear, Nose & Throat Institute – provides complete otolaryngology care for children and adults. Subspecialty areas focus on areas of the head and neck that may benefit from surgical

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intervention. Centers of Excellence within the Institute include: Audiology and Cochlear Implants; Community Care; Ear, Hearing and Balance; Head and Neck Cancer; Neurofibromatosis; Nose, Sinus and Allergy; Sleep; Basic and Translational Research; and Voice and Swallowing.

- UH Eye Institute – specializes in diseases and conditions affecting the eye and maintaining visual health. Centers of Excellence within the Institute include: Center for Anterior Segment Diseases and Surgery; Center for Oculoplastics and Neuro-Ophthalmology; Dry Eye; Center for Pediatric Ophthalmology and Adult Strabismus; and Retina and Macular Disease.
- UH Harrington Discovery Institute – supports physicians and scientists in the U.S., U.K. and Canada who have breakthrough discoveries with the potential to be translated into novel treatments. See additional detail below.
- UH Harrington Heart & Vascular Institute – offers advanced, comprehensive care for cardiovascular conditions. With funding from the National Institutes of Health awarded through CWRU School of Medicine, the Institute aims to advance the study of heart and vascular disease through innovative translational research programs. Centers of Excellence within the Institute include: Advanced Heart Failure & Transplant; Adult Congenital Heart Disease; Cardiovascular Imaging; Cardiovascular Pulmonary Rehabilitation; Electrophysiology; Evaluation & Prevention; Heart Surgery; Interventional Cardiovascular; Research & Innovation; Vascular; Women's Cardiovascular; and Cardio-Oncology.
- UH Neurological Institute – aims to deliver comprehensive, coordinated care for disorders of the brain and nervous system. It offers multiple hippocampal transection as a surgical solution to eliminate seizures and effectively cure epilepsy. Institute Centers of Excellence include: Brain Health & Memory; Brain Tumor & Neuro-oncology; Stroke; Epilepsy; Functional & Restorative Neurosurgery; Movement Disorders; Music & Medicine; Neurocritical Care; Neurological & Behavioral Outcomes; Neuromuscular; Neuropsychiatry; Neuroscience Nursing Practice; and Spinal Neurosurgery.
- UH Pain Management Institute – provides a multi-disciplinary approach to maximize function and minimize risk for patients with pain by providing innovative, integrated and individualized care. The Institute aims to help patients better understand pain management and address pain in an effective, safe and holistic manner.
- UH Primary Care Institute – provides supports UH's primary care physicians by developing models of care that aim to foster positive outcomes and patient satisfaction, as well as operational effectiveness.
- UH Rainbow Primary Care Institute – supports pediatric professionals in providing accessible community integrated pediatric primary care. The Institute promotes provider, staff and patient health and well-being while embracing a rapidly changing healthcare environment.
- UH Research & Education Institute – manages academic efforts, basic and translational research, and medical education for its nearly 1,100 residents and fellows. The Institute also provides faculty development for nearly 1,000 physician-scientists and manages the System's efforts around the recently announced Cleveland Innovation District. See additional detail concerning the Cleveland Innovation District below.
- UH Respiratory Institute – offers expertise in the management of critical care, end stage lung disease, airway disorders, interstitial lung disease, COPD, asthma, cystic fibrosis, sleep disorders and workup of lung nodules.

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- UH Seidman Cancer Center – provides the most advanced forms of cancer care, from prevention, screening, diagnosis, treatment through survivorship. The single disease-focused teams design personalized cancer treatment plans for patients.
- UH Spine Institute – brings together specialists in neurosurgery, neurology, orthopedics, physical medicine and rehabilitation, radiology, rheumatology and pain management to collaborate in the treatment of a variety of spine-related disorders, including arthritis, degenerative disorders, scoliosis, herniated discs, spinal tumors, fractures and paralysis.
- UH Drusinsky Sports Medicine Institute – offers comprehensive specialty and subspecialty care for athletes of all ages and every skill level with subspecialty-trained physicians readily available in one location. UH Sports Medicine provides skilled expertise and knowledgeable resources for athletes, coaches and trainers, throughout the entire diagnosis, treatment and rehabilitation process.
- UH Transplant Institute – specializes in the organ transplantation of the heart, lung, liver, kidney and pancreas. Post-transplant, the Institute's team aims to stay involved in the patient's care throughout their life, measuring new organ function, discussing potential immunosuppression issues; and providing other services including support groups and pastoral care.
- UH Urology Institute – offers expertise, clinical research and treatments in the areas of urologic oncology, robotic and minimally invasive surgery, female pelvic medicine, genitourinary reconstruction and prosthetic surgery and pediatric urology. The Institute's Center for Outcomes Research and Quality Improvement focuses on comparative effectiveness research dedicated to improving the processes of care and health outcomes for patients diagnosed with urologic diseases.
- Angie Fowler Adolescent & Young Adult Cancer Institute – resides within UH Rainbow Babies & Children's Hospital. Angie's Institute was created to meet the unique needs of pediatric, adolescent and young adult patients diagnosed with cancer. It is integrated with Seidman Cancer Center.

Orthopedic Services

As one of the pre-eminent academic orthopedic programs in the country, the UH Orthopedics Department is one of the busiest orthopedic departments in northeast Ohio, performing over 17,000 orthopedic surgeries, seeing more than 198,722 clinical visits in 43 locations. Surgeons within the UH Orthopedics Department were among the first to perform joint replacement surgery in the United States; developed classic studies on the newer design and function of semi-constrained total knee replacement; are among the first to work with intraoperative spinal cord monitoring, which revolutionized the ability to do complex spine surgery, and use decompression for patients with quadriplegic paralysis from an anterior approach; and conducted seminal work on correction of spinal deformities in scoliosis in children. UH's orthopedic care specialists are also making major clinical advancements in how we repair joints to relieve pain and improve ease of movement. The UH Hip & Knee Replacement Center of Excellence offers a comprehensive range of services that encompasses evaluation, surgery, after care and associated ancillary services. Through this program, UH's specially trained, board-certified, fellowship-trained orthopedic surgeons perform procedures such as knee and hip arthroplasty, which can be safely done on an outpatient basis. The UH Orthopedics Department is also looking to several opportunities to propel the future of orthopedics, including expansion of ambulatory orthopedic surgeries that fulfill patients' wishes to recover at home; wider development and adoption of wearable smart technology to enable surgeons to

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monitor patients remotely; and biologics and stem cells. The department is among the first nationally to receive FDA approval to grow stem cells for orthopedic use.

Other Care Services

The Center for Geriatric Medicine manages the health and well-being of older adults using a collaborative approach that involves professionals from a variety of other disciplines including nursing, social sciences, dentistry, and public health. The Center's Acute Care for the Elderly ("ACE") program combines the principles of geriatric assessment and quality improvement. The ACE interdisciplinary team consists of a geriatrician, gerontologic clinical nurse specialist, social worker, pharmacist, rehabilitation therapist, dietitian and nurses. This team recommends interventions to improve care for frail elders, such as providing early referrals to therapy services and identifying medications that could exacerbate confusion or balance issues.

Through its partnership with LifePoint Health, the System offers comprehensive inpatient rehabilitation care at two UH Rehabilitation facilities in Beachwood and Avon, Ohio. See the *"Organizational Structure – Joint Ventures and Affiliations"* section herein for further details. Skilled Nursing Care transitions patients between hospital and home, offering short- and long-term skilled medical care that helps them regain their independence. Services provided include occupational, speech and/or physical therapy, nutrition counseling, pastoral care, discharge planning and social activities.

Palliative Care offers customized treatments and caring for the physical, emotional and spiritual needs of patients with serious illnesses. Often confused with hospice care, palliative care offers support for both the patient and their families and provides both curative and life-prolonging treatments.

The Brain Health and Memory Center brings together clinicians across many different areas of expertise to test, diagnose and treat a variety of memory issues. These include long-term and short-term memory loss, sudden memory loss, learning disabilities, memory loss in young adults and memory disorders stemming from injury or underlying disease. The Center also offers emotional support and assistance with family issues often associated with disorders such as Alzheimer's disease, Parkinson's disease, Huntington's disease and dementia.

UH Foley ElderHealth Center brings together geriatricians, behavioral neurologists, and social workers and nurses specializing in geriatrics to address issues pertinent to older adults. The Center provides comprehensive, multidisciplinary evaluation of elderly persons with physical, psychological and social problems, with a strong emphasis on cognitive function and specific ability to carry out the activities of daily living.

Rehabilitation Services are provided on both an inpatient and outpatient basis for patients that need to regain function after surgery, illness or injury. UH provides a full range of rehabilitative care for all stages of recovery through physical therapy, occupational therapy and speech therapy services.

UH Home Care Services help patients recover following a hospital stay or change in medical condition, as well as manage a chronic illness or disability. Medicare quality outcome ratings show UH Home Care to be among the highest ranking providers in the region. UH provides two types of home care programs to patients, based on their medical condition and needs. Care visits are provided from nursing; physical, occupational and speech therapies; medical social workers and dietitians.

Clinical Care Delivery

Traditional Home Care services are provided to patients following a qualified hospital stay to help them continue the recovery process at home. UH Home Care Services also helps patients learn to live with a chronic illness or disability, with the goal of helping them regain their independence, become self-sufficient and maintain optimum health. Home care services may also be recommended for patients, on an outpatient basis, who have not been hospitalized, but whose health condition worsens or changes while at home.

Hospital-at-Home Care is a home care program that allows certain eligible patients to avoid a hospital admission altogether. Potential patients are typically identified in the ER and offered the option of receiving inpatient-level care, through a multidisciplinary approach and remote patient nurse monitoring, in their home in lieu of being admitted to the hospital. The most frequent care delivery services include antibiotic infusions, wound care and rehabilitation therapies.

UH Connor Whole Health (UH Connor) works to strengthen relationships between patients and providers to improve outcomes by working collaboratively with the entire clinical team. The Whole Health approach prioritizes compassionate care centered on the patient's entire well-being beyond disease management to focus on health management. The health care provider's goal is to equip and empower each patient to take charge of their physical, mental and spiritual health in order to live a full and meaningful life. Linking the patient's larger purpose and life goals to their lifestyle allows clinical services, integrative medicine, and well-being programs to be delivered in a way that increases collaboration, motivation and adherence to self-care and clinical needs. UH Connor services include acupuncture, chiropractic, expressive therapy (art, dance, and music), guided imagery, integrative medicine/lifestyle medicine consultations (adult and pediatric), massage therapy, meditation, mindfulness, stress management and resilience training workshops and yoga therapy. Additionally, UH Connor has a strong commitment to education and a NHI-funded research program.

Research and Innovation

University Hospitals Research and Education Institute manages academic efforts; basic translational, clinical and health service research; medical education for its more than 1,200 residents and fellows; clerkships and elective clinical rotations for more than 1,800 medical students; faculty development for more than 1,100 physicians and scientists; and the System's efforts around the recently announced Cleveland Innovation District. During the last several years, the System has taken steps to further its mission in academic medicine, investing in its research faculty, augmenting infrastructure to facilitate clinical research through the UH Clinical Research Center and recruiting faculty and leaders. The UH Clinical Research Center provides support across all aspects of clinical research and is the centralized infrastructure that supports our investigators across the System.

The total research portfolio in 2022 was \$177 million in sponsored funding. This includes \$89 million in sponsored clinical and translational research funding to CWRU School of Medicine, including National Institutes of Health (NIH) grants awarded at the UHCMC campus, as well as \$88 million in sponsored funding to UHCMC including industry-sponsored clinical trials.

UH participated in the Pfizer vaccine clinical trial and earlier in 2020 the Remdesivir clinical trial to provide an antiviral drug to hospitalized adults with pneumonia due to the documented novel coronavirus. UH is also one of the first sites in the U.S. to study the investigational drug, RHB-107 (also known as Upamostat), for use in treating COVID-19 patients who do not need to be hospitalized. To date, UH has launched more than 180 COVID-19-related clinical trials and research studies since the pandemic began while also maintaining its non-COVID-19-related research programs with nearly 3,000 active studies underway.

To facilitate COVID-19 research efforts across the System and provide investigators with access to de-identified data and biological specimens, the UH Clinical Research Center established a centralized biorepository and data repository to help conduct observational studies about COVID-19. The purpose of this research is to obtain medical information and samples from participants testing positive for COVID-19 or suspected to be positive for COVID-19 and willing to donate blood, saliva, nasal swabs, urine, and other samples.

In February 2021, UH established a new 10-year affiliation agreement with CWRU. The modifications included in this extension help focus research and joint investment in areas such as cancer, neurosciences, immunity, imaging, and population health. The agreement also provides a framework that is intended to facilitate regular dialogue around each entity's respective strategic priorities and enhances our shared interest in supporting the highest-quality educational opportunities for medical and allied health students.

In January 2021, the Ohio Governor's office, in partnership with JobsOhio and the Ohio Development Services Agency, announced a new collaborative initiative – the Cleveland Innovation District. With this initiative, UH has taken a leadership role in guiding the work around Research and Product Innovation. Designed to transform Northeast Ohio into a global force in human welfare, the District aims to attract top innovators, new companies, and talent to Ohio and generate an estimated \$3 billion in economic impact while bringing more than 20,000 new jobs to Ohio over the next 10 years. Specifically, UH is charged with leading efforts on Global Health and Emerging Infections; SmartHealth Product Innovation; and leveraging the success of The Harrington Discovery Institute at University Hospitals, part of the Harrington Project for Discovery & Development.

Harrington Discovery Institute supports physicians-scientists in the U.S., U.K. and Canada who have breakthrough discoveries with the potential to be translated into novel treatments. Founded in 2012

Research and Innovation

through a gift from the Harrington family, Harrington Discovery Institute is fulfilling its mission to accelerate promising discoveries into medicines for unmet needs.

Harrington Scholars are provided with financial support and drug and business development support from Harrington's Therapeutics Development Center, which is comprised of pharma-experienced industry leaders with a track record of bringing new drugs to market.

In 2020, Harrington Discovery Institute took immediate action in response to the COVID-19 pandemic. It launched a call for medical breakthroughs for broad-spectrum anti-COVID drugs and next-generation vaccines that would aid in this pandemic and avert future ones. Within weeks, it received nearly 300 applications from academic medical centers in the U.S., U.K. and Canada, identified 50 medicines with potential promise, and funded 12 projects for further advancement. Harrington Discovery Institute has actively collaborated to advance four of those projects to human trials. In addition, Harrington's COVID-19 program yielded one start-up company, and two projects resulted in the formation of partnerships with pharmaceutical companies, which enabled the advancement of new medical compounds.

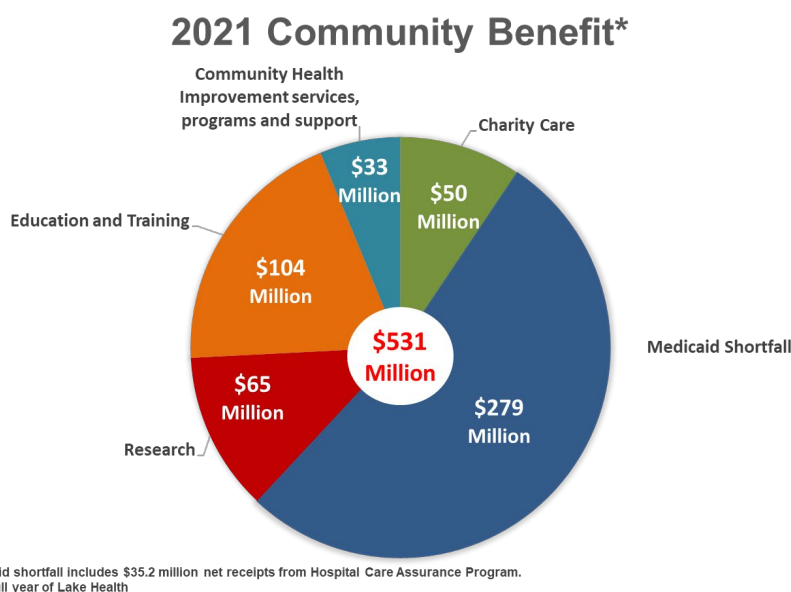
In February 2021, Harrington Discovery Institute announced a new \$215 million fund with Advent Life Sciences, to advance breakthrough discoveries into treatments. The Advent-Harrington Impact fund, a market rate investment fund launched by Morgan Stanley, breaks new ground through a partnership with a novel philanthropic vehicle at Morgan Stanley Wealth Management (Morgan Stanley GIFT Cures powered by Harrington Discovery Institute). Profits from the Advent-Harrington Impact Fund are shared with Harrington to create the means to sustainable philanthropy. In this way, financial returns catalyze additional drug development to address future unmet medical need.

With 165 drugs in the making, the launch of 36 companies, the progression of 19 medicines into clinical trials, and the licensing of 13 projects to pharmaceutical companies, Harrington Discovery Institute is an important force to change the standard of care in medicine and improve the health of patients.

Community Benefit

Since its founding, the mission of the System has been to provide quality, compassionate care to all patients and improve the lives of people in the communities it serves. The System provides diverse populations throughout the Northeast Ohio region with comprehensive health care from primary care to highly specialized medical care for the most serious of health problems. It provides the same quality and compassionate service, regardless of the income, ability to pay or socioeconomic status. Care is provided for the well-insured, the underinsured and the uninsured; men, women and children from every community in the region; and from urban centers, small towns, rural areas and suburbs.

The System's net community benefit contribution for fiscal year 2021⁷ totaled \$531 million, an increase of \$48 million over the \$483 million reported in fiscal year 2020. The 2021 community benefit numbers include Lake as of January 1, 2021 and consisted of charity care (\$50 million), Medicaid shortfall (\$279 million, net of \$35.2 million from the Hospital Care Assurance Program), research (\$65 million), education and training (\$104 million), and community health improvement services, programs and support (\$33 million). To measure and report community benefit, the System has followed the Internal Revenue Service guidelines.



Each component of community benefit is aligned to assist in addressing the health needs of the communities served. Through community health improvement, the System's outreach programs provide no-cost health screenings and help thousands within the communities understand their health, ways to improve and maintain it, and resources available. Further investment in the communities' health is done by supporting health-related community causes and selected organizations that boost prosperity, correlating to improved health.

Charity care is provided to patients who lack the means to pay for essential health care. Medicaid shortfall represents losses associated with services provided to UH's low-income patients who qualify for Ohio expanded Medicaid coverage. The Medicaid program reimburses providers for only a portion of the care they provide and UH underwrites the remainder of these patients' bills, reflecting its commitment to the community's health.

⁷ The most current information available is provided.

Community Benefit

Research enables UH to serve the community in its broadest sense by engaging in and funding clinical research. In conjunction with the CWRU School of Medicine and private-sector health care companies, our medical and research professionals advance care standards and develop new ways to diagnose, prevent, treat and cure diseases and injuries.

Through education and training, UH elevates the standards of health care at UH and elsewhere by preparing future generations of caregivers. Approximately 1,200 physician residents and fellows train at UH each year, along with thousands of nurses and other health professionals. The System reaches into local communities to teach lifesaving techniques and to inspire young people to pursue health care careers.

In May 2022, UH broke ground on a new model of care in the Glenville neighborhood that will bring care closer to home for these residents, and for the first time, will bring UH care directly into a housing community – furthering UH’s commitment to enhance access to high-quality care for all. Collaborating with the NRP Group, the Cleveland Metropolitan School District, the Cleveland Metropolitan Housing Authority and the City of Cleveland, the new model will increase health care access and help reduce disparities in care. The Center is anticipated to open in 2024.

The new UH Glenville Community Health Center will be located at The Davis, a novel, affordable housing complex with a four-story, 52-unit apartment building and four townhomes. The innovative co-location of UH programs within a housing complex will address the need for access to care, health education and healthy food. This Glenville Health Center is a beautiful example of the System’s Community Health Investment Strategy in action, building upon other successful place-based anchor investments, such as the UH Rainbow Babies & Children’s Ahuja Center for Women & Children in the Hough neighborhood and the UH Otis Moss Jr. Health Center in the Fairfax neighborhood. The foundation upon which these services were built is the belief that high-quality health care should be accessible to everyone.

The UH Glenville Community Health Center will provide convenient access to health-focused programs and staff, such as Centering Pregnancy and group diabetes care. The Center will also address social factors that affect overall health such as food insecurity with the addition of a Food for Life Market. There will be an opportunity to provide non-medical services in the future, such as legal help, health fairs, job connections, financial counselors and other educational events.

Leadership

Cliff Megerian, MD, FACS, became Chief Executive Officer of UH in February 2021. He is also the Jane and Henry Meyer Chief Executive Officer Distinguished Chair.

Prior to becoming Chief Executive Officer, Dr. Megerian served as the system's President, a position he was appointed to in December 2019. Previously, he served as President, University Hospitals Physician Network, Physician Services and System Institutes. In these positions, Dr. Megerian was charged with managing the clinical integration strategies, policies and practice guidelines for more than 2,500 UH employed physicians as well as the operations and infrastructure for UH system institutes. These clinical care institutes bring highly trained subspecialists together from multiple disciplines to collaborate on the best treatment for patients – promoting uniform, standard care protocols and the sharing of best practices.

Additionally, he raised physician productivity to its highest level and significantly increased physician engagement and research funding. UH's physician network includes the full-time academic medical practice at UH Cleveland Medical Center and UH's community-based, multi-specialty physician network throughout Northeast Ohio.

Dr. Megerian is also a Professor in the Department of Otolaryngology, Head and Neck Surgery, at Case Western Reserve University (CWRU) School of Medicine where he was Chair from 2012-2018 and held the Julius McCall Professorship at CWRU, as well as the Richard and Patricia Pogue endowed Chair in Auditory Surgery and Hearing Sciences at University Hospitals. He also serves as an Adjunct Professor of Surgery at Northeast Ohio Medical University.

Prior to UH, he served on the physician staffs of the Louis Stokes Cleveland Veteran Affairs Medical Center and MetroHealth System Medical Center. At the University of Massachusetts Medical Center, Dr. Megerian was the Director of Otology and Neurotology, as well as the Director of Residency Training, the Medical Director, Cochlear Implantation Program, and the Co-Director, Center for Skull Base Diseases. He also served on the medical staff of Massachusetts Eye and Ear Infirmary and Boston Medical Center.

Dr. Megerian's clinical career has been devoted to the management of hearing loss, chronic ear disease, cholesteatoma, otosclerosis, vertigo, and other otology and neurotology issues. As a surgeon, Dr. Megerian co-founded UH's Cochlear implant program and he and his team have performed over 1,500 cochlear implant surgeries, making it one of the largest programs in the country.

He is also an expert in the diagnosis and treatment of acoustic neuroma. He has published over 130 peer-reviewed manuscripts and abstracts and has served as visiting professor at numerous medical schools and institutions throughout the world.

His research interests in the pathogenesis of Meniere's disease have been funded by a number of agencies including the NIH and DRF. He previously served as a consultant to the FDA in the regulation of Ear, Nose and Throat Devices. He is co-author of a textbook in its second publishing, "Surgery of the Cerebellopontine Angle."

Dr. Megerian is a graduate of the University of Michigan Medical School and completed a residency in otolaryngology-head and neck surgery at University Hospitals of Cleveland and CWRU. He completed a research and clinical fellowship in otology and neurotology at Harvard Medical School, Massachusetts Eye

Leadership

and Ear Infirmary. He also completed a certificate program in healthcare management at Weatherhead School of Business at CWRU.

Dr. Megerian serves on the American Hospital Association's Health Systems Committee. In addition, he serves on the boards of the Ohio Hospital Association, the Ohio Business Roundtable and the Greater Cleveland Partnership. He is also Chair of the Cleveland Innovation District/Jobs Ohio Consortium.

In 2022, Becker's Healthcare named Dr. Megerian one of 113 Great Leaders in U.S. Healthcare and one of 8 Highly Successful Health System CEO-CFO Duos. Ohio Business Magazine appointed him to the Ohio 500, recognizing the most powerful and influential leaders who are working to make Ohio great. Crain's Cleveland Business named Dr. Megerian to the Power 150 – a list of executives leading some of Northeast Ohio's most influential organizations who are in a position to move the region forward. Modern Healthcare named Dr. Megerian as one of the 300 Most Influential People in Healthcare and one of the 150 Most Influential Clinical Executives.

Paul R. Hinchey, MD, is the Chief Operating Officer for the System and is leading University Hospitals' march toward systemness and value by leveraging its strengths as a unified health system to create the best value in health care. He is responsible for all of UH's clinical operations system-wide, including the operations of the academic medical center's main campus, physician services, nursing, acute-care pharmacy operations, Connor Whole Health and the community hospital network. Additionally, Dr. Hinchey is overseeing the clinical aspects of UH's conversion of its electronic medical record to the Epic-based platform.

Dr. Hinchey has more than 30 years of experience in in clinical medicine, operations, business development, strategic planning and implementation, change management and medical affairs. Before joining UH, Dr. Hinchey served as Chief Strategy Officer and Senior Vice President of Business Development at Boulder Community Health, an independent health care system based in Boulder, CO. He also served in several leadership positions, including Chief Operating Officer of Medical Operations, with Envision Healthcare, a Denver-headquartered, Fortune 500, publicly traded health care services organization.

Dr. Hinchey is an established researcher, author and international lecturer on diverse topics such as quality assurance and care redesign, health care finance and systems of care, population health, post-acute care, as well as mobile and virtual clinical models. He has served on more than 15 boards and national committees in areas including hospital quality, hospice, ambulatory surgery centers, telemedicine and EMS. Dr. Hinchey has also received numerous awards for his leadership, teaching, service and clinical care. He is a member of the American College of Healthcare Executives (ACHE) and the National Association of EMS Physicians (NAEMSP).

Dr. Hinchey received his medical degree from the School of Medicine and Biomedical Science at State University of New York (SUNY), Buffalo; and his Master of Business Administration from the School of Management at SUNY, Buffalo. Dr. Hinchey completed his emergency medicine residency and EMS fellowship at the University of North Carolina, Chapel Hill.

Leadership

Dan Simon, MD, is the President of Academic & External Affairs and Chief Clinical & Scientific Officer for the University Hospitals Health System. He is also the Ernie and Patti Novak Distinguished Chair in Health Care Leadership at UHCMC.

As President of Academic & External Affairs and Chief Scientific Officer, Dr. Simon leads the system's strategy and performance across the spectrum of research including basic, translational, clinical and health services/outcomes. He also oversees UH's graduate medical education and has primary responsibility for academic affiliations, including with Case Western Reserve University, Oxford University, NEOMED and Technion – Israel Institute of Technology. Dr. Simon is also charged with elevating the system's performance in medical education and discovery to the highest levels and driving strategic philanthropy. Additionally, Dr. Simon oversees the Harrington Discovery Institute at University Hospitals -- part of The Harrington Project for Discovery & Development.

Since joining UH in 2006 as Division Chief of Cardiovascular Medicine at UH Cleveland Medical Center and as Director of the UH Harrington Heart & Vascular Institute, Dr. Simon has been promoted to increasing levels of responsibility as the system has grown, including President of UH Cleveland Medical Center, President of Community Medical Centers, and Chief Clinical & Scientific Officer for the entire health system.

Dr. Simon is a practicing cardiologist and continues to play a leading role in national and international clinical trials investigating new devices and anti-thrombotic drugs.

Prior to UH, Dr. Simon served as Associate Director of Interventional Cardiology at Brigham and Women's Hospital in Boston and was an Associate Professor of Medicine at Harvard Medical School.

A recipient of numerous research awards, Dr. Simon was elected into the American Society for Clinical Investigation, Association of University Cardiologists, and the Association of American Physicians. He is a recipient of the prestigious MERIT Award from the National Heart, Lung, and Blood Institute and the 2016 Distinguished Scientist Award from the American College of Cardiology. He is a Fellow of the American College of Cardiology, the American Heart Association, and the Society of Cardiac Angiography and Interventions.

He has published extensively in peer-reviewed basic science and clinical journals. Dr. Simon has served on the Editorial Boards of Circulation and Journal American College Cardiology and is currently appointed to the Editorial Board of JAMA Cardiology.

He graduated summa cum laude from Harvard College. After earning his medical degree from Harvard Medical School, he completed his internal medicine residency and cardiovascular medicine fellowship at Brigham and Women's Hospital and interventional cardiology training at Beth Israel Hospital, Harvard Medical School.

Michael A. Szubski, is Chief Financial Officer of University Hospitals. Mr. Szubski joined University Hospitals in 2003, and has held several executive leadership roles, including Chief Operating Officer of all the owned acute care hospitals and Chief Financial Officer at UHCMC. He has been the system's CFO since 2008.

Leadership

In his current role, Mr. Szubski is responsible for all financial, treasury, managed care contracting, insurance/enterprise risk management, revenue cycle, information technology, supply chain and materials management services. . He also leads UH Ventures, the innovation, commercialization and venturing division of the health system.

Prior to joining University Hospitals, Mr. Szubski served as Executive Vice President and Chief Financial Officer at EMH Regional Healthcare System. In addition, Mr. Szubski served as Vice President of Operations at UnitedHealthcare of Ohio, Inc. (Cleveland), a business unit of UnitedHealth Group, one of the nation's largest health care management services companies. Mr. Szubski also served as Assistant Vice President and Controller at Mt. Sinai Medical Center (Cleveland) and, prior to that, held several positions at Ernst & Young.

Mr. Szubski received his Bachelor of Arts Degree in Accounting and Political Science from Baldwin Wallace University and a Masters of Business Administration from CWRU. He is a Certified Public Accountant in Ohio and a Fellow of the Healthcare Financial Management Association.

Mr. Szubski is a member of the American Hospital Association ("AHA") Regional Policy Board (5) and served on the Board of the Ohio Hospital Association ("OHA") from 2011-2016. He continues involvement with the OHA Board as its AHA representative. He also serves on numerous (5) UH related boards, including Western Reserve Assurance Co, UH Holdings, Inc., UH's Research & Education Collaborative, and UH's Coordinated Care Organization. Mr, Szubski is a member of the HFMA Large System CFO Council and has been recognized by Crain's Cleveland Business as "CFO of the Year" in 2010. In 2022, Becker's Hospital Review named Mr. Szubski as one of "8 Highly Successful Health System CEO-CFO Duos and "75 Academic Medical Center CFOs to Know."

Peter Pronovost, MD, PhD, serves as Chief Quality & Clinical Transformation Officer. In that role, he is charged with fostering ideation and implementation for new protocols to eliminate defects in value and thereby enhance quality of care; developing new frameworks for population health management for UH's more than one million patients; and managing the UH Accountable Care Organization with more than 580,000 covered members. In 2023, he was named the Veale Distinguished Chair in Leadership and Clinical Transformation.

Previously, Dr. Pronovost served as the Senior Vice President for Patient Safety and Quality at Johns Hopkins Medicine as well as the founder and director of the Johns Hopkins Medicine Armstrong Institute for Patient Safety and Quality. Dr. Pronovost also served as the Senior Vice President for Clinical Strategy and the Chief Medical officer for UnitedHealthcare.

Dr. Pronovost was elected to the National Academy of Medicine in 2011, to the American Academy of Nursing and has received multiple honorary degrees. Dr. Pronovost is an advisor to the World Health Organizations' World Alliance for Patient Safety and regularly addresses the U.S. Congress on patient safety issues. Along with the deputy secretary of Health and Human Services (HHS), Dr. Pronovost co-chaired the Healthcare Quality Summit, an initiative created in response to President Donald Trump's White House Executive Order to modernize and improve quality measures for HHS, Veterans Affairs and Department of Defense. He currently serves as a member of the Presidents Council for Science and Technology Patient Safety Working Group that is producing recommendations for improving safety to President Joseph Biden.

Leadership

Thomas D. Snowberger is Chief Administrative Officer of University Hospitals. In this capacity, Mr. Snowberger is charged with leading the office of integration & change management, human resources, communications, facilities management, and construction services.

With more than 20 years of comprehensive leadership experience in domestic and international environments, Mr. Snowberger has an extensive background in leading enterprise-wide, transformational change to support high-value strategic initiatives, organizational design, reputation management, employee engagement, talent management, succession planning and leadership development. In his role as head of human resources, Mr. Snowberger oversees the development and implementation of strategies that have positioned UH as the second largest employer in Northeast Ohio; an employer of choice in Cleveland as noted by a national media outlet; and as one of the World's Most Ethical Companies repeatedly per Ethisphere Institute.

Prior to joining University Hospitals, Mr. Snowberger served as Senior Vice President of Human Resources at Battelle – the world's largest non-profit independent research and development organization with more than 20,000 employees in 120 locations worldwide – where his responsibilities included organizational development, administration, labor relations, and compensation and benefits design.

Additionally, Mr. Snowberger served as Senior Vice President of Human Resources for DHL Holdings (USA), Inc., the international express industry's global market leader with more than 32,000 employees and operations in 220 countries. Before joining DHL, Mr. Snowberger was Senior Vice President of Human Resources for University Hospitals. He also served in human resource management positions with LG&E Energy Corporation, National Service Industries, Inc. and PPG Industries, Inc.

In 2017, Mr. Snowberger received the Archer Award, recognizing him as the top human resource executive in Northeast Ohio. Mr. Snowberger holds a bachelor's degree in communication studies from the University of Iowa.

Paul G. Tait has been the Chief Strategic Planning Officer for the System since 1996. He oversees strategic planning and business development. In this capacity, he also manages the affiliation agreements UH has with independent hospitals in the region.

Mr. Tait facilitated and led the development of the Vision 2010 strategic plan for the System, a five-year initiative that raised \$1.2 billion in capital.

Before joining the System in 1996, Mr. Tait held various positions of increasing responsibility in strategic planning, business development and marketing at two Fortune 500 companies: TRW, where he served as a Director in one of the automotive divisions; and Frito-Lay, Inc., a division of PepsiCo.

Mr. Tait has a Master of Business Administration degree from the Harvard Business School and a Bachelor of Arts in Economics from Carleton College in Northfield, Minnesota. He has served on the board for several UH hospitals including UH Parma Medical Center and UH Elyria Medical Center and our joint venture partner Southwest General Health Center.

Leadership

Harlin G. Adelman, JD, was elected Chief Legal Officer and Secretary for the System effective in March 2019. Prior to becoming Chief Legal Officer, he served as the Vice President & Deputy General Counsel for the UH Law Department, responsible for day-to-day management of the Department, including corporate transactional work and claims and litigation. In his role as Chief Legal Officer, Mr. Adelman leads all legal affairs, internal audit, claims and litigation, immigration and legal risk management. He also manages the Office of Board Administration overseeing corporate governance for the UH and UH Cleveland Medical Center Boards of Directors as well as more than 80 subsidiary entities within the UH system. Mr. Adelman also sits on the board of UH's captive insurance company, Western Reserve Assurance Co., LTD., SPC.

Prior to joining UH in 1998, Mr. Adelman was a Senior Consultant with Medimetrix Group, a health care consulting firm. Prior to that, he was an associate in the health care practice group at the Benesch Friedlander law firm. His practice focused on health care industry business and operations as well as health care regulation, entity acquisition and consolidation, and administrative hearings with various state regulatory boards.

Mr. Adelman holds a Bachelor of Arts from Boston University with majors in biology and psychology and a Juris Doctor from the Boston University School of Law. He is a member of the Ohio and Metropolitan Bar Associations, former trustee of the Cleveland Bar Association's Health Law Council and a member of the American Health Lawyers Association. Additionally, Mr. Adelman currently serves on the boards of the Legal Aid Society of Cleveland, The Diversity Center of Northeast Ohio and the Cleveland Council on World Affairs. Mr. Adelman is a member of the Leadership Cleveland Class of 2019 and was an inaugural member and graduate of the University Hospitals Leadership Academy. He has also served as an adjunct professor at the Case Western Reserve University School of Law and the Kent State University Executive MBA Program.

Michelle D. Hereford, MSHA, RN, FACHE joined UH in April 2021 as System Chief Nursing Executive. She also holds the Ethel Morikis Endowed Chair in Nursing Leadership. In her role as System Chief Nursing Executive, Ms. Hereford is responsible for the overall delivery and management of nursing operations, professional practice, education, professional development, research, administration and clinical services. Additionally, she is charged with staff accountability for enhancing a clinical practice environment that is patient centered, with unsurpassed patient experience, clinical quality and patient safety while also providing significant contributions to education and research. Ms. Hereford also serves on the UH Clinical Network Senior Leadership Council.

Ms. Hereford's broad nursing and administrative leadership experience spans nearly three decades to include small and large community hospitals, major academic medical centers, proprietary organizations, health systems and the post-acute industry. In her most recent position prior to joining UH, she served as Senior Vice President, System Chief Nursing Officer and Post-Acute Care Officer for AMITA Health -- Illinois' largest health care system comprised of 19 hospitals in the Chicago area.

Ms. Hereford also served as Chief of the Community Hospitals & Post-Acute Division at the University of Virginia Health System, an academic health care center associated with the University of Virginia in Charlottesville. Additionally, she served as Chief of their Transitional Care Hospital, where she led operations, fiscal and human resource management, effective resource utilization, and short- and long-range strategic planning.

Leadership

She is an active member of the American College of Healthcare Executives (ACHE) and the American Nurses Association and previously served on numerous industry- and community-related boards, including the Virginia Board of Nursing, the National Association of Health Service Executives and Adventist Healthcare Fort Washington Medical Center.

Ms. Hereford earned her BSN and MSHA from Virginia Commonwealth University / Medical College of Virginia and her Diploma of Nursing from Riverside School of Professional Nursing in Newport News, Virginia. She is also a fellow in the ACHE.

LaVonne E. Pulliam, JD joined UH in June 2022 as the system's Chief Compliance Officer. As an experienced attorney and health care leader with more than 10 years of experience in health care compliance, Ms. Pulliam oversees the system's compliance, ethics and privacy programs, ensuring institutional adherence to internal policies and external legal and regulatory requirements. She is also responsible for leading the organization's work to foster a strong ethical culture.

Before joining UH, she served as the Compliance Officer for the Neuromodulation Operating Unit at Medtronic. Ms. Pulliam also served in both legal and compliance roles at Medtronic supporting several business units and the Medtronic Foundation. Prior to that role, Ms. Pulliam served as Assistant General Counsel for UH, advising in a variety of areas including supply chain, privacy and data sharing, and reimbursement. Ms. Pulliam began her legal career at Benesch, Friedlander, Coplan & Aronoff in the corporate and securities practice group, where she focused her practice in the areas of mergers and acquisitions, debt and equity financing, business formation and corporate governance matters.

Ms. Pulliam earned her Juris Doctor from Case Western Reserve University School of Law. Ms. Pulliam also holds a Master of Arts in Bioethics from Case Western Reserve University School of Medicine and a Bachelor of Arts in Biology from Case Western Reserve University. She is a member of the American Health Lawyers Association and the Health Care Compliance Association and is admitted to practice in the State of Ohio.

Celina Cunanan, MSN, APRN-CNM was appointed Chief Diversity, Equity & Belonging Officer in September 2022. In this role, Ms. Cunanan oversees the system-wide strategy to enhance diversity, equity and inclusion and champions strategies that promote a culture of equity and belonging internally within the organization, as well as in the many diverse communities that UH serves throughout the region. Ms. Cunanan is leading UH to develop and grow thoughtful, innovative signature programs such as the UH Health Scholars youth pipeline program, the UH Second Look and Satcher Clerkship programs for graduate medical education recruitment, the UH Food For Life Markets to address food insecurity and UH LGBTQ/Gender Services.

In her prior role as Director, UH Office of Community Impact, Equity, Diversity and Inclusion (CEDI) and co-chair of the Social Justice & Equity committee, Ms. Cunanan made a tremendous impact by leading change within the UH system, as well as improving the health of Greater Cleveland. Under her leadership, UH's Food for Life Markets have expanded to four UH locations serving families suffering the health ramifications of living in food deserts. Additionally, she has expanded Cook Ross Bias Training and facilitated caregiver education on the topic of LGBTQ+ 101. Ms. Cunanan initiated the Departmental Equity Officers program and convened the underrepresented in medicine (URiM) faculty to cultivate a sense of belonging. Ms. Cunanan also helped advance the UH Health Scholars program, which engages

Leadership

Black and Brown high school students to consider careers in health care. And through UH's Second Look program, she has increased the visibility of UH to URiM medical students. Ms. Cunanan was UH's inaugural Division Director for Nurse-Midwifery in the Department of Obstetrics & Gynecology from 2007 through June 2022, and System Chief for Nurse-Midwifery since 2017.

Ms. Cunanan serves on the executive board for First Year Cleveland, our region's civic and community collaborative to address infant mortality, where she has co-chaired both the Centering Pregnancy Coalition and Community Action Council. She also serves as vice chair of the Ohio Minority Health Commission where she'll help guide the Commission's goal of eliminating health disparities and promoting health and the prevention of disease among minoritized populations in Ohio. She has served as a member of the Commission since 2020 when she was appointed by Governor Mike DeWine. Additionally, Ms. Cunanan serves on the Ohio Pregnancy Associated Mortality Review Committee. She previously served as president of the Northeast Ohio chapter of the American College of Nurse-Midwives (ACNM) and as an elected member of the ACNM Nominating Committee. Ms. Cunanan was inducted as a Fellow in the American College of Nurse-Midwives in 2019.

Ms. Cunanan was recently recognized by the Cleveland Business Journal as a 2022 Woman of Influence and by Crain's Cleveland Business as a 2022 Notable Executive in Diversity, Equity and Inclusion.

Ms. Cunanan earned her BA degree as a dual major in Health & Society and Psychology from the University of Rochester in 1994, her BSN from St. Louis University in 1998, and her MSN in Nurse-Midwifery from Case Western Reserve University (CWRU) in 2000. She earned her Women's Leadership Certificate (2018) and Coaching Certificate (2021) from CWRU Weatherhead School of Management, and her DEI Certificate from Northwestern University in 2022.

Bradley C. Bond has been Vice President of Treasury for the System since July 2002. In his treasury role, Mr. Bond's primary responsibilities include management of short and long-term investments, debt and swap transactions, cash management, leasing contracts, pension and risk management, and tax compliance and research. Under his leadership, the System has issued over \$5 billion in taxable and tax-exempt public bonds, negotiated over \$2 billion notional swap transactions and over \$2 billion in bank credit facilities. Mr. Bond currently oversees the investment program with over \$3.7 billion in assets under management, including Endowment funds, defined benefit pension, and off-shore Captive Insurance Company investments. Mr. Bond has also served on the retirement and investment committees of the Parma, Elyria, Portage, Samaritan, and Lake Foundation Boards and Southwest General Hospital in Cleveland.

In addition to his treasury responsibilities, since May 2011, Mr. Bond has served in the role of finance lead for operations involving the System's community medical centers, encompassing over \$1.7 billion in annual revenue; and since January 2015 its community physician group, UHMP, comprising over 756 providers and \$420 million in annual revenue. Beginning January 2018, Mr. Bond assumed financial responsibility for the new Ventures business unit, which has grown to \$427 million in annual revenue. Over the span of the past 7 years, Mr. Bond has been involved with five successful hospital acquisitions and three joint ventures with Private Equity firms.

Mr. Bond also serves as the Chairman of the Medical Center Company Board, a \$39 million revenue district energy company which serves UH, CWRU, and other cultural organizations in the University Circle area on the east side of Cleveland.

Leadership

Prior to joining the System, Mr. Bond served as Assistant Treasurer at the Cleveland Clinic Health System since December 1997 and Senior Treasury Analyst from November 1994 to December 1997. Previously, Mr. Bond was associated with General Electric Capital Corporation, where he served as a Financial Specialist from 1992 to 1994. Mr. Bond began his career as a staff accountant and consultant with Ernst & Young LLP. Mr. Bond received a Bachelor of Science in Business Administration from The Ohio State University and a Masters in Business Administration from Weatherhead School of Management - Case Western Reserve University. Mr. Bond is a Chartered Financial Analyst (CFA) and a Certified Public Accountant (CPA-non practicing).

Corporate Governance

The Parent is governed by a Board of Directors (the “Board”), pursuant to the current Code of Regulations (the “Code”) dated as of May 3, 2022. The Board may consist of up to 30 regular Directors, which, in unique circumstances, may temporarily exceed 30, provided that such temporary period does not exceed 12 consecutive months; the Board also has ex-officio Directors. As of December 31, 2022, the Board consists of 29 Directors (regular and ex-officio fiduciary members). Directors are elected to serve staggered terms of three years in three separate groups. There is a four-term limit for regularly elected Directors prior to 2021 and a three-term limit thereafter. The term limits may be waived by the Member for good cause. As a result, approximately one-third (1/3) of the Directors of the Board are elected every year.

The Executive Committee is authorized to act on behalf of the Board between meetings of the full Board. The Committee comprises the Chairperson, Vice Chairperson(s) and immediate past Chairperson of the Board, and the Chairpersons of the other standing Board committees.

Other standing committees of the Board include: Audit and Compliance Committee; Compensation Committee; Finance Committee; and Governance and Community Benefits Committee.

The Parent has reserved powers for all Members of the Obligated Group including the power to approve and control financial matters.

Board of Directors of University Hospitals

The following persons were members of the Board as of December 31, 2022. Their respective names, occupations and expiration dates of their current terms, as of that date, are as follows:

<u>Board Member</u>	<u>Company and Title</u>	<u>Date Board Term Expires</u>
Adelman, Joel	AdCap Management, Inc. President and CEO	2023
Anton, Arthur F. Chair – UH Board	MCM Capital Senior Operating Partner	2023
Antonucci, John	The Superior Beverage Group Executive Chairman	2023
Baum, Robin	Zinner & Co. LLP Managing Partner	2025
Beer, Anne	Process Manager Spire Advertising	Ex-officio
Connell, Michele L.	Squire Patton Boggs (US) LLP Global Managing Partner	2023
Deckard, Jenniffer D.	Covia Holdings Corp. Former President, Director, and CEO	2023

Corporate Governance

Della Ratta, Jr., Ralph M.	Kirtland Capital Partners Partner	2023
Gorman, Christopher M.	KeyCorp Chairman, CEO and President	2024
Haber, Irwin G.	The PDI Group Chairman and CEO	Ex-officio
Hargan, Eric D.	The Hargan Group Founder & CEO	2024
Haslam, Dee Bagwell Vice Chair – UH Board	Haslam Sports Group, Chief Executive Officer	2024
Heller, J. David	The NRP Group Co-Founder, President and CEO	2023
Jaros, Carey F.	GOJO Industries President and CEO	2025
Jones, Harold V.	Eaton Corporation, Chief Sustainability Officer and Executive Vice President Eaton Business System	2024
Kelsheimer, Jerry L.	Medic Management Group President	2023
Lacey, William	Amazon Vice President, Finance, Books & Kindle Content	2025
Mainardi, Cesare	Booz & Company Former CEO	2024
Megerian, MD, Cliff	University Hospitals Health System, Inc. Chief Executive Officer	Ex-officio
Miggins, Lynn S.	KS Associates, Inc. President	Ex-officio

Corporate Governance

Morikis, John G. Vice Chair – UH Board	The Sherwin-Williams Company Chairman and CEO	2024
Pandurangi, M.D., Vasu	Southwest Community Health System Board Chair; Retired from University Hospitals Medical Practices (UHMP)	Ex-officio
Potash, Steve	OverDrive, Inc. CEO and President	2023
Sabik III, M.D., Joseph F.	University Hospitals Cleveland Medical Center, Chair Department of Surgery	2024
Sethi, Neil	Transtar Holding Company, LLC President and CEO	2024
Smith, Robert C.	Cerity Partners Partner and Ohio Market Leader	2025
Talton, Sheila	Gray Matter Analytics President and CEO	2025
Taylor, Jr., Eddie	Taylor Oswald President and CEO	2023
Young, Jr., William A.	Southwest General President and CEO	Ex-officio

Corporate Governance

Conflicts of Interest Policy

As of the release date of this report, the System has adopted seven conflict of interest policies that set forth guidelines related to transactions with Disqualified Persons (as defined in applicable federal regulation). These policies apply to all employees, employed physicians and other licensed practitioners (excluding physician trainees), directors, officers, and related parties to UH and its wholly-owned subsidiaries. UH regularly and consistently monitors and enforces compliance with the conflict of interest policies. Designated individuals, (e.g., UH management, directors, employed physicians, and advanced practice professionals), are required to complete an annual disclosure and provide information regarding any interests that may be potential conflicts pursuant to the conflict of interest policies. They are required to provide any changes or new disclosures should they occur. All disclosures and subsequent updates to disclosures are reviewed by the UH Compliance and Ethics Department. Board-level and key personnel conflicts are reviewed and approved, if appropriate, by the Audit and Compliance Committee of the UH Board and/or the UH Board. If a conflict exists with a director, certain restrictions may be imposed, such as excusing the director from the room during discussion and/or voting with regard to a proposed transaction. Education regarding conflicts of interest is included in the annual compliance training that includes all directors, employees, physicians and licensed practitioners.

Cybersecurity

University Hospitals Information Security manages IT cyber risk through a program that utilizes numerous policies and procedures which outline the appropriate use of all equipment, system access, configuration management, risk assessments, and device security. Along with policies, the Information Security team is responsible for monitoring the network and connected systems. This is done with various tools such as Endpoint Detection and Response, multifactor authentication, secure email gateway, secure web gateway, DNS security, Data Loss Prevention, Webmail & URL isolation, intrusion prevention, vulnerability scanning, File integrity monitoring, security incident event monitoring system, cyber risk monitoring and address the risk assessments and reporting to various areas within University Hospitals. These systems are monitored 24 hours a day by internal and external service providers with escalation Service Level Agreements in place for any notifications or alerts generated. A multi-layered approach with intentional redundancies is implemented to addresses many different attack vectors. UH continues to invest and implement new technologies to address the increased targeted threats. UH ensured to have adequate cybersecurity controls in the top control category and able to meet the expectations from rigorous underwrites.

University Hospital's primary inpatient EHR is hosted and maintained by a vendor in Charlotte, NC (Allscripts and Atos Origin) and Malvern, PA (Cerner). Allscripts and Cerner have a business associate agreement with UH and are primarily responsible for the maintenance, availability and back-ups for their systems. To supplement the controls already mentioned, University Hospitals does maintain cyber insurance for instances such as network interruptions, data breaches, and other security and privacy incidents. In addition to the above, the Information Security team also has a third-party assess the System's security practices compared to the National Institute of Standards and Technology ("NIST") Special Publication 800-53 cybersecurity framework and perform penetration tests against external and internal systems and controls.

Risk Management

Insurance and Litigation

Western Reserve Assurance Co., Ltd., SPC (“Western Reserve”), a wholly-owned subsidiary of the Parent, commenced operations on July 1, 2002 to provide primary professional liability and primary general liability insurance coverage on a claims-made basis for substantially all of the System. See “Organizational Structure” section of this report for further details of the System entities. The Parent purchases commercial insurance policies for automobile liability; non-owned aircraft liability; heliport operations liability; and employers’ liability. Each of these policies is subject to various limits, deductibles, retentions and sub-limits. Western Reserve provides excess liability for the above risks through reinsurance agreements in place with unrelated commercial insurance companies.

In addition to the above, the Parent also purchases commercial insurance policies for management (including directors & officers) liability; environmental liability; commercial crime; and all-risk property, including business interruption, cyber liability, and excess workers’ compensation, among others. Each policy is subject to certain limits, sub-limits and deductibles. Western Reserve provides deductible reimbursement coverage to the Parent for its management liability and all-risk property policies.

Various claimants have asserted professional and general liability and workers' compensation claims against the System. These claims are in various stages of processing or are in litigation.

In the first quarter of 2018, an unexpected equipment failure occurred at a fertility clinic operated by UHCMC. Multiple claims, with multiple theories of recovery, have been filed against the System and some of its wholly-owned entities; some of the lawsuits have requested certification as a class action. In general, the lawsuits seek both compensatory and punitive damages. The claims and lawsuits are being treated as professional liability claims against the System's professional liability insurance policies. As of the date of this report, all asserted patient claims related to the fertility clinic matter have been settled. The System continues to pursue recovery from other sources.

The System notified its insurance carriers and in June 2018 recorded a reserve for the anticipated resolution of these claims including estimated legal costs and recorded receivables from its insurance carriers. The System continually monitors its estimate of the anticipated costs and records appropriate adjustments to its reserves and the related receivables, most recently in the fourth quarter of 2021. The anticipated costs for the affected policy year exceed the relevant reinsurance coverage, and such excess amount is reflected as losses in excess of insurance within the System’s statement of operations. The System's reserves for professional, general, and workers' compensation liabilities (including incurred but not reported claims) total \$236M and \$231M at December 31, 2022 and 2021, respectively. The System may further adjust its reserve levels as more information becomes available.

Beyond the claims and lawsuits noted above, there are known incidents, and there also may be unknown incidents, which may result in the assertion of additional claims for professional liability, general liability or workers compensation. The System has accrued an estimate of both asserted and unasserted losses primarily based on external actuarially determined amounts.

Litigation is inherently unpredictable and judgments could be entered that could adversely affect the System's consolidated operating results or cash flows in a particular period. Based on current knowledge and taking into account amounts already accrued, the System does not believe the outcome of the claims and lawsuits described above will have a material adverse effect on the consolidated financial position or liquidity of the System, or adversely affect its ability to meet debt service or pension obligations.

Appendix

Unaudited statistics for the years ended December 31, 2022, 2021, and 2020.

Payor Mix and Utilization Statistics Consolidated System

UNAUDITED

	Years Ended		
	31-Dec-22	31-Dec-21 ⁽⁷⁾	31-Dec-20
Payor Mix %: ⁽¹⁾			
Medicare ⁽²⁾	48.6%	46.9%	45.6%
Medicaid ⁽²⁾	19.2%	20.1%	21.3%
Commercial	24.8%	25.5%	26.2%
Self Pay	0.8%	1.0%	0.9%
Other ⁽⁶⁾	6.6%	6.5%	6.0%
	100.0%	100.0%	100.0%
All Services ⁽³⁾			
Available Beds ⁽⁴⁾	2,389	2,410	2,124
Patient Days	515,543	533,583	428,238
Adjusted Discharges	266,929	267,315	218,275
Discharges (excluding newborn)	105,569	107,449	88,443
Observations ⁽⁵⁾	25,781	30,919	24,270
Total Inpatient Activity	131,350	138,368	112,713
Surgical Cases:			
Inpatient	26,554	27,000	25,797
Outpatient	96,300	96,852	73,527
Total Surgical Cases	122,854	123,852	99,324
Outpatient Procedures	12,932,336	12,835,735	10,035,420
Emergency Cases	419,139	428,186	363,524
Clinic Visits	376,076	345,365	338,223

(1) Payor Mix is based on Gross Revenue.

(2) Includes a managed care component.

(3) Utilization statistics presented in this section include newborns, except where disclosed.

(4) Available beds represents the average staffed beds for the period reported.

(5) Excludes patients subsequently admitted during the same encounter.

(6) Other includes volume from UH employees covered under the UH health plan, currently 39,388 lives.

(7) Includes Lake as of April 1, 2021.

Appendix

Unaudited statistics for the years ended December 31, 2022, 2021, and 2020.

Payor Mix and Utilization Statistics Obligated Group (8)

UNAUDITED

	Years Ended		
	31-Dec-22	31-Dec-21 ⁽⁷⁾	31-Dec-20
Payor Mix %: (1)			
Medicare (2)	48.1%	46.5%	45.0%
Medicaid (2)	19.5%	20.4%	21.6%
Commercial	24.9%	25.6%	26.4%
Self Pay	0.8%	1.0%	0.8%
Other (6)	6.7%	6.5%	6.2%
	100.0%	100.0%	100.0%
All Services (3)			
Available Beds (4)	2,161	2,146	1,934
Patient Days	472,573	485,834	399,834
Adjusted Discharges	218,119	221,534	178,872
Discharges (excluding newborn)	94,406	95,765	80,634
Observations (5)	21,682	26,520	20,576
Total Inpatient Activity	116,088	122,285	101,210
Surgical Cases:			
Inpatient	24,876	25,284	24,039
Outpatient	75,542	77,650	61,792
Total Surgical Cases	100,418	102,934	85,831
Outpatient Procedures	7,064,531	7,121,953	5,487,599
Emergency Cases	340,033	349,647	290,546
Clinic Visits	376,076	345,365	338,223

(1) Payor Mix is based on Gross Revenue.

(2) Includes a managed care component.

(3) Utilization statistics presented in this section include newborns, except where disclosed.

(4) Available beds represents the average staffed beds for the period reported.

(5) Excludes patients subsequently admitted during the same encounter.

(6) Other includes volume from UH employees covered under the UH health plan, currently 39,388 lives.

(7) Includes Lake as of the date acquired April 1, 2021. Lake became a member of the Obligated Group on October 13, 2021.

(8) For comparative purposes, all periods reported include UH Regionals as of January 1st. UH Regionals became a member of the Obligated Group on February 1, 2022.

Appendix

Unaudited Statements of Operations for the years ended December 31, 2022, 2021, and 2020.

Consolidated System Statements of Operations

\$ in Thousands

	Years Ended		
	31-Dec-22	31-Dec-21 (1)	31-Dec-20
Revenues:			
Net patient service revenue	\$5,058,417	\$4,938,316	\$4,058,340
Other revenue	348,690	400,081	421,214
Total unrestricted revenues	5,407,107	5,338,397	4,479,554
Expenses:			
Salaries, wages and employee benefits	3,151,102	2,880,165	2,494,271
Purchased Services	376,940	326,271	278,843
Patient Care Supplies	1,227,548	1,126,313	935,119
Other Supplies	50,496	43,858	44,577
Insurance	62,159	97,338	57,282
Other	518,325	467,220	386,707
Depreciation and Amortization	273,228	235,345	198,634
Non-cash interest for the sale of future revenue	3,582	2,696	908
Interest	47,418	54,487	52,030
Recoveries in excess of insurance	(6,894)	(750)	(26,053)
Special Charges	5,292	953	2,581
Total expenses	5,709,196	5,233,896	4,424,899
Net operating (loss) income	(302,089)	104,501	54,655
Nonoperating (expense) income:			
Net investment (loss) income	(198,075)	141,324	124,024
Change in fair value of derivative instruments	89,064	17,643	(36,473)
Loss on extinguishment of debt	-	(75)	(2,029)
Membership Substitution	-	217,940	-
Disposition of business unit	-	(2)	17,623
Pension Settlement Costs	(71,261)	-	-
Other nonservice periodic pension benefit (costs)	1,985	(14,021)	(24,318)
Total nonoperating (expense) income	(178,287)	362,809	78,827
(Deficiency) excess of revenues over expenses	(480,376)	\$467,310	\$133,482

(1) Includes Lake as of April 1, 2021.

Appendix

Unaudited Statements of Operations for the years ended December 31, 2022, 2021, and 2020.

Obligated Group Statements of Operations

\$ in Thousands

	Years Ended		
	31-Dec-22	(2) 31-Dec-21	(1) 31-Dec-20
Revenues:			
Net patient service revenue	\$3,611,439	\$3,291,473	\$2,797,528
Other revenue	295,977	283,988	322,456
Total unrestricted revenues	3,907,416	3,575,461	3,119,984
Expenses:			
Salaries, wages and employee benefits	1,893,749	1,620,565	1,426,625
Purchased Services	260,755	114,824	107,938
Patient Care Supplies	912,943	834,207	728,766
Other Supplies	38,703	29,973	33,499
Insurance	38,587	51,028	34,849
Other	483,355	402,813	342,601
Depreciation and Amortization	247,783	195,680	172,283
Non-cash interest for the sale of future revenue	3,582	2,696	908
Interest	47,418	47,520	52,016
Recoveries in excess of insurance	(6,894)	(750)	(26,053)
Special Charges	5,194	737	2,377
Total expenses (3)	3,925,175	3,299,293	2,875,809
Net operating (loss) income	(17,759)	276,168	244,175
Nonoperating (expense) income:			
Net investment (loss) income	(197,015)	135,984	123,561
Change in fair value of derivative instruments	89,064	21,762	(36,473)
Loss on extinguishment of debt	-	(75)	(2,029)
Membership Substitution	-	17,897	-
Disposition of business unit	-	(2)	22,700
Pension Settlement Costs	(71,261)	-	-
Other nonservice periodic pension benefit (costs)	1,985	(14,021)	(24,318)
Total nonoperating (expense) income	(177,227)	161,545	83,441
(Deficiency) excess of revenues over expenses	(194,986)	\$437,713	\$327,616

(1) Includes Lake as of October 1, 2021.

(2) Includes UH Regional Hospitals as of January 1, 2022.

(3) Operating expenses for the current period include adjustments to corporate allocations from the Parent to Obligated Group members totaling \$28 million while prior periods were not adjusted, the result would have been an increase to operating expenses of \$25 million and \$11 million, respectively.

Appendix

Audited Financial Statements for the years ended December 31, 2022 and 2021.

Please see attached audited consolidated financial statements.

The consolidated financial statements of the System for the years ended December 31, 2022 and 2021 have been audited and the audit reports for those periods and previous annual periods are included in the System's annual filings available on the EMMA website of the Municipal Securities Rulemaking Board. Other financial information contained in this report has not been audited.