UPMC Year End Financial and Operating Report & Audited Consolidated Financial Statements

FOR THE PERIOD ENDED DECEMBER 31, 2022





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The following financial data is as of and for the years ended December 31, 2022 and 2021. Operating and financial results reported herein are not necessarily indicative of the results that may be expected for any future periods.

The information contained herein is being filed by UPMC for the purpose of complying with its obligations under Continuing Disclosure Agreements entered into in connection with the issuance of the series of bonds listed herein and disclosure and compliance obligations in connection with various banking arrangements. Digital Assurance Certification, L.L.C., as Dissemination Agent, has not participated in the preparation of this Year End Financial and Operating Report & Audited Consolidated Financial Statements and has not examined its contents and makes no representations concerning the accuracy and completeness of the information contained herein.



PERIOD ENDED DECEMBER 31, 2022

UPMC, doing business as the University of Pittsburgh Medical Center, is one of the world's leading Integrated Delivery and Financing Systems ("IDFS"). UPMC is based in Pittsburgh, Pennsylvania and primarily serves residents across the Commonwealth of Pennsylvania, as well as western New York and northwestern Maryland. We also draw patients for highly specialized services from across the nation and around the world. UPMC's 40 hospitals and 800 clinical locations comprise one of the largest nonprofit health systems in the United States. UPMC serves customers across the continuum of healthcare with its hospital, physician and homecare services, physical and behavioral health insurance product offerings, international operations, and its Enterprises division.

We are committed to providing high quality, cost-effective healthcare to our communities and our insurance members, while continuing to grow our business and execute on our mission of service. As part of this mission, UPMC continues to make significant investments in equipment, technology and operational strategies designed to improve clinical quality and to provide the best possible patient and member experience. Investments in our operations and continued capital improvements are expected to become increasingly important as the competitive environment of the market and national changes to the industry continue to shift the landscape of healthcare. We build new facilities, make strategic acquisitions and enter into joint venture arrangements or affiliations with healthcare businesses — in each case in communities where we believe our mission can be effectively utilized to improve the overall health of those communities.

As the stewards of UPMC's community assets, we are guided by our core values of integrity, excellence, respect and teamwork. These values govern the manner in which we serve our communities and are embedded in the execution and delivery of Life Changing Medicine. By continually evolving and refining UPMC's world-class financial processes, we focus on achieving optimal financial results that support the continued development of our organization, as well as ongoing investment in the future of the communities we serve. We are committed to achieving these objectives with unyielding commitments to transparency in reporting and disclosure, enterprise-wide integration and ongoing process improvement.

The purpose of this section, Management's Discussion and Analysis ("MD&A"), is to provide a narrative explanation of our consolidated financial statements that enhances our overall financial disclosures, to provide the context within which our financial information may be analyzed, and to provide information about the quality of, and potential variability of, our financial condition, results of operations and cash flows.

Unless otherwise indicated, all financial information included herein relates to our continuing operations, with dollar amounts expressed in millions (except for statistical information and as otherwise noted). MD&A should be read in conjunction with the accompanying audited consolidated financial statements.

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BUSINESS HIGHLIGHTS

Throughout 2022, UPMC continued to lead the evolution of healthcare in a post-pandemic world by adeptly tackling the lingering challenges related to the pandemic that are affecting health systems across the nation. UPMC led in addressing unprecedented healthcare workforce shortages; improving access to care for those in need; assessing the healthcare and health coverage needs in our many diverse communities; and growing our clinical programs, community outreach and insurance services to meet those needs. Meanwhile, UPMC continued its expansion internationally and forged ahead locally with its business and scientific innovations. These efforts keep UPMC continuously focused on shaping the future of healthcare by delivering high-quality services to patients and members.

Investing in and Supporting our Workforce

UPMC has invested over \$300 million in support of its workforce throughout 2022. Amidst staffing challenges over the past two years, a major part of UPMC's investment in its workforce has been in the development of innovative programs in 2022 that focus on retention, recruitment and building a workforce pipeline. By the end of 2022, more than 1,800 internal and external nurses had applied for the new UPMC Travel Staffing team; more than 1,400 graduate nurses were hired, attracted by the new Monthly Loan Repayment Program; and 150 new students have officially been accepted into the UPMC Schools of Nursing via the new Tuition Loan Forgiveness Program. Other investments include extra shift bonus incentives to reward staff who take on extra shifts to support patient care and the My Nursing Career platform, which acts as a pathway to encourage and support career growth. In addition, UPMC opened several new schools of nursing and developed new strategic partnerships with various clinical specialty training programs at numerous colleges, universities and technical schools to provide affordable opportunities for new students to enter the healthcare field.

Improving Access to Care

During 2022, UPMC further extended its specialty services throughout all our regions with emphasis on meeting patient preferences by providing new models of high-quality care at lower costs, while improving on convenience by positioning itself closer to patients' homes. Investments included new UPMC Hillman Cancer Centers in Somerset, Hanover and Butler; UPMC Magee-Womens Specialty Services in Williamsport and Erie; heart and vascular services at UPMC West Shore and UPMC Jameson; UPMC Children's at UPMC Harrisburg and Carlisle; and several other new outpatient centers for primary and multi-specialty care.

UPMC continued to broaden member access to telehealth services for its members. Community Care expanded access to behavioral services via telemedicine. UPMC also launched teledental services for Medicaid and Children's Health members; these innovations resulted in exceptionally high member satisfaction levels for those who utilized the telehealth resources.

Advancing Clinical Specialty Services throughout our Regions

In 2022, UPMC placed the final beam atop the new UPMC Mercy Pavilion and broke ground for the new UPMC Presbyterian Tower within Allegheny County. These facilities are expected to open in the spring of 2023 and late 2026, respectively. In other regions, UPMC invested in advanced specialty care to more local communities, including robotic bronchoscopy at UPMC Altoona, interventional stroke care at UPMC Harrisburg, a wound care center at UPMC Bedford, inpatient rehab at UPMC West Shore, and UPMC Western Behavioral Health at Twin Lakes near UPMC Somerset, which is expected to open in early 2023.

Caring for our Communities

Reflecting on UPMC's steadfast commitment to community service, UPMC provided more than \$1.5 billion in IRS-defined community benefits during the last fiscal year. This is part of UPMC's total community investment of over \$4 billion, which includes local, state and federal taxes paid, unreimbursed Medicare costs and investment in facilities, equipment and technology. This total amount excludes UPMC's expenditures related to COVID-19. UPMC's \$1.5 billion in community-focused programs last year equals \$4.1 million per day, or nearly 15% of net patient service revenue. According to the most recent publicly available data, UPMC contributes more community benefits than any other health system in Pennsylvania. UPMC

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opened the new UPMC Health Plan Neighborhood Center in Pittsburgh's East Liberty Neighborhood, where individuals can access virtual health consultations via UPMC Health Plan's AnywhereCare telehealth platform, workforce development programs and social services from UPMC's many community partners. Other notable investments in 2022 included Second Avenue Commons, a new homeless shelter in Uptown Pittsburgh for which UPMC provides free clinical care; the new Graham Park, supporting health and fitness programs for neighbors near UPMC Passavant; a renovated and redesigned Matilda H. Theiss Health Center in Pittsburgh's Hill District; and the UPMC Street Medicine program, serving homeless individuals in the Harrisburg area. The UPMC Health Plan Center for Social Impact continued its leadership in helping to break down barriers to affordable, stable housing by expanding its successful supportive housing program, Cultivating Health for Success, to Blair and Lawrence Counties by implementing new community-based organization partnerships to help expand the reach of the Emergency Rental Assistance Program and building a partnership with Rebuilding Together Pittsburgh to provide home repairs for individuals in need. UPMC's model Pathways to Work program implemented new training programs and apprenticeship models while continuing to recruit, train and hire an average of 200 Medicaid members per month. As part of this commitment, UPMC and UPMC Health Plan also secured state funding to expand the highly successful Freedom House 2.0 community health job training program into three additional regions in the state. UPMC also completed its triennial Community Health Needs Assessments to identify and address the most pressing needs in every corner of the communities we serve.

Growing our Insurance Services

As the second-largest provider-owned health plan nationally, UPMC Health Plan continued to receive national recognition for clinical quality and value. During 2022, UPMC further grew its membership across its family of award-winning insurance products, which now serves nearly 4.5 million members. In 2022, the Pennsylvania Department of Human Services awarded UPMC *for You* a Medicaid contract to serve all five Physical HealthChoices zones across Pennsylvania. Earning a coveted Five Star Medicare rating from the Centers for Medicare and Medicaid Services (CMS), UPMC *for Life* continued to maintain its position as market share leader in Western Pennsylvania for both its Medicare Advantage Individual and Special Needs Plans. Community Care Behavioral Health, the largest nonprofit behavioral health managed care organization in the nation, marked its 25th anniversary last year by earning contracts with two additional counties; the program now serves more than 1.5 million individuals in 43 Pennsylvania counties. UPMC Community HealthChoices, which coordinates physical care with home and community-based support, reached its highest enrollment level since the state Department of Human Services launched the program five years ago. Adding seven counties in Eastern Pennsylvania in Q4, UPMC *for Kids* CHIP plan now provides coverage to children in 64 of Pennsylvania's 67 counties. With this growth in 2022, UPMC Health Plan's family of government-related lines of business are operating statewide. Through Pennie, Pennsylvania's state-based health insurance marketplace, UPMC Health Plan enrolled over 31,000 new members and retained 93 percent of its existing membership.

Expanding UPMC's International Footprint

UPMC's expansion continued globally in 2022, including the announcement of a new partnership in Croatia to create a UPMC Hillman Cancer Center, which would be UPMC's first entry into that country. UPMC also saw the opening of a third cancer center in Italy at the UPMC-managed ISMETT transplant hospital in Sicily. Likewise, Community-focused growth continued in Ireland with the addition of new UPMC Sports Medicine clinics in Limerick and Tipperary and the first UPMC Institute for Health in Mayo. A new academic partnership with University College Cork will expand cancer research through the appointment of two UPMC-funded academic oncologists.

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Driving Innovations through UPMC Enterprises

Shaping the future of healthcare through innovation remained a focus of UPMC's during 2022, particularly through the investment and commercialization efforts of UPMC Enterprises. Among its Translational Sciences successes, portfolio companies Avista, Cerevance, CodeBio and Generian signed research partnerships or licensing agreements with large pharmaceutical and biotechnology companies that will advance development of their programs. In Digital Solutions, UPMC created startups like Pip Care to advance perioperative patient care and licensed technology innovations like its Alexandria Charts unstructured data platform to Clearsense. The development of digital tools for UPMC's patients was strengthened through a strategic partnership with and an investment in Kyruus, a provider search and scheduling solutions company, with the goal of providing patients with additional digital access channels and self-service tools.

Earning Recognition for our Commitment to Quality

Providing high-quality care remained a top priority in 2022. UPMC Children's Hospital of Pittsburgh was recognized as one of the top pediatric hospitals in the nation, earning the sixth position on the 2022-23 U.S. News & World Report Honor Roll of America's Best Children's Hospitals. In the U.S. News America's Best Hospitals survey, UPMC Presbyterian Shadyside was nationally ranked in 9 adult specialties. UPMC Magee-Womens Hospital was recognized as a 2022-2023 High Performing Hospital for Maternity Care (Uncomplicated Pregnancy) by *U.S. News & World Report*, while UPMC Harrisburg and UPMC Williamsport were also recognized as High Performing in Maternity Care. In addition, a significant number of hospitals received an "A" Hospital Safety Grade, the highest achievable safety mark, from The Leapfrog Group, a national organization that aims to improve healthcare quality and safety for consumers and purchasers.

UPMC Health Plan also received national recognition for clinical excellence and an unrivaled focus on Member Services. UPMC Health Plan earned 12 Stevie[®] Awards for Sales & Customer Service in 2022, competing with organizations of all sizes across almost every industry. UPMC *for Life*, earned a five-out-of-five overall Star Rating for its HMO and PPO Medicare for medical coverage and member service delivery, and was similarly recognized by *U.S. News & World Report* as one of the "Best Insurance Companies for Medicare Advantage and Part D Prescription Drugs," as well as receiving accreditation from the National Committee for Quality Assurance (NCQA). UPMC Health Plan was also among the first plans to earn the Health Equity Plus accreditation from the NCQA.

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CONSOLIDATED FINANCIAL HIGHLIGHTS

Financial Results for the Years Ended December 31		2022		2021
Operating revenues	\$	25,532	\$	24,366
Operating income (prior to lease impairment)*	\$	238	\$	843
Operating margin % (prior to lease impairment)*		0.9%		3.5%
Operating income	\$	162	\$	843
Operating margin %		0.6%		3.5%
Operating margin % (after income tax and interest expense)		0.0%		2.8%
(Loss) gain from investing and financing activities	\$	(1,078)	\$	810
Excess of (expenses over revenues) revenues over expenses attributable to controlling interest	\$	(1,033)	\$	1,460
Operating EBIDA	\$	856	\$	1,532
Capital expenditures	\$	994	\$	782
Reinvestment ratio		1.43		1.13
Selected Other Information as of	Decemb	oer 31, 2022	Decem	nber 31, 2021
Total cash and investments	\$	8,658	\$	10,697
Unrestricted cash and investments	\$	7,414	\$	9,184
Unrestricted cash and investments over long-term debt	\$	2,063	\$	3,131**
Days of cash on hand		109		148
Days in net accounts receivable		45		46
Average age of plant (in years)		10.4		9.8

*Excludes \$76 million of expense related to lease impairment

**Excludes \$515 million of Medicare advance funding and \$104 million of deferred FICA payments

Throughout 2022, the continued effect of COVID-19 on patient volumes, along with conditions in the labor and supply markets, have resulted in cost growth in employment, staffing and other operating expenses in excess of revenue growth. For the year ended December 31, 2022, UPMC recognized \$234 million of total COVID-19 relief funding within operating income, compared to \$316 million recognized for the year ended December 31, 2021. Refer to Note 2 in the accompanying year end consolidated financial statements for additional information. UPMC's loss from investing and financing activities for year ended December 31, 2022 was \$1.1 billion, in line with overall market trends in 2022. UPMC continues to have a long-term perspective with regard to its investment activities. As of December 31, 2022, UPMC had \$8.7 billion of cash and investments, of which approximately \$3.0 billion was held by UPMC's regulated health and captive insurance companies. Unrestricted cash and investment sover long-term debt, as shown on page 12, decreased in 2022 compared to prior year primarily due to negative investment returns.

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CONDENSED CONSOLIDATING STATEMENTS OF OPERATIONS

Year Ended December 31, 2022 Revenues:	Health Services	Insurance Services	EI	iminations	Co	onsolidated
Net patient service revenue	\$ 13,272	\$ -	\$	(3,032)	\$	10,240
Insurance enrollment revenue	-	13,036		-		13,036
Other revenue	1,451	885		(80)		2,256
Total operating revenues	\$ 14,723	\$ 13,921	\$	(3,112)	\$	25,532
Expenses:						
Salaries, professional fees and benefits	\$ 8,560	\$ 578	\$	(63)	\$	9,075
Insurance claims expense	-	11,882		(2,970)		8,912
Supplies, purchased services and general	5,725	967		(79)		6,613
Depreciation and amortization	687	7		-		694
Total operating expenses	14,972	13,434		(3,112)		25,294
Operating income (prior to lease impairment)	\$ (249)	\$ 487	\$	-	\$	238
Operating margin % (prior to lease impairment)	(1.7)%	3.5%		-		0.9%
Lease impairment expense	76	-		-		76
Operating (loss) income	\$ (325)	\$ 487	\$	-	\$	162
Operating margin %	(2.2)%	3.5%		-		0.6%
Operating margin % (including income tax and interest expense)	(3.3)%	3.4%		-		- %
Operating EBIDA	\$ 362	\$ 494	\$	-	\$	856
Operating EBIDA %	2.5%	3.5%		-		3.4%
Year Ended December 31, 2021 Revenues:						
Net patient service revenue	\$ 12,874	\$ -	\$	(2,869)	\$	10,005
Insurance enrollment revenue	-	12,110		-		12,110
Other revenue	1,471	877		(97)		2,251
Total operating revenues	\$ 14,345	\$ 12,987	\$	(2,966)	\$	24,366
Expenses:						
Salaries, professional fees and benefits	\$ 7,732	\$ 538	\$	(63)	\$	8,207
Insurance claims expense	-	11,339		(2,869)		8,470
Supplies, purchased services and general	5,277	914		(34)		6,157
Depreciation and amortization	678	11		-		689
Total operating expenses	13,687	12,802		(2,966)		23,523
Operating income	\$ 658	\$ 185	\$	-	\$	843
Operating margin %	4.6%	1.4%		-		3.5%
Operating margin % (including income tax and interest expense)	3.4%	1.4%		-		2.8%
Operating EBIDA	\$ 1,336	\$ 196	\$	-	\$	1,532
Operating EBIDA %	 9.3%	 1.5%		-		6.3%

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Health Services

UPMC Health Services division ("Health Services") includes a comprehensive array of clinical capabilities consisting of hospitals, specialty service lines (e.g., transplantation services, woman care, behavioral health, pediatrics, cancer care and rehabilitation services), contract services (emergency medicine, pharmacy and laboratory) and approximately 5,200 employed physicians with associated practices. Also included within Health Services are supporting foundations and UPMC's captive insurance programs. Hospital activity is monitored in four distinct groups: (i) academic hospitals that provide a comprehensive array of clinical services that include the specialty service lines listed above and serve as the primary academic and teaching centers for UPMC and are located in Pittsburgh; (ii) community hospitals that provide core clinical services to certain other areas of western (including Erie), and central (including Williamsport and Harrisburg) Pennsylvania, as well as western New York and northwestern Maryland; and (iv) pre- and post-acute care capabilities that include: UPMC HomeCare, a network of home health services, and UPMC Senior Communities, the facilities of which provide a complete network of senior living capabilities in greater Pittsburgh and the surrounding counties.

Health Services also includes international activities, with locations across the globe, which extend UPMC's core mission and aim to bring new revenue streams into UPMC's domestic operations. In Italy, UPMC locations include ISMETT, a government-approved hospital for end-stage organ disease treatment and research, Salvator Mundi International Hospital in Rome and UPMC Cancer Centers in Rome, Sicily and Campania. In Ireland, UPMC has a network of three hospitals and two UPMC Hillman Cancer Centers across southeast Ireland, stretching from Cork to Dublin. Other UPMC international ventures include management services agreements in China and Kazakhstan.

Operating income for the Health Services division for the year ended December 31, 2022 declined \$907 million versus the same period in the prior year when excluding the lease impairment charge in the current year. The decline is primarily the result of the continued effects of COVID-19 on patient volumes, as well as cost growth due to employment, staffing, premium labor costs and other operating expenses caused by conditions in the labor and supply markets. Additionally, COVID-19 relief funding recognized in the current year was \$82 million less than the year ended December 31, 2021.

Insurance Services

UPMC holds various interests in health care financing initiatives and network care delivery operations that have nearly 4.5 million members as of December 31, 2022. UPMC Health Plan is a health maintenance organization ("HMO") offering coverage for commercial and Medicare members. UPMC *for You*, also an HMO, is engaged in providing coverage to Medical Assistance & Medicare Special Needs Plan beneficiaries. UPMC Health Network offers preferred provider organization ("PPO") plan designs to serve Medicare beneficiaries. UPMC Health Options offers PPO plan designs to serve commercial beneficiaries. UPMC Health Options offers PPO plan designs to serve commercial beneficiaries. UPMC *for Life* is a Medicare product line offered by various companies within the Insurance Services division. UPMC WorkPartners provides fully insured workers' compensation, integrated workers' compensation and disability services to employers. Community Care Behavioral Health Organization ("Community Care") is a state-licensed HMO that manages the behavioral health services for Medical Assistance through mandatory managed care programs in Pennsylvania. Community HealthChoices ("CHC") is Pennsylvania's managed care program for individuals who are dual eligible for Medicaid and Medicare or qualify for Medicaid Long Term Services and Supports ("LTSS") and is designed to increase opportunities for older Pennsylvanians and individuals with physical disabilities to remain in their homes and communities rather than in facilities.

Insurance Services operating income for the year ended December 31, 2022 increased by \$302 million compared to the year ended December 31, 2021. UPMC had a favorable expense ratio compared to prior year as a result of continuing management of healthcare expenditures and the effects of COVID-19.

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UPMC Enterprises

As an organization dedicated to outstanding patient care, UPMC has defined a bold mission: to shape the future of health care through innovation. UPMC Enterprises helps bring this mission to life by transforming ideas into thriving businesses and Life Changing Medicine. UPMC Enterprises leverages UPMC's integrated delivery and financing system capabilities to generate new revenue streams by collaborating across UPMC, the University of Pittsburgh and Carnegie Mellon University, as well as health care entrepreneurs, companies and investors across the globe in all stages of commercial development, to bring to market new health care companies, technologies, and solutions. These ventures both support UPMC's core mission and help stimulate the economy within the communities we serve.

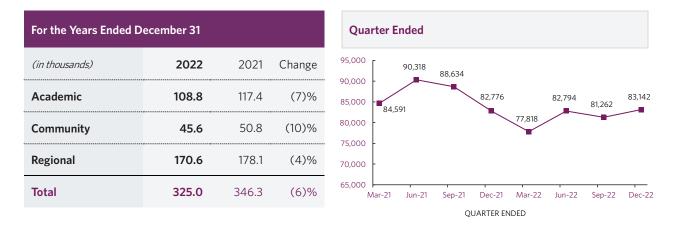
UPMC Enterprises manages a portfolio that includes various research and product development initiatives and numerous operating companies with commercially available products and services directed toward the improvement of the delivery of health care. UPMC Enterprises' results are classified as investing and financing activity in the consolidated statements of operations and changes in net assets, consistent with the long-term nature of developing and commercializing life sciences and technology-enabled initiatives. Due to the nature of UPMC Enterprises' investment activity, financial results can fluctuate between periods.

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REVENUE METRICS - HEALTH SERVICES

Medical-Surgical Admissions and Observation Visits

Inpatient activity, as measured by medical-surgical admissions and observation visits at UPMC's hospitals for the year ended December 31, 2022, decreased 6% compared to the same period in 2021, as volumes declined due to the ongoing shift of site of care from inpatient to outpatient, as well as the continued effects of the COVID-19 experience on the operating activities of UPMC.



Outpatient Revenue per Workday

UPMC's outpatient activity for the year ended December 31, 2022, as measured by average revenue per workday, increased 7% compared to the same period in 2021. Surgical demand, particularly in the outpatient setting, has increased as former inpatient services continue to move to outpatient. This, coupled with the increase in ambulatory patient volumes, has caused the increase to outpatient revenue per workday. Hospital outpatient activity is measured on an equivalent workday ("EWD") basis to adjust for weekend and holiday hours.

For the Years Ended December 31				
(in thousands)	2022		2021	Change
Academic	\$ 6,804	\$	6,424	6%
Community	1,813		1,804	1%
Regional	9,704		8,953	8%
Total	\$ 18,321	\$	17,181	7%

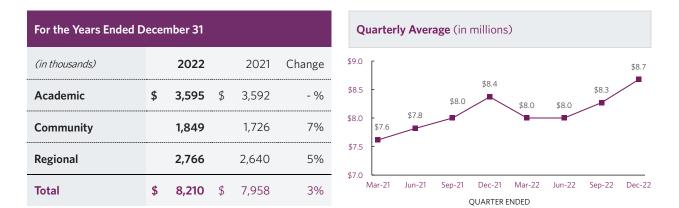


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REVENUE METRICS - HEALTH SERVICES (CONTINUED)

Physician Service Revenue per Weekday

UPMC's physician activity for the year ended December 31, 2022, as measured by average revenue per weekday, increased 3% from the comparable period in 2021. Physician services activity is measured on a weekday basis.



Sources of Patient Service Revenue

The gross patient service revenues, before price concessions and intercompany transactions, of UPMC are derived from payers which reimburse or pay UPMC for the services it provides to patients covered by such payers. The following table is a summary of the percentage of the hospitals' gross patient service revenue by payer.

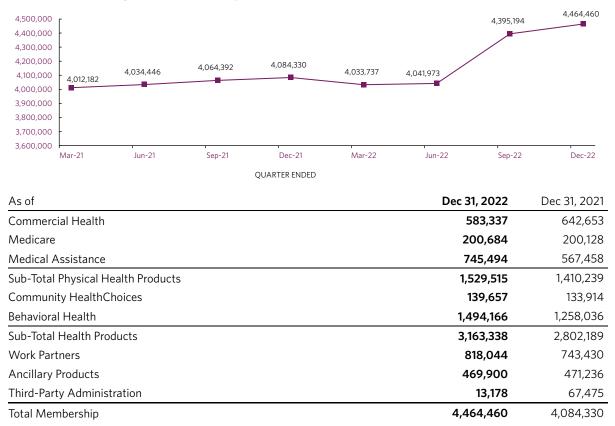
		Years Ended December 31	
	2022	2021	
Medicare	48%	47%	
Medical Assistance	17%	18%	
Commercial Insurers	16%	15%	
UPMC Insurance Services Commercial	11%	12%	
Self-pay/Other	8%	8%	
Total	100%	100%	

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OPERATING METRICS - INSURANCE SERVICES

Membership

Membership in the UPMC Insurance Services division increased to 4,464,460 as of December 31, 2022, a 9% increase versus December 31, 2021. The Insurance Services division has experienced significant growth in enrollment during the second half of 2022, primarily attributable to the growth in Behavioral Health products and expansion of Medical Assistance products (Medicaid) into new regions of eastern Pennsylvania.



Medical Expense Ratio

UPMC Insurance Services' medical expense ratio for the trailing twelve months has decreased to 85.5% as of December 31, 2022. The chart below is revised quarterly to reflect updated estimates and actual medical claims expense experience for each presented period and is reflective of the effect of the COVID-19 pandemic on medical claims expense.



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KEY FINANCIAL INDICATORS

(Dollars in millions)

Operating Earnings before Interest, Depreciation and Amortization

Operating EBIDA for the year ended December 31, 2022 decreased \$600 million compared to the year ended December 31, 2021.

For the Years Ended Dece	mber 31		
(in thousands)	2022	2021	Change
Operating Income	\$ 238*	\$ 843	(72%)
Depreciation and Amortization	694	689	1%
Operating EBIDA	\$ 932*	\$ 1,532	(39%)



*Excludes \$76 million of lease impairment

Unrestricted Cash and Investments Over Long Term Debt and Days Cash on Hand

Unrestricted cash and investments over long term debt as of December 31, 2022 decreased \$1.1 billion when compared to December 31, 2021 due primarily to negative investment returns in 2022.



Days in Net Accounts Receivable

Days in net Accounts Receivable at December 31, 2022 and December 31, 2021 were 45 and 46, respectively.



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MARKET SHARE

The chart below shows the change in UPMC's estimated inpatient market share for the first two quarters of calendar years 2021 and 2022 by service area.⁽¹⁾ This is the most recent market share data currently available.

UPMC INPATIENT MEDICAL-SURGICAL MARKET SHARE

AS OF JUNE 30⁽²⁾ 70% 60% 2021 2022 60% 50% MARKET SHARE 40% 44% 30% 27% 20% 10% 0% Central PA (19-County) Allegheny County Western PA (29-County)

(1) UPMC's three service areas are (1) Allegheny County, (2) a 29-county region which also includes Armstrong, Beaver, Bedford, Blair, Butler, Cambria, Cameron, Centre, Clarion, Clearfield, Crawford, Elk, Erie, Fayette, Forest, Greene, Huntingdon, Indiana, Jefferson, Lawrence, McKean, Mercer, Potter, Somerset, Venango, Warren, Washington and Westmoreland counties, and (3) a 19-county region including Adams, Clinton, Columbia, Cumberland, Dauphin, Franklin, Fulton, Juniata, Lancaster, Lebanon, Lycoming, Mifflin, Montour, Northumberland, Perry, Snyder, Tioga, Union and York counties.

⁽²⁾ Excludes psychiatry and substance abuse discharges.

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ASSET AND LIABILITY MANAGEMENT

For the year ended December 31, 2022, UPMC's investment portfolio, excluding Enterprises and various restricted assets, returned (10.9%). As of December 31, 2022, UPMC utilized 174 ongoing external investment managers including 45 traditional managers, 18 hedge fund managers and 111 private capital managers. UPMC is also invested with an additional 32 legacy private capital and hedge fund managers. UPMC's investment portfolio has a long-term perspective and has generated annualized returns of (10.9%), 3.7% and 4.2% for the trailing one-, three- and five-year periods. As of December 31, 2022, 69% of UPMC's investment portfolio could be liquidated within three days.

UPMC's cost of capital during the year ended December 31, 2022 was 3.1%. This cost of capital includes the accrual of interest payments, the amortization of financing costs and original issue discount or premium, the ongoing costs of variable rate debt and the cash flow impact of derivative contracts. As of December 31, 2022, the interest rates on UPMC's long-term debt were approximately 88% fixed and 12% variable after giving effect to derivative contracts. Interest cost for the variable rate debt for the period averaged 2.0%. The interest cost for the fixed rate debt was 3.2%. UPMC's primary credit facility, which expires in January 2024, has a borrowing limit of \$600 million. As of December 31, 2022, UPMC had approximately \$138 million in letters of credit outstanding under the credit facility, leaving \$462 million available to fund operating and capital needs, none of which was drawn.

In support of the Insurance Services division, UPMC has credit facilities of \$350 million and \$250 million, the latter of which temporarily decreases each year to \$25 million from September 1st to April 30th. The credit facilities expire in May 2026 and May 2027, respectively. As of December 31, 2022, these credit facilities were undrawn.

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The table below compares reported Investing and Financing Activity for the years ended December 31, 2022 and 2021 by type.

Investing and Financing Activity by Type

Years Ended December 31	2022	2021
(in thousands)		
Realized (loss) gain	\$ (28,000)	\$ 575,402
Interest and dividends, net of fees	119,923	79,530
Realized investment gain	\$ 91,923	\$ 654,932
Unrealized gain on derivative contracts	2,728	2,557
Other unrealized (loss) gain	(842,834)	245,080
Investment (loss) gain	\$ (748,183)	\$ 902,569
Interest expense	(157,959)	(161,976)
Gain (loss) on extinguishment of debt	14,409	(2,342)
UPMC Enterprises activity	(186,702)	71,697
(Loss) gain from investing and financing activities	\$ (1,078,435)	\$ 809,948

Sources and Uses of Cash

UPMC's primary source of operating cash is the collection of revenues and related accounts receivable. As of December 31, 2022, UPMC had approximately \$954 million of cash and cash equivalents.

Operating EBIDA before lease impairment was \$932 million for the year ended December 31, 2022, compared to \$1.5 billion for the year ended December 31, 2021. Key uses of cash for the year ended December 31, 2022 include capital expenditures of approximately \$1.0 billion (including any capital acquired through lease arrangements). Major capital projects included construction and improvements at UPMC Central PA, UPMC North Central PA, UPMC Mercy and UPMC Presbyterian as well as ongoing expansion and improvement across the entirety of UPMC. Major information services projects included enhancements that are advancing UPMC's leading clinician centric computing environment, technology infrastructure that supports UPMC's diversified digital environment, investments in enterprise data analytics and other technologies that are transforming the consumer experience across the spectrum of health care.

UTILIZATION STATISTICS

PERIOD ENDED DECEMBER 31, 2021

The following table presents selected consolidated statistical indicators of medical-surgical, psychiatric, rehabilitation and skilled nursing patient activity for the years ended December 31, 2022 and 2021.

	Years Ende	ed December 31
	2022	2021
Licensed Beds	8,774	8,771
BEDS IN SERVICE		
Medical-Surgical	5,106	5,089
Psychiatric	430	430
Rehabilitation	249	256
Skilled Nursing	1,539	1,551
Total Beds in Service	7,324	7,326
PATIENT DAYS		
Medical-Surgical	1,368,102	1,446,186
Psychiatric	109,455	122,366
Rehabilitation	66,021	74,332
Skilled Nursing	328,039	319,638
Total Patient Days	1,871,617	1,962,522
Average Daily Census	5,128	5,377
Observation Days	169,486	168,726
Obs Average Daily Census	464	462
ADMISSIONS AND OBSERVATION CASES		
Medical-Surgical	234,385	251,039
Observation Cases	90,631	95,280
Subtotal	325,016	346,319
Psychiatric	9,359	10,643
Rehabilitation	4,287	4,566
Skilled Nursing	3,597	3,444
Total Admissions and Observation Cases	342,259	364,972
Overall Occupancy	76%	80%
AVERAGE LENGTH OF STAY		
Medical-Surgical	5.8	5.8
Psychiatric	11.7	11.5
Rehabilitation	15.4	16.3
Skilled Nursing	91.2	92.8
Overall Average Length of Stay	7.4	7.3
Emergency Room Visits	1,000,660	1,030,438
TRANSPLANTS (DOMESTIC AND INTERNATIONAL)		
Liver	228	247
Kidney	351	328
All Other	293	312
Total	872	887
OTHER POST-ACUTE METRICS		
Home Health Visits	586,595	679,616
Hospice Care Days	232,477	242,688
Outpatient Rehab Visits	680,742	722,628
	232,477	242,6

OUTSTANDING DEBT

PERIOD ENDED DECEMBER 31, 2022 (DOLLARS IN THOUSANDS)

ssuer	Original Borrower	Series	Amount Outstanding
Allegheny County Hospital Development	UPMC Health System	1997B	\$43,606
Authority	UPMC	2007A	38,342
	UPMC	2017D	397,936
	UPMC	2019A	740,532
	UPMC	2021B	52,825
Aonroeville Finance Authority	UPMC	2012	73,410
, , , , , , , , , , , , , , , , , , ,	UPMC	2013B	44,084
	UPMC	2014B	43,904
	UPMC	2022B	189,780
Pennsylvania Economic Development Financing Authority	UPMC	2013A	104,298
6 ,	UPMC	2014A	261,471
	UPMC	2015B	113,488
	UPMC	2016	220,327
	UPMC	2017A	410,925
	UPMC	2017B	88,527
	UPMC	2017C	133,960
	UPMC	2020A	267,952
	UPMC	2021A	253,803
	UPMC	2022A	227,531
Fioga County Industrial Development Authority	Laurel Health System	2010	5,603
	Laurel Health System	2011	3,956
Dauphin County General Authority	Pinnacle Health System	2016A	93,665
	Pinnacle Health System	2016B	80,605
General Authority of Southcentral Pennsylvania	Hanover Hospital	2013	3,558
	Hanover Hospital	2015	21,093
Potter County Hospital Authority	UPMC	2018A	12,781
Somerset County Hospital Authority	Somerset Hospital	2009	420
Maryland Health and Higher Educational Facilities Authority	UPMC	2020B	197,530
None	UPMC	2020D	349,730
	UPMC	2020 Term Loans	499,929
	UPMC	2021C	399,513
	Somerset Management Services	2013	1,405
	Various	Financing Leases & Loans	144,386
		Swap Liabilities	732
Fotal			\$5,521,607

Includes original issue discount and premium, deferred financing costs and other.

Source: UPMC Records

DEBT COVENANT CALCULATIONS

PERIOD ENDED DECEMBER 31, 2022

DEBT SERVICE COVERAGE RATIO

(Dollars in thousands)

Trailing Twelve-Month Perioc December 3		n Period Ended mber 31, 2022
Excess of expenses over revenues	\$	(1,032,988)
ADJUSTED BY:		
Net Unrealized Losses during Period ⁽¹⁾		840,106
Depreciation and Amortization ⁽¹⁾		693,757
Gain on Extinguishment of Debt ⁽¹⁾		(14,409)
Lease Impairment – Facilities ⁽¹⁾		75,784
Realized Investment Impairments ⁽²⁾		(14,804)
Interest Expense ⁽³⁾		155,711
Revenues Available for Debt Service	\$	703,157
Historical Debt Service Requirements - 2007 Master Trust Indenture ("MTI")	\$	365,655
Debt Service Coverage Ratio - 2007 MTI		1.92X
Historical Debt Service Requirements - All Debt and Finance Leases	\$	403,296
Debt Service Coverage Ratio - All Debt and Finance Leases		1.74X
LIQUIDITY RATIO AS OF DECEMBER 31, 2022		
Unrestricted Cash and Investments	\$	7,414,475

MTI Debt	5,124,649
Unrestricted Cash to MTI Debt	1.45
⁽¹⁾ Non-Cash.	
⁽²⁾ Reflects ultimate realization of previously impaired cost-based investments.	
⁽³⁾ Includes only interest on long-term debt.	

I hereby certify to the best of my knowledge that, as of December 31, 2022, UPMC is in compliance with the applicable covenants contained in the financing documents for the bonds listed on the cover hereof and all applicable bank lines of credit and no Event of Default (as defined in any related financing document) has occurred and is continuing.

J.C. Stilley Treasurer UPMC

Audited Consolidated Financial Statements

FOR THE PERIOD ENDED DECEMBER 31, 2022



Ernst & Young LLP 2100 One PPG Place Pittsburgh, PA 15222

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Report of Independent Registered Public Accounting Firm

To the Board of Directors of UPMC

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of UPMC (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations and changes in net assets, and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States) (PCAOB) and in accordance with auditing standards generally accepted in the United States of America, the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 27, 2023 (not presented herein) expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are required to be independent with respect to the Company in accordance with the relevant ethical requirements relating to our audit.

We conducted our audits in accordance with the auditing standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.



Implicit and Explicit Price Concessions for Revenue Recognition

Description of the Matter	For the year ended December 31, 2022, the Company's net patient service revenue was \$10.2 billion. As discussed in Note 1 to the consolidated financial statements, net patient service revenue is recorded based upon the estimated amounts the Company expects to be entitled to receive from patients and third-party payers in exchange for providing patient care. Estimates of the explicit price concessions under managed care, commercial, and governmental insurance plans are based upon the payment terms specified in the related contractual agreements or as mandated under government payer programs. Management continually reviews the explicit price concession estimation process to consider and incorporate updates to laws and regulations and the frequent changes in managed care and commercial contractual terms resulting from contract negotiations and renewals. Revenues related to uninsured patients and uninsured copayment and deductible amounts for patients who have health care insurance coverage may have discounts applied (uninsured discounts and contractual discounts). The Company also records estimated implicit price concessions (based primarily on historical collection experience) related to uninsured accounts to record these revenues at the estimated amounts the Company expects to collect. Additional collection risks relate to uninsured patients' accounts, including amounts owed from patients after insurance has paid the amounts covered by the applicable agreement. Implicit price concessions relate primarily to amounts due directly from patients and are based upon management's assessment of a patient's historical propensity to pay and write-offs, business and economic conditions, trends in federal, state and private employer health care coverage and other collection indicators.
	Auditing management's estimates of explicit and implicit price concessions was complex and judgmental due to the significant data inputs and subjective assumptions utilized in determining related amounts.
How We Addressed the Matter in Our Audit	We tested internal controls that address the risks of material misstatement related to the measurement and valuation of revenues, including estimation of explicit and implicit price concessions. For example, we tested management's internal controls over the key data inputs to the explicit and implicit price concessions models, significant assumptions underlying management's models, and management's internal controls over retrospective hindsight reviews of historical reserve accuracy.
	To test the estimated explicit and implicit price concessions, we performed audit procedures that

To test the estimated explicit and implicit price concessions, we performed audit procedures that included, among others, assessing methodologies and evaluating the significant assumptions discussed above and testing completeness and accuracy of the underlying data used by the Company in its estimates. We compared the significant assumptions used by management to current industry and economic trends and considered changes, if any, to the Company's business and other relevant factors. We also assessed the historical accuracy of management's estimates based on the results of the analysis comparing prior year estimates to actual results and other analytics as a source of potential corroborative or contrary evidence.

Ernst + Young LLP

We have served as the Company's auditor since 1994. February 27, 2023

CONSOLIDATED BALANCE SHEETS

(DOLLARS IN THOUSANDS)

	As of			
	December 31, 2022 December 3			cember 31, 2021
CURRENT ASSETS				
Cash and cash equivalents	\$	953,980	\$	930,376
Patient accounts receivable		1,418,566		1,404,695
Insurance and other receivables		1,933,177		1,634,524
Other current assets		588,555		591,570
Total current assets		4,894,278		4,561,165
Board-designated, restricted, trusteed and other investments		7,704,484		9,766,549
Beneficial interests in foundations and trusts		667,380		783,779
Property, buildings and equipment:				
Land and land improvements		558,402		532,564
Buildings and fixed equipment		8,651,098		8,314,299
Movable equipment		3,372,982		3,294,921
Finance Leases		222,178		194,118
Construction in progress		901,389		590,085
		13,706,049		12,925,987
Less allowance for depreciation		(7,186,157)		(6,715,391)
		6,519,892		6,210,596
Operating lease right-of-use assets		796,886		976,026
Other assets		744,434		790,300
Total assets	\$	21,327,354	\$	23,088,415
CURRENT LIABILITIES				
Accounts payable and accrued expenses	\$	834,097	\$	783,477
Accrued salaries and related benefits		1,024,110		963,076
Current portion of insurance reserves		1,155,133		1,018,418
Current portion of long-term obligations		369,443		280,793
Other current liabilities		939,010		1,571,781
Total current liabilities		4,321,793		4,617,545
Long-term obligations		5,152,164		5,300,849
Long-term insurance reserves		458,285		429,182
Operating lease noncurrent liabilities		770,766		895,949
Other noncurrent liabilities		717,464		566,530
Total liabilities		11,420,472		11,810,055
Net assets without donor restrictions		8,737,069		9,883,697
Net assets with donor restrictions		1,169,813		1,394,663
Total net assets		9,906,882		11,278,360
Total liabilities and net assets	\$	21,327,354	\$	23,088,415
Constant in the second se				

See accompanying notes

CONSOLIDATED STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS

(DOLLARS IN THOUSANDS)

	Years Ended December 3			December 31
		2022		2021
NET ASSETS WITHOUT DONOR RESTRICTIONS				
Net patient service revenue	\$	10,240,253	\$	10,005,556
Insurance enrollment revenue	,	13,036,362	Ŧ	12,110,124
Other revenue		2,255,388		2,250,804
Total operating revenues		25,532,003		24,366,484
Salaries, professional fees and employee benefits		9,075,804		8,207,431
Insurance claims expense		8,911,760		8,469,749
Supplies, purchased services and general		6,612,758		6,157,002
Depreciation and amortization		693,757		689,389
Total operating expenses		25,294,079		23,523,571
Operating income (prior to lease impairment expense)		237,924		842,913
Lease impairment expense		75,784		-
Operating income		162,140		842,913
Academic and research support provided		(242,000)		(240,300)
Other non-operating activities		122,326		87,171
Income tax expense		(6,186)		(6,032)
After-tax income	\$	36,280	\$	683,752
Investing and financing activities:				
Investment (loss) gain		(748,183)		902,569
Interest expense		(157,959)		(161,976)
Gain (loss) on extinguishment of debt		14,409		(2,342)
UPMC Enterprises activity:				
Portfolio company revenue and net gains from sales		11,470		271,482
Portfolio company and research and development expense		(198,172)		(199,785)
(Loss) gain from investing and financing activities		(1,078,435)		809,948
Excess of (expenses over revenues) revenues over expenses		(1,042,155)		1,493,700
Excess of (expenses over revenues) revenues over expenses attributable to noncontrolling interest		(9,167)		33,674
Excess of (expenses over revenues) revenues over expenses attributable to		(1,032,988)		1,460,026
controlling interest				
Net change in pension liability and other		(113,640)		256,909
Change in net assets without donor restrictions	\$	(1,146,628)	\$	1,716,935
NET ASSETS WITH DONOR RESTRICTIONS				
Net contributions and other changes		6,792		21,081
(Losses) gains on restricted investments		(20,642)		22,754
Assets released from restriction for operations and		(94,601)		(8,573)
capital purchases		(116 200)		
Change in beneficial interests in foundations and trusts Change in net assets with donor restrictions		(116,399) (224,850)		104,973 140,235
Change in total net assets		(1,371,478) 11,278,360		1,857,170
Net assets, beginning of period	-		¢	9,421,190
Net assets, end of period	\$	9,906,882	\$	11,278,360

See accompanying notes

CONSOLIDATED STATEMENTS OF CASH FLOWS

(DOLLARS IN THOUSANDS)

	Years Ended December 3		
		2022	2021
OPERATING ACTIVITIES			
(Decrease) increase in total net assets	\$	(1,371,478) \$	1,857,170
Adjustments to reconcile change in total net assets to net cash			
provided by operating activities:			
Depreciation and amortization		693,757	689,389
Change in beneficial interest in foundations and trusts		116,399	(104,973)
Restricted contributions and investment losses (gains)		13,850	(43,835)
Unrealized losses (gains) on investments		842,834	(245,080)
Realized losses (gains) on investments		28,000	(575,402)
Purchases of non-alternative investments		(8,080,807)	(11,759,789)
Sales of non-alternative investments		9,251,039	11,128,045
Changes in operating assets and liabilities:			
Accounts receivable		(312,524)	(415,492)
Other current assets		3,015	(81,005)
Accounts payable and accrued liabilities		111,654	115,865
Insurance reserves		165,818	107,923
Other current liabilities		(632,771)	290,364
Other noncurrent assets and liabilities		55,516	(830,497)
Other operating changes		114,263	(153,202)
Net cash provided by (used in) operating activities		998,565	(20,519)
INVESTING ACTIVITIES			
Purchase of property, buildings and equipment		(964,243)	(756,970)
UPMC Enterprises investments in non-consolidated entities		(55,039)	(43,156)
Cash acquired through divestitures		-	83,543
Net change in investments designated as nontrading		35,143	(21,593)
Purchases of alternative investments		(212,346)	(289,523)
Sales of alternative investments		255,969	363,264
Net change in other assets		40,793	39,131
Net cash used in investing activities		(899,723)	(625,304)
FINANCING ACTIVITIES			
Repayments of long-term obligations		(1,113,374)	(1,372,555)
Borrowings of long-term obligations		1,051,986	1,363,883
Restricted contributions and investment (losses) gains		(13,850)	43,835
Net cash (used in) provided by financing activities		(75,238)	35,163
Net change in cash and cash equivalents		23,604	(610,660)
Cash and cash equivalents, beginning of period		930,376	1,541,036
Cash and cash equivalents, end of period	\$	953,980 \$	930,376
SUPPLEMENTAL INFORMATION			
Finance lease obligations incurred to acquire assets	\$	29,757 \$	25,130
manee lease obligations meaned to dequire assets	Ψ	<i>_</i> ∕,,,,, <i>ψ</i>	20,100

See accompanying notes

(DOLLARS IN THOUSANDS)

1. ORGANIZATIONAL OVERVIEW AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

UPMC is a Pennsylvania nonprofit corporation and is exempt from federal income tax pursuant to Section 501(a) of the Internal Revenue Code (the "Code") as an organization described in Section 501(c)(3) of the Code. Headquartered in Pittsburgh, Pennsylvania, UPMC is one of the world's leading integrated delivery and financing systems. UPMC comprises nonprofit and for-profit entities offering medical and health care-related services, including health insurance products. Closely affiliated with the University of Pittsburgh (the "University") and with shared academic and research objectives, UPMC partners with the University's Schools of the Health Sciences to deliver outstanding patient care, train tomorrow's health care specialists and biomedical scientists, and conduct groundbreaking research on the causes and course of disease.

The accompanying audited consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America ("GAAP") and include the accounts of UPMC and its subsidiaries. Intercompany accounts and transactions are eliminated in consolidation.

Cash and Cash Equivalents

Cash and cash equivalents consist primarily of cash and investments, which are so near to maturity that they present insignificant risk of changes in value. Fixed income instruments with original, short-term maturities of less than 90 days that are held in Master Trust Funds ("MTF") are excluded from cash equivalents as they are commingled with longer-term investments.

Net Patient Service Revenue

UPMC's net patient service revenue is recorded based upon the estimated amounts UPMC expects to be entitled to receive from patients, third-party payers (including health insurers and government programs) and others and includes an estimate of variable consideration for retroactive revenue adjustments due to settlement of audits, reviews and investigations. Generally, UPMC bills the patients and third-party payers several days after the services are performed and/or the patient is discharged from the facility. Estimates of the explicit price concessions under managed care, commercial and governmental insurance plans are based upon the payment terms specified in the related contractual agreements or as mandated under government payer programs. UPMC continually reviews the explicit price concession estimation process to consider and incorporate updates to laws and regulations and the frequent changes in managed care and commercial contractual terms resulting from contract negotiations and renewals. Revenue is recognized as performance obligations are satisfied. Performance obligations are determined based on the nature of the services provided by UPMC. Revenue for performance obligations satisfied over time is recognized based on actual charges incurred in relation to total expected (or actual) charges. UPMC believes that this method provides a reasonable representation of the transfer of services over the term of the performance obligation based on the inputs needed to satisfy the obligation. Generally, performance obligations satisfied over time relate to inpatient services. UPMC measures the performance obligation from admission into the hospital to the point when it is no longer required to provide services to that patient, which is generally at the time of discharge. Revenue for performance obligations satisfied at a point in time is recognized when goods or services are provided and UPMC does not believe it is required to provide additional goods or services to the patient.

(DOLLARS IN THOUSANDS)

The majority of UPMC's services are rendered to patients with third-party coverage. Payment under these programs for all payers is based on a combination of prospectively determined rates, discounted charges and historical costs. Amounts received under Medicare and Medical Assistance programs are subject to review and final determination by program intermediaries or their agents. The contracts UPMC has with commercial payers also provide for retroactive audit and review of claims. Agreements with third-party payers typically provide for payments at amounts less than established charges. Generally, patients who are covered by third-party payers are responsible for related deductibles and coinsurance, which vary in amount. UPMC also provides services to uninsured patients. Revenues related to uninsured patients and uninsured copayment and deductible amounts for patients who have health care coverage may have discounts applied (uninsured discounts and contractual discounts). UPMC also records estimated implicit price concessions (based primarily on historical collection experience) related to uninsured accounts to record these revenues at the estimated amounts UPMC expects to collect. Subsequent changes to the estimate of the transaction price are generally recorded as adjustments to net patient service revenue in the period of the change and are accrued on an estimated basis in the period the related services are rendered and adjusted in future periods if final settlements differ from estimates. Adjustments arising from a change to previously estimated transaction prices were not significant in the years ended December 31, 2022 or 2021.

Consistent with UPMC's mission, care is provided to patients regardless of their ability to pay. UPMC has determined it has provided implicit price concessions to uninsured patients and patients with other uninsured balances (for example, copays and deductibles). The implicit price concessions included in estimating the transaction price represent the difference between amounts billed to patients and the amounts UPMC expects to collect based on its collection history with those patients. Patients who meet UPMC's criteria for charity care are provided care without charge or at amounts less than established rates and UPMC has determined it has provided an implicit price concession. Price concessions, including charity care, are deducted from net patient service revenue.

The collection of outstanding receivables from Medicare, Medicaid, managed care payers, other third-party payers and patients is UPMC's primary source of cash and is critical to its operating performance. The primary collection risks relate to uninsured patient accounts, including patient accounts for which the primary insurance carrier has paid the amounts covered by the applicable agreement, but patient responsibility amounts (deductibles and copayments) remain outstanding. Implicit price concessions relate primarily to amounts due directly from patients. Estimated implicit price concessions are recorded for all uninsured accounts, regardless of the age of those accounts. Accounts are written off when all reasonable internal and external collection efforts have been performed. The estimates for implicit price concessions are based upon UPMC's assessment of historical write-offs and expected net collections, business and economic conditions, trends in federal, state and private employer health care coverage and other collection indicators.

The composition of net patient service revenue for the years ended December 31, 2022 and 2021 is as follows:

Years Ended December 31	2022	2021
Commercial	38%	39%
Medicare	39%	37%
Medical Assistance	16%	16%
Self-pay/other	7%	8%
	100%	100%

(DOLLARS IN THOUSANDS)

Laws and regulations governing the Medicare and Medical Assistance programs are complex and subject to interpretation. Compliance with such laws and regulations is subject to government review and interpretation as well as significant regulatory action, including fines, penalties and exclusion from Medicare and Medical Assistance programs. As a result, there is at least a reasonable possibility that the recorded estimates may change.

Insurance Enrollment Revenue

UPMC's insurance subsidiaries (collectively, the "Health Plans") provide health care services on a prepaid basis under various contracts. Insurance enrollment revenues are recognized as income in the period in which enrollees are entitled to receive health care services, which represents the performance obligation. Health care premium payments received from UPMC's members in advance of the service period are recorded as unearned revenues.

Insurance enrollment revenues include premiums that are collected from companies, individuals, and government entities. Laws and regulations governing the Medicare and Medical Assistance programs are complex and subject to interpretation. Compliance with such laws and regulations can be subject to government review and interpretation as well as significant regulatory action, including fines, penalties and exclusion from the programs. As a result, there is at least a reasonable possibility that recorded estimates may change.

Other Revenue

UPMC's other revenue consists of various contracts related to its Health Services and Insurance Services divisions. These contracts vary in duration and in performance obligations. Revenues are recognized when the performance obligations identified within the individual contracts are satisfied and collectability is probable. Revenue recognized related to governmental funding in response to the COVID-19 pandemic is captured in other revenue.

Receivables

Concentrations of patient accounts receivable at December 31, 2022 and 2021 include:

Years Ended December 31	2022	2021
Commercial	44%	44%
Medicare	30%	28%
Medical Assistance	11%	12%
Self-pay/other	15%	16%
	100%	100%

Insurance and other receivables are primarily comprised of payments due to Insurance Services and include the uncollected amounts from fully insured groups, individuals and government programs and are reported net of an allowance for estimated terminations and uncollectible accounts.

(DOLLARS IN THOUSANDS)

Board-Designated, Restricted, Trusteed and Other Investments

Substantially all of UPMC's investments in debt and equity securities are classified as trading. This classification requires UPMC to recognize unrealized gains and losses on substantially all of its investments in debt and equity securities as investment (loss) gain in the consolidated statements of operations and changes in net assets. This classification also includes UPMC Enterprises' cost basis investments in early stage entities, which are categorized as alternative investments. Gains and losses on the sales of securities are determined by the average cost method. Realized and unrealized gains and losses are included in investment (loss) gain in the consolidated statements of operations and changes in net assets. Realized and unrealized gains and losses on donor-restricted assets are recorded as changes in net assets with donor restrictions in the consolidated statements of operations and changes in net assets with donor restrictions in the consolidated statements of operations and changes in net assets with donor restrictions in the consolidated statements of operations and changes in net assets with donor restrictions in the consolidated statements of operations and changes in net assets.

Investments in equity securities with readily determinable fair values and all investments in debt securities are measured at fair value using quoted market prices or model-driven valuations. These investments predominantly include those maintained in MTF and are summarized as nonalternative investments in Note 5.

Investments in limited partnerships that invest in marketable securities (hedge funds) are reported using the equity method of accounting based on information provided by the respective partnership, generally received on a one month lag. The values provided by the respective partnerships are based on historical cost, appraisals or other estimates that require varying degrees of judgment. Generally, UPMC's holdings reflect net contributions to the partnership and an allocated share of realized and unrealized investment income and expenses. The investments may individually expose UPMC to securities lending, short sales, and trading in futures and forward contract options and other derivative products. UPMC's risk is limited to its carrying value for these lending and derivatives transactions. Amounts can be divested only at specified times. The financial statements of the limited partnerships are audited annually, generally as of December 31.

The values of UPMC's private equity investments are based upon financial statements received from the general partners, which are generally received on a quarterly lag. As a result, the market values and earnings recorded as of December 31, 2022 generally reflect the partnership activity experienced during the year ended September 30, 2022. These investments are summarized as alternative investments in Note 5.

Fair Value Elections

Pursuant to accounting guidance provided by ASC 825-10, *Financial Instruments*, UPMC makes elections, on an investment-byinvestment basis, as to whether it measures certain equity method investments that are traded in active markets at fair value. Fair value elections are generally irrevocable. The initial unrealized gains recognized upon election of the fair value option are recorded as operating revenue in the consolidated statements of operations and changes in net assets consistent with accounting for other equity method investments where UPMC has the ability to exercise significant influence but not control. Any subsequent changes in the fair value of the investment are recorded as investment (loss) gain in the consolidated statements of operations and changes in net assets, consistent with UPMC's reporting of gains and losses on other marketable securities included in board-designated, restricted, trusteed and other investments. Management believes this reporting increases the transparency of UPMC's financial condition.

(DOLLARS IN THOUSANDS)

Financial Instruments

Cash and cash equivalents and investments recorded at fair value aggregate to \$7,502,345 and \$9,583,692 at December 31, 2022 and 2021, respectively. The fair value of these instruments is based on market prices as estimated by financial institutions. The fair value of amounts owed to counterparties under derivative contracts at December 31, 2022 and 2021, is \$732 and \$3,683, respectively, and due from counterparties is \$0 and \$222, respectively, based on pricing models that take into account the present value of estimated future cash flows.

UPMC participates in securities lending transactions whereby a portion of its investments are loaned, through its agent, to various parties in return for cash and securities from the parties as collateral for the securities loaned. The amount of cash collateral received under securities lending is reported as an asset with a corresponding payable in the consolidated balance sheets. The total collateral is required to have a market value between 102% and 105% of the market value of securities loaned. As of December 31, 2022 and 2021, securities loaned to various parties, of which UPMC maintains ownership, were \$203,429 and \$203,256, respectively, and total collateral (cash and noncash) received related to the securities loaned was \$212,925 and \$213,284, respectively.

Beneficial Interests in Foundations and Trusts

Several of UPMC's subsidiary hospitals have foundations that, according to their bylaws, were formed for the exclusive purpose of supporting and furthering the mission of the respective hospital. The foundations are separate corporations and are not liable for the obligations of UPMC, including any claims of creditors of any UPMC entities. The net assets of certain foundations are included in the consolidated balance sheets as beneficial interests in foundations and net assets with donor restrictions because the hospitals' use of these assets is at the discretion of the foundations' independent boards of directors.

Beneficial interests in foundations and trusts of \$667,380 and \$783,779 and the net assets with donor restrictions of consolidated foundations of \$53,208 and \$61,262 as of December 31, 2022 and 2021, respectively, are not pledged as collateral for UPMC's debt.

Property, Buildings and Equipment

Property, buildings and equipment are recorded at cost or, if donated or impaired, at fair market value at the date of receipt or impairment. Interest cost incurred on borrowed funds (net of interest earned on such funds) during the period of construction of capital assets is capitalized as a component of the cost of acquiring those assets.

Costs associated with the development and installation of internal-use software are expensed or capitalized depending on whether they are incurred in the preliminary project stage, application development stage or post-implementation stage.

Depreciation is computed using the straight-line method at rates designed to depreciate the assets over their estimated useful lives (predominantly ranging from 3 to 40 years) and includes depreciation related to finance leases. Certain newly constructed buildings have estimated useful lives of up to 60 years. Depreciation expense on property, buildings and equipment for the years ended December 31, 2022 and 2021 was \$692,765 and \$687,178, respectively.

(DOLLARS IN THOUSANDS)

Leases

Leases are classified as either operating or financing, and the lease classification determines whether the expense is recognized on a straight-line basis (operating leases) or based on an effective interest method (finance leases). UPMC has made accounting policy elections not to apply lease recognition requirements to short-term leases as well as to use the risk-free discount rate for its operating leases. Operating leases are categorized as operating lease right-of-use assets on the consolidated balance sheets, while finance leases are recognized as property, buildings and equipment. UPMC has also made an accounting policy election not to bifurcate lease components from non-lease components. For leases that include variable lease payments, the payment is determined based on the executed contract terms. Some leases contain options to extend or terminate the lease, but these are not recognized in the right-of-use assets and lease liabilities as of December 31, 2022, unless it is probable that the option will be exercised. During the year ended December 31, 2022, due to changes in the nature and extent as to how specific leased locations are utilized, certain renewal options, previously deemed probable, were deemed to be unlikely to be exercised. As a result, a reduction of both the right-of-use-asset and lease liability totaling \$118,557 was recorded as of December 31, 2022.

Asset Impairment

UPMC evaluates the recoverability of the carrying value of long-lived assets by reviewing long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable and adjusts the asset cost to fair value if undiscounted cash flows are less than the carrying amount of the asset. For the year ended December 31, 2022, an impairment for certain right-of-use assets was recorded in the amount of \$75,784. No impairment was recorded for the year ended December 31, 2021.

Other Assets

Investments in individual entities in which UPMC has the ability to exercise significant influence but does not control, generally 20% to 50% ownership, are reported using the equity method of accounting unless the fair value option is elected. Other assets includes approximately \$392,787 and \$384,920 at December 31, 2022 and 2021, respectively, relating to investments in partnerships and joint ventures that provide health care, management, and other goods and services to UPMC, its affiliates and the community at large.

Goodwill

Goodwill represents the excess of the cost of an acquired entity over the net of the amounts assigned to the fair value of assets acquired and liabilities assumed. As of December 31, 2022 and 2021, goodwill of \$266,799 and \$267,702 respectively, is recorded in UPMC's consolidated balance sheets as other assets.

Goodwill is reviewed annually for impairment, or more frequently if events or circumstances indicate that the carrying value of an asset may not be recoverable. UPMC has the option to qualitatively assess goodwill for impairment before completing a quantitative assessment. Under the qualitative approach, if, after assessing the totality of events or circumstances, including both macroeconomic, industry and market factors, and entity-specific factors, UPMC determines it is likely (more likely than not) that the fair value is greater than its carrying amount, then the quantitative impairment analysis is not required. As of December 31, 2022 and 2021, after application of the qualitative approach, there were no indicators of impairment.

(DOLLARS IN THOUSANDS)

Derivatives

UPMC uses derivative financial instruments ("derivatives") to modify the interest rates and manage risks associated with its asset allocation and outstanding debt. UPMC records derivatives as assets or liabilities in the consolidated balance sheets at fair value. The accounting for changes in the fair value (i.e., gains or losses) of a derivative depends on whether it has been designated and qualifies as part of a hedging relationship and, further, on the type of hedging relationship. UPMC has entered into interest rate swap agreements that convert a portion of its variable rate debt to a fixed interest rate. None of UPMC's swaps outstanding as of December 31, 2022 and 2021 are designated as hedging instruments and, as such, changes in fair value are recognized in investing and financing activities as investment (loss) gain in the consolidated statements of operations and changes in net assets.

By using derivatives to manage these risks, UPMC exposes itself to credit risk and market risk. Credit risk is the failure of the counterparty to perform under the terms of the derivatives. When the fair value of a derivative is positive, the counterparty owes UPMC, which creates credit risk for UPMC. When the fair value of a derivative is negative, UPMC owes the counterparty, and therefore, it does not incur credit risk. UPMC minimizes the credit risk in derivatives by entering into transactions that require the counterparty to post collateral for the benefit of UPMC based on the credit rating of the counterparty and the fair value of the derivative. If UPMC has a derivative in a liability position, UPMC's credit is a risk and fair market values could be adjusted downward. Market risk is the effect on the value of a financial instrument that results from a change in interest rates. The market risk associated with interest rate changes is managed by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken. Management also mitigates risk through periodic reviews of derivative positions in the context of UPMC's total blended cost of capital.

Net Assets

Resources are classified for reporting purposes as net assets without donor restrictions and net assets with donor restrictions, according to the absence or existence of donor-imposed restrictions. Board-designated net assets are net assets without donor restrictions that have been set aside by the Board for specific purposes. Net assets with donor restrictions are those assets, including contributions and accumulated investment returns, whose use has been limited by donors for a specific purpose or time period or are those for which donors require the principal of the gifts to be maintained in perpetuity to provide a permanent source of income.

Net assets with donor restrictions include \$379,125 and \$439,517 of net assets held in perpetuity and \$790,688 and \$955,146 of temporary restricted net assets at December 31, 2022 and 2021, respectively. Net assets with donor restrictions include beneficial interests in foundations that support research and other health care programs. Some net assets with donor restrictions are limited by donors and the foundations to a specific time period or purpose and are reclassified to net assets without donor restrictions and included in the consolidated statements of operations and changes in net assets as other revenue or assets released from restriction for capital purchases when the restriction is met.

(DOLLARS IN THOUSANDS)

Excess of Expenses over Revenues

The consolidated statements of operations and changes in net assets include excess of expenses over revenues as a performance indicator. Excess of expenses over revenues includes all changes in net assets without donor restrictions except for contributions and distributions from foundations for the purchase of property and equipment, adjustments for pension liability, other than net periodic pension cost, discontinued operations, if any, and the cumulative effect of changes in accounting principles, if any.

Use of Estimates

The preparation of financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

2. COVID-19

In March 2020 and March 2021, the federal government enacted the CARES Act and the American Rescue Plan ("ARP"), respectively, that provide, among other funding sources, relief funds to hospitals and other health care providers on the front lines of the COVID-19 response. This funding has been used to support health care related expenses or lost revenue attributable to COVID-19. For the year ended December 31, 2022, UPMC recognized approximately \$234,000 within operating income compared to \$316,000 recognized for the year ended December 31, 2021. UPMC and its subsidiaries have and expect to continue to experience an impact on operations as a result of the COVID-19 pandemic.

In order to increase cash flow to providers of services and suppliers impacted by the COVID-19 pandemic, the Centers for Medicare & Medicaid Services ("CMS") expanded the current Accelerated and Advance Payment Program. Beginning in April 2020, CMS provided advance funding that aggregated to a total of approximately \$840,000 to 185 individually identified UPMC entities. In October 2020, a bill was signed into law which changed the original Medicare loan repayment terms for health care providers allowing recoupment to begin one year after the Medicare Accelerated and Advance Payment Program loan was issued. Recoupment began in April 2021 and the recovery period was approximately 18 months from that date. Additionally, the CARES Act allowed employers to defer the deposit and payment of certain employer's share of Social Security/FICA taxes. As of December 31, 2022, these deferred amounts were substantially repaid. As of December 31, 2021, \$619,000 was outstanding and included in other current liabilities.

3. NEW ACCOUNTING PRONOUNCEMENTS

Effective January 1, 2021, UPMC adopted the Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") 2018-14, *Compensation – Retirement Benefits- Defined Benefit Plans* (Topic 715). This ASU modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. UPMC applied the relevant provisions of the standard to their consolidated financial statement disclosures accordingly.

4. CHARITY CARE

UPMC's patient acceptance policy is based on its mission and its community service responsibilities. Accordingly, UPMC accepts patients in immediate need of care, regardless of their ability to pay. UPMC does not pursue collection of amounts determined to qualify as charity care based on established policies of UPMC. These policies define charity care as those services for which no payment is due for all or a portion of the patient's bill. For financial reporting purposes, charity care is excluded from net patient service revenue. The amount of charity care provided, determined on the basis of cost, was \$108,905 and \$87,331 for the years ended December 31, 2022 and 2021, respectively. UPMC estimates the cost of providing charity care using the ratio of average patient care cost to gross charges and then applying that ratio to the gross uncompensated charges associated with providing charity care.

(DOLLARS IN THOUSANDS)

5. CASH AND INVESTMENTS

Following is a summary of cash and investments included in the consolidated balance sheets:

	December 31		
	2022	2021	
Internally designated:			
Health insurance programs	\$ 1,689,382	\$ 1,694,242	
Professional and general liability insurance program	625,533	692,969	
Employee benefit and workers' compensation self-insurance programs	121,798	159,220	
Other	-	99,182	
	2,436,713	2,645,613	
Externally designated:			
Trusteed assets for capital and debt service payments	3,533	3,447	
Donor-restricted assets	476,322	606,064	
	479,855	609,511	
Other long-term investments	4,787,916	6,511,425	
Board-designated, restricted, trusteed and other investments	7,704,484	9,766,549	
Cash and cash equivalents	953,980	930,376	
	\$ 8,658,464	\$ 10,696,925	

Investments are primarily maintained in MTF and administered using a bank as trustee. As of December 31, 2022, UPMC utilized 174 ongoing external investment managers, including 45 traditional managers, 18 hedge fund managers and 111 private capital managers. UPMC is also invested with an additional 32 legacy private capital and hedge fund managers. The largest allocation to any alternative investment fund is \$90,160 as of December 31, 2022. Certain managers use various equity and interest rate derivatives. These instruments are subject to various risks similar to nonderivative financial instruments, including market, credit, liquidity, operational and foreign exchange risk. UPMC's unfunded commitments to investments are \$525,148 and \$376,193 as of December 31, 2022 and 2021, respectively. Unfunded commitments may be called by managers pursuant to the terms of each specific fund's documents, which allow capital to be called during a fund's investment period for new investments. While terms vary, investment periods are generally within six years.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (DOLLARS IN THOUSANDS)

Investment return from cash and investments is comprised of the following for the years ended December 31, 2022 and 2021:

	2022	2021
Interest income	\$ 109,917	\$ 73,213
Dividend income	44,008	40,928
Net realized (losses) gains on sales of securities	(28,000)	575,402
	125,925	689,543
Unrealized investment (losses) gains	(842,834)	245,080
Derivative contracts mark to market	2,728	2,557
	(840,106)	247,637
Total investment (loss) gain	(714,181)	937,180
Traditional investment manager and trustee fees	(34,002)	(34,611)
Investment (loss) gain	\$ (748,183)	\$ 902,569

In managing the UPMC investment strategy, an important consideration is to ensure sufficient liquidity. While UPMC's relationships with its external investment managers vary in terms of exit provisions, a percentage of the agreements allow ready access to underlying assets which are generally liquid and marketable. Liquidity as of December 31, 2022 is shown below:

Liquidity Availability	Cash and Cash Equivalents	Nonalternative Investments	Alternative Investments	Total
Within three days	\$ 953,980	\$ 4,725,107	\$ -	\$ 5,679,087
Within 30 days	-	124,887	100,048	224,935
Within 60 days	-	-	-	-
Within 90 days	-	-	494,384	494,384
More than 90 days	-	308,759	1,951,299	2,260,058
Total	\$ 953,980	\$ 5,158,753	\$ 2,545,731	\$ 8,658,464

6. CREDIT ARRANGEMENTS

UPMC has a revolving line and letter of credit facility (the "Revolving Facility") with a capacity of \$600,000. The Revolving Facility expires on January 24, 2024. The Revolving Facility is used to manage cash flow during the year and to provide for a consolidated method of issuing various letters of credit for certain business units. A note to secure UPMC's repayment obligation with respect to the Revolving Facility was issued under the 2007 MTI and is secured by a pledge of and security interest in the gross revenues of UPMC's parent corporation, UPMC Presbyterian Shadyside, UPMC Magee-Womens Hospital, UPMC Passavant and UPMC St. Margaret as members of the obligated group under the 2007 UPMC MTI. Advances may be variable rate based on the prime rate or the Federal Funds effective rates or fixed on the date of the advance based on the LIBOR Rate and the reserve requirement on Eurocurrency liabilities.

As of December 31, 2022 and 2021, UPMC had issued \$137,778 and \$82,990, respectively, of letters of credit under the Revolving Facility. These letters of credit predominantly support the capital requirements of certain insurance subsidiaries. As of December 31, 2022 and 2021, there was \$462,222 and \$517,010, respectively, available to borrow under the Revolving Facility. No amounts were outstanding under the Revolving Facility as of December 31, 2022 and 2021.

(DOLLARS IN THOUSANDS)

In support of the Insurance Services division, UPMC has credit facilities of \$350 million and \$250 million, the latter of which temporarily decreases each year to \$25 million from September 1st to April 30th. The credit facilities expire in May 2026 and May 2027, respectively. As of December 31, 2022, these credit facilities were undrawn.

7. LONG-TERM OBLIGATIONS AND DERIVATIVE INSTRUMENTS

Long-term obligations consist of the following:

	December 31			
		2022		2021
Fixed rate revenue bonds	\$	4,452,224	\$	4,496,406
Variable rate revenue bonds		673,157		701,192
Finance leases and other		144,350		124,758
Par value of long-term obligations		5,269,731		5,322,356
Net premium and other		251,876		259,286
		5,521,607		5,581,642
Less current portion		(369,443)		(280,793)
Total long-term obligations	\$	5,152,164	\$	5,300,849

Bonds and leases outstanding represent funds borrowed by the UPMC parent corporation and various subsidiaries pursuant to loan agreements and lease and sublease financing arrangements with governmental authorities. The proceeds were used for the purchase, construction and renovation of hospital facilities, certain buildings and equipment, as well as the extinguishment of debt.

The fixed rate revenue bonds bear interest at fixed coupon rates ranging from 1.80% to 6.00% as of December 31, 2022 and from 1.80% to 6.00% as of December 31, 2021. The average interest costs for the variable rate revenue bonds were 2.02% and 1.30% during the years ended December 31, 2022 and 2021, respectively. Bonds have varying principal payments and final maturities from 2023 through 2052. Certain revenue bonds (\$43,606 and \$43,595 for 2022 and 2021, respectively) are secured by bond insurance. The bonds contain redemption provisions whereby, at the direction of UPMC, the bonds may be redeemed on various dates as presented within the bond agreements.

Bonds in the aggregate of \$5,124,649 and \$5,193,915 as of December 31, 2022 and 2021, respectively, are issued under the UPMC MTI. The bonds are secured by a pledge of and security interest in gross revenues. Certain amounts borrowed under the MTI are loaned to certain subsidiary corporations pursuant to loan and contribution agreements and require the transfer of subsidiary funds to the parent corporation in the event of failure to satisfy the UPMC parent corporation liquidity covenant.

The various indebtedness agreements contain restrictive covenants, the most significant of which are the maintenance of minimum debt service coverage and liquidity ratios, and restrictions as to the incurrence of additional indebtedness and transfers of assets. UPMC was in compliance with such covenants as of December 31, 2022 and 2021.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (DOLLARS IN THOUSANDS)

Aggregate maturities of long-term obligations for the next five years, assuming no remarketing of UPMC's variable rate debt, indicating the maximum potential payment obligations in these years, are as follows:

2023	\$ 369,443		
2024	162,531		
2025	521,222		
2026	575,575		
2027	254,135		

Interest paid, net of amounts capitalized, on all obligations was \$193,283 and \$191,221 during the years ended December 31, 2022 and 2021, respectively.

During the year ended December 31, 2022, UPMC issued the tax-exempt Series 2022A and 2022B fixed rate bonds in the par amount of \$212,430 and \$172,195, respectively, in order to fund new capital projects and refund existing debt. Concurrently, UPMC remarketed the tax-exempt Series 2017C and 2017D-2 bonds. During the year ended December 31, 2021, UPMC issued Series 2021A, 2021B, and 2021C fixed rate bonds in the par amount of \$221,860, \$47,430, and \$400,000, respectively, with an original issue premium of \$42,165, \$10,288, and \$0, respectively, in order to fund new capital projects and refund existing debt.

UPMC maintains interest rate swap programs on certain of its bonds in order to manage its interest rate risk. To meet this objective and to take advantage of low interest rates, UPMC entered into various interest rate swap agreements to manage interest rate risk. The notional amount under each interest rate swap agreement is reduced over the term of the respective agreement to correspond with reductions in various outstanding bond series.

During the term of these agreements, the floating to fixed rate swaps convert variable rate debt to a fixed rate and the basis swaps convert the interest rate on underlying LIBOR-based bonds to the Securities Industry and Financial Markets Association Municipal Swap Index ("SIFMA Index").

Under the basis swaps, UPMC pays a rate equal to the SIFMA Index, an index of seven-day, high-grade, tax-exempt variable rate demand obligations. The SIFMA Index rates ranged from 0.04% to 3.80% (weighted average rate of 1.23%) and from 0.02% to 0.11% (weighted average rate of 0.04%) as of December 31, 2022 and 2021, respectively.

The following table summarizes UPMC's interest rate swap agreements:

					Not	ional /	Amount at
Swap	Maturity Date	UPMC Pays	UPMC Receives	Dec	: 31, 2022	De	ec 31, 2021
Floating to fixed	2025	3.60%	68% one-month LIBOR	\$	37,935	\$	49,280
Basis	2037	SIFMA Index ¹	67% three-month LIBOR plus .3217%		38,450		46,095
Floating to fixed	2024	1.413%	67% one-month LIBOR		-		7,500
				\$	76,385	\$	102,875

¹The SIFMA Index is a 7-day high-grade market index comprised of tax-exempt variable rate demand obligations.

(DOLLARS IN THOUSANDS)

Pursuant to master netting arrangements, UPMC has the right to offset the fair value of amounts recognized for derivatives, including the right to reclaim or obligation to return cash collateral from/to counterparties. The fair values of UPMC's derivative financial instruments are presented below, representing the gross amounts recognized as of December 31, 2022 and December 31, 2021 which are not offset by counterparty or type of item hedged:

	Dec 31, 2022	De	c 31, 2021
Other assets Long-term obligations	\$ - (732)	\$	222 (3,683)
	\$ (732)	\$	(3,461)

8. FAIR VALUE MEASUREMENTS

As of December 31, 2022 and 2021, UPMC held certain assets that are required to be measured at fair value on a recurring basis. These include cash and cash equivalents, certain board-designated, restricted, trusteed, and other investments and derivative instruments. Certain alternative investments are measured using the equity method of accounting and are therefore excluded from the fair value hierarchy tables presented herein. The valuation techniques used to measure fair value are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs are generally unsupported by market activity. The three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value, includes:

- Level 1: Quoted prices for identical assets or liabilities in active markets.
- Level 2: Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-driven valuations whose inputs are observable or whose significant value drivers are observable.
- Level 3: Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The following tables represent UPMC's fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2022 and 2021. The interest rate swaps are valued using internal models, which are primarily based on market observable inputs, including interest rate curves. When quoted market prices are unobservable for fixed income securities, quotes from independent pricing vendors based on recent trading activity and other relevant information, including market interest rate curves, referenced credit spreads and estimated prepayment rates where applicable, are used for valuation purposes. These investments are included in Level 2 and include corporate fixed income, government bonds, and mortgage and asset-backed securities. As of December 31, 2022 and 2021, respectively, UPMC had \$1,156,119 and \$1,113,233 of alternative investments accounted for under the equity method, which approximates fair value.

Other investments measured at fair value represent funds included on the consolidated balance sheets that are reported using net asset value ("NAV"). These amounts are not required to be categorized in the fair value hierarchy. The fair value of these investments is based on the net asset value information provided by the general partner. Fair value is based on the proportionate share of the NAV based on the most recent partners' capital statements received from the general partners, which is generally one quarter prior to the balance sheet date. Certain of UPMC's alternative investments are utilizing NAV to calculate fair value and are included in other investments in the following tables.

(DOLLARS IN THOUSANDS)

FAIR VALUE MEASUREMENTS AS OF DECEMBER 31, 2022

	Level 1	Level 2	Level 3	NAV	Тс	otal Carrying Amount
ASSETS						
Fixed income	\$ 853,228	\$ 1,723,814	\$ -	\$ -	\$	2,577,042
Domestic equity	1,275,130	8,700	-	-		1,283,830
International equity	696,429	541	-	-		696,970
Public real estate	103,870	-	-	-		103,870
Long/short equity	61,389	13,657	-	-		75,046
Absolute equity	51,241	-	-	-		51,241
Commodities	-	-	-	-		-
Derivative instruments	-	-	-	-		-
Securities on loan	203,429	-	-	-		203,429
Securities lending collateral	116,000	-	-	-		116,000
Alternative and other investments at NAV	-	-	-	1,556,937		1,556,937
Total assets measured at fair value on a recurring basis	\$ 3,360,716	\$ 1,746,712	\$ -	\$ 1,556,937	\$	6,664,365
LIABILITIES						
Payable under securities lending agreement	\$ (116,000)	\$ -	\$ -	\$ -	\$	(116,000)
Derivative instruments	-	(732)	-	-		(732)
Total liabilities measured at fair value on a recurring basis	\$ (116,000)	\$ (732)	\$ -	\$ -	\$	(116,732)

FAIR VALUE MEASUREMENTS AS OF DECEMBER 31, 2021

	Level 1	Level 2	Level 3	NAV	То	tal Carrying Amount
ASSETS						
Fixed income	\$ 1,041,729	\$ 2,911,201	\$ -	\$ -	\$	3,952,930
Domestic equity	1,490,595	9,760	-	-		1,500,355
International equity	873,730	-	-	-		873,730
Public real estate	137,364	-	-	-		137,364
Long/short equity	73,485	15,173	-	-		88,658
Absolute equity	54,195	-	-	-		54,195
Commodities	-	-	-	-		-
Derivative instruments	-	222	-	-		222
Securities on loan	203,256	-	-	-		203,256
Securities lending collateral	117,873	-	-	-		117,873
Alternative and other investments at NAV	-	-	-	1,842,828		1,842,828
Total assets measured at						
fair value on a recurring basis	\$ 3,992,227	\$ 2,936,356	\$ -	\$ 1,842,828	\$	8,771,411
LIABILITIES						
Payable under securities lending agreement	\$ (117,873)	\$ -	\$ -	\$ -	\$	(117,873)
Derivative instruments	-	(3,683)	-	-		(3,683)
Total liabilities measured at fair value on a recurring basis	\$ (117,873)	\$ (3,683)	\$ -	\$ -	\$	(121,556)

9. PENSION PLANS

UPMC and its subsidiaries maintain defined benefit pension plans (the "Plans"), defined contribution plans and nonqualified pension plans that cover substantially all of UPMC's employees. Under the defined contribution plans, employees may elect to contribute a percentage of their salary, which is matched in accordance with the provisions of the defined contribution plans. Contributions to the nonqualified pension plans are based on a percentage of salary or contractual arrangements. Within excess of (expenses over revenues) revenues over expenses, the total expense relating to the aforementioned pension plans was \$213,822 and \$231,374, respectively, for the years ended December 31, 2022 and 2021.

Benefits under the Plans vary and are generally based upon the employee's earnings and years of participation. It is UPMC's policy to meet the requirements of the Employee Retirement Income Security Act of 1974 ("ERISA") and the Pension Protection Act of 2006. No contributions were made to the Plans for the years ended December 31, 2022 and 2021.

To develop the expected long-term rate of return on plan assets assumption, UPMC considers the current level of expected returns on risk-free investments, the historical level of risk premium associated with the other asset classes in which the pension portfolio is invested and the expectations for future returns on each asset class. The expected return for each asset class is then weighted based on the target asset allocation to develop the expected long-term rate of return on assets assumption for the pension portfolio.

The table below sets forth the accumulated benefit obligation, the change in the projected benefit obligation and the change in the assets of the Plan. The table also reflects the funded status of the Plans as well as recognized and unrecognized amounts in the consolidated balance sheets. As of December 31, 2022 and December 31, 2021, the pension liability is included in other noncurrent liabilities and the pension asset is included in other assets on the consolidated balance sheet, respectively.

	Year Ended December 3			December 31
		2022		2021
Accumulated benefit obligation	\$	2,713,380	\$	2,895,156
CHANGE IN PROJECTED BENEFIT OBLIGATION				
Projected benefit obligation at beginning of year Service cost Interest cost Actuarial gain	\$	3,057,429 179,540 89,701 (302,638)	\$	3,018,239 174,019 76,674 (5,429)
Benefits paid		(202,838)		(206,074)
Projected benefit obligation at end of year		2,821,194		3,057,429
CHANGE IN PLAN ASSETS Fair value of plan assets at beginning of year Actual return on plan assets		3,087,194 (256,663)		2,846,256 447,012
Employer contributions Annuity purchases Benefits paid		- - (202,838)		- - (206,074)
Fair value of plan assets at end of year		2,627,693		3,087,194
Pension liability (asset) at end of year	\$	193,501	\$	(29,765)

Year Ended December 31

(DOLLARS IN THOUSANDS)

Included in net assets without donor restrictions at December 31, 2022 and 2021 are the following amounts that have not yet been recognized in net periodic pension cost:

	As of December 3		
	2022		2021
Unrecognized prior service credit	\$ 28,807	\$	34,063
Unrecognized net actuarial loss	(405,972)		(243,569)
	\$ (377,165)	\$	(209,506)

Changes in plan assets and benefit obligations recognized in net assets without donor restrictions during 2022 and 2021 include the following:

	Year Ended Decemb			December 31
		2022		2021
Current year net actuarial (loss) gain	\$	(162,408)	\$	261,056
Amortization of actuarial loss		5		28,280
Amortization of prior service credit		(5,256)		(5,256)
	\$	(167,659)	\$	284,080

The service cost component of net periodic benefit cost is included in salaries, professional fees and employee benefits and all other components of net periodic benefit cost are included in other non-operating activities in the consolidated statements of operations and changes in net assets. The components of net periodic pension cost for the Plan were as follows:

	Year Ended December 3			
		2022		2021
Service cost	\$	179,540	\$	174,019
Interest cost		89,701		76,674
Expected return on plan assets		(208,383)		(191,385)
Recognized net actuarial loss		5		28,280
Amortization of prior service credit		(5,256)		(5,256)
Net periodic pension cost	\$	55,607	\$	82,332

The weighted average actuarial assumptions used to determine the benefit obligations and net periodic pension cost for the Plan are as follows:

	As of December 31		
	2022	2021	
Discount rates:			
Used for benefit obligations	5.20%	2.87%	
Used for net periodic pension cost	2.87%	2.49%	
Expected rate of compensation increase:			
Used for benefit obligations	Age-graded	Age-graded	
Used for net periodic pension cost	Age-graded	Age-graded	
Expected long-term rate of return on plan assets	7.00%	7.00%	
Interest crediting rate	4.20%	2.40%	

(DOLLARS IN THOUSANDS)

The assumptions for long-term rate of return are developed using the expected returns of the various asset classes in which the pension invests and the allocations of each asset class with respect to the investment as a whole. The change in discount rate from 2.87% to 5.20% had the net effect of decreasing the projected benefit obligation by \$624,482 for the year ended December 31, 2022. The change in the interest crediting rate from 2.40% to 4.20% increased the projected benefit obligation by \$301,031 for the year ended December 31, 2022.

2023	\$ 230,2	55
2024	234,1	25
2025	242,8	16
2026	242,73	30
2027	244,0	32
2028-2032	1,200,93	38

The following pension benefit payments are expected to be paid in the years ending December 31:

UPMC employs a total return investment approach whereby a mix of equities and fixed income investments are used to maximize the long-term return on plan assets subject to accepting a prudent level of risk. Risk tolerance is established through consideration of plan liabilities, plan funded status and corporate financial condition. The pension portfolio contains a diversified blend of equity, fixed income and alternative investments. Equity investments are diversified across United States and non-United States corporate stocks, as well as growth, value, and small and large capitalizations. Other assets such as real estate, private equity and hedge funds are used to enhance long-term returns while improving portfolio diversification. Investment risk is measured and monitored on an ongoing basis through quarterly investment portfolio reviews, annual liability measurements and periodic asset/liability studies.

As of December 31, 2022, UPMC employed 182 external investment managers to handle the investment of the assets in the pension portfolio. Of these, 23 managers manage equity investments, 10 manage fixed income investments and 149 managers oversee alternative investment strategies. The largest allocation to any alternative investment manager is \$43,800 as of December 31, 2022. Unfunded commitments due to investments within the Plans, funded with Plan assets, are \$338,338 and \$349,438 as of December 31, 2022 and 2021, respectively. Unfunded commitments may be called by managers pursuant to the terms of each specific fund's documents, which allow capital to be called during a fund's investment period for new investments. While terms vary, investment periods are generally within six years.

(DOLLARS IN THOUSANDS)

	2022	2021	2022 Target
Nonalternative investments:			
Fixed income	11.7%	11.8%	13.0%
Domestic equity	16.8%	21.1%	25.0%
International equity	16.2%	18.2%	19.0%
Total nonalternative investments	44.7%	51.1%	57.0%
Real assets:			
Real estate	5.0%	3.7%	4.0%
Income opportunities	1.7%	1.7%	2.0%
Natural resources	5.4%	4.2%	4.0%
Total real assets	12.1%	9.6%	10.0%
Alternative investments:			
Long/short equity	11.4%	10.9%	11.0%
Absolute return	7.3%	6.0%	7.0%
Private equity	24.5%	22.4%	15.0%
Total alternative investments	43.2%	39.3%	33.0%
Total	100.0%	100.0%	100.0%

The following is a summary of the pension plan asset allocations at December 31, 2022 and 2021:

All of the Plans' assets are measured at fair value, including its alternative investments. The same levels of the fair value hierarchy as described in Note 8 are used to categorize the Plans' assets. Corporate debt instruments and fixed income/bonds are valued using pricing models, quoted prices of securities with similar characteristics or discounted cash flows. The fair value of common/collective trust funds is determined by the issuer sponsoring such funds by dividing the fund's net assets at fair value by its units outstanding at the valuation dates. Partnership interests are valued using NAV, which is based on the unit values of the interests as determined by the issuer sponsoring such interests dividing the fund's net assets at fair value by its units outstanding at the valuation dates.

(DOLLARS IN THOUSANDS)

The fair values of the Plans' assets at December 31, 2022, by asset category and by the level of inputs used to determine fair value, were as follows:

	Level 1	Level 2	Level 3	NAV	Total
ASSETS					
Equity securities:					
Domestic equity	\$ 361,310	\$ 4,300	\$ -	\$-	\$ 365,610
International equity	261,073	129	-	-	261,202
U.S. REITS	37,558	1,714	-	-	39,272
Fixed income:					
Government securities	37,691	2,669	-	-	40,360
Bond funds	95,860	-	-	-	95,860
Corporate debt instruments	-	41,951	-	-	41,951
Asset and mortgage-backed securities	-	62,870	-	-	62,870
Long/short equity	72,302	45,094	-	-	117,396
Absolute return	11,074	-	-	-	11,074
Other investments	-	-	-	1,588,482	1,588,482
Net receivables	3,616	-	-	-	3,616
Plans' assets at fair value	\$ 880,484	\$ 158,727	\$ -	\$ 1,588,482	\$ 2,627,693

The fair values of the Plans' assets at December 31, 2021, by asset category and by the level of inputs used to determine fair value, were as follows:

	Level 1	Level 2	Level 3	NAV	Total
ASSETS					
Equity securities:					
Domestic equity	\$ 576,856	\$ 6,403	\$ - \$	-	\$ 583,259
International equity	322,344	-	-	-	322,344
U.S. REITS	51,923	1,598	-	-	53,521
Fixed income:					
Government securities	30,976	-	-	-	30,976
Bond funds	145,405	-	-	-	145,405
Corporate debt instruments	-	42,145	-	-	42,145
Asset and mortgage-backed securities	-	68,948	-	-	68,948
Long/short equity	47,895	-	-	-	47,895
Absolute return	11,482	-	-	-	11,482
Other investments	-	-	-	1,780,190	1,780,190
Net receivables	1,029	-	-	-	1,029
Plans' assets at fair value	\$ 1,187,910	\$ 119,094	\$ - \$	1,780,190	\$ 3,087,194

(DOLLARS IN THOUSANDS)

10. HEALTH INSURANCE REVENUE AND COSTS

Health care costs were \$11,882,007 and \$11,338,966, of which \$2,970,247 and \$2,869,217 were eliminated in consolidation representing medical services performed by other UPMC entities for the years ended December 31, 2022 and 2021, respectively. Such costs are included in insurance claims expense. These costs include estimates of payments to be made on claims reported but not yet processed as of the balance sheet date and estimates of health care services incurred but not reported to the Health Plans. Such estimates include the cost of services that will continue to be incurred after the balance sheet date when the Health Plans are obligated to remit payment for such services in accordance with contract provisions or regulatory requirements. UPMC determines the amount of the reserve for incurred but not paid claims by following a detailed actuarial process that uses both historical claim payment patterns as well as emerging medical cost trends to project UPMC's best estimate of reserve for physical health care costs. This process involves formatting of historical paid claims data into claim triangles, which compare claim incurred dates to the dates of claim payments. This information is analyzed to create completion factors that represent the average percentage of total incurred claims that have been paid through a given date after being incurred. Completion factors are applied to claims paid through the period-end date to estimate the ultimate claim expense incurred for the period. Actuarial estimates of incurred but not paid claims.

For the most recent incurred months, the percentage of claims paid for claims incurred in those months is generally low. This makes the completion factors methodology less reliable for such months. Therefore, incurred claims for most recent months are not projected from historical completion and payment patterns; rather, they are projected by estimating the claims expense for those months based on recent claims expense levels and health care trend levels, or trend factors.

While there are many factors that are used as part of the estimation of UPMC's reserve for physical health care costs, the two key assumptions having the most significant impact on UPMC's incurred but not paid claims liability as of December 31, 2022 were the completion and trend factors.

	2022	2021
Reserve for physical health care costs (beginning balance) Add: Provisions for medical costs occurring in:	\$ 642,078	\$ 705,361
Current year	10,622,623	10,149,739
Prior year	13,174	(26,263)
Net incurred medical costs	10,635,797	10,123,476
Deduct: Payments for claims occurring in:		
Current year	9,975,085	9,507,661
Prior year	655,252	679,098
Net paid medical costs	10,630,337	10,186,759
Reserve for physical health care costs (ending balance)	\$ 647,538	\$ 642,078

The foregoing rollforward shows unfavorable development of \$13,174 and favorable development of (\$26,263) for the years ended December 31, 2022 and 2021, respectively. UPMC regularly reviews and sets assumptions regarding cost trends and utilization when initially establishing a reserve for physical health care costs. UPMC continually monitors and adjusts the reserve and claim expense based on subsequent paid claims activity. If it is determined that UPMC's assumptions regarding cost trends and utilization are materially different from actual results, UPMC's consolidated statement of operations and changes in net assets and consolidated balance sheet could be impacted in future periods. Adjustments of prior year estimates may result in additional claim expense or a reduction of claim expense in the period an adjustment is made.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (DOLLARS IN THOUSANDS)

Incurred claims development for the years ended December 31, 2022, 2021 and 2020 are as follows:

	(Unaudited)	(Unaudited)		
	December 31, 2020	December 31, 2021	Dec	ember 31, 2022
December 31, 2020	\$ 9,319,976	\$ 9,300,474	\$	9,300,474
December 31, 2021		10,149,739		10,162,913
December 31, 2022				10,622,623
			\$	30,086,010

Paid claims development for the years ended December 31, 2022, 2021 and 2020 are as follows:

	(Unaudited)	(Unaudited)		
	December 31, 2020	December 31, 2021	Dec	ember 31, 2022
December 31, 2020	\$ 8,623,868	\$ 9,300,474	\$	9,300,474
December 31, 2021		9,507,661		10,162,913
December 31, 2022				9,975,085
			\$	29,438,472

At December 31, 2022, the total of incurred but not reported ("IBNR") liabilities plus expected development on reported claims and the cumulative number of reported claims for the years ended December 31, 2022, 2021 and 2020 are as follows:

	Total IBNR and Expected	l Development on Reported Claims	(umulative Number
December 31, 2020	\$	-	23,307
December 31, 2021		-	25,671
December 31, 2022		647,538	27,268
Total	\$	647,538	76,246

* In thousands

The cumulative number of reported claims for each claim year has been developed using historical data captured by UPMC's claims payment system and data warehouse.

Net assets without donor restrictions required to meet statutory requirements of the Health Plans were \$1,622,649 and \$1,587,303 at December 31, 2022 and 2021, respectively.

11. PROFESSIONAL AND GENERAL LIABILITY INSURANCE

UPMC is insured for professional and general liability losses through wholly owned, multiprovider insurance companies (the "Captives"). The Captives provide primary and excess professional liability coverage to UPMC subsidiaries, employed physicians of UPMC and other entities not included in the consolidated financial statements. For those self-insured risks, UPMC has established irrevocable trust funds to pay claims and related costs.

Certain insurance agreements have retrospective clauses that permit additional premiums or refunds to be made based on actual experience. The reserve for professional and general liability indemnity losses and loss adjustment expenses is determined using individual case-based evaluations and actuarial analyses and represents an estimate of reported claims and claims incurred but not reported. Those estimates are subject to the effects of trends in average loss severity and average frequency. Although considerable variability is inherent in such estimates, management believes that the reserves for professional and general liability losses and loss adjustment expenses are reasonable. The estimates are reviewed and adjusted as necessary as experience develops or new information becomes known. Such adjustments are included in current operations. Reserves for professional and general liability losses and loss adjustment expenses of \$541,413 and \$533,315, discounted at 3.50% and 1.00% (which approximates the risk-free rates), were recorded as of December 31, 2022 and 2021, respectively. \$105,711 and \$104,133 of the loss reserves are included in current portion of insurance reserves and \$435,702 and \$429,182 are included in long-term insurance reserves.

The following table provides a rollforward of the reserve balances for professional and general liability costs for the years ended December 31, 2022 and 2021.

	2022	2021
Reserve for professional and general liability costs (beginning balance) Add: Provisions for expenses occurring in:	\$ 533,315	\$ 479,421
Current year	138,402	125,437
Prior year	2,398	5,292
Change in discount rate	(22,008)	(8,100)
Net incurred expenses	118,792	122,629
Deduct: Payments for expenses occurring in:		
Current year	510	363
Prior year	95,071	81,791
Net paid expenses	95,581	82,154
Changes in other reserves	(15,113)	13,419
Reserve for professional and general liability costs (ending balance)	\$ 541,413	\$ 533,315

The foregoing rollforward shows unfavorable development of \$2,398 and \$5,292 for the years ended December 31, 2022 and 2021, respectively.

(DOLLARS IN THOUSANDS)

The following table provides undiscounted information for claims development for incurred losses and paid claim loss by incident year for the year ended December 31, 2022. The information about incurred and paid claims development for the years ended December 2013 to 2021 is presented as supplementary information. For the reported development, the adequacy of case reserves has been consistent and favorable over time, and there have been no significant changes in the rate at which claims have been reported. For the paid development, the rate of payment of claims has been relatively consistent over time.

DIRECT CLAIM LOSS INCURRED

Accident										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	 				Unaudited				I	
2013	\$ 77,146	\$ 79,850	\$ 72,831	\$ 68,055	\$ 72,144	\$ 68,116	\$ 68,529	\$ 69,693	\$ 72,457	\$ 75,635
2014	-	86,191	84,910	83,562	78,108	75,644	73,443	74,808	76,487	76,103
2015	-	-	96,593	102,111	89,569	88,801	83,033	80,946	79,273	79,446
2016	-	-	-	90,844	94,155	91,655	84,615	73,214	72,195	71,692
2017	-	-	-	-	100,732	99,428	104,403	103,570	100,146	99,861
2018	-	-	-	-	-	100,781	97,451	96,836	93,128	89,834
2019	-	-	-	-	-	-	103,995	106,787	109,126	109,640
2020	-	-	-	-	-	-	-	108,482	109,915	112,983
2021	-	-	-	-	-	-	-	-	125,437	125,368
2022	-	-	-	-	-	-	-	-	-	138,402
								Total		\$ 978,964

DIRECT CLAIM LOSS PAID

Accident										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
					Unaudited					
2013	\$ 353	\$ 5,861	\$ 12,020	\$ 28,016	\$ 42,775	\$ 49,807	\$ 56,494	\$ 58,760	\$ 64,342	\$ 67,950
2014	-	467	7,771	16,949	40,736	48,191	57,372	61,217	64,744	67,374
2015	-	-	355	16,914	26,838	43,634	58,646	65,427	68,562	70,716
2016	-	-	-	446	6,375	14,220	27,736	39,232	46,946	50,379
2017	-	-	-	-	1,610	10,168	27,867	50,244	55,202	60,770
2018	-	-	-	-	-	251	3,555	22,235	37,270	44,465
2019	-	-	-	-	-	-	216	13,936	25,751	40,448
2020	-	-	-	-	-	-	-	759	12,369	25,494
2021	-	-	-	-	-	-	-	-	363	18,416
2022	-	-	-	-	-	-	-	-	-	510
								Total		\$ 446,522
Net reserves										\$ 532,442
Other reserves										24,120
Risk retention gro	oup									32,209
Discount adjustm	nent									(47,358)
Total reserves										\$ 541,413

(DOLLARS IN THOUSANDS)

Year 10 and Prior	Year 9	Year 8	Year 7	Year 6	Year 5	Year 4	Year 3	Year 2	Year 1
and Prior	Teal 9	Teal O Teal / Teal O		Teal O	rear 5	Teal 4	Teal 5	Teal 2	Teal I
12.5%	5.5%	5.6%	7.3%	10.5%	16.1%	20.4%	12.9%	8.4%	0.8%

AVERAGE ANNUAL PERCENTAGE PAYOUT OF INCURRED CLAIMS (UNAUDITED)

In addition, the following table shows the total of IBNR plus expected development on reported claims by incident year and the cumulative number of reported claims by incident year. The cumulative number of reported claims are counted on a per occurrence and per coverage basis. Claim counts include open claims, claims that have been paid and closed, and asserted reported claims that have been closed without the need for any payment.

Incident Year	Incurred Claim Loss an Adjustment Expenses for th Year Ended December 31, 202	e Not Reported as o	of Of Claims Reported as of
2013	\$ 75,63	5 \$	- 277
2014	76,10	3	- 248
2015	79,44	6 97	4 305
2016	71,69	2 5,18	4 278
2017	99,86	1 22,02	8 271
2018	89,83	4 28,22	7 275
2019	109,64	39,79	7 302
2020	112,98	3 62,06	6 216
2021	125,36	8 98,69	4 145
2022	138,40	2 135,84	0 96

The methodology for reserving and determining the reserve for loss and loss adjustment expenses, IBNR reserves, considers, among other things, the line of business, the number of years of experience and the age of the experience year being developed.

Loss development factors are also applied to the current evaluations of losses to project the ultimate incurred losses arising from each period of coverage. The selected loss development factors are based on the historical loss experience of UPMC. Therefore, it is assumed that the selected loss development factors coupled with UPMC's experience and actuarial support are appropriate to project the loss development that will be experienced.

The reserve for costs and claims adjustment expenses was based on the best data available to UPMC; however, these estimates are subject to a degree of inherent variability. It is possible that UPMC's actual incurred costs and claim adjustment expenses will not conform to the assumptions inherent in the determination of the liability; accordingly, the ultimate settlement of costs and the related claims adjustment expenses may vary from the estimates included in the consolidated financial statements.

The Medical Care Availability and Reduction of Error ("MCARE") Act was enacted by the legislature of the Commonwealth of Pennsylvania (the "Commonwealth") in 2002. This Act created the MCARE Fund, which replaced The Pennsylvania Medical Professional Liability Catastrophe Loss Fund (the "Medical CAT Fund"), as the agency for the Commonwealth to facilitate the payment of medical malpractice claims exceeding the primary layer of professional liability insurance carried by UPMC and other health care providers practicing in the Commonwealth.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (DOLLARS IN THOUSANDS)

The MCARE Fund is funded on a "pay as you go basis" and assesses health care providers based on a percentage of the rates established by the Joint Underwriting Association (also a Commonwealth agency) for basic coverage. The MCARE Act of 2002 provides for a further reduction to the current MCARE coverage of \$500 per occurrence to \$250 per occurrence and the eventual phaseout of the MCARE Fund, subject to the approval of the Pennsylvania Insurance Commissioner. To date, the Pennsylvania Insurance Commissioner has deferred the change in coverage and eventual phaseout of the MCARE Fund to future years.

12. RELATED-PARTY TRANSACTIONS

UPMC monitors its relationships with related or affiliated entities on an ongoing basis. The most significant of these relationships is with the University in which UPMC purchases and sells certain services from and to the University. With shared academic and research objectives, UPMC provides financial support annually to the University to advance these objectives recognizing the long-term inherent benefit to UPMC's core clinical operations. UPMC looks to the University to lead the efforts related to the academic and research support objectives of UPMC and believes that, while complementary to its mission, the support provided to the University for academics and research is not part of UPMC's core operating activities of providing direct patient care or offering health insurance coverage. For the years ended December 31, 2022 and 2021, UPMC incurred expenses of \$242,000 and \$240,300, respectively, for academic and research support. Payments to the University that are core to UPMC's missions related to providing clinical care and insurance coverage totaled \$170,932 and \$208,854 for the years ended December 31, 2022 and 2021, respectively, which includes clinical services rendered by certain faculty and medical residents, facility rental agreements and other related services, and are reflected within operating expense.

13. LEASES

UPMC has operating and finance leases for corporate offices, physician offices and various equipment types, among others. These lease arrangements have remaining lease terms of one year to 25 years, some of which include options to extend the leases for several periods, and some of which include options to terminate the leases within one year. Statement of operations and changes in net assets information related to leases were as follows:

	Year Ended December 31			
	2022		2021	
Finance lease cost:				
Depreciation	\$ 27,840	\$	26,975	
Interest on lease liabilities	1,999		2,115	
Total finance lease cost	29,839		29,090	
Operating lease cost	159,230		152,068	
Short-term/variable lease cost	27,817		30,554	
Total	\$ 216,886	\$	211,712	

(DOLLARS IN THOUSANDS)

Supplemental balance sheet information related to leases was as follows:

	Year Ended December			
	2022		2021	
OPERATING LEASES				
Operating lease right-of-use assets	\$ 796,886	\$	976,026	
Other current liabilities	148,940		127,194	
Operating lease liabilities	770,766		895,949	
Total operating lease liabilities	\$ 919,706	\$	1,023,143	
FINANCE LEASES				
Property, plant and equipment, net	\$ 60,853	\$	60,501	
Current portion of long-term obligations	22,673		24,555	
Long-term obligations	46,965		47,269	
Total finance lease liabilities	\$ 69,638	\$	71,824	
WEIGHTED AVERAGE REMAINING LEASE TERM				
Operating leases	9.6 years		11.7 years	
Finance leases	7.2 years		7.4 years	
WEIGHTED AVERAGE DISCOUNT RATE				
Operating leases	2.8%		2.9%	
Finance leases	2.8%		2.9%	
Undiscounted maturities of lease liabilities were as follows:				

For the Years Ended December 31	Opera	Fina	Finance Leases		
2023	\$	155,121	\$	23,804	
2024		135,380		15,750	
2025		114,860		8,625	
2026		102,262		4,630	
2027		82,438		1,542	
Thereafter		391,105		15,856	
Total undiscounted maturities of lease liabilities	\$	981,166	\$	70,207	
Less: discount on lease liabilities		(61,460)		(569)	
Total lease liabilities	\$	919,706	\$	69,638	

14. INCOME TAXES

UPMC calculates income taxes using the balance sheet method for its taxable subsidiaries. Taxable income differs from pretax book income principally due to certain income and deductions for tax purposes being recorded in the financial statements in different periods. Deferred income tax assets and liabilities are recorded for the tax effect of these differences using enacted tax rates for the years in which the differences are expected to reverse. UPMC assesses the realization of deferred tax assets and the need for a valuation allowance to reduce those assets to their net realizable value based on future operations, reversal of existing temporary differences, carryforward and carryback periods for credits and net operating losses, and potential tax planning strategies that may exist.

As of December 31, 2022, the for-profit entities of UPMC had gross federal net operating loss ("NOL") carryforwards of \$883,149 (expiring in years 2023 through 2042) and gross state (primarily related to Pennsylvania) NOL carryforwards of \$1,919,208 (expiring in years 2023 through 2042) that are available to offset future taxable income. During 2022, Pennsylvania enacted a corporate income tax rate reduction that will take effect incrementally from 2023 through 2031 and which resulted in revaluation of UPMC state NOLs to reflect the lower rate. Utilization of the Pennsylvania NOL carryforwards in any one year is limited to 40% of taxable income per company. Federal NOLs generated prior to January 1, 2018 can be carried forward up to 20 years and there is no taxable income limitation on the utilization of such NOLs. Non-insurance company federal NOLs generated subsequent to December 31, 2017 carryforward indefinitely and utilization of such NOLs is limited to 80% of taxable income limitation on the utilization of such NOLs. During the calendar years ended December 31, 2022 and December 31, 2021, UPMC realized tax benefits of \$736 and \$147, respectively, from the use of NOL carryforwards to offset federal and state net taxable income.

The following is a reconciliation of income taxes computed at the statutory U.S. federal income tax rate to the actual effective income tax expense:

Years Ended December 31	2022	2021
Taxes computed at the federal rate	\$ (34,781)	\$ (60,405)
State income taxes, net of federal tax benefit	2,228	1,384
Valuation allowance	29,630	58,291
Permanent differences	6,366	4,730
Other items, net	2,743	2,032
Income tax expense	\$ 6,186	\$ 6,032

(DOLLARS IN THOUSANDS)

The following table presents deferred tax assets as of December 31, 2022 and 2021:

	2022	2021
Deferred tax assets:		
Net operating losses Accrued benefits Other	\$ 261,230 23,618 36,986	\$ 306,814 18,922 33,895
	321,834	359,631
Less valuation allowance	(321,834)	(359,631)
	\$ -	\$ -

Tax benefits are recognized when it is more likely than not that a tax position will be sustained upon examination by the tax authorities based on the technical merits of the position. Such tax positions are measured as the largest amount of tax benefit that is greater than 50% likely to be realized upon ultimate settlement with the tax authorities assuming full knowledge of the position and all relevant facts. As of December 31, 2022, there were no uncertain tax positions. Certain of UPMC's subsidiaries are subject to taxation in the United States and foreign jurisdictions. As of December 31, 2022, UPMC's returns for the calendar years ended December 31, 2019, through December 31, 2021, are open for examination by the various taxing authorities.

15. FUNCTIONAL EXPENSES

UPMC provides general health care services primarily to residents within its geographic locations and supports related research and education programs. For the years ended December 31, 2022 and 2021, expenses related to providing these services were as follows:

FOR THE YEAR ENDED DECEMBER 31, 2022

	Hospital & health care services	Insurance services	Academic & research activities	UPMC Enterprises activity	Admin support	Total
Salaries, professional fees and employee benefits	\$ 7,516,856 \$	578,066 \$	- \$	-	\$ 980,882	\$ 9,075,804
Insurance claims expense	-	8,911,760	-	-	-	8,911,760
Supplies, purchased services and general	5,207,606	826,025	-	-	579,127	6,612,758
Depreciation and amortization	494,332	7,095	-	-	192,330	693,757
Lease Impairment	-	-	-	-	75,784	75,784
Academic and research support provided	-	-	242,000	-	-	242,000
Income tax expense	-	-	-	-	6,186	6,186
Interest expense	157,959	-	-	-	-	157,959
Portfolio company and development expense	-	-	75,155	123,017	-	198,172
	\$ 13,376,753 \$	10,322,946 \$	317,155 \$	123,017	\$ 1,834,309	\$ 25,974,180

FOR THE YEAR ENDED DECEMBER 31, 2021

	Hospital & health care services	Insurance services	A	cademic & research activities	UPMC Enterprises activity	Admin support	Total
Salaries, professional fees and employee benefits	\$ 6,718,365 \$	537,570 \$	\$	- \$	- \$	951,496	\$ 8,207,431
Insurance claims expense	-	8,469,749		-	-	-	8,469,749
Supplies, purchased services and general	4,916,400	846,517		-	-	394,085	6,157,002
Depreciation and amortization	504,900	11,330		-	-	173,159	689,389
Lease Impairment	-	-		-	-	-	-
Academic and research support provided	-	-		240,300	-	-	240,300
Income tax expense	-	-		-	-	6,032	6,032
Interest expense	161,976	-		-	-	-	161,976
Portfolio company and development expense	-	-		86,582	113,203	-	199,785
	\$ 12,301,641 \$	9,865,166	\$	326,882 \$	5 113,203 \$	1,524,772	\$ 24,131,664

16. UPMC ENTERPRISES ACTIVITY

UPMC Enterprises conducts research, development and innovation activities on behalf of UPMC primarily focused on technologies for use in the health care industry to lower costs and improve care; such activities are expensed as incurred. From time to time, UPMC invests in companies that are developing technologies that align with its strategic imperatives, including companies that are not yet at the commercialization stage. UPMC's level of investment is dependent on numerous strategic considerations and may provide either a controlling or a non-controlling ownership interest. UPMC Enterprises also seeks partnerships with external companies to accelerate commercial growth of innovation activities, which may include the sale of internally developed technology solutions. Leveraging UPMC's long-standing reputation for academic and research excellence, UPMC Enterprises also sponsors the translation of basic science conducted in a research setting to its commercial use in bedside clinical practice, application in medical laboratories or use across emerging venues where medicine is delivered; such activities are expensed as incurred.

UPMC Enterprises activity is comprised of the following for the years ended December 31:

	2022	2021
Technology research and development costs	\$ (52,887)	\$ (48,211)
Investments in translational sciences	(22,268)	(38,371)
Revenue from portfolio companies with controlling interest	33,041	37,828
Expenses of portfolio companies with controlling interest	(116,864)	(108,251)
Net loss from non-consolidated interest in portfolio companies	(6,153)	(4,952)
Net (losses) gains from technology-related investments	(21,571)	233,654
UPMC Enterprises activity	\$ (186,702)	\$ 71,697

17. CONTINGENCIES

On October 9, 2012, UPMC received a Civil Investigative Demand ("CID") from the Department of Justice ("DOJ") that sought records relating to 40 surgical procedures performed between January 25, 2008 and June 24, 2010. UPMC timely responded to that CID. In November 2013, the DOJ advised UPMC that the CID had been served as part of the DOJ's investigation of allegations asserted by Relators in a federal qui tam lawsuit filed under seal. On July 27, 2016, the DOJ announced that it had reached an agreement with UPMC to settle certain allegations that UPMC had violated the False Claims Act for approximately \$2,500. UPMC admitted no liability in settling those claims. The DOJ declined to intervene in the remaining allegations of the Relators' lawsuit, which was also unsealed on July 27, 2016. In their Second Amended Complaint against UPMC and UPP, Inc., Relators allege that UPMC violated the False Claims Act by overpaying physicians and encouraging physicians to perform medically unnecessary procedures. On June 29, 2022, the Court denied UPMC's motion for summary judgment. Trial is scheduled for October 23 - November 9, 2023. The outcome and ultimate effect on UPMC's consolidated financial statements cannot be determined at this time.

On July 29, 2019, UPMC received two grand jury subpoenas and an unexecuted search warrant from the DOJ seeking various records from one of UPMC's clinical departments. On or about September 2, 2021, the United States filed a Complaint in Partial Intervention against UPMC, UPP and a UPMC cardiothoracic surgeon, in the matter previously filed under seal in the United States District Court of the Western District of Pennsylvania as U.S. ex. rel. Jonathan D'Cunha, M.D. v. UPMC et al, alleging that the Defendants violated the False Claims Act by, inter alia, performing concurrent surgeries. UPMC plans to zealously defend against the United States' claims. On November 1, 2021, Defendants moved to dismiss the United States' claims. On June 30, 2022, the Court denied UPMC's motion to dismiss. On February 23, 2023, the United States and Defendants signed a settlement agreement that will result in a dismissal with prejudice of the United States' claims. The settlement will not have a material impact on UPMC's consolidated financial statements.

On or about August 30, 2022, Plaintiff, Jonathan D'Cunha, M.D. filed a third party complaint in the United States District Court for the Western District of Pennsylvania against UPMC and certain of its subsidiaries alleging that they failed to provide insurance coverage and/or indemnification to him for claims asserted against him by a current UPMC cardiothoracic surgeon. Those claims contend, inter alia, that Dr. D'Cunha defamed and illegally wiretapped the UPMC surgeon. The UPMC Defendants have filed answers to those claims. The ultimate outcome and effect on UPMC's consolidated financial statements cannot be determined at this time.

On or about December 15, 2020, a current employee filed a claim against UPMC, the University of Pittsburgh and other defendants, contending that the Defendants retaliated against him for authoring an article asserting that the medical profession discriminates against applicants from underrepresented races and ethnicities. On April 11, 2021, the UPMC Defendants moved to dismiss most of the claims in the Complaint. On December 21, 2021, the Court entered an Order granting the UPMC Defendants' motion in part and denying it in part and provided the employee with leave to amend certain of his claims. On January 11, 2022, the employee filed an Amended Complaint that would ultimately assert two claims. On January 25, 2022, the UPMC Defendants' motion to dismiss one of the claims and answered the other. On April 4, 2022, the Court denied the UPMC Defendants' motion to dismiss. On July 1, 2022, UPMC answered the second claim. Discovery is proceeding. The ultimate outcome and effect on UPMC's consolidated financial statements cannot be determined at this time.

On or about March 9, 2021, Vince Ranalli and Lou Ranalli filed a putative class action in the Allegheny County Court of Common Pleas against UPMC and a local law firm that UPMC had retained. The lawsuit alleges that a data breach at the law firm exposed the plaintiffs' personal medical and financial information. Michael Bowen was later substituted as the named plaintiff. The parties have reached a settlement that received final court approval on October 6, 2022. The settlement will result in no material impact to UPMC's financial condition.

On October 22, 2021, Penn State Hershey Medical Center ("PSHMC") filed a demand for arbitration against UPMC Central PA, alleging that contending that UPMC Central PA breached a joint venture agreement with PSHMC that created the Pennsylvania

(DOLLARS IN THOUSANDS)

Psychiatric Institute. On October 27, 2021, UPMC Central PA filed counterclaims against PSHMC. An arbitration hearing was conducted in December 2022. The parties await the arbitrator's ruling. The ultimate outcome and effect on UPMC's consolidated financial statements cannot be determined at this time.

On May 19, 2022, Maxim Healthcare, Inc. filed a counterclaim in a confidential arbitration proceeding initiated by UPMC regarding Maxim's placement of a drug-seeking radiology technician at UPMC. The counterclaims seek at least \$1.7M as well as punitive damages. UPMC plans to zealously defend against these counterclaims. The ultimate outcome and effect on UPMC's consolidated financial statements cannot be determined at this time.

On or about August 30, 2022, Plaintiff Malinda Smidga filed a putative class action complaint in the United States District Court for the Western District of Pennsylvania against Meta Platforms, Inc. and UPMC alleging that UPMC's use of Meta's Pixel violated the putative class's right to privacy as well as federal and state statutory and common law. On November 21, 2022, the Court granted UPMC's motion to compel arbitration and administratively closed the matter pending individual arbitration of the Plaintiff's claims, which had not been initiated as of January 24, 2023. The ultimate outcome and effect on UPMC's consolidated financial statements cannot be determined at this time.

18. SUBSEQUENT EVENTS

Management evaluated events occurring subsequent to December 31, 2022 through February 27, 2023, the date the consolidated financial statements of UPMC were issued. During this period, there were no subsequent events requiring recognition or disclosure in the consolidated financial statements.