UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

ANNUAL REPORT PURSUANT TO ACT OF 1934	SECTION 13 OR 15(d)	OF THE SECURITIES EXCHANGE
For the f	iscal year ended December	r 31, 2019
	or	
☐ TRANSITION REPORT PURSUAN ACT OF 1934	T TO SECTION 13 OR 15	5(d) OF THE SECURITIES EXCHANGE
For the tra	nsition period from	to
	nmission file number: 1-10	
Unit	EDHEALTH G	ROUP®
		_
United Ho (Exact na	ealth Group Income of registrant as specified in it	orporated is charter)
Delaware		41-1321939
(State or other jurisdiction of incorporation or organization)		(I.R.S. Employer Identification No.)
UnitedHealth Group Center		
9900 Bren Road East		
Minnetonka, Minnesota		55343
(Address of principal executive offices)	(Zip Code)
(Registran	(952) 936-1300 at's telephone number, including	area code)
Securities regist	tered pursuant to Section 1	12(b) of the Act:
Title of each class Common Stock, \$.01 par value	Trading Symbol(s) UNH	Name of each exchange on which registered New York Stock Exchange
Securities registere	ed pursuant to Section 12(g) of the Act: None
Indicate by check mark if the registrant is a well-known	seasoned issuer, as defined in Rule	e 405 of the Securities Act. Yes ⊠ No □
Indicate by check mark if the registrant is not required t	o file reports pursuant to Section 1	3 or Section 15(d) of the Act. Yes ☐ No 🗵
Indicate by check mark whether the registrant (1) has fi 1934 during the preceding 12 months (or for such shorts such filing requirements for the past 90 days. Yes	er period that the registrant was req	by Section 13 or 15(d) of the Securities Exchange Act of quired to file such reports), and (2) has been subject to
Indicate by check mark whether the registrant has subm pursuant to Rule 405 of Regulation S-T during the prece- post such files). Yes No	itted electronically every Interactive eding 12 months (or for such shorte	ve Data File required to be submitted and posted er period that the registrant was required to submit and
Indicate by check mark whether the registrant is a large or an emerging growth company. See the definitions of growth company" in Rule 12b-2 of the Exchange Act. ("large accelerated filer," "accelera-	er, a non-accelerated filer, a smaller reporting company, ted filer," "smaller reporting company" and "emerging
Large Accelerated Filer Non-accelerated filer	Sr	ccelerated filer maller reporting company merging growth company
If an emerging growth company, indicate by check mar any new or revised financial accounting standards provi		
Indicate by check mark whether the registrant is a shell	company (as defined in Rule 12b-2	2 of the Act). Yes \square No \boxtimes
The aggregate market value of voting stock held by non reported sale price of \$244.01 per share on June 28, 201 beneficially by directors, executive officers and subsidiates.	9, on the New York Stock Exchan	
As of January 31, 2020, there were 948,573,372 shares	•	
DOCUME	NTS INCORPORATED BY RE	FERENCE

The information required by Part III of this report, to the extent not set forth herein, is incorporated by reference from the registrant's definitive proxy statement relating to its 2020 Annual Meeting of Shareholders. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

UNITEDHEALTH GROUP

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PART I

ITEM 1. BUSINESS

INTRODUCTION

Overview

UnitedHealth Group is a diversified health care company dedicated to helping people live healthier lives and helping make the health system work better for everyone. The terms "we," "our," "us," "its," "UnitedHealth Group," or the "Company" used in this report refer to UnitedHealth Group Incorporated and its subsidiaries.

Through our diversified family of businesses, we leverage core competencies in data and health information, advanced technology, and clinical expertise, focused on improving health outcomes, lowering health care costs and creating a better experience for patients, their caregivers and physicians. These core competencies are deployed within our two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

UnitedHealthcare provides health care benefits to an array of customers and markets. UnitedHealthcare Employer & Individual serves employers ranging from sole proprietorships to large, multi-site and national employers, public sector employers and individual consumers. UnitedHealthcare Medicare & Retirement delivers health and well-being benefits for Medicare beneficiaries and retirees. UnitedHealthcare Community & State manages health care benefit programs on behalf of state Medicaid and community programs and their participants. UnitedHealthcare Global provides health and dental benefits and hospital and clinical services to employer groups and individuals in South America, and other diversified global health businesses.

Optum is a health services business serving the broad health care marketplace, including payers, care providers, employers, governments, life sciences companies and consumers, through its OptumHealth, OptumInsight and OptumRx businesses. These businesses have dedicated units that help improve overall health system performance through optimizing care quality, reducing costs and improving consumer experience and care provider performance, leveraging distinctive capabilities in data and analytics, pharmacy care services, population health, health care delivery and health care operations.

Through UnitedHealthcare and Optum, in 2019, we processed nearly a trillion dollars in gross billed charges and we managed more than \$250 billion in aggregate health care spending on behalf of the customers and consumers we serve. Our revenues are derived from premiums on risk-based products; fees from management, administrative, technology, consulting and managed outsourced services; sales of a wide variety of products and services related to the broad health care industry; and investment and other income. Our two business platforms have four reportable segments:

- UnitedHealthcare, which includes UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global;
- OptumHealth;
- OptumInsight; and
- OptumRx.

UnitedHealthcare

Through its health benefits offerings, UnitedHealthcare is enabling better health, helping to control rising health care costs and creating a better health care experience for its customers. UnitedHealthcare's market position is built on:

- strong local-market relationships;
- the breadth of product offerings, based upon extensive expertise in distinct market segments in health care;
- service and advanced technology, including digital consumer engagement;
- competitive medical and operating cost positions;
- effective clinical engagement; and
- innovation for customers and consumers.

UnitedHealthcare utilizes Optum's capabilities to help coordinate and provide patient care, improve affordability of medical care, analyze cost trends, manage pharmacy benefits, work with care providers more effectively and create a simpler and more satisfying consumer experience.

In the United States, UnitedHealthcare arranges for discounted access to care through networks that include 1.4 million physicians and other health care professionals and more than 6,500 hospitals and other facilities.

UnitedHealthcare is subject to extensive government regulation. See further discussion of our regulatory environment below under "Government Regulation" and in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

UnitedHealthcare Employer & Individual

UnitedHealthcare Employer & Individual offers a comprehensive array of consumer-oriented health benefit plans and services nationwide for large national employers, public sector employers, mid-sized employers, small businesses, and individual consumers. UnitedHealthcare Employer & Individual provides access to medical services for 27.8 million people on behalf of our customers and alliance partners, including employer customers, serving people across all 50 states, the District of Columbia and most U.S. territories. Products are offered through affiliates that are licensed as insurance companies, health maintenance organizations (HMOs), or third-party administrators (TPAs). Large employer groups typically use self-funded arrangements where UnitedHealthcare Employer & Individual earns a service fee. Smaller employer groups and individuals are more likely to purchase risk-based products because they are less willing or unable to bear a greater potential liability for health care expenditures.

Through its risk-based product offerings, UnitedHealthcare Employer & Individual assumes the risk of both medical and administrative costs for its customers in return for a monthly premium, which is typically a fixed rate per individual served for a one-year period. When providing administrative and other management services to customers that elect to self-fund the health care costs of their employees and employees' dependents, UnitedHealthcare Employer & Individual receives a fixed monthly service fee per individual served. These customers retain the risk of financing medical benefits for their employees and employees' dependents, while UnitedHealthcare Employer & Individual provides services such as coordination and facilitation of medical and related services to customers, consumers and health care professionals, administration of transaction processing and access to a contracted network of physicians, hospitals and other health care professionals, including dental and vision.

The consolidated purchasing capacity represented by the individuals served by UnitedHealth Group makes it possible for UnitedHealthcare Employer & Individual to contract for cost-effective access to a large number of conveniently located care professionals and facilities. UnitedHealthcare Employer & Individual has relationships with network care providers that integrate data and analytics, implement value-based payments and care management programs and enable us to jointly better manage health care and improve quality across populations.

UnitedHealthcare Employer & Individual typically distributes its products through consultants or direct sales in the larger employer and public sector segments. In the smaller group segment of the commercial marketplace, UnitedHealthcare Employer & Individual's distribution system consists primarily of direct sales and sales through collaboration with brokers and agents. UnitedHealthcare Employer & Individual also distributes products through wholesale agents or agencies that contract with health insurance carriers to distribute individual or group benefits and provide other related services to their customers. In addition, UnitedHealthcare Employer & Individual distributes its products through professional employer organizations, associations and through both multi-carrier and its own proprietary private exchange marketplaces.

UnitedHealthcare Employer & Individual's diverse product portfolio offers employers a continuum of benefit designs, price points and approaches to consumer engagement, which provides the flexibility to meet a full spectrum of their coverage needs.

UnitedHealthcare Employer & Individual's major product families include:

Traditional Products. Traditional products include a full range of medical benefits and network options, and offer a spectrum of covered services, including preventive care, direct access to specialists and catastrophic protection.

Consumer Engagement Products. Consumer engagement products couple plan design with financial accounts to increase individuals' responsibility for their health and well-being. This suite of products includes high-deductible consumer-driven benefit plans, which include health reimbursement accounts (HRAs), health savings accounts (HSAs) and consumer engagement services such as personalized behavioral incentive programs, consumer education and other digital offerings. We also offer and have been developing a variety of innovative consumer-centric products that align to the unique needs and financial means of our customers, while engaging individuals in better managing their health.

Clinical and Pharmacy Products. UnitedHealthcare Employer & Individual offers a comprehensive suite of clinical and pharmacy care services products, which complement its service offerings by improving quality of care, engaging consumers and providing cost-saving options. Consumers served by UnitedHealthcare Employer & Individual can access clinical products that help them make better health care decisions and better use of their medical benefits, which contribute to improved health and lowered medical expenses.

UnitedHealthcare Employer & Individual's comprehensive and integrated pharmacy care services promote lower costs by using formulary programs to produce better unit costs, encouraging consumers to use drugs that offer improved value and outcomes, helping consumers take actions to improve their health and supporting the appropriate use of drugs based on clinical evidence through physician and consumer education programs.

Each medical plan has a core set of clinical programs embedded in the offering, with additional services available depending on offering type (risk-based or self-funded), line of business (e.g., small business, key accounts, public sector, national accounts or individual consumers) and clinical need. UnitedHealthcare Employer & Individual's clinical programs include:

- wellness programs;
- decision support;
- utilization management;
- case and disease management;
- complex condition management;
- on-site programs, including biometrics and flu shots;
- incentives to reinforce positive behavior change;

- mental health/substance use disorder management; and
- employee assistance programs.

Specialty Offerings. Through its broad network, UnitedHealthcare Employer & Individual delivers dental, vision, hearing, life, transportation, critical illness, specified disease/sickness, accident and short-term disability product offerings using an integrated approach in private and retail settings.

UnitedHealthcare Medicare & Retirement

UnitedHealthcare Medicare & Retirement provides health and well-being services to individuals age 50 and older, addressing their unique needs for preventive and acute health care services, as well as services dealing with chronic disease and other specialized issues common among older people. UnitedHealthcare Medicare & Retirement is fully dedicated to serving this growing senior market segment, providing products and services in all 50 states, the District of Columbia and most U.S. territories. UnitedHealthcare Medicare & Retirement has distinct pricing, underwriting, clinical program management and marketing capabilities dedicated to health products and services in this market.

UnitedHealthcare Medicare & Retirement offers a selection of products that allow people choice in obtaining the health coverage and services they need as their circumstances change. UnitedHealthcare Medicare & Retirement is positioned to serve seniors who find that affordable, network-based care provided through Medicare Advantage plans meets their unique health care needs. For those who prefer traditional fee-for-service Medicare, UnitedHealthcare Medicare & Retirement offers both Medicare Supplement and Medicare Prescription Drug Benefit (Medicare Part D) programs that supplement their government-sponsored Medicare by providing additional benefits and coverage options. UnitedHealthcare Medicare & Retirement services include care management and health system navigator services, clinical management programs, nurse health line services, 24-hour access to health care information, access to discounted health services from a network of care providers and administrative services.

UnitedHealthcare Medicare & Retirement has extensive distribution capabilities and experience, including direct marketing to consumers on behalf of its key clients, including AARP, the nation's largest membership organization dedicated to the needs of people age 50 and over, and state and U.S. government agencies. Products are also offered through agents, employer groups and digital channels.

UnitedHealthcare Medicare & Retirement's major product categories include:

Medicare Advantage. UnitedHealthcare Medicare & Retirement provides health care coverage for seniors and other eligible Medicare beneficiaries primarily through the Medicare Advantage program administered by the Centers for Medicare & Medicaid Services (CMS), including Medicare Advantage HMO plans, preferred provider organization (PPO) plans, Point-of-Service plans, Private-Fee-for-Service plans and Special Needs Plans (SNPs). Under the Medicare Advantage program, UnitedHealthcare Medicare & Retirement provides health insurance coverage in exchange for a fixed monthly premium per member from CMS plus, in some cases, monthly consumer premiums. Premium amounts received from CMS vary based on the geographic areas in which individuals reside; demographic factors such as age, gender and institutionalized status; and the health status of the individual. Medicare Advantage plans are designed to compete at the local level, taking into account consumer and care provider preferences, competitor offerings, our quality and cost initiatives, our historical financial results and the long-term payment rate outlook for each geographic area. UnitedHealthcare Medicare & Retirement served 5.3 million people through its Medicare Advantage products as of December 31, 2019.

Built on more than 20 years of experience, UnitedHealthcare Medicare & Retirement's senior-focused care management model operates at a medical cost level below that of traditional Medicare, while helping seniors live healthier lives. Through our HouseCalls program, nurse practitioners performed 1.7 million in-home preventive care visits in 2019 to address unmet care opportunities and close gaps in care. Our Navigate4Me program

provides a single point of contact and a direct line of support for individuals as they go through their health care experiences. For high-risk patients in certain care settings and programs, UnitedHealthcare Medicare & Retirement uses proprietary, automated medical record software and digital therapeutics for remote monitoring that enables clinical care teams to capture and track patient data and clinical encounters, creating a comprehensive set of care information that bridges across home, hospital and nursing home care settings. Proprietary predictive modeling tools help identify people at high risk and enable care managers to create individualized care plans that help them obtain the right care, in the right place, at the right time.

Medicare Part D. UnitedHealthcare Medicare & Retirement provides Medicare Part D benefits to beneficiaries throughout the United States and its territories through its Medicare Advantage and stand-alone Medicare Part D plans. The stand-alone Medicare Part D plans address a large spectrum of people's needs and preferences for their prescription drug coverage, including low-cost prescription options. Each of the plans includes the majority of the drugs covered by Medicare and provides varying levels of coverage to meet the diverse needs of Medicare beneficiaries. As of December 31, 2019, UnitedHealthcare enrolled 9.0 million people in the Medicare Part D programs, including 4.4 million individuals in the stand-alone Medicare Part D plans, with the remainder in Medicare Advantage plans incorporating Medicare Part D coverage.

Medicare Supplement. UnitedHealthcare Medicare & Retirement is currently serving 4.8 million seniors nationwide through various Medicare Supplement products in association with AARP. UnitedHealthcare Medicare & Retirement offers a full range of supplemental products at a diversity of price points. These products cover various levels of coinsurance and deductible gaps that seniors are exposed to in the traditional Medicare program.

Premium revenues from CMS represented 33% of UnitedHealth Group's total consolidated revenues for the year ended December 31, 2019, most of which were generated by UnitedHealthcare Medicare & Retirement.

UnitedHealthcare Community & State

UnitedHealthcare Community & State is dedicated to serving state programs that care for the economically disadvantaged, the medically underserved and those without the benefit of employer-funded health care coverage, typically in exchange for a monthly premium per member from the state program. UnitedHealthcare Community & State's primary customers oversee Medicaid plans, including Temporary Assistance to Needy Families (TANF), Children's Health Insurance Programs (CHIP), Dual SNPs (DSNPs), Long-Term Services and Supports (LTSS), Aged, Blind and Disabled and other federal, state and community health care programs. As of December 31, 2019, UnitedHealthcare Community & State participated in programs in 31 states and the District of Columbia, and served 5.9 million people; including nearly 1 million people through Medicaid expansion programs in 15 states under the Patient Protection and Affordable Care Act (ACA).

States using managed care services for Medicaid beneficiaries select health plans by using a formal bid process or by awarding individual contracts. A number of factors are considered by UnitedHealthcare Community & State when choosing programs for participation, including the state's commitment and consistency of support for its Medicaid managed care program in terms of service, innovation and funding; the eligible population base, both immediate and long term; and the structure of the projected program. UnitedHealthcare Community & State works with its state customers to advocate for actuarially sound rates, commensurate with medical cost trends.

These health plans and care programs are designed to address the complex needs of the populations they serve, including the chronically ill, people with disabilities and people with a higher risk of medical, behavioral and social conditions. UnitedHealthcare Community & State administers benefits for the unique needs of children, pregnant women, adults, seniors and those who are institutionalized or are nursing home eligible. These individuals often live in areas that are medically underserved and are less likely to have a consistent relationship with the medical community or a care provider. They also often face significant social and economic challenges.

UnitedHealthcare Community & State leverages the national capabilities of UnitedHealth Group locally, supporting effective care management, strong regulatory partnerships, greater administrative efficiency, improved clinical outcomes and the ability to adapt to a changing national and local market environment. UnitedHealthcare Community & State coordinates resources among family, physicians, other health care providers, and government and community-based agencies and organizations to facilitate continuous and effective care and often addresses other social determinants that can affect people's health status and health system usage.

Approximately 75% of the people in state Medicaid programs are served by managed care, but this population represents only 50% of total Medicaid spending. UnitedHealthcare Community & State's business development opportunities include entering fee-for-service markets converting to managed care; and growing in existing managed care markets, including state expansions to populations with more complex needs requiring more sophisticated models of care, including DSNP and LTSS programs. This expansion includes integrated care management of physical, behavioral, long-term care services and supports, and social services by applying strong data analytics and community-based collaboration.

UnitedHealthcare Community & State continues to evolve its clinical model to enhance quality and the clinical experience for the people it serves. The model enables UnitedHealthcare Community & State to quickly identify the people who could benefit most from more highly coordinated care; typically, the 5% who are most at risk drive over 50% of states' medical costs.

UnitedHealthcare Global

UnitedHealthcare Global serves nearly 8 million people with medical and dental benefits, residing principally in Brazil, Chile, Colombia and Peru, but also in more than 140 other countries. UnitedHealthcare Global serves multinational and local businesses, governments, insurers and individuals and their families through health insurance plans for local populations, care delivery services, benefit plans and risk and assistance solutions. UnitedHealthcare Global offers health care delivery in these markets through more than 300 hospitals, outpatient and ambulatory clinics and surgery centers to UnitedHealthcare Global members and consumers served by the external payer market.

In Brazil, Amil provides health benefits to 3.6 million people and dental benefits to 2.2 million people. Empresas Banmédica provides health benefits and health care services to 2.1 million people in Chile, Colombia and Peru. Lusíadas Saúde provides clinical services to people in Portugal through an owned network of hospitals and outpatient clinics.

Optum

Optum is a technology-enabled health services business serving the broad health care marketplace, including:

- Those who need care: the consumers who need the right support, information, resources and products to achieve their health goals.
- Those who provide care: pharmacies, hospitals, physicians, practices and other health care facilities seeking to modernize the health system and support the best possible patient care and experiences.
- Those who pay for care: employers, health plans, and state, federal and municipal agencies devoted to
 ensuring the populations they sponsor receive high-quality care, administered and delivered efficiently and
 effectively.
- Those who innovate for care: global life sciences organizations dedicated to developing more effective approaches to care, enabling technologies and medicines that improve care delivery and health outcomes.

Optum operates three business segments leveraging distinctive capabilities in data and analytics, pharmacy care services, population health, health care delivery and health care operations:

- OptumHealth focuses on care delivery, care management, wellness and consumer engagement, and health financial services;
- OptumInsight offers data, analytics, research, consulting, technology and managed services solutions; and
- OptumRx provides a diversified array of pharmacy care services.

OptumHealth

OptumHealth is a diversified health and wellness business serving the physical, emotional and health-related financial needs of 96 million unique individuals. OptumHealth enables population health through programs offered by employers, payers, government entities and directly with the care delivery system. OptumHealth products and services deliver value by improving quality and patient satisfaction while lowering cost. OptumHealth builds high-performing networks and centers of excellence across the care continuum, by working directly with physicians to advance population health and by coordinating care for the most medically complex patients.

OptumHealth serves patients and care providers through its local ambulatory care services business and delivers care through a physician-led, patient-centric and data-driven organization comprised of nearly 50,000 employed, managed or contracted physicians, helping improve care quality, affordability and patient experience. OptumHealth also enables care providers' transition from traditional, fee-for-service care delivery to performance-based delivery and payment models that improve the focus on patient health and outcomes, such as those emerging through accountable care organizations (ACOs) and local care provider partnerships. Through strategic partnerships, alliances and ownership arrangements, OptumHealth helps care providers adopt new approaches and technologies that improve the coordination of care across all providers involved in patient care to more comprehensively serve patients. Surgical Care Affiliates' independent ambulatory surgical centers and surgical hospitals provide high-value surgical services at a substantially lower cost than a traditional in-patient hospital setting and MedExpress' neighborhood care centers provide urgent and walk-in care services with a consumer-friendly approach.

OptumServe provides a wide range of health services specifically tailored to active military and veterans and the agencies that support them.

OptumHealth serves people through population health services that meet both the preventive care and health intervention needs of consumers across the care continuum, encompassing physical health and wellness, mental health, complex medical conditions, disease management, hospitalization and post-acute care. This includes offering access to proprietary networks of provider specialists, including behavioral health, organ transplant, chiropractic and physical therapy. OptumHealth engages consumers in managing their health through guidance, digital tools and programs that help them achieve their health goals and maintain healthy lifestyles.

Optum Financial Services, through Optum Bank, a wholly-owned subsidiary, serves consumers through 5.6 million health savings and other accounts and has nearly \$12 billion in assets under management as of December 31, 2019. During 2019, Optum Bank processed \$170 billion in digital medical payments to physicians and other health care providers. Organizations across the health system rely on Optum to manage and improve payment flows through its highly automated, scalable, digital payment systems.

OptumHealth offers its products on a risk basis, where it assumes responsibility for health care costs in exchange for a monthly premium per individual served, on an administrative fee basis, under which it manages or administers delivery of the products or services in exchange for a fixed monthly fee per individual served, or on a fee-for-service basis, where it delivers medical services to patients in exchange for a contracted fee. For its financial services offerings, OptumHealth charges fees and earns investment income on managed funds.

OptumHealth sells its products primarily through its direct sales force, strategic collaborations and external producers in three markets: employers (which includes the sub-markets of large, mid-sized and small employers), payers (which includes the sub-markets of health plans, TPAs, underwriter/stop-loss carriers and individual market intermediaries) and government entities (which includes states, CMS, the Department of Defense, the Veterans Administration and other federal procurement agencies).

OptumInsight

OptumInsight provides services, technology and health care expertise to major participants in the health care industry. OptumInsight's capabilities are focused on technology, research and consulting and managed services that help improve the quality of care and drive greater efficiency in the health care system. Technology includes population health and risk analytics, administrative and clinical technology for claims editing, risk adjustment and payment integrity, health information and electronic data exchange and technology strategy and management. Research and consulting helps organizations reduce administrative costs and implement best practices to improve clinical performance. Managed services provides solutions such as revenue cycle management, risk analytics, payment integrity outsourcing and state Medicaid data and technology management. Hospital systems, physicians, health plans, governments, life sciences companies and other organizations that comprise the health care industry depend on OptumInsight to help them improve performance, achieve efficiency, reduce costs, advance quality, meet compliance mandates and modernize their core operating systems to meet the changing needs of the health system.

Many of OptumInsight's software and information products and professional services are delivered over extended periods, often several years. OptumInsight maintains an order backlog to track unearned revenues under these long-term arrangements. The backlog consists of estimated revenue from signed contracts, other legally binding agreements and anticipated contract renewals based on historical experience with OptumInsight's customers. OptumInsight's aggregate backlog as of December 31, 2019 was \$19.3 billion, of which \$9.9 billion is expected to be realized within the next 12 months. The aggregate backlog includes \$7.1 billion related to affiliated agreements. OptumInsight's aggregate backlog as of December 31, 2018, was \$17.0 billion. OptumInsight cannot provide any assurance that it will be able to realize all of the revenues included in the backlog due to uncertainties with regard to the timing and scope of services and the potential for cancellation, non-renewal or early termination of service arrangements.

OptumInsight's products and services are sold primarily through a direct sales force. OptumInsight's products are also supported and distributed through an array of alliances and business partnerships with other technology vendors, who integrate and interface OptumInsight's products with their applications.

OptumInsight believes it is well positioned to address the needs of four primary market segments: care providers (e.g., physicians and hospital systems), health plans, governments and life sciences companies.

Care Providers. Serving nine out of ten U.S. hospitals and more than 100,000 physicians, OptumInsight assists care providers in meeting their challenge to improve patient outcomes and care amid changing payment models and pressures. OptumInsight brings a broad array of solutions to help care providers meet these challenges, with particular focus on clinical performance and quality improvement, population health, data management and analytics, revenue management, cost containment, compliance, cloud-enabled collaboration and consumer engagement.

Health Plans. OptumInsight serves four out of five U.S. health plans through cost-effective, technology-enabled solutions that help them improve efficiency, understand and optimize growth while managing risk, improve payment integrity performance, deliver on clinical initiatives and compliance goals, and build and manage strong networks of care.

Governments. OptumInsight provides services tailored to government payers, including data and analytics technology, claims management and payment accuracy services, and strategic consulting.

Life Sciences. OptumInsight provides services to global life sciences companies. These companies look to OptumInsight for data, analytics and expertise in core areas of health economics and outcomes research, market access consulting, integrated clinical and health care claims data and informatics services, epidemiology and drug safety, and patient reported outcomes.

OptumRx

OptumRx provides a full spectrum of pharmacy care services to 56 million people in the United States through its network of more than 67,000 retail pharmacies, multiple home delivery, specialty and community health pharmacies and through the provision of infusion services. OptumRx manages limited and ultra-limited distribution drugs in oncology, HIV, pain management and ophthalmology and serves the growing pharmacy needs of people with behavioral health and substance use disorders, particularly Medicare and Medicaid beneficiaries.

OptumRx's comprehensive whole-person approach to pharmacy care services integrates demographic, medical, laboratory, pharmaceutical and other clinical data and applies analytics to drive clinical care insight to support care treatments and compliance, benefiting clients and individual consumers through enhanced services, elevated clinical quality and cost trend management.

In 2019, OptumRx managed \$96 billion in pharmaceutical spending, including \$40 billion in specialty pharmaceutical spending.

OptumRx provides pharmacy care services to a number of health plans, including a substantial majority of UnitedHealthcare members, large national employer plans, unions and trusts, purchasing coalitions and government entities. OptumRx's distribution system consists primarily of health insurance brokers and other health care consultants and direct sales.

OptumRx offers multiple clinical programs, digital tools and services to help clients manage overall pharmacy and health care costs in a clinically appropriate manner, which are designed to promote better health outcomes, and to help target inappropriate utilization and non-adherence to medication, each of which may result in adverse medical events that affect member health and client pharmacy and medical spend. OptumRx provides various utilization management, medication management, quality assurance, adherence and counseling programs to complement the client's plan design and clinical strategies. OptumRx offers a distinctive approach to integrating the management of medical and pharmaceutical care by using data and advanced analytics to help improve comprehensive decision-making, elevate quality, close gaps in care and reduce costs for customers and people served.

As of December 31, 2019, OptumRx operated seven home delivery pharmacies in the United States, which provide patients with access to maintenance medications and enables OptumRx to manage clients' drug costs through operating efficiencies and economies of scale. As of December 31, 2019, OptumRx's specialty pharmacy operations included nearly 70 specialty and infusion pharmacies located throughout the United States that are used for delivery of advanced medications to people with chronic or genetic diseases and disorders. OptumRx also operates more than 500 community mental health facility pharmacies, which help align benefits, care management and pharmacy services for those living with complex, chronic medical and behavioral health issues.

GOVERNMENT REGULATION

Our businesses are subject to comprehensive federal, state and international laws and regulations. We are regulated by federal, state and international regulatory agencies that generally have discretion to issue regulations and interpret and enforce laws and rules. The regulations can vary significantly from jurisdiction to jurisdiction and the interpretation of existing laws and rules also may change periodically. Domestic and international governments continue to enact and consider various legislative and regulatory proposals that could materially impact certain aspects of the health care system. New laws, regulations and rules, or changes in the interpretation of existing laws, regulations and rules, including as a result of changes in the political climate, could adversely affect our business.

If we fail to comply with, or fail to respond quickly and appropriately to changes in, applicable laws, regulations and rules, our business, results of operations, financial position and cash flows could be materially and adversely affected. See Part I, Item 1A, "Risk Factors" for a discussion of the risks related to our compliance with federal, state and international laws and regulations.

Federal Laws and Regulation

We are subject to various levels of U.S. federal regulation. For example, when we contract with the federal government, we are subject to federal laws and regulations relating to the award, administration and performance of U.S. government contracts. CMS regulates our UnitedHealthcare businesses and certain aspects of our Optum businesses. Payments by CMS to our businesses are subject to regulations, including those governing fee-for-service and the submission of information relating to the health status of enrollees for purposes of determining the amounts of certain payments to us. CMS also has the right to audit our performance to determine our compliance with CMS contracts and regulations and the quality of care we provide to Medicare beneficiaries. Our commercial business is further subject to CMS audits related to medical loss ratios (MLRs) and risk adjustment data.

UnitedHealthcare Community & State has Medicaid and CHIP contracts that are subject to federal regulations regarding services to be provided to Medicaid enrollees, payment for those services and other aspects of these programs. There are many regulations affecting Medicare and Medicaid compliance and the regulatory environment with respect to these programs is complex. In addition, our business is subject to laws and regulations relating to consumer protection, anti-fraud and abuse, anti-kickbacks, false claims, prohibited referrals, inappropriately reducing or limiting health care services, anti-money laundering, securities and antitrust compliance.

Privacy, Security and Data Standards Regulation. The administrative simplification provisions of the Health Insurance Portability and Accountability Act of 1996, as amended (HIPAA), apply to both the group and individual health insurance markets, including self-funded employee benefit plans. Federal regulations related to HIPAA contain minimum standards for electronic transactions and code sets and for the privacy and security of protected health information.

The Health Information Technology for Economic and Clinical Health Act (HITECH) regulates matters relating to privacy, security and data standards. HITECH imposes requirements on uses and disclosures of health information; included contracting requirements for HIPAA business associate agreements; extends parts of HIPAA privacy and security provisions to business associates; adds federal data breach notification requirements for covered entities and business associates and reporting requirements to the U.S. Department of Health and Human Services (HHS) and the Federal Trade Commission (FTC) and, in some cases, to the local media; strengthens enforcement and imposes higher financial penalties for HIPAA violations and, in certain cases, imposes criminal penalties for individuals, including employees. In the conduct of our business, depending on the circumstances, we may act as either a covered entity or a business associate.

The use and disclosure of individually identifiable health data by our businesses is also regulated in some instances by other federal laws, including the Gramm-Leach-Bliley Act (GLBA) or state statutes implementing GLBA. These federal laws and state statutes generally require insurers to provide customers with notice regarding how their non-public personal health and financial information is used and the opportunity to "opt out" of certain disclosures before the insurer shares such information with a third party, and generally prescribe safeguards for the protection of personal information. Neither the GLBA nor HIPAA privacy regulations preempt more stringent state laws and regulations that may apply to us, as discussed below. Federal consumer protection laws may also apply in some instances to privacy and security practices related to personally identifiable information.

ERISA. The Employee Retirement Income Security Act of 1974, as amended (ERISA), regulates how our services are provided to or through certain types of employer-sponsored health benefit plans. ERISA is a set of laws and regulations that is subject to periodic interpretation by the U.S. Department of Labor (DOL) as well as the federal courts. ERISA sets forth standards on how our business units may do business with employers who sponsor employee health benefit plans, particularly those that maintain self-funded plans. Regulations established by the DOL subject us to additional requirements for administration of benefits, claims payment and member appeals under health care plans governed by ERISA.

State Laws and Regulation

Health Care Regulation. Our insurance and HMO subsidiaries must be licensed by the jurisdictions in which they conduct business. All of the states in which our subsidiaries offer insurance and HMO products regulate those products and operations. The states require periodic financial reports and establish minimum capital or restricted cash reserve requirements. The National Association of Insurance Commissioners (NAIC) has adopted model regulations that, where adopted by states, require expanded governance practices and risk and solvency assessment reporting. Most states have adopted these or similar measures to expand the scope of regulations relating to corporate governance and internal control activities of HMOs and insurance companies. We are required to maintain a risk management framework and file a confidential self-assessment report with state insurance regulators. We file reports annually with Connecticut, our lead regulator, and with New York, as required by that state's regulation. Certain states have also adopted their own regulations for minimum MLRs with which health plans must comply. In addition, a number of state legislatures have enacted or are contemplating significant reforms of their health insurance markets, either independent of or to comply with or be eligible for grants or other incentives in connection with the ACA, which may affect our operations and our financial results.

Health plans and insurance companies are regulated under state insurance holding company regulations. Such regulations generally require registration with applicable state departments of insurance and the filing of reports that describe capital structure, ownership, financial condition, certain affiliated transactions and general business operations. Most state insurance holding company laws and regulations require prior regulatory approval of acquisitions and material affiliated transfers of assets, as well as transactions between the regulated companies and their parent holding companies or affiliates. These laws may restrict the ability of our regulated subsidiaries to pay dividends to our holding companies.

Some of our business activity is subject to other health care-related regulations and requirements, including PPO, Managed Care Organization (MCO), utilization review (UR), TPA, pharmacy care services, durable medical equipment or care provider-related regulations and licensure requirements. These regulations differ from state to state and may contain network, contracting, product and rate, licensing and financial and reporting requirements. There are laws and regulations that set specific standards for delivery of services, appeals, grievances and payment of claims, adequacy of health care professional networks, fraud prevention, protection of consumer health information, pricing and underwriting practices and covered benefits and services. State health care antifraud and abuse prohibitions encompass a wide range of activities, including kickbacks for referral of members, billing for unnecessary medical services and improper marketing. Certain of our businesses are subject to state general agent, broker and sales distribution laws and regulations. UnitedHealthcare Community & State and certain of our Optum businesses are subject to regulation by state Medicaid agencies that oversee the provision of benefits to our Medicaid and CHIP beneficiaries and to our dually eligible (for Medicare and Medicaid) beneficiaries. We also contract with state governmental entities and are subject to state laws and regulations relating to the award, administration and performance of state government contracts.

State Privacy and Security Regulations. A number of states have adopted laws and regulations that may affect our privacy and security practices, such as state laws that govern the use, disclosure and protection of social security numbers and protected health information or that are designed to implement GLBA or protect credit card account data. State and local authorities increasingly focus on the importance of protecting individuals from

identity theft, with a significant number of states enacting laws requiring businesses to meet minimum cyber-security standards and notify individuals of security breaches involving personal information. State consumer protection laws may also apply to privacy and security practices related to personally identifiable information, including information related to consumers and care providers. Different approaches to state privacy and insurance regulation and varying enforcement philosophies in the different states may materially and adversely affect our ability to standardize our products and services across state lines. See Part I, Item 1A, "Risk Factors" for a discussion of the risks related to compliance with state privacy and security regulations.

Corporate Practice of Medicine and Fee-Splitting Laws. Certain of our businesses function as direct medical service providers and, as such, are subject to additional laws and regulations. Some states have corporate practice of medicine laws that prohibit specific types of entities from practicing medicine or employing physicians to practice medicine. Moreover, some states prohibit certain entities from engaging in fee-splitting practices that involve sharing in the fees or revenues of a professional practice. These prohibitions may be statutory or regulatory, or may be imposed through judicial or regulatory interpretation. The laws, regulations and interpretations in certain states have been subject to limited judicial and regulatory interpretation and are subject to change.

Pharmacy and Pharmacy Benefits Management (PBM) Regulations

OptumRx's businesses include home delivery, specialty and compounding pharmacies, as well as clinic-based pharmacies that must be licensed as pharmacies in the states in which they are located. Certain of our home delivery, specialty and compounding pharmacies must also register with the U.S. Drug Enforcement Administration (DEA) and individual state controlled substance authorities to dispense controlled substances. In addition to adhering to the laws and regulations in the states where our home delivery, specialty and compounding pharmacies are located, we also are required to comply with laws and regulations in some non-resident states where we deliver pharmaceuticals, including those requiring us to register with the board of pharmacy in the non-resident state. These non-resident states generally expect our home delivery, specialty and compounding pharmacies to follow the laws of the state in which the pharmacies are located, but some states also require us to comply with the laws of that non-resident state when pharmaceuticals are delivered there. Additionally, certain of our pharmacies that participate in programs for Medicare and state Medicaid providers are required to comply with the applicable Medicare and Medicaid provider rules and regulations. Other laws and regulations affecting our home delivery and specialty pharmacies include federal and state statutes and regulations governing the labeling, packaging, advertising and adulteration of prescription drugs and dispensing of controlled substances. See Part I, Item 1A, "Risk Factors" for a discussion of the risks related to our pharmacy care services businesses.

Federal and state legislation of PBM activities affect both our ability to limit access to a pharmacy provider network or remove network providers. Additionally, many states limit our ability to manage and establish maximum allowable costs for generic prescription drugs. With respect to formulary services, a number of government entities, including CMS, HHS and state departments of insurance, regulate the administration of prescription drug benefits offered through federal or state exchanges. Many states also regulate the scope of prescription drug coverage, as well as the delivery channels to receive such prescriptions, for insurers, MCOs and Medicaid managed care plans. These regulations could limit or preclude (i) certain plan designs, (ii) limited networks, (iii) requirements to use particular care providers or distribution channel, (iv) copayment differentials among providers and (v) formulary tiering practices.

Legislation seeking to regulate PBM activities introduced or enacted at the federal or state level could impact our business practices with others in the pharmacy supply chain, including pharmaceutical manufacturers and network providers. Additionally, organizations like the NAIC periodically issue model regulations and credentialing organizations, like the National Committee for Quality Assurance (NCQA) and the Utilization Review Accreditation Commission (URAC), may establish standards that impact PBM pharmacy activities. While these model regulations and standards do not have the force of law, they may influence states to adopt their recommendations and impact the services we deliver to our clients.

Consumer Protection Laws

Certain of our businesses participate in direct-to-consumer activities and are subject to regulations applicable to on-line communications and other general consumer protection laws and regulations such as the Federal Tort Claims Act, the Federal Postal Service Act and the FTC's Telemarketing Sales Rule. Most states also have similar consumer protection laws.

Certain laws, such as the Telephone Consumer Protection Act, give the FTC, Federal Communications Commission ("FCC") and state attorneys general the ability to regulate, and bring enforcement actions relating to, telemarketing practices and certain automated outbound contacts such as phone calls, texts or emails. Under certain circumstances, these laws may provide consumers with a private right of action. Violations of these laws could result in substantial statutory penalties and other sanctions.

Banking Regulation

Optum Bank is subject to regulation by federal banking regulators, including the Federal Deposit Insurance Corporation, which performs annual examinations to ensure that the bank is operating in accordance with federal safety and soundness requirements, and the Consumer Financial Protection Bureau, which may perform periodic examinations to ensure that the bank is in compliance with applicable consumer protection statutes, regulations and agency guidelines. Optum Bank is also subject to supervision and regulation by the Utah State Department of Financial Institutions, which carries out annual examinations to ensure that the bank is operating in accordance with state safety and soundness requirements and performs periodic examinations of the bank's compliance with applicable state banking statutes, regulations and agency guidelines. In the event of unfavorable examination results from any of these agencies, the bank could become subject to increased operational expenses and capital requirements, enhanced governmental oversight and monetary penalties.

International Regulation

Certain of our businesses operate internationally and are subject to regulation in the jurisdictions in which they are organized or conduct business. These regulatory regimes vary from jurisdiction to jurisdiction. In addition, our non-U.S. businesses and operations are subject to U.S. laws that regulate the conduct and activities of U.S.-based businesses operating abroad, such as the Foreign Corrupt Practices Act (FCPA), which prohibits offering, promising, providing or authorizing others to give anything of value to a foreign government official to obtain or retain business or otherwise secure a business advantage.

COMPETITION

As a diversified health care company, we operate in highly competitive markets across the full expanse of health care benefits and services, including organizations ranging from startups to highly sophisticated Fortune 50 global enterprises, for-profit and non-profit companies, and private and government-sponsored entities. New entrants and business combinations also contribute to a dynamic and competitive environment. We compete fundamentally on the quality and value we provide to those we serve, which can include elements such as product and service innovation; use of technology; consumer and provider engagement and satisfaction; sales, marketing and pricing. See Part I, Item 1A, "Risk Factors" for additional discussion of our risks related to competition.

INTELLECTUAL PROPERTY RIGHTS

We have obtained trademark registration for the UnitedHealth Group, UnitedHealthcare and Optum names and logos. We own registrations for certain of our other trademarks in the United States and abroad. We hold a portfolio of patents and have patent applications pending from time to time. We are not substantially dependent on any single patent or group of related patents.

Unless otherwise noted, trademarks appearing in this report are trademarks owned by us. We disclaim any proprietary interest in the marks and names of others.

EMPLOYEES

As of December 31, 2019, we employed 325,000 individuals.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The following sets forth certain information regarding our executive officers as of February 14, 2020, including the business experience of each executive officer during the past five years:

Name		Position
David S. Wichmann	57	Chief Executive Officer
Andrew P. Witty	55	President; Chief Executive Officer of Optum
Dirk C. McMahon	60	Chief Executive Officer of UnitedHealthcare
John F. Rex	58	Executive Vice President; Chief Financial Officer
Thomas E. Roos	47	Senior Vice President; Chief Accounting Officer
Marianne D. Short	68	Executive Vice President; Chief Legal Officer
D. Ellen Wilson	62	Executive Vice President

Our Board of Directors elects executive officers annually. Our executive officers serve until their successors are duly elected and qualified, or until their earlier death, resignation, removal or disqualification.

Mr. Wichmann is Chief Executive Officer of UnitedHealth Group and a member of the Board of Directors and has served in that capacity since September 2017. Mr. Wichmann previously served as President of UnitedHealth Group from November 2014 to August 2017. Mr. Wichmann also served as Chief Financial Officer of UnitedHealth Group from January 2011 to June 2016. From April 2008 to November 2014, Mr. Wichmann served as Executive Vice President of UnitedHealth Group and President of UnitedHealth Group Operations.

Sir Andrew Witty is President of UnitedHealth Group and Chief Executive Officer of Optum. Sir Andrew has served as President since November 2019 and has served as Chief Executive Officer of Optum since July 2018. Witty previously served as a UnitedHealth Group director from August 2017 to March 2018. Prior to joining UnitedHealth Group, he was Chief Executive Officer and a board member of GlaxoSmithKline, a global pharmaceutical company, from 2008 to April 2017.

Mr. McMahon is Chief Executive Officer of UnitedHealthcare and has served in that capacity since June 2019. Mr. McMahon previously served as President and Chief Operating Officer of Optum from April 2017 to June 2019 and as Executive Vice President, Operations at UnitedHealth Group from November 2014 to April 2017. Mr. McMahon also served as Chief Executive Officer of OptumRx from November 2011 to November 2014. Prior to 2011, he held various positions in UnitedHealthcare in operations, technology and finance.

Mr. Rex is Executive Vice President and Chief Financial Officer of UnitedHealth Group and has served in that capacity since June 2016. From March 2012 to June 2016, Mr. Rex served as Executive Vice President and Chief Financial Officer of Optum. Prior to joining Optum in 2012, Mr. Rex was a Managing Director at JP Morgan, a global financial services firm.

Mr. Roos is Senior Vice President and Chief Accounting Officer of UnitedHealth Group and has served in that capacity since August 2015. Prior to joining UnitedHealth Group, Mr. Roos was a Partner at Deloitte & Touche LLP, an independent registered public accounting firm, from September 2007 to August 2015.

Ms. Short is Executive Vice President and Chief Legal Officer of UnitedHealth Group and has served in that capacity since January 2013. Prior to joining UnitedHealth Group, Ms. Short served as the Managing Partner at Dorsey & Whitney LLP, an international law firm, from January 2007 to December 2012.

Ms. Wilson is Executive Vice President of UnitedHealth Group and has served in that capacity since June 2013. She also served as Chief Human Resources Officer of UnitedHealth Group from June 2013 through October 2019. From January 2012 to May 2013, Ms. Wilson served as Chief Administrative Officer of Optum. Prior to joining Optum, Ms. Wilson served for 17 years at Fidelity Investments, concluding her tenure there as head of Human Resources.

Additional Information

UnitedHealth Group Incorporated was incorporated in January 1977 in Minnesota. On July 1, 2015, UnitedHealth Group Incorporated changed its state of incorporation from Minnesota to Delaware pursuant to a plan of conversion. Our executive offices are located at UnitedHealth Group Center, 9900 Bren Road East, Minnesota 55343; our telephone number is (952) 936-1300.

You can access our website at *www.unitedhealthgroup.com* to learn more about our company. From the site you can download and print copies of our annual reports to shareholders, annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, along with amendments to those reports. You can also download from our website our certificate of incorporation, bylaws and corporate governance policies, including our Principles of Governance, Board of Directors Committee Charters and Code of Conduct. We make periodic reports and amendments available, free of charge, on our website, as soon as reasonably practicable after we file or furnish these reports to the Securities and Exchange Commission (SEC). We will also provide a copy of any of our corporate governance policies published on our website free of charge, upon request. To request a copy of any of these documents, please submit your request to: UnitedHealth Group Incorporated, 9900 Bren Road East, Minnetonka, MN 55343, Attn: Corporate Secretary. Information on or linked to our website is neither part of nor incorporated by reference into this Annual Report on Form 10-K or any other SEC filings.

Our transfer agent, Equiniti (EQ), can help you with a variety of shareholder-related services, including change of address, lost stock certificates, transfer of stock to another person and other administrative services. You can write to our transfer agent at: EQ Shareowner Services, P.O. Box 64854, St. Paul, Minnesota 55164-0854, or telephone (800) 401-1957 or (651) 450-4064.

ITEM 1A. RISK FACTORS

CAUTIONARY STATEMENTS

The statements, estimates, projections or outlook contained in this Annual Report on Form 10-K include forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (PSLRA). When used in this Annual Report on Form 10-K and in future filings by us with the SEC, in our news releases, presentations to securities analysts or investors, and in oral statements made by or with the approval of one of our executive officers, the words "believe," "expect," "intend," "estimate," "anticipate," "forecast," "outlook," "plan," "project," "should" or similar words or phrases are intended to identify such forward-looking statements. These statements are intended to take advantage of the "safe harbor" provisions of the PSLRA. These forward-looking statements involve risks and uncertainties that may cause our actual results to differ materially from the expectations expressed or implied in the forward-looking statements. Any forward-looking statement in this report speaks only as of the date of this report and, except as required by law; we undertake no obligation to update any forward-looking statement to reflect events or circumstances, including unanticipated events, after the date of this report.

The following discussion contains cautionary statements regarding our business that investors and others should consider. We do not undertake to address in future filings or communications regarding our business or results of operations how any of these factors may have caused our results to differ from discussions or information contained in previous filings or communications. In addition, any of the matters discussed below may have affected past, as well as current, forward-looking statements about future results. Any or all forward-looking

statements in this Annual Report on Form 10-K and in any other public filings or statements we make may turn out to be wrong. Our forward-looking statements can be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties. Many factors discussed below will be important in determining our future results. By their nature, forward-looking statements are not guarantees of future performance or results and are subject to risks, uncertainties and assumptions that are difficult to predict or quantify.

If we fail to estimate, price for and manage our medical costs in an effective manner, the profitability of our risk-based products and services could decline and could materially and adversely affect our results of operations, financial position and cash flows.

Through our risk-based benefit products, we assume the risk of both medical and administrative costs for our customers in return for monthly premiums. We generally use approximately 80% to 85% of our premium revenues to pay the costs of health care services delivered to these customers. The profitability of our products depends in large part on our ability to predict, price for and effectively manage medical costs. Our OptumHealth business negotiates capitation arrangements with commercial third-party payers, which are also included in premium revenues. Under the typical capitation arrangement, the health care provider receives a fixed percentage of a third-party payer's premiums to cover all or a defined portion of the medical costs provided to the capitated member. Premium revenues from risk-based products comprise nearly 80% of our total consolidated revenues. If we fail to predict accurately, or effectively price for or manage the costs of providing care to our capitated members, our results of operations could be materially and adversely affected.

We manage medical costs through underwriting criteria, product design, negotiation of favorable provider contracts and care management programs. Total medical costs are affected by the number of individual services rendered, the cost of each service and the type of service rendered. Our premium revenue on commercial policies and Medicaid contracts are typically based on a fixed monthly rate per individual served for a 12-month period and is generally priced one to six months before the contract commences. Our revenue on Medicare policies is based on bids submitted to CMS in June the year before the contract year. Although we base the commercial and Medicaid premiums we charge and our Medicare bids on our estimates of future medical costs over the fixed contract period, many factors may cause actual costs to exceed those estimated and reflected in premiums or bids. These factors may include medical cost inflation, increased use of services, increased cost of individual services, large-scale medical emergencies, the introduction of new or costly drugs, treatments and technology, new treatment guidelines, new mandated benefits (such as the expansion of essential benefits coverage) or other regulatory changes and insured population characteristics. Relatively small differences between predicted and actual medical costs or utilization rates as a percentage of revenues can result in significant changes in our financial results. For example, if our 2019 medical costs for commercial insured products had been 1% higher than our actual medical costs, without proportionally higher revenues from such products, our annual net earnings for 2019 would have been reduced by approximately \$320 million, excluding any offsetting impact from risk adjustment or from reduced premium rebates due to minimum MLRs.

In addition, the financial results we report for any particular period include estimates of costs that have been incurred for which claims are still outstanding. These estimates involve an extensive degree of judgment. If these estimates prove inaccurate, our results of operations could be materially and adversely affected.

Our business activities are highly regulated and new laws or regulations or changes in existing laws or regulations or their enforcement or application could materially and adversely affect our business.

We are regulated by federal, state and local governments in the United States and other countries where we do business. Our insurance and HMO subsidiaries must be licensed by and are subject to regulation in the jurisdictions in which they conduct business. For example, states require periodic financial reports and enforce minimum capital or restricted cash reserve requirements. Health plans and insurance companies are also regulated under state insurance holding company regulations and some of our activities may be subject to other health care-related regulations and requirements, including those relating to PPOs, MCOs, UR and TPA-related

regulations and licensure requirements. Under state guaranty association laws, certain insurance companies can be assessed (up to prescribed limits) for certain obligations to the policyholders and claimants of impaired or insolvent insurance companies that write the same line or similar lines of business. Any such assessment could expose our insurance entities and other insurers to the risk that they would be required to pay a portion of an impaired or insolvent insurance company's claims through state guaranty associations.

Certain of our businesses provide products or services to various government agencies. For example, some of our UnitedHealthcare and Optum businesses hold government contracts or provide services related to government contracts and are subject to U.S. federal and state and non U.S. self-referral, anti-kickback, medical necessity, risk adjustment, false claims and other laws and regulations governing government contractors and the use of government funds. Our relationships with these government agencies are subject to the terms of contracts that we hold with the agencies and to laws and regulations regarding government contracts. Among others, certain laws and regulations restrict or prohibit companies from performing work for government agencies that might be viewed as an actual or potential conflict of interest. These laws may limit our ability to pursue and perform certain types of work, thereby materially and adversely affecting our results of operations, financial position and cash flows.

Certain of our Optum businesses are also subject to regulations that are distinct from those faced by our insurance and HMO subsidiaries, including, for example, state telemedicine regulations; debt collection laws; banking regulations; distributor and producer licensing requirements; state corporate practice of medicine doctrines; fee-splitting rules; and health care facility licensure and certificate of need requirements, some of which could impact our relationships with physicians, hospitals and customers. These risks and uncertainties may materially and adversely affect our ability to market or provide our products and services, or to do so at targeted operating margins, or may increase the regulatory burdens under which we operate.

The laws and rules governing our businesses and interpretations of those laws and rules are subject to frequent change. For example, legislative, administrative and public policy changes to the ACA are being considered, and we cannot predict if the ACA will be further modified or repealed or replaced. Litigation challenges have been brought seeking to invalidate the ACA in whole or in part; and a federal appeals court struck down the ACA as in part unconstitutional in 2019. That case has been remanded to federal district court. Further, the integration into our businesses of entities that we acquire may affect the way in which existing laws and rules apply to us, including by subjecting us to laws and rules that did not previously apply to us. The broad latitude given to the agencies administering, interpreting and enforcing current and future regulations governing our businesses could force us to change how we do business, restrict revenue and enrollment growth, increase our health care and administrative costs and capital requirements, or expose us to increased liability in courts for coverage determinations, contract interpretation and other actions.

We also must obtain and maintain regulatory approvals to market many of our products and services, increase prices for certain regulated products and services and complete certain acquisitions and dispositions or integrate certain acquisitions. For example, premium rates for our health insurance and managed care products are subject to regulatory review or approval in many states and by the federal government. Additionally, we must submit data on all proposed rate increases on many of our products to HHS for monitoring purposes. Geographic and product expansions may be subject to state and federal regulatory approvals. Delays in obtaining necessary approvals or our failure to obtain or maintain adequate approvals could materially and adversely affect our results of operations, financial position and cash flows.

Certain of our businesses operate internationally and are subject to regulation in the jurisdictions in which they are organized or conduct business. These regulatory regimes encompass, among other matters, local and cross-border taxation, licensing, tariffs, intellectual property, investment, capital (including minimum solvency margin and reserve requirements), management control, labor, anti-fraud, anti-corruption and privacy and data protection regulations (including requirements for cross-border data transfers) that vary by jurisdiction. We currently operate outside of the United States and in the future may acquire or commence additional businesses based

outside of the United States, increasing our exposure to non-U.S. regulatory regimes. For example, our UnitedHealthcare Global business subjects us to Brazilian laws and regulations affecting hospitals, managed care and insurance industries and to regulation by Brazilian regulators, including the national regulatory agency for private health insurance and plans, the Agência Nacional de Saúde Suplementar, while the Banmédica business is subject to Chilean, Colombian and Peruvian laws, regulations and regulators applicable to hospitals and private insurance. Any international regulator may take an approach to the interpretation, implementation and enforcement of industry regulations that could differ from the approach taken by U.S. regulators. In addition, our non-U.S. businesses and operations are subject to U.S. laws that regulate the conduct and activities of U.S.-based businesses operating abroad, such as the FCPA, which prohibits offering, promising, providing or authorizing others to give anything of value to a foreign government official to obtain or retain business or otherwise secure a business advantage. Our failure to comply with U.S. or non-U.S. laws and regulations governing our conduct outside the United States or to establish constructive relations with non-U.S. regulators could adversely affect our ability to market our products and services, or to do so at targeted operating margins, which may have a material adverse effect on our business, financial condition and results of operations.

The health care industry is regularly subject to negative publicity, including as a result of governmental investigations, adverse media coverage and political debate surrounding industry regulation. Negative publicity may adversely affect our stock price and damage our reputation in various markets.

As a result of our participation in various government health care programs, both as a payer and as a service provider to payers, we are exposed to additional risks associated with program funding, enrollments, payment adjustments, audits and government investigations that could materially and adversely affect our business, results of operations, financial position and cash flows.

We participate in various federal, state and local government health care benefit programs, including as a payer in Medicare Advantage, Medicare Part D, various Medicaid programs and CHIP, and receive substantial revenues from these programs. Certain of our Optum businesses also provide services to payers participating in government health care programs. A reduction or less than expected increase, or a protracted delay, in government funding for these programs or change in allocation methodologies, or termination of the contract at the option of the government, may materially and adversely affect our results of operations, financial position and cash flows.

The government health care programs in which we participate generally are subject to frequent changes, including changes that may reduce the number of persons enrolled or eligible for coverage, reduce the amount of reimbursement or payment levels, reduce our participation in certain service areas or markets, or increase our administrative or medical costs under such programs. Revenues for these programs depend on periodic funding from the federal government or applicable state governments and allocation of the funding through various payment mechanisms. Funding for these government programs depends on many factors outside of our control, including general economic conditions and budgetary constraints at the federal or applicable state level. For example, CMS has in the past reduced or frozen Medicare Advantage benchmarks, and additional cuts to Medicare Advantage benchmarks are possible. In addition, from time to time, CMS makes changes to the way it calculates Medicare Advantage risk adjustment payments. Although we have adjusted members' benefits and premiums on a selective basis, ceased to offer benefit plans in certain counties, and intensified both our medical and operating cost management in response to the benchmark reductions and other funding pressures, these or other strategies may not fully address the funding pressures in the Medicare Advantage program. In addition, payers in the Medicare Advantage program may be subject to reductions in payments from CMS as a result of decreased funding or recoupment pursuant to government audit.

Under the Medicaid managed care program, state Medicaid agencies seek bids from eligible health plans to continue their participation in the acute care Medicaid health programs. If we are not successful in obtaining renewals of state Medicaid managed care contracts, we risk losing the members that were enrolled in those Medicaid plans. Under the Medicare Part D program, to qualify for automatic enrollment of low income

members, our bids must result in an enrollee premium below a regional benchmark, which is calculated by the government after all regional bids are submitted. If the enrollee premium is not below the government benchmark, we risk losing the members who were auto-assigned to us and will not have additional members auto-assigned to us. In general, our bids are based upon certain assumptions regarding enrollment, utilization, medical costs and other factors. If any of these assumptions is materially incorrect, either as a result of unforeseen changes to the programs on which we bid, implementation of material program or policy changes after our bid submission, or submission by our competitors at lower rates than our bids, our results of operations, financial position and cash flows could be materially and adversely affected.

Many of the government health care coverage programs in which we participate are subject to the prior satisfaction of certain conditions or performance standards or benchmarks. For example, as part of the ACA, CMS has a system that provides various quality bonus payments to Medicare Advantage plans that meet certain quality star ratings at the individual plan or local contract level. The star rating system considers various measures adopted by CMS, including, among others, quality of care, preventive services, chronic illness management and customer satisfaction. Plans must have a rating of four stars or higher to qualify for bonus payments. If we do not maintain or continue to improve our star ratings, our plans may not be eligible for quality bonuses and we may experience a negative impact on our revenues and the benefits that our plans can offer, which could materially and adversely affect the marketability of our plans, our membership levels, results of operations, financial position and cash flows. Any changes in standards or care delivery models that apply to government health care programs, including Medicare and Medicaid, or our inability to improve our quality scores and star ratings to meet government performance requirements or to match the performance of our competitors could result in limitations to our participation in or exclusion from these or other government programs, which in turn could materially and adversely affect our results of operations, financial position and cash flows.

CMS uses various payment mechanisms to allocate funding for Medicare programs, including adjustment of monthly capitation payments to Medicare Advantage plans and Medicare Part D plans according to the predicted health status of each beneficiary as supported by data from health care providers for Medicare Advantage plans, as well as, for Medicare Part D plans, risk-sharing provisions based on a comparison of costs predicted in our annual bids to actual prescription drug costs. Some state Medicaid programs utilize a similar process. For example, our UnitedHealthcare Medicare & Retirement and UnitedHealthcare Community & State businesses submit information relating to the health status of enrollees to CMS or state agencies for purposes of determining the amount of certain payments to us. CMS and the Office of Inspector General for HHS periodically perform risk adjustment data validation (RADV) audits of selected Medicare health plans to validate the coding practices of and supporting documentation maintained by health care providers. Certain of our local plans have been selected for such audits, which have in the past resulted and could in the future result in retrospective adjustments to payments made to our health plans, fines, corrective action plans or other adverse action by CMS.

We have been and may in the future become involved in routine, regular and special governmental investigations, audits, reviews and assessments. Such investigations, audits, reviews or assessments sometimes arise out of, or prompt claims by private litigants or whistleblowers that, among other allegations, we failed to disclose certain business practices or, as a government contractor, submitted false or erroneous claims to the government. Governmental investigations, audits, reviews and assessments could lead to government actions, which could result in adverse publicity, the assessment of damages, civil or criminal fines or penalties, or other sanctions, including restrictions or changes in the way we conduct business, loss of licensure or exclusion from participation in government programs, any of which could have a material adverse effect on our business, results of operations, financial position and cash flows.

If we fail to maintain properly the integrity or availability of our data or successfully consolidate, integrate, upgrade or expand our existing information systems, or if our technology products do not operate as intended, our business could be materially and adversely affected.

Our business is highly dependent on the integrity and timeliness of the data we use to serve our members, customers and health care professionals and to operate our business. The volume of health care data generated, and the uses of data, including electronic health records, are rapidly expanding. Our ability to implement new and innovative services, price adequately our products and services, provide effective service to our customers in an efficient and uninterrupted fashion, and report accurately our results of operations depends on the integrity of the data in our information systems. In addition, connectivity among technologies is becoming increasingly important and recent trends toward greater consumer engagement in health care require new and enhanced technologies, including more sophisticated applications for mobile devices. Our information systems require an ongoing commitment of significant resources to maintain, protect and enhance existing systems and develop new systems to keep pace with continuing changes in information processing technology, evolving systems and regulatory standards and changing customer preferences. If the data we rely upon to run our businesses is found to be inaccurate or unreliable or if we fail to maintain or protect our information systems and data integrity effectively, we could experience failures in our health, wellness and information technology products; lose existing customers; have difficulty attracting new customers; experience problems in determining medical cost estimates and establishing appropriate pricing; have difficulty preventing, detecting and controlling fraud; have disputes with customers, physicians and other health care professionals; become subject to regulatory sanctions or penalties; incur increases in operating expenses or suffer other adverse consequences.

We periodically consolidate, integrate, upgrade and expand our information systems' capabilities as a result of technology initiatives and recently enacted regulations, changes in our system platforms and integration of new business acquisitions. Our process of consolidating the number of systems we operate, upgrading and expanding our information systems' capabilities, enhancing our systems and developing new systems to keep pace with continuing changes in information processing technology may not be successful. Failure to protect, consolidate and integrate our systems successfully could result in higher than expected costs and diversion of management's time and energy, which could materially and adversely affect our results of operations, financial position and cash flows.

Certain of our businesses sell and install software products that may contain unexpected design defects or may encounter unexpected complications during installation or when used with other technologies utilized by the customer. A failure of our technology products to operate as intended and in a seamless fashion with other products could materially and adversely affect our results of operations, financial position and cash flows.

Uncertain and rapidly evolving U.S. federal and state, non-U.S. and international laws and regulations related to health data and the health information technology market may alter the competitive landscape or present compliance challenges and could materially and adversely affect the configuration of our information systems and platforms, and our ability to compete in this market.

If we sustain cyber-attacks or other privacy or data security incidents that result in security breaches that disrupt our operations or result in the unintended dissemination of protected personal information or proprietary or confidential information, we could suffer a loss of revenue and increased costs, exposure to significant liability, reputational harm and other serious negative consequences.

We routinely process, store and transmit large amounts of data in our operations, including protected personal information as well as proprietary or confidential information relating to our business or third parties. Some of the data we process, store and transmit may be outside of the United States due to our information technology systems and international business operations. We are regularly the target of attempted cyber-attacks and other security threats and may be subject to breaches of the information technology systems we use. We have programs in place that are intended to detect, contain and respond to data security incidents and that provide employee awareness training regarding phishing, malware and other cyber risks to protect against cyber risks and security

breaches. However, because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and may be difficult to detect for long periods of time, we may be unable to anticipate these techniques or implement adequate preventive measures. Experienced computer programmers and hackers may be able to penetrate our security controls and access, misappropriate or otherwise compromise protected personal information or proprietary or confidential information or that of third-parties, create system disruptions or cause system shutdowns that could negatively affect our operations. They also may be able to develop and deploy viruses, worms and other malicious software programs that attack our systems or otherwise exploit any security vulnerabilities. Hardware, software, or applications we develop or procure from third parties may contain defects in design or manufacture or other problems that could unexpectedly compromise information security. Our facilities and services may also be vulnerable to security incidents or security attacks; acts of vandalism or theft; coordinated attacks by activist entities; misplaced or lost data; human error; malicious social engineering; or other events that could negatively affect our systems, our customers' data, proprietary or confidential information relating to our business or third parties, or our operations. In certain circumstances we may rely on third party vendors to process, store and transmit large amounts of data for our business whose operations are subject to similar risks.

The costs to eliminate or address the foregoing security threats and vulnerabilities before or after a cyber-incident could be material. Our remediation efforts may not be successful and could result in interruptions, delays, or cessation of service and loss of existing or potential customers. In addition, breaches of our security measures and the unauthorized dissemination of sensitive personal information, proprietary information or confidential information about us or our customers or other third-parties, could expose our customers' private information and our customers to the risk of financial or medical identity theft, or expose us or other third-parties to a risk of loss or misuse of this information, result in litigation and potential liability, including regulatory penalties, for us, damage our brand and reputation, or otherwise harm our business.

If we fail to comply with applicable privacy, security and data laws, regulations and standards, including with respect to third-party service providers that utilize protected personal information on our behalf, our business, reputation, results of operations, financial position and cash flows could be materially and adversely affected.

The collection, maintenance, protection, use, transmission, disclosure and disposal of protected personal information is regulated at the federal, state, international and industry levels and requirements are imposed on us by contracts with customers. These laws, rules and requirements are subject to change. Compliance with new privacy and security laws, regulations and requirements may result in increased operating costs, and may constrain or require us to alter our business model or operations.

Internationally, many of the jurisdictions in which we operate have established their own data security and privacy legal framework with which we or our customers must comply. We expect that there will continue to be new proposed laws, regulations and industry standards concerning privacy, data protection and information security in the European Union, Brazil, Chile, India and other jurisdictions, and we cannot yet determine the impacts such future laws, regulations and standards may have on our businesses or the businesses of our customers. For example, effective May 2018, the European Union's General Data Protection Regulation (GDPR) overhauled data protection laws in the European Union. The new regulation superseded prior European Union privacy and data protection legislation, imposed more stringent European Union data protection requirements on us or our customers, and prescribed greater penalties for noncompliance. Brazilian privacy legislation, similar in certain respects to GDPR, goes into effect in 2020.

Many of our businesses are also subject to the Payment Card Industry Data Security Standard, which is a multifaceted security standard that is designed to protect credit card account data.

HIPAA requires business associates as well as covered entities to comply with certain privacy and security requirements. While we provide for appropriate protections through our contracts with our third-party service providers and in certain cases assess their security controls, we have limited oversight or control over their

actions and practices. Several of our businesses act as business associates to their covered entity customers and, as a result, collect, use, disclose and maintain protected personal information in order to provide services to these customers. HHS administers its audit program to assess HIPAA compliance efforts by covered entities and business associates. An audit resulting in findings or allegations of noncompliance could have a material adverse effect on our results of operations, financial position and cash flows.

Through our Optum businesses, including our Optum Labs business, we maintain a database of administrative and clinical data that is statistically de-identified in accordance with HIPAA standards. Noncompliance or findings of noncompliance with applicable laws, regulations or requirements, or the occurrence of any privacy or security breach involving the misappropriation, loss or other unauthorized disclosure of protected personal information, whether by us or by one of our third-party service providers, could have a material adverse effect on our reputation and business and, among other consequences, could subject us to mandatory disclosure to the media, loss of existing or new customers, significant increases in the cost of managing and remediating privacy or security incidents and material fines, penalties and litigation awards. Any of these consequences could have a material and adverse effect on our results of operations, financial position and cash flows.

Our businesses providing pharmacy care services face regulatory and operational risks and uncertainties that may differ from the risks of our other businesses.

We provide pharmacy care services through our OptumRx and UnitedHealthcare businesses. Each business is subject to federal and state anti-kickback, beneficiary inducement and other laws that govern the relationships of the business with pharmaceutical manufacturers, physicians, pharmacies, customers and consumers. In addition, federal and state legislatures regularly consider new regulations for the industry that could materially affect current industry practices, including potential new legislation and regulations regarding the receipt or disclosure of rebates and other fees from pharmaceutical companies, the development and use of formularies and other utilization management tools, the use of average wholesale prices or other pricing benchmarks, pricing for specialty pharmaceuticals, limited access to networks and pharmacy network reimbursement methodologies. Additionally, various governmental agencies have conducted investigations into certain PBM practices, which have resulted in other PBMs agreeing to civil penalties, including the payment of money and entry into corporate integrity agreements. As a provider of pharmacy benefit management services, OptumRx is also subject to an increasing number of licensure, registration and other laws and accreditation standards that impact the business practices of a pharmacy benefit manager. OptumRx also conducts business through home delivery, specialty and compounding pharmacies, pharmacies located in community mental health centers and home infusion, which subjects it to extensive federal, state and local laws and regulations, including those of the DEA and individual state controlled substance authorities, the Food and Drug Administration (FDA) and Boards of Pharmacy.

We could face potential claims in connection with purported errors by our home delivery, specialty or compounding or clinic-based pharmacies or the provision of home infusion services, including as a result of the risks inherent in the packaging and distribution of pharmaceuticals and other health care products. Disruptions from any of our home delivery, specialty pharmacy or home infusion services could materially and adversely affect our results of operations, financial position and cash flows.

In addition, our pharmacy care services businesses provide services to sponsors of health benefit plans that are subject to ERISA. A private party or the DOL, which is the agency that enforces ERISA, could assert that the fiduciary obligations imposed by the statute apply to some or all of the services provided by our pharmacy care services businesses even where those businesses are not contractually obligated to assume fiduciary obligations. If a court were to determine that fiduciary obligations apply, we could be subject to claims for breaches of fiduciary obligations or claims that we entered into certain prohibited transactions.

If we fail to compete effectively to maintain or increase our market share, including maintaining or increasing enrollments in businesses providing health benefits, our results of operations, financial position and cash flows could be materially and adversely affected.

Our businesses compete throughout the United States, South America and other foreign markets and face significant competition in all of the geographic markets in which we operate. In particular markets, our competitors, compared to us, may have greater capabilities, resources or market share; a more established reputation; superior supplier or health care professional arrangements; better existing business relationships; lower profit margin or financial return expectations; or other factors that give such competitors a competitive advantage. Our competitive position may also be adversely affected by significant merger and acquisition activity that has occurred in the industries in which we operate, both among our competitors and suppliers (including hospitals, physician groups and other health care professionals). Consolidation may make it more difficult for us to retain or increase our customer base, improve the terms on which we do business with our suppliers, or maintain or increase profitability.

In addition, our success in the health care marketplace will depend on our ability to develop and deliver innovative and potentially disruptive products and services to satisfy evolving market demands. If we do not continue to innovate and provide products and services that are useful and relevant to consumers, we may not remain competitive, and we risk losing market share to existing competitors and disruptive new market entrants. For example, new direct-to-consumer business models from competing businesses may make it more difficult for us to directly engage consumers in the selection and management of their health care benefits and health care usage, and we may face challenges from new technologies and market entrants that could affect our existing relationship with health plan enrollees in these areas. Our business, results of operations, financial position and cash flows could be materially and adversely affected if we do not compete effectively in our markets, if we set rates too high or too low in highly competitive markets, if we do not design and price our products properly and competitively, if we are unable to innovate and deliver products and services that demonstrate value to our customers, if we do not provide a satisfactory level of services, if membership or demand for other services does not increase as we expect or declines, or if we lose accounts with more profitable products while retaining or increasing membership in accounts with less profitable products.

If we fail to develop and maintain satisfactory relationships with physicians, hospitals and other service providers, our business could be materially and adversely affected.

Our results of operations and prospects are substantially dependent on our continued ability to contract with physicians, hospitals, pharmaceutical benefit service providers, pharmaceutical manufacturers and other service providers at competitive prices. Any failure by us to develop and maintain satisfactory relationships with health care providers, whether in-network or out-of-network, could materially and adversely affect our business, results of operations, financial position and cash flows. In addition, certain activities related to network design, provider participation in networks and provider payments could result in disputes that may be costly, divert management's attention from our operations and result in negative publicity.

In any particular market, physicians and health care providers could refuse to contract, demand higher payments, or take other actions that could result in higher medical costs, less desirable products for customers or difficulty meeting regulatory or accreditation requirements. In some markets, certain health care providers, particularly hospitals, physician and hospital organizations or multi-specialty physician groups, may have significant market positions or near monopolies that could result in diminished bargaining power on our part. In addition, ACOs; practice management companies (which aggregate physician practices for administrative efficiency); and other organizational structures adopted by physicians, hospitals and other care providers may change the way in which these providers do business with us and may change the competitive landscape. Such organizations or groups of physicians may compete directly with us, which could adversely affect our business, and our results of operations, financial position and cash flows by impacting our relationships with these providers or affecting the way that we price our products and estimate our costs, which might require us to incur costs to change our operations. In addition, if these providers refuse to contract with us, use their market position to negotiate

favorable contracts or place us at a competitive disadvantage, our ability to market products or to be profitable in those areas could be materially and adversely affected.

Our health care benefits businesses have capitation arrangements with some physicians, hospitals and other health care providers. Capitation arrangements limit our exposure to the risk of increasing medical costs, but expose us to risk related to the adequacy of the financial and medical care resources of the health care provider. To the extent that a capitated health care provider organization faces financial difficulties or otherwise is unable to perform its obligations under the capitation arrangement, we may be held responsible for unpaid health care claims that should have been the responsibility of the capitated health care provider and for which we have already paid the provider. Further, payment or other disputes between a primary care provider and specialists with whom the primary care provider contracts could result in a disruption in the provision of services to our members or a reduction in the services available to our members. Health care providers with which we contract may not properly manage the costs of services, maintain financial solvency or avoid disputes with other providers. Any of these events could have a material adverse effect on the provision of services to our members and our operations.

Some providers that render services to our members do not have contracts with us. In those cases, we do not have a pre-established understanding about the amount of compensation that is due to the provider for services rendered to our members. In some states, the amount of compensation due to these out-of-network providers is defined by law or regulation, but in most instances the amount is either not defined or is established by a standard that does not clearly specify dollar terms. In some instances, providers may believe that they are underpaid for their services and may either litigate or arbitrate their dispute with us or try to recover from our members the difference between what we have paid them and the amount they charged us.

The success of some of our businesses, including OptumHealth and UnitedHealthcare Global, depend on maintaining satisfactory relationships with physicians as our employees, independent contractors or joint venture partners. The physicians that practice medicine or contract with our affiliated physician organizations could terminate their provider contracts or otherwise become unable or unwilling to continue practicing medicine or contracting with us. We face and will likely continue to face heightened competition in the markets where we operate to acquire or manage physician practices or to employ or contract with individual physicians. If we are unable to maintain or grow satisfactory relationships with physicians, or to acquire, recruit or, in some instances, employ physicians, or to retain enrollees following the departure of a physician, our revenues could be materially and adversely affected. In addition, our affiliated physician organizations contract with competitors of UnitedHealthcare. Our businesses could suffer if our affiliated physician organizations fail to maintain relationships with these companies, or fail to adequately price their contracts with these third-party payers.

In addition, physicians, hospitals, pharmaceutical benefit service providers, pharmaceutical manufacturers and certain health care providers are customers of our Optum businesses. Physicians also provide medical services at facilities owned by our Optum businesses. Given the importance of health care providers and other constituents to our businesses, failure to maintain satisfactory relationships with them could materially and adversely affect our results of operations, financial position and cash flows.

We are routinely subject to various legal actions due to the nature of our business, which could damage our reputation and, if resolved unfavorably, could result in substantial penalties or monetary damages and materially and adversely affect our results of operations, financial position and cash flows.

We are routinely made party to a variety of legal actions related to, among other matters, the design, management and delivery of our product and service offerings. These matters have included or could in the future include matters related to health care benefits coverage and payment claims (including disputes with enrollees, customers and contracted and non-contracted physicians, hospitals and other health care professionals), tort claims (including claims related to the delivery of health care services, such as medical malpractice by staff at our affiliates' facilities, or by health care practitioners who are employed by us, have contractual relationships with us, or serve as providers to our managed care networks), whistleblower claims (including claims under the False

Claims Act or similar statutes), contract and labor disputes, tax claims and claims related to disclosure of certain business practices. We may also be party to certain class action lawsuits brought by health care professional groups and consumers. In addition, we operate in jurisdictions outside of the United States where contractual rights, tax positions and applicable regulations may be subject to interpretation or uncertainty to a greater degree than in the United States, and therefore subject to dispute by customers, government authorities or others. We are largely self-insured with regard to litigation risks. While we maintain excess liability insurance with outside insurance carriers for claims in excess of our self-insurance, certain types of damages, such as punitive damages in some circumstances, are not covered by insurance. Although we record liabilities for our estimates of the probable costs resulting from self-insured matters, it is possible that the level of actual losses will significantly exceed the liabilities recorded.

We cannot predict the outcome of significant legal actions in which we are involved and are incurring expenses in resolving these matters. The legal actions we face or may face in the future could further increase our cost of doing business and materially and adversely affect our results of operations, financial position and cash flows. In addition, certain legal actions could result in adverse publicity, which could damage our reputation and materially and adversely affect our ability to retain our current business or grow our market share in some markets and businesses.

Any failure by us to manage successfully our strategic alliances or complete, manage or integrate acquisitions and other significant strategic transactions or relationships domestically or outside the United States could materially and adversely affect our business, prospects, results of operations, financial position and cash flows.

As part of our business strategy, we frequently engage in discussions with third parties regarding possible investments, acquisitions, divestitures, strategic alliances, joint ventures and outsourcing transactions and often enter into agreements relating to such transactions. For example, we have a strategic alliance with AARP under which we provide AARP-branded Medicare Supplement insurance to AARP members and other AARP-branded products and services to Medicare beneficiaries. If we fail to meet the needs of our alliance or joint venture partners, including by developing additional products and services, providing high levels of service, pricing our products and services competitively or responding effectively to applicable federal and state regulatory changes, our alliances and joint ventures could be damaged or terminated, which in turn could adversely impact our reputation, business and results of operations. Further, if we fail to identify and successfully complete transactions that further our strategic objectives, we may be required to expend resources to develop products and technology internally, we may be placed at a competitive disadvantage or we may be adversely affected by negative market perceptions, any of which may have a material adverse effect on our results of operations, financial position or cash flows.

Success in completing acquisitions is also dependent on efficiently integrating the acquired business into our existing operations, including our internal control environment, or otherwise leveraging its operations, which may present challenges that are different from those presented by organic growth and that may be difficult for us to manage. If we cannot successfully integrate these acquisitions and realize contemplated revenue growth opportunities and cost savings, our business, prospects, results of operations, financial position and cash flows could be materially and adversely affected.

As we expand and operate our business outside of the United States, we are presented with challenges that differ from those presented by acquisitions of domestic businesses, including challenges in adapting to new markets, languages, business, labor and cultural practices and regulatory environments. Adapting to these challenges could require us to devote significant senior management attention and other resources to the acquired businesses before we realize anticipated synergies or other benefits from the acquired businesses. These challenges vary widely by country and, outside of the United States, may include political instability, government intervention, discriminatory regulation and currency exchange controls or other restrictions that could prevent us from transferring funds from these operations out of the countries in which our acquired businesses operate, or converting local currencies that we hold into U.S. dollars or other currencies. If we are unable to manage

successfully our non-U.S. acquisitions, our business, prospects, results of operations and financial position could be materially and adversely affected.

Foreign currency exchange rates and fluctuations may have an impact on our shareholders' equity from period to period, which could adversely affect our debt to debt-plus-equity ratio, and our future revenues, costs and cash flows from international operations. Any measures we may implement to reduce the effect of volatile currencies may be costly or ineffective.

Our sales performance will suffer if we do not adequately attract, retain and provide support to a network of independent producers and consultants.

Our products and services are sold in part through nonexclusive producers and consultants for whose services and allegiance we must compete. Our sales would be materially and adversely affected if we are unable to attract, retain and support such independent producers and consultants or if our sales strategy is not appropriately aligned across distribution channels. Our relationships with producers could be materially and adversely impacted by changes in our business practices and the nature of our relationships to address these pressures, including potential reductions in commission levels.

A number of investigations have been conducted regarding the marketing practices of producers selling health care products and the payments they receive and have resulted in enforcement actions against companies in our industry and producers marketing and selling those companies' products. If we were subjected to similar investigations and enforcement actions, such actions could result in penalties and the imposition of corrective action plans, which could materially and adversely impact our ability to market our products.

Unfavorable economic conditions could materially and adversely affect our revenues and our results of operations.

Unfavorable economic conditions may impact demand for certain of our products and services. For example, high unemployment can cause lower enrollment or lower rates of renewal in our employer group plans. Unfavorable economic conditions also have caused and could continue to cause employers to stop offering certain health care coverage as an employee benefit or elect to offer this coverage on a voluntary, employee-funded basis as a means to reduce their operating costs. In addition, unfavorable economic conditions could adversely impact our ability to increase premiums or result in the cancellation by certain customers of our products and services. These conditions could lead to a decrease in our membership levels and premium and fee revenues and could materially and adversely affect our results of operations, financial position and cash flows.

During a prolonged unfavorable economic environment, state and federal budgets could be materially and adversely affected, resulting in reduced reimbursements or payments in our federal and state government health care coverage programs, including Medicare, Medicaid and CHIP. A reduction in state Medicaid reimbursement rates could be implemented retrospectively to apply to payments already negotiated or received from the government and could materially and adversely affect our results of operations, financial position and cash flows. In addition, state and federal budgetary pressures could cause the affected governments to impose new or a higher level of taxes or assessments for our commercial programs, such as premium taxes on health insurance and surcharges or fees on select fee-for-service and capitated medical claims. Any of these developments or actions could materially and adversely affect our results of operations, financial position and cash flows.

A prolonged unfavorable economic environment also could adversely impact the financial position of hospitals and other care providers, which could materially and adversely affect our contracted rates with these parties and increase our medical costs or materially and adversely affect their ability to purchase our service offerings. Further, unfavorable economic conditions could adversely impact the customers of our Optum businesses, including health plans, hospitals, care providers, employers and others, which could, in turn, materially and adversely affect Optum's financial results.

Our investment portfolio may suffer losses, which could adversely affect our results of operations, financial position and cash flows.

Market fluctuations could impair our profitability and capital position. Volatility in interest rates affects our interest income and the market value of our investments in debt securities of varying maturities, which constitute the vast majority of the fair value of our investments as of December 31, 2019. Relatively low interest rates on investments, such as those experienced during recent years, have adversely impacted our investment income. In addition, a delay in payment of principal or interest by issuers, or defaults by issuers (primarily issuers of our investments in corporate and municipal bonds), could reduce our investment income and require us to write down the value of our investments, which could adversely affect our profitability and equity.

There can be no assurance that our investments will produce total positive returns or that we will not sell investments at prices that are less than their carrying values. Changes in the value of our investment assets, as a result of interest rate fluctuations, changes in issuer financial conditions, illiquidity or otherwise, could have an adverse effect on our equity. In addition, if it became necessary for us to liquidate our investment portfolio on an accelerated basis, such an action could have an adverse effect on our results of operations and the capital position of our regulated subsidiaries.

If the value of our intangible assets is materially impaired, our results of operations, equity and credit ratings could be materially and adversely affected.

As of December 31, 2019, our goodwill and other intangible assets had a carrying value of \$76 billion, representing 44% of our total consolidated assets. We periodically evaluate our goodwill and other intangible assets to determine whether all or a portion of their carrying values may be impaired, in which case a charge to earnings may be necessary. The value of our goodwill may be materially and adversely impacted if businesses that we acquire perform in a manner that is inconsistent with our assumptions. In addition, from time to time we divest businesses, and any such divestiture could result in significant asset impairment and disposition charges, including those related to goodwill and other intangible assets. Any future evaluations requiring an impairment of our goodwill and other intangible assets could materially and adversely affect our results of operations and equity in the period in which the impairment occurs. A material decrease in equity could, in turn, adversely affect our credit ratings and potentially impact our compliance with the financial covenants in our bank credit facilities.

If we are not able to protect our proprietary rights to our databases, software and related products, our ability to market our knowledge and information-related businesses could be hindered and our results of operations, financial position and cash flows could be materially and adversely affected.

We rely on our agreements with customers, confidentiality agreements with employees and third parties, and our trademarks, trade secrets, copyrights and patents to protect our proprietary rights. These legal protections and precautions may not prevent misappropriation of our proprietary information. In addition, substantial litigation regarding intellectual property rights exists in the software industry, and we expect software products to be increasingly subject to third-party infringement claims as the number of products and competitors in this industry segment grows. Such litigation and misappropriation of our proprietary information could hinder our ability to market and sell products and services and our results of operations, financial position and cash flows could be materially and adversely affected.

Restrictions on our ability to obtain funds from our regulated subsidiaries could materially and adversely affect our results of operations, financial position and cash flows.

Because we operate as a holding company, we are dependent on dividends and administrative expense reimbursements from our subsidiaries to fund our obligations. Many of these subsidiaries are regulated by departments of insurance or similar regulatory authorities. We are also required by law or regulation to maintain specific prescribed minimum amounts of capital in these subsidiaries. The levels of capitalization required depend primarily on the volume of premium revenues generated by the applicable subsidiary. In most states, we are required to seek approval by state regulatory authorities before we transfer money or pay dividends from our

regulated subsidiaries that exceed specified amounts. An inability of our regulated subsidiaries to pay dividends to their parent companies in the desired amounts or at the time of our choosing could adversely affect our ability to reinvest in our business through capital expenditures or business acquisitions, as well as our ability to maintain our corporate quarterly dividend payment, repurchase shares of our common stock and repay our debt. If we are unable to obtain sufficient funds from our subsidiaries to fund our obligations, our results of operations, financial position and cash flows could be materially and adversely affected.

Any downgrades in our credit ratings could adversely affect our business, financial condition and results of operations.

Claims paying ability, financial strength and debt ratings by Nationally Recognized Statistical Rating Organizations are important factors in establishing the competitive position of insurance companies. Ratings information is broadly disseminated and generally used by customers and creditors. We believe our claims paying ability and financial strength ratings are important factors in marketing our products to certain of our customers. Our credit ratings impact both the cost and availability of future borrowings. Each of the credit rating agencies reviews its ratings periodically. Our ratings reflect each credit rating agency's opinion of our financial strength, operating performance and ability to meet our debt obligations or obligations to policyholders. There can be no assurance that our current credit ratings will be maintained in the future. Any downgrades in our credit ratings could materially increase our costs of or ability to access funds in the debt capital markets and otherwise materially increase our operating costs.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

To support our business operations in the United States and other countries we own and lease real properties. Our various reportable segments use these facilities for their respective business purposes, and we believe these current facilities are suitable for their respective uses and are adequate for our anticipated future needs.

ITEM 3. LEGAL PROCEEDINGS

The information required by this Item 3 is incorporated herein by reference to the information set forth under the captions "Legal Matters" and "Governmental Investigations, Audits and Reviews" in Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

MARKET AND HOLDERS

Our common stock is traded on the New York Stock Exchange (NYSE) under the symbol UNH. On January 31, 2020, there were 11,517 registered holders of record of our common stock.

DIVIDEND POLICY

In June 2019, the Company's Board of Directors increased the Company's quarterly cash divided to shareholders to an annual rate of \$4.32 compared to \$3.60 per share, which the Company had paid since June 2018. Declaration and payment of future quarterly dividends is at the discretion of the Board and may be adjusted as business needs or market conditions change.

ISSUER PURCHASES OF EQUITY SECURITIES

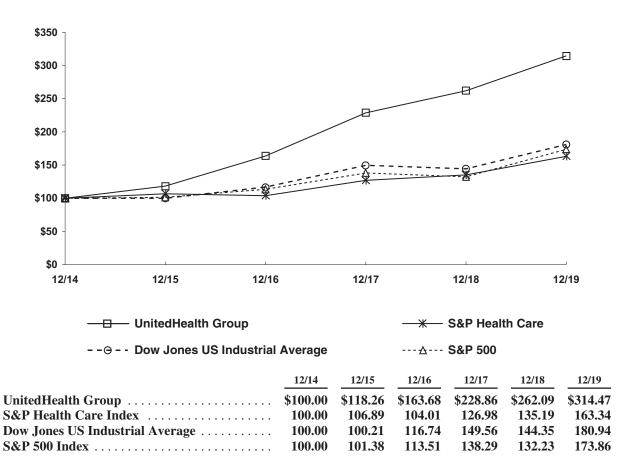
In November 1997, our Board of Directors adopted a share repurchase program, which the Board evaluates periodically. There is no established expiration date for the program. During the fourth quarter of 2019, we repurchased 1.6 million shares at an average price of \$256.55 per share. As of December 31, 2019, we had Board authorization to purchase up to 72 million shares of our common stock.

PERFORMANCE GRAPH

The following performance graph compares the cumulative five-year total return to shareholders on our common stock relative to the cumulative total returns of the S&P 500 index, the S&P Health Care Index and the Dow Jones US Industrial Average Index for the five-year period ended December 31, 2019. The comparisons assume the investment of \$100 on December 31, 2014 in our common stock and in each index, and that dividends were reinvested when paid.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among UnitedHealth Group, the S&P Health Care Index, the Dow Jones US Industrial Average Index and the S&P 500 Index



The stock price performance included in this graph is not necessarily indicative of future stock price performance.

ITEM 6. SELECTED FINANCIAL DATA

	For the Years Ended December 31,						
(in millions, except percentages and per share data)	2019	2018	2017 (a)	2016	2015 (b)		
Consolidated operating results							
Revenues	\$242,155	\$226,247	\$201,159	\$184,840	\$157,107		
Earnings from operations	19,685	17,344	15,209	12,930	11,021		
Net earnings attributable to UnitedHealth Group							
common shareholders	13,839	11,986	10,558	7,017	5,813		
Return on equity (c)	25.7%	24.4%	24.4%	6 19.4%	6 17.7%		
Basic earnings per share attributable to UnitedHealth							
Group common shareholders	\$ 14.55	\$ 12.45	\$ 10.95	\$ 7.37	\$ 6.10		
Diluted earnings per share attributable to							
UnitedHealth Group common shareholders	14.33	12.19	10.72	7.25	6.01		
Cash dividends declared per common share	4.14	3.45	2.875	2.375	1.875		
Consolidated cash flows from (used for)							
Operating activities	\$ 18,463	\$ 15,713	\$ 13,596	\$ 9,795	\$ 9,740		
Investing activities	(12,699)	(12,385)	(8,599)	(9,355)	(18,395)		
Financing activities	(5,625)	(4,365)	(3,441)	(1,011)	12,239		
Consolidated financial condition							
(as of December 31)							
Cash and investments	\$ 51,454	\$ 46,834	\$ 43,831	\$ 37,143	\$ 31,703		
Total assets	173,889	152,221	139,058	122,810	111,254		
Total commercial paper and long-term debt	40,678	36,554	31,692	32,970	31,965		
Redeemable noncontrolling interests	1,726	1,908	2,189	2,012	1,736		
Total equity	60,436	54,319	49,833	38,177	33,725		

⁽a) Includes the impact of the revaluation of our net deferred tax liabilities due to tax reform enacted in December 2017.

This selected financial data should be read with the accompanying "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 and the Consolidated Financial Statements and Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

⁽b) Includes the effects of the July 2015 acquisition of Catamaran Corporation (Catamaran) and related debt issuances.

⁽c) Return on equity is calculated as net earnings attributable to UnitedHealth Group common shareholders divided by average shareholders' equity. Average shareholders' equity is calculated using the shareholders' equity balance at the end of the preceding year and the shareholders' equity balances at the end of each of the four quarters of the year presented.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read together with the accompanying Consolidated Financial Statements and Notes to the Consolidated Financial Statements thereto included in Item 8, "Financial Statements and Supplementary Data." Readers are cautioned that the statements, estimates, projections or outlook contained in this report, including discussions regarding financial prospects, economic conditions, trends and uncertainties contained in this Item 7, may constitute forward-looking statements within the meaning of the PSLRA. These forward-looking statements involve risks and uncertainties that may cause our actual results to differ materially from the expectations expressed or implied in the forward-looking statements. A description of some of the risks and uncertainties can be found further below in this Item 7 and in Part I, Item 1A, "Risk Factors."

Discussions of year-over-year comparisons between 2018 and 2017 that are not included in this Form 10-K can be found in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of the Company's Form 10-K for the fiscal year ended December 31, 2018.

EXECUTIVE OVERVIEW

General

UnitedHealth Group is a diversified health care company dedicated to helping people live healthier lives and helping make the health system work better for everyone. Through our diversified businesses, we leverage core competencies in data analytics and health information; advanced technology; and clinical expertise. These core competencies are deployed within two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

We have four reportable segments across our two business platforms, UnitedHealthcare and Optum:

- UnitedHealthcare, which includes UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global;
- OptumHealth;
- · OptumInsight; and
- OptumRx.

Further information on our business and reportable segments is presented in Part I, Item 1, "Business" and in Note 14 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

Business Trends

Our businesses participate in the United States, South America and certain other international health markets. In the United States, health care spending has grown consistently for many years and comprises 18% of gross domestic product (GDP). We expect overall spending on health care to continue to grow in the future, due to inflation, medical technology and pharmaceutical advancement, regulatory requirements, demographic trends in the population and national interest in health and well-being. The rate of market growth may be affected by a variety of factors, including macro-economic conditions and regulatory changes, which could impact our results of operations, including our continued efforts to control health care costs.

Pricing Trends. To price our health care benefit products, we start with our view of expected future costs. We frequently evaluate and adjust our approach in each of the local markets we serve, considering relevant factors, such as product positioning, price competitiveness and environmental, competitive, legislative and regulatory considerations, including minimum MLR thresholds. We will continue seeking to balance growth and profitability across all of these dimensions.

The commercial risk market remains highly competitive in both the small group and large group segments. We expect broad-based competition to continue as the industry adapts to individual and employer needs. The ACA, which includes three distinct taxes (ACA Tax), has an annual, nondeductible insurance industry tax (Health Insurance Industry Tax) to be levied proportionally across the insurance industry for risk-based health insurance products. A provision in the 2018 federal budget imposed a one year moratorium for 2019 on the collection of the Health Insurance Industry Tax. Pricing for contracts that cover some portion of calendar year 2020 reflect the return of the Health Insurance Industry Tax. The ACA Tax was permanently repealed by Congress, effective January 1, 2021.

Medicare Advantage funding continues to be pressured, as discussed below in "Regulatory Trends and Uncertainties."

We expect Medicaid revenue growth due to anticipated changes in mix and increases in the number of people we serve; we also believe that the payment rate environment creates the risk of continued downward pressure on Medicaid margin percentages. We continue to take a prudent, market-sustainable posture for both new business and maintenance of existing relationships. We continue to advocate for actuarially sound rates that are commensurate with our medical cost trends and we remain dedicated to partnering with those states that are committed to the long-term viability of their programs.

Medical Cost Trends. Our medical cost trends primarily relate to changes in unit costs, health system utilization and prescription drug costs. We endeavor to mitigate those increases by engaging physicians and consumers with information and helping them make clinically sound choices, with the objective of helping them achieve high-quality, affordable care.

Delivery System and Payment Modernization. The health care market continues to change based on demographic shifts, new regulations, political forces and both payer and patient expectations. Health plans and care providers are being called upon to work together to close gaps in care and improve overall care quality, improve the health of populations and reduce costs. We continue to see a greater number of people enrolled in plans with underlying incentive-based care provider payment models that reward high-quality, affordable care and foster collaboration. We work together with clinicians to leverage our data and analytics to provide the necessary information to close gaps in care and improve overall health outcomes for patients.

We are increasingly rewarding care providers for delivering improvements in quality and cost-efficiency. As of December 31, 2019, we served over 17 million people through some form of aligned contractual arrangement, including full-risk, shared-risk and bundled episode-of-care and performance incentive payment approaches. As of December 31, 2019, our contracts with value-based elements totaled \$79 billion in annual spending, including \$20 billion through risk-transfer agreements.

This trend is creating needs for health management services that can coordinate care around the primary care physician, including new primary care channels, and for investments in new clinical and administrative information and management systems, which we believe provide growth opportunities for our Optum business platform.

Regulatory Trends and Uncertainties

Following is a summary of management's view of the trends and uncertainties related to some of the key provisions of the ACA and other regulatory matters. For additional information regarding the ACA and regulatory trends and uncertainties, see Part I, Item 1 "Business—Government Regulation" and Item 1A, "Risk Factors."

Medicare Advantage Rates. Final 2020 Medicare Advantage rates resulted in an increase in industry base rates of approximately 2.5%, short of the industry forward medical cost trend. This combined with the return of the Health Insurance Industry Tax creates continued pressure in the Medicare Advantage program.

The ongoing Medicare Advantage funding pressure places continued importance on effective medical management and ongoing improvements in administrative efficiency. There are a number of adjustments we have made to partially offset these rate pressures and reductions. In some years, these adjustments impact the majority of the seniors we serve through Medicare Advantage. For example, we seek to intensify our medical and operating cost management, make changes to the size and composition of our care provider networks, adjust members' benefits and implement or increase the member premiums that supplement the monthly payments we receive from the government. Additionally, we decide annually on a county-by-county basis where we will offer Medicare Advantage plans.

Our Medicare Advantage rates are currently enhanced by CMS quality bonuses in certain counties based on our local plans' Star ratings. The level of Star ratings from CMS, based upon specified clinical and operational performance standards, will impact future quality bonuses.

ACA Tax. A provision in the 2019 Federal Budget imposed a one year moratorium for 2019 on the collection of the Health Insurance Industry Tax. In 2020, the industry-wide amount of the Health Insurance Industry Tax, which is primarily borne by customers, will be \$15.5 billion and we expect our portion to be approximately \$3.0 billion. The ACA Tax was repealed by Congress, effective January 1, 2021.

SELECTED OPERATING PERFORMANCE ITEMS

The following represents a summary of select 2019 year-over-year operating comparisons to 2018.

- Consolidated revenues increased by 7%, UnitedHealthcare revenues increased 6% and Optum revenues grew 12%.
- UnitedHealthcare served 575,000 additional people domestically as a result of growth in commercial business and services to seniors, partially offset by the proactive withdrawal from the Iowa medicaid market
- Earnings from operations increased by 13%, including increases of 13% at UnitedHealthcare and 14% at Optum.
- Diluted earnings per common share increased 18% to \$14.33.
- Cash flows from operations were \$18.5 billion, an increase of 18%.

RESULTS SUMMARY

The following table summarizes our consolidated results of operations and other financial information:

	For the Yea	Change			
(in millions, except percentages and per share data)	2019	2017	2019 vs. 2018		
Revenues:					
Premiums	\$189,699	\$178,087	\$158,453	\$11,612	7%
Products	31,597	29,601	26,366	1,996	7
Services	18,973	17,183	15,317	1,790	10
Investment and other income	1,886	1,376	1,023	510	37
Total revenues	242,155	226,247	201,159	15,908	7
Operating costs:					
Medical costs	156,440	145,403	130,036	11,037	8
Operating costs	35,193	34,074	29,557	1,119	3
Cost of products sold	28,117	26,998	24,112	1,119	4
Depreciation and amortization	2,720	2,428	2,245	292	12
Total operating costs	222,470	208,903	185,950	13,567	6
Earnings from operations	19,685	17,344	15,209	2,341	13
Interest expense	(1,704)	(1,400)	(1,186)	(304)	22
Earnings before income taxes	17,981	15,944	14,023	2,037	13
Provision for income taxes	(3,742)	(3,562)	(3,200)	(180)	5
Net earnings	14,239	12,382	10,823	1,857	15
Earnings attributable to noncontrolling interests	(400)	(396)	(265)	(4)	1
Net earnings attributable to UnitedHealth Group common					
shareholders	\$ 13,839	\$ 11,986	\$ 10,558	\$ 1,853	15%
Diluted earnings per share attributable to UnitedHealth					
Group common shareholders	\$ 14.33	\$ 12.19	\$ 10.72	\$ 2.14	18%
Medical care ratio (a)	82.5%	81.6%	82.1%	0.9%	
Operating cost ratio	14.5	15.1	14.7	(0.6)	
Operating margin	8.1	7.7	7.6	0.4	
Tax rate	20.8	22.3	22.8	(1.5)	
Net earnings margin (b)	5.7	5.3	5.2	0.4	
Return on equity (c)	25.7%	24.4%	24.4%	1.3%	

⁽a) Medical care ratio is calculated as medical costs divided by premium revenue.

2019 RESULTS OF OPERATIONS COMPARED TO 2018 RESULTS

Consolidated Financial Results

Revenue

The increase in revenue was primarily driven by the increase in the number of individuals served through Medicare Advantage; pricing trends; and organic and acquisition growth across the Optum business, primarily due to expansion in pharmacy care services and care delivery, partially offset by the moratorium of the Health Insurance Industry Tax in 2019.

⁽b) Net earnings margin attributable to UnitedHealth Group shareholders.

⁽c) Return on equity is calculated as net earnings attributable to UnitedHealth Group common shareholders divided by average shareholders' equity. Average shareholders' equity is calculated using the shareholders' equity balance at the end of the preceding year and the shareholders' equity balances at the end of each of the four quarters of the year presented.

Medical Costs and MCR

Medical costs increased due to growth in people served through Medicare Advantage and medical cost trends, partially offset by increased prior year favorable medical development. The MCR increased due to the revenue effects of the Health Insurance Industry Tax moratorium.

Reportable Segments

See Note 14 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data" for more information on our segments. The following table presents a summary of the reportable segment financial information:

	For the Ye	Change				
(in millions, except percentages)	2019	2018	2017	2019 vs. 2018		
Revenues						
UnitedHealthcare	\$193,842	\$183,476	\$163,257	\$10,366	6%	
OptumHealth	30,317	24,145	20,570	6,172	26	
OptumInsight	10,006	9,008	8,087	998	11	
OptumRx	74,288	69,536	63,755	4,752	7	
Optum eliminations	(1,661)	(1,409)	(1,227)	(252)	18	
Optum	112,950	101,280	91,185	11,670	12	
Eliminations	(64,637)	(58,509)	(53,283)	(6,128)	10	
Consolidated revenues	\$242,155	\$226,247	\$201,159	\$15,908	7%	
Earnings from operations						
UnitedHealthcare	\$ 10,326	\$ 9,113	\$ 8,498	\$ 1,213	13%	
OptumHealth	2,963	2,430	1,823	533	22	
OptumInsight	2,494	2,243	1,770	251	11	
OptumRx	3,902	3,558	3,118	344	10	
Optum	9,359	8,231	6,711	1,128	14	
Consolidated earnings from operations	\$ 19,685	\$ 17,344	\$ 15,209	\$ 2,341	13%	
Operating margin						
UnitedHealthcare	5.3%	5.0%	5.2%	0.3%		
OptumHealth	9.8	10.1	8.9	(0.3)		
OptumInsight	24.9	24.9	21.9	_		
OptumRx	5.3	5.1	4.9	0.2		
Optum	8.3	8.1	7.4	0.2		
Consolidated operating margin	8.1%	7.7%	7.6%	0.4%		

UnitedHealthcare

The following table summarizes UnitedHealthcare revenues by business:

	For the Ye	Change	е		
(in millions, except percentages)	2019 2018		2017	2019 vs. 2018	
UnitedHealthcare Employer & Individual	\$ 56,945	\$ 54,761	\$ 52,066	\$ 2,184	4%
UnitedHealthcare Medicare & Retirement	83,252	75,473	65,995	7,779	10
UnitedHealthcare Community & State	43,790	43,426	37,443	364	1
UnitedHealthcare Global	9,855	9,816	7,753	39	_
Total UnitedHealthcare revenues	\$193,842	\$183,476	\$163,257	\$10,366	6%

The following table summarizes the number of individuals served by our UnitedHealthcare businesses, by major market segment and funding arrangement:

		December 3	Change		
(in thousands, except percentages)	2019	2018	2017	2019 vs.	2018
Commercial:					
Risk-based	8,575	8,495	8,420	80	1%
Fee-based	19,185	18,420	18,595	765	4
Fee-based TRICARE			2,850		—
Total commercial	27,760	26,915	29,865	845	3
Medicare Advantage	5,270	4,945	4,430	325	7
Medicaid	5,900	6,450	6,705	(550)	(9)
Medicare Supplement (Standardized)	4,500	4,545	4,445	(45)	(1)
Total public and senior	15,670	15,940	15,580	(270)	(2)
Total UnitedHealthcare — domestic medical	43,430	42,855	45,445	575	1
International	5,720	6,220	4,080	(500)	(8)
Total UnitedHealthcare — medical	49,150	49,075	49,525	75	%
Supplemental Data:					
Medicare Part D stand-alone	4,405	4,710	4,940	(305)	(6)%

Fee-based commercial group business increased primarily due to an acquisition. Medicare Advantage increased due to the growth in people served through individual and employer-sponsored group Medicare Advantage plans. The decrease in people served through Medicaid was primarily driven by the proactive withdrawal from the Iowa market as well as by states adding new carriers to existing programs and managing eligibility, partially offset by increases in Dual Special Needs Plans. The decrease in people served internationally is a result of our continued affordability efforts and underwriting discipline.

UnitedHealthcare's revenue and earnings from operations increased due to growth in the number of individuals served through Commercial and Medicare Advantage, including a greater mix of people with a higher acuity needs. Revenue increases were partially offset by the moratorium on the Health Insurance Industry Tax in 2019. Earnings from operations were also favorably impacted by operating cost management.

Optum

Total revenues and earnings from operations increased as each segment reported increased revenues and earnings from operations as a result of the factors discussed below. Earnings from operations also increased due to productivity and overall cost management initiatives.

The results by segment were as follows:

OptumHealth

Revenue increased at OptumHealth primarily due to organic growth and acquisitions in care delivery, increased care services and organic growth in behavioral health services. Earnings from operations increased primarily due to care delivery. OptumHealth served approximately 96 million and 93 million people as of December 31, 2019 and 2018, respectively.

OptumInsight

Revenue and earnings from operations at OptumInsight increased primarily due to organic and acquisition growth in managed services.

OptumRx

Revenue at OptumRx increased primarily due to organic growth and acquisitions in specialty pharmacy, partially offset by an expected large client transition. Earnings from operations increased primarily due to the factors that increased revenue as well as improved supply chain management. OptumRx fulfilled 1,340 million and 1,343 million adjusted scripts in 2019 and 2018, respectively, with 2019 impacted by the large client transition.

LIQUIDITY, FINANCIAL CONDITION AND CAPITAL RESOURCES

Liquidity

Introduction

We manage our liquidity and financial position in the context of our overall business strategy. We continually forecast and manage our cash, investments, working capital balances and capital structure to meet the short-term and long-term obligations of our businesses while seeking to maintain liquidity and financial flexibility. Cash flows generated from operating activities are principally from earnings before noncash expenses.

Our regulated subsidiaries generate significant cash flows from operations and are subject to, among other things, minimal levels of statutory capital, as defined by their respective jurisdiction, and restrictions on the timing and amount of dividends paid to their parent companies.

Our U.S. regulated subsidiaries paid their parent companies dividends of \$5.6 billion and \$3.7 billion in 2019 and 2018, respectively. See Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data" for further detail concerning our regulated subsidiary dividends.

Our nonregulated businesses also generate significant cash flows from operations that are available for general corporate use. Cash flows generated by these entities, combined with dividends from our regulated entities and financing through the issuance of long-term debt as well as issuance of commercial paper or the ability to draw under our committed credit facilities, further strengthen our operating and financial flexibility. We use these cash flows to expand our businesses through acquisitions, reinvest in our businesses through capital expenditures, repay debt and return capital to our shareholders through dividends and repurchases of our common stock.

Summary of our Major Sources and Uses of Cash and Cash Equivalents

	For the Yo	Change		
(in millions)	2019	2018	2018 2017	
Sources of cash:				
Cash provided by operating activities	\$ 18,463	\$ 15,713	\$ 13,596	\$ 2,750
Issuances of long-term debt and commercial paper, net of				
repayments	3,994	4,134		(140)
Proceeds from common share issuances	1,037	838	688	199
Customer funds administered	13		3,172	13
Other	219			219
Total sources of cash	23,726	20,685	17,456	
Uses of cash:				
Cash paid for acquisitions, net of cash assumed	(8,343)	(5,997)	(2,131)	(2,346)
Cash dividends paid	(3,932)	(3,320)	(2,773)	(612)
Common share repurchases	(5,500)	(4,500)	(1,500)	(1,000)
Repayments of long-term debt and commercial paper, net				
of issuances	_		(2,615)	_
Purchases of property, equipment and capitalized				
software	(2,071)	(2,063)	(2,023)	(8)
Purchases of investments, net of sales and maturities	(2,504)	(4,099)	(4,319)	1,595
Other	(1,237)	(1,743)	(539)	506
Total uses of cash	(23,587)	(21,722)	(15,900)	
Effect of exchange rate changes on cash and cash				
equivalents	(20)	(78)	(5)	58
Net increase (decrease) in cash and cash equivalents	\$ 119	\$ (1,115)	\$ 1,551	\$ 1,234

2019 Cash Flows Compared to 2018 Cash Flows

Increased cash flows provided by operating activities were primarily driven by higher net earnings as well as changes in working capital accounts. Other significant changes in sources or uses of cash year-over-year included an increase in cash paid for acquisitions, increased share repurchases and decreased net purchases of investments.

Financial Condition

As of December 31, 2019, our cash, cash equivalent, available-for-sale debt securities and equity securities balances of \$49.1 billion included \$11.0 billion of cash and cash equivalents (of which \$584 million was available for general corporate use), \$36.1 billion of debt securities and \$2.0 billion of investments in equity securities. Given the significant portion of our portfolio held in cash equivalents, we do not anticipate fluctuations in the aggregate fair value of our financial assets to have a material impact on our liquidity or capital position. Other sources of liquidity, primarily from operating cash flows and our commercial paper program, which is supported by our bank credit facilities, reduce the need to sell investments during adverse market conditions. See Note 4 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data" for further detail concerning our fair value measurements.

Our available-for-sale debt portfolio had a weighted-average duration of 3.4 years and a weighted-average credit rating of "Double A" as of December 31, 2019. When multiple credit ratings are available for an individual security, the average of the available ratings is used to determine the weighted-average credit rating.

Capital Resources and Uses of Liquidity

In addition to cash flows from operations and cash and cash equivalent balances available for general corporate use, our capital resources and uses of liquidity are as follows:

Commercial Paper and Bank Credit Facilities. Our revolving bank credit facilities provide liquidity support for our commercial paper borrowing program, which facilitates the private placement of senior unsecured debt through independent broker-dealers, and are available for general corporate purposes. For more information on our commercial paper and bank credit facilities, see Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

Our revolving bank credit facilities contain various covenants, including covenants requiring us to maintain a defined debt to debt-plus-shareholders' equity ratio of not more than 60%, subject to increase in certain circumstances set forth in the applicable credit agreement. As of December 31, 2019, our debt to debt-plus-shareholders' equity ratio, as defined and calculated under the credit facilities, was 39%.

Long-Term Debt. Periodically, we access capital markets to issue long-term debt for general corporate purposes, such as, to meet our working capital requirements, to refinance debt, to finance acquisitions or for share repurchases. For more information on our debt, see Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8 "Financial Statements and Supplementary Data."

Credit Ratings. Our credit ratings as of December 31, 2019 were as follows:

	Moody's		S&P Global		Fitch		A.M. Best	
	Ratings	Outlook	Ratings	Outlook	Ratings	Outlook	Ratings	Outlook
Senior unsecured debt	A3	Stable	A+	Stable	A-	Stable	A-	Positive
Commercial paper	P-2	n/a	A-1	n/a	F1	n/a	AMB-1	n/a

The availability of financing in the form of debt or equity is influenced by many factors, including our profitability, operating cash flows, debt levels, credit ratings, debt covenants and other contractual restrictions, regulatory requirements and economic and market conditions. A significant downgrade in our credit ratings or adverse conditions in the capital markets may increase the cost of borrowing for us or limit our access to capital.

Share Repurchase Program. As of December 31, 2019, we had Board authorization to purchase up to 72 million shares of our common stock. For more information on our share repurchase program, see Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

Dividends. In June 2019, the Company's Board of Directors increased the Company's quarterly cash dividend to shareholders to an annual rate of \$4.32 compared to \$3.60 per share. For more information on our dividend, see Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

CONTRACTUAL OBLIGATIONS AND COMMITMENTS

The following table summarizes future obligations due by period as of December 31, 2019, under our various contractual obligations and commitments:

(in millions)	2020	2020 2021 to 2022		2023 to 2024		2023 to 2024 Thereafter	
Debt (a)	\$ 5,532	\$	9,118	\$	6,122	\$ 44,302	\$ 65,074
Operating leases	804		1,327		901	1,671	4,703
Purchase and other obligations (b)			2,483		768	248	5,116
Other liabilities (c)	914		344		285	7,767	9,310
Redeemable noncontrolling interests (d)	852		542			332	1,726
Total contractual obligations	\$ 9,719	\$	13,814	\$	8,076	\$ 54,320	\$ 85,929

- (a) Includes interest coupon payments and maturities at par or put values. The table also assumes amounts are outstanding through their contractual term. See Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data" for more detail.
- (b) Includes fixed or minimum commitments under existing purchase obligations for goods and services, including agreements that are cancelable with the payment of an early termination penalty and remaining capital commitments for venture capital funds and other funding commitments. Excludes agreements that are cancelable without penalty and excludes liabilities to the extent recorded in our Consolidated Balance Sheets as of December 31, 2019.
- (c) Includes obligations associated with contingent consideration and payments related to business acquisitions, certain employee benefit programs, amounts accrued for guaranty fund assessments, unrecognized tax benefits, and various long-term liabilities. Due to uncertainty regarding payment timing, obligations for employee benefit programs, charitable contributions, future settlements, unrecognized tax benefits and other liabilities have been classified as "Thereafter."
- (d) Includes commitments for redeemable shares of our subsidiaries. When the timing of the redemption is indeterminable, the commitment has been classified as "Thereafter."

We do not have other significant contractual obligations or commitments that require cash resources. However, we continually evaluate opportunities to expand our operations, which include internal development of new products, programs and technology applications and may include acquisitions.

OFF-BALANCE SHEET ARRANGEMENTS

As of December 31, 2019, we were not involved in any off-balance sheet arrangements, which have or are reasonably likely to have a material effect on our financial condition, results of operations or liquidity.

RECENTLY ISSUED ACCOUNTING STANDARDS

See Note 2 of Notes to the Consolidated Financial Statements in Part II, Item 8 "Financial Statements and Supplementary Data" for a discussion of new accounting pronouncements that affect us.

CRITICAL ACCOUNTING ESTIMATES

Critical accounting estimates are those estimates that require management to make challenging, subjective or complex judgments, often because they must estimate the effects of matters that are inherently uncertain and may change in subsequent periods. Critical accounting estimates involve judgments and uncertainties that are sufficiently sensitive and may result in materially different results under different assumptions and conditions.

Medical Costs Payable

Medical costs and medical costs payable include estimates of our obligations for medical care services that have been rendered on behalf of insured consumers, but for which claims have either not yet been received or processed. Depending on the health care professional and type of service, the typical billing lag for services can be up to 90 days from the date of service. Approximately 90% of claims related to medical care services are known and settled within 90 days from the date of service and substantially all within twelve months. As of December 31, 2019, our days outstanding in medical payables was 51 days, calculated as total medical payables divided by total medical costs times the number of days in the period.

In each reporting period, our operating results include the effects of more completely developed medical costs payable estimates associated with previously reported periods. If the revised estimate of prior period medical costs is less than the previous estimate, we will decrease reported medical costs in the current period (favorable development). If the revised estimate of prior period medical costs is more than the previous estimate, we will increase reported medical costs in the current period (unfavorable development). Medical costs in 2019, 2018 and 2017 included favorable medical cost development related to prior years of \$580 million, \$320 million and \$690 million, respectively.

In developing our medical costs payable estimates, we apply different estimation methods depending on the month for which incurred claims are being estimated. For example, for the most recent two months, we estimate claim costs incurred by applying observed medical cost trend factors to the average per member per month (PMPM) medical costs incurred in prior months for which more complete claim data is available, supplemented by a review of near-term completion factors.

Completion Factors. A completion factor is an actuarial estimate, based upon historical experience and analysis of current trends, of the percentage of incurred claims during a given period that have been adjudicated by us at the date of estimation. Completion factors are the most significant factors we use in developing our medical costs payable estimates for periods prior to the most recent two months. Completion factors include judgments in relation to claim submissions such as the time from date of service to claim receipt, claim levels and processing cycles, as well as other factors. If actual claims submission rates from providers (which can be influenced by a number of factors, including provider mix and electronic versus manual submissions) or our claim processing patterns are different than estimated, our reserve estimates may be significantly impacted.

The following table illustrates the sensitivity of these factors and the estimated potential impact on our medical costs payable estimates for those periods as of December 31, 2019:

Completion Factors (Decrease) Increase in Factors	Increase (Decrease) In Medical Costs Payable
	(in millions)
(0.75)%	\$ 584
(0.50)	388
(0.25)	
0.25	
0.50	
0.75	(575)

Medical Cost Per Member Per Month Trend Factors. Medical cost PMPM trend factors are significant factors we use in developing our medical costs payable estimates for the most recent two months. Medical cost trend factors are developed through a comprehensive analysis of claims incurred in prior months, provider contracting and expected unit costs, benefit design and a review of a broad set of health care utilization indicators, including but not limited to, pharmacy utilization trends, inpatient hospital authorization data and influenza incidence data from the National Centers for Disease Control. We also consider macroeconomic variables such as GDP growth, employment and disposable income. A large number of factors can cause the medical cost trend to vary from our

estimates, including: our ability and practices to manage medical and pharmaceutical costs, changes in level and mix of services utilized, mix of benefits offered, including the impact of co-pays and deductibles, changes in medical practices, catastrophes and epidemics.

The following table illustrates the sensitivity of these factors and the estimated potential impact on our medical costs payable estimates for the most recent two months as of December 31, 2019:

Medical Cost PMPM Quarterly Trend Increase (Decrease) in Factors	Increase (Decrease) In Medical Costs Payable
	(in millions)
3%	\$ 754
2	502
1	251
(1)	(251)
(2)	(502)
(3)	(754)

The completion factors and medical costs PMPM trend factors analyses above include outcomes that are considered reasonably likely based on our historical experience estimating liabilities for incurred but not reported benefit claims.

Management believes the amount of medical costs payable is reasonable and adequate to cover our liability for unpaid claims as of December 31, 2019; however, actual claim payments may differ from established estimates as discussed above. Assuming a hypothetical 1% difference between our December 31, 2019 estimates of medical costs payable and actual medical costs payable, excluding AARP Medicare Supplement Insurance and any potential offsetting impact from premium rebates, 2019 net earnings would have increased or decreased by approximately \$160 million.

For more detail related to our medical cost estimates, see Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

Goodwill

We evaluate goodwill for impairment annually or more frequently when an event occurs or circumstances change that indicate the carrying value may not be recoverable. When testing goodwill for impairment, we may first assess qualitative factors to determine if it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value. During a qualitative analysis, we consider the impact of changes, if any, to the following factors: macroeconomic, industry and market factors, cost factors, changes in overall financial performance, and any other relevant events and uncertainties impacting a reporting unit. If our qualitative assessment indicates that goodwill impairment is more likely than not, we perform additional quantitative analyses. We may also elect to skip the qualitative testing and proceed directly to the quantitative testing. For reporting units where a quantitative analysis is performed, we perform a multi-step test measuring the fair values of the reporting units and comparing them to their aggregate carrying values, including goodwill. If the fair value is less than the carrying value of the reporting unit, then the implied value of goodwill would be calculated and compared to the carrying amount of goodwill to determine whether goodwill is impaired.

We estimate the fair values of our reporting units using discounted cash flows, which include assumptions about a wide variety of internal and external factors. Significant assumptions used in the impairment analysis include financial projections of free cash flow (including significant assumptions about operations, capital requirements and income taxes), long-term growth rates for determining terminal value beyond the discretely forecasted periods and discount rates. For each reporting unit, comparative market multiples are used to corroborate the results of our discounted cash flow test.

Forecasts and long-term growth rates used for our reporting units are consistent with, and use inputs from, our internal long-term business plan and strategies. Key assumptions used in these forecasts include:

- Revenue trends. Key revenue drivers for each reporting unit are determined and assessed. Significant factors
 include: customer and/or membership growth, medical trends and the impact and expectations of regulatory
 environments. Additional macro-economic assumptions relating to unemployment, GDP growth, interest
 rates and inflation are also evaluated and incorporated, as appropriate.
- Medical cost trends. For further discussion of medical cost trends, see the "Medical Cost Trend" section of
 Executive Overview-Business Trends and the "Medical Costs Payable" critical accounting estimate above.
 Similar factors, including historical and expected medical cost trend levels, are considered in estimating our
 long-term medical trends at the reporting unit level.
- *Operating productivity.* We forecast expected operating cost levels based on historical levels and expectations of future operating cost levels.
- Capital levels. The operating and long-term capital requirements for each business are considered.

Discount rates are determined for each reporting unit and include consideration of the implied risk inherent in their forecasts. Our most significant estimate in the discount rate determinations involves our adjustments to the peer company weighted average costs of capital that reflect reporting unit-specific factors. We have not made any adjustments to decrease a discount rate below the calculated peer company weighted average cost of capital for any reporting unit. Company-specific adjustments to discount rates are subjective and thus are difficult to measure with certainty. The passage of time and the availability of additional information regarding areas of uncertainty with respect to the reporting units' operations could cause these assumptions to change in the future. As of October 1, 2019, we completed our annual impairment tests for goodwill with all of our reporting units having fair values substantially in excess of their carrying values.

LEGAL MATTERS

A description of our legal proceedings is presented in Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

CONCENTRATIONS OF CREDIT RISK

Investments in financial instruments such as marketable securities and accounts receivable may subject us to concentrations of credit risk. Our investments in marketable securities are managed under an investment policy authorized by our Board of Directors. This policy limits the amounts that may be invested in any one issuer and generally limits our investments to U.S. government and agency securities, state and municipal securities and corporate debt obligations that are investment grade. Concentrations of credit risk with respect to accounts receivable are limited due to the large number of employer groups and other customers that constitute our client base. As of December 31, 2019, there were no significant concentrations of credit risk.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our primary market risks are exposures to changes in interest rates that impact our investment income and interest expense and the fair value of certain of our fixed-rate investments and debt, as well as foreign currency exchange rate risk of the U.S. dollar primarily to the Brazilian real and Chilean peso.

As of December 31, 2019, we had \$14 billion of financial assets on which the interest rates received vary with market interest rates, which may significantly impact our investment income. Also as of December 31, 2019, \$9 billion of our financial liabilities, which include commercial paper, debt and deposit liabilities, were at interest rates that vary with market rates, either directly or through the use of related interest rate swap contracts.

The fair value of our fixed-rate investments and debt also varies with market interest rates. As of December 31, 2019, \$33 billion of our investments were fixed-rate debt securities and \$39 billion of our debt was non-swapped fixed-rate term debt. An increase in market interest rates decreases the market value of fixed-rate investments and fixed-rate debt. Conversely, a decrease in market interest rates increases the market value of fixed-rate investments and fixed-rate debt.

We manage exposure to market interest rates by diversifying investments across different fixed-income market sectors and debt across maturities, as well as by endeavoring to match our floating-rate assets and liabilities over time, either directly or through the use of interest rate swap contracts. Unrealized gains and losses on investments in available-for-sale debt securities are reported in comprehensive income.

The following tables summarize the impact of hypothetical changes in market interest rates across the entire yield curve by 1% point or 2% points as of December 31, 2019 and 2018 on our investment income and interest expense per annum and the fair value of our investments and debt (in millions, except percentages):

	December 31, 2019										
Increase (Decrease) in Market Interest Rate	Inco	estment ome Per nnum	e Per Expense Per		Fair Value of Financial Assets (a)		Fair Value of Financial Liabilities				
2%	\$	282	\$	185	\$	(2,668)	\$	(6,813)			
1		141		93		(1,331)		(3,704)			
(1)		(141)		(93)		1,246		4,433			
(2)		(282)		(185)		2,071		9,613			

	December 31, 2018									
Increase (Decrease) in Market Interest Rate	Investment Income Per Annum		Inte Expen Anr			ir Value of cial Assets (a)		ir Value of cial Liabilities		
2%	\$	276	\$	189	\$	(2,242)	\$	(5,017)		
1		138		94		(1,140)		(2,724)		
(1)		(138)		(94)		1,118		3,155		
(2)		(276)		(189)		2,196		6,953		

⁽a) As of December 31, 2019 and 2018, some of our investments had interest rates below 2% so the assumed hypothetical change in the fair value of investments does not reflect the full 200 basis point reduction.

We have an exposure to changes in the value of foreign currencies, primarily the Brazilian real and the Chilean peso, to the U.S. dollar in translation of UnitedHealthcare Global's operating results at the average exchange rate over the accounting period, and UnitedHealthcare Global's assets and liabilities at the exchange rate at the end of the accounting period. The gains or losses resulting from translating foreign assets and liabilities into U.S. dollars are included in equity and comprehensive income.

An appreciation of the U.S. dollar against the Brazilian real or Chilean peso reduces the carrying value of the net assets denominated in those currencies. For example, as of December 31, 2019, a hypothetical 10% and 25% increase in the value of the U.S. dollar against those currencies would have caused a reduction in net assets of approximately \$600 million and \$1.3 billion, respectively. We manage exposure to foreign currency earnings risk primarily by conducting our international business operations in their functional currencies.

As of December 31, 2019, we had \$2.0 billion of investments in equity securities, primarily consisting of investments in non-U.S. dollar fixed-income funds; employee savings plan related investments; and dividend paying stocks. Valuations in non-U.S. dollar funds are subject to foreign exchange rates.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of UnitedHealth Group Incorporated and Subsidiaries:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of UnitedHealth Group Incorporated and subsidiaries (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 14, 2020 expressed an unqualified opinion on the Company's internal control over financial reporting.

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 a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. 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 Matters

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

Incurred but not Reported (IBNR) Claim Liability—Refer to Notes 2 and 7 to the financial statements.

Critical Audit Matter Description

Medical costs payable includes estimates of the Company's obligations for medical care services rendered on behalf of insured consumers, for which claims have either not yet been received or processed. These estimates are referred to as incurred but not reported (IBNR) claim liabilities. The Company develops IBNR estimates using an actuarial model that requires management to exercise certain judgments in developing its estimates. Judgments made by management include the time from date of service to claim receipt, the impact of claim levels and processing cycles, as well as other factors.

We identified the IBNR claim liability as a critical audit matter because of the significant assumptions made by management in estimating the liability. This required complex auditor judgment, and an increased extent of effort, including the involvement of actuarial specialists in performing procedures to evaluate the reasonableness of management's methods, assumptions and judgments in developing the liability.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures included the following, among others:

- We tested the effectiveness of controls over management's estimate of the IBNR claim liability balance, including controls over the judgments of time from date of service to claim receipt, and the impact of claim levels and processing cycles.
- We tested the underlying claims and membership data and other information that served as the basis for the actuarial analysis, to test that the inputs to the actuarial estimate were complete and accurate.
- With the assistance of actuarial specialists, we evaluated the reasonableness of the actuarial methods and assumptions used by management to estimate the IBNR claim liability by:
 - Performing an overlay of the historical claims data used in management's current year model to the
 data used in prior periods to validate that there were no material changes to the claims data tested in
 prior periods.
 - Developing an independent estimate of the IBNR claim liability and comparing our estimate to management's estimate.
 - Performing a retrospective review comparing management's prior year assumptions of the estimate of IBNR to claims processed in 2019 with dates of service in 2018 or prior.

Goodwill—Refer to Notes 2 and 6 to the financial statements.

Critical Audit Matter Description

At December 31, 2019, the Company's goodwill balance was \$66 billion. As discussed in Note 2 of the financial statements, goodwill is tested for impairment for certain of the Company's reporting units, at least annually, by comparing the carrying values of the reporting units to the estimated fair values as of the impairment testing date. The estimates of the reporting unit fair values are calculated using discounted cash flows, which include financial projections including significant assumptions about revenue trends, medical cost trends, and operating costs as well as discount rates. Comparative market multiples are used to corroborate the results of the discounted cash flow test. The fair values of the reporting units exceeded the carrying values as of the impairment testing date, therefore no impairment was recognized.

We identified certain reporting units as a critical audit matter because of the significant assumptions made by management to estimate the fair value of the reporting unit. This required increased auditor judgment and extent of effort, including involvement of fair value specialists to evaluate the reasonableness of management's estimates and assumptions related to financial projections, which can be impacted by regulatory and macroeconomic factors.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the valuation and business assumptions including the discount rate and financial forecasts used by management to estimate the fair value of certain reporting units included the following, among others:

- We tested the effectiveness of controls over management's annual goodwill impairment assessment, including those over the determination of the fair value such as controls related to management's financial forecasts, as well as controls over the selection of discount rates and company specific risks.
- We evaluated management's ability to forecast and meet future revenue, medical cost trend, and operating costs by comparing:
 - Actual results to historical forecasts.
 - Forecasted information to: internal communications to management and the Board of Directors, industry and economic trends, and analyst reports of revenue and earnings expectations for the Company and its peers.
- We evaluated the impact of changes in management's forecasts from the October 1, 2019 annual measurement date to December 31, 2019.
- With the assistance of our fair value specialists, we evaluated the reasonableness of the (1) valuation methodology, including testing the mathematical accuracy of the calculation and (2) discount rate and company specific risks by:
 - Testing the source information underlying the determination of the discount rate and the mathematical accuracy of the calculation.
 - Developing a range of independent discount rate estimates and comparing to those selected by management.

/S/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota February 14, 2020

We have served as the Company's auditor since 2002.

UnitedHealth Group Consolidated Balance Sheets

(in millions, except per share data)	De	ecember 31, 2019	De	December 31, 2018		
Assets						
Current assets: Cash and cash equivalents Short-term investments Accounts receivable, net of allowances of \$519 and \$712 Other current receivables, net of allowances of \$859 and \$502 Assets under management Prepaid expenses and other current assets	\$	10,985 3,260 11,822 9,640 3,076 3,851	\$	10,866 3,458 11,388 6,862 3,032 3,086		
Total current assets Long-term investments Property, equipment and capitalized software, net of accumulated depreciation and amortization of \$4,995 and \$4,141 Goodwill		42,634 37,209 8,704 65,659		38,692 32,510 8,458 58,910		
Other intangible assets, net of accumulated amortization of \$5,072 and \$4,592 Other assets	_	10,349 9,334	_	9,325 4,326		
Total assets	\$ =	173,889	\$ =	152,221		
Liabilities, redeemable noncontrolling interests and equity Current liabilities: Medical costs payable	\$	21,690	\$	19,891		
Accounts payable and accrued liabilities Commercial paper and current maturities of long-term debt Unearned revenues Other current liabilities		19,005 3,870 2,622 14,595	Ψ	16,705 1,973 2,396 12,244		
Total current liabilities Long-term debt, less current maturities Deferred income taxes Other liabilities		61,782 36,808 2,993 10,144		53,209 34,581 2,474 5,730		
Total liabilities		111,727	_	95,994		
Commitments and contingencies (Note 12) Redeemable noncontrolling interests		1,726		1,908		
Preferred stock, \$0.001 par value — 10 shares authorized; no shares issued or outstanding		_		_		
issued and outstanding		9 7		10		
Retained earnings Accumulated other comprehensive loss Nonredeemable noncontrolling interests		61,178 (3,578) 2,820		55,846 (4,160) 2,623		
Total equity	_	60,436	_	54,319		
Total liabilities, redeemable noncontrolling interests and equity	\$	173,889	\$	152,221		
	_		_			

See Notes to the Consolidated Financial Statements

UnitedHealth Group Consolidated Statements of Operations

	For the Years Ended December			
(in millions, except per share data)	2019	2018	2017	
Revenues:				
Premiums	\$189,699	\$178,087	\$158,453	
Products	31,597	29,601	26,366	
Services	18,973	17,183	15,317	
Investment and other income	1,886	1,376	1,023	
Total revenues	242,155	226,247	201,159	
Operating costs:				
Medical costs	156,440	145,403	130,036	
Operating costs	35,193	34,074	29,557	
Cost of products sold	28,117	26,998	24,112	
Depreciation and amortization	2,720	2,428	2,245	
Total operating costs	222,470	208,903	185,950	
Earnings from operations	19,685	17,344	15,209	
Interest expense	(1,704)	(1,400)	(1,186)	
Earnings before income taxes	17,981	15,944	14,023	
Provision for income taxes	(3,742)	(3,562)	(3,200)	
Net earnings	14,239	12,382	10,823	
Earnings attributable to noncontrolling interests	(400)	(396)	(265)	
Net earnings attributable to UnitedHealth Group common				
shareholders	\$ 13,839	\$ 11,986	\$ 10,558	
Earnings per share attributable to UnitedHealth Group common				
shareholders:				
Basic	\$ 14.55	\$ 12.45	\$ 10.95	
Diluted	\$ 14.33	\$ 12.19	\$ 10.72	
Basic weighted-average number of common shares outstanding	951	963	964	
Dilutive effect of common share equivalents	15	20	21	
Diluted weighted-average number of common shares outstanding	966	983	985	
Anti-dilutive shares excluded from the calculation of dilutive effect of				
common share equivalents	10	6	5	

UnitedHealth Group Consolidated Statements of Comprehensive Income

	For the Yea	ecember 31,	
(in millions)	2019	2018	2017
Net earnings	\$14,239	\$12,382	\$10,823
Other comprehensive income (loss): Gross unrealized gains (losses) on investment securities during the			
period	1,212	(294)	209
Income tax effect	(279)	67	(72)
Total unrealized gains (losses), net of tax	933	(227)	137
Gross reclassification adjustment for net realized gains included in net earnings	(104)	(62) 14	(83)
Total reclassification adjustment, net of tax	(80)	(48)	(53)
Total foreign currency translation losses	(271)	(1,242)	(70)
Other comprehensive income (loss)	582	(1,517)	14
Comprehensive income	14,821 (400)	10,865 (396)	10,837 (265)
Comprehensive income attributable to UnitedHealth Group common shareholders	\$14,421	\$10,469	\$10,572

UnitedHealth Group Consolidated Statements of Changes in Equity

Accumulated Other Comprehensive (Loss) Income

	~		~. •	Additional		Net Unrealized (Losses)	Foreign Currency	Nonredeemable	
(in millions)	Comm			Additional Paid-In Capital	Retained Earnings		Translation	Noncontrolling Interests	Total Equity
Balance at January 1, 2017		\$	10	\$	\$ 40,945 10,558	\$ (97)	\$ (2,584)	\$ (97) 194	\$38,177 10,752 14
Issuances of common stock, and related tax effects	26		_	2,225 582 (1,500)					2,225 582 (1,500)
shares (\$2.875 per share)					(2,773)				(2,773)
noncontrolling interest shares Redeemable noncontrolling interest				283					283
fair value and other adjustments Acquisition and other adjustments of nonredeemable noncontrolling				113					113
interests								2,112	2,112
noncontrolling interest		_						(152)	(152)
Balance at December 31, 2017 Adjustment to adopt ASU 2016-01	969		10	1,703	48,730 (24)	(13) 24	(2,654)	2,057	49,833
Net earnings					11,986	(275)	(1,242)	273	12,259 (1,517)
related tax effects			_	814 620 (2,974)	(1,526)				814 620 (4,500)
shares (\$3.45 per share)				(1(2)	(3,320)				(3,320)
fair value and other adjustments Acquisition and other adjustments of nonredeemable noncontrolling interests				(163)				521	(163) 521
Distributions to nonredeemable noncontrolling interest								(228)	(228)
Balance at December 31, 2018 Adjustment to adopt ASU 2016-02 Net earnings			10		55,846 (13) 13,839	(264)	(3,896)	2,623 (5) 285	54,319 (18) 14,124
Other comprehensive income (loss) Issuances of common stock, and					13,037	853	(271)	203	582
related tax effects			_	696 673					696 673
Common share repurchases	(22)		(1)	(937)	(4,562)				(5,500)
Cash dividends paid on common shares (\$4.14 per share)					(3,932)				(3,932)
Redeemable noncontrolling interests fair value and other adjustments Acquisition and other adjustments of nonredeemable noncontrolling				(316)					(316)
interests				(109)				196	87
noncontrolling interests								(279)	(279)
Balance at December 31, 2019	948	\$	9	\$ 7	\$ 61,178	\$ 589	\$ (4,167)	\$ 2,820	\$60,436

See Notes to the Consolidated Financial Statements

UnitedHealth Group Consolidated Statements of Cash Flows

	For the Years Ended December			
(in millions)	2019	2018	2017	
Operating activities				
Net earnings	\$ 14,239	\$ 12,382	\$ 10,823	
Noncash items:				
Depreciation and amortization	2,720	2,428	2,245	
Deferred income taxes	230	42	(965)	
Share-based compensation	697	638	597	
Other, net	(106)	(71)	217	
Net change in other operating items, net of effects from acquisitions and				
changes in AARP balances:				
Accounts receivable	162	(1,351)	(1,062)	
Other assets	(1,563)	(750)	(630)	
Medical costs payable	1,221	1,831	1,284	
Accounts payable and other liabilities	733	526	930	
Unearned revenues	130	38	157	
Cash flows from operating activities	18,463	15,713	13,596	
Investing activities				
Purchases of investments	(18,131)	(14,010)	(14,588)	
Sales of investments	8,536	3,641	4,623	
Maturities of investments	7,091	6,270	5,646	
Cash paid for acquisitions, net of cash assumed	(8,343)	(5,997)	(2,131)	
Purchases of property, equipment and capitalized software	(2,071)	(2,063)	(2,023)	
Other, net	219	(226)	(126)	
Cash flows used for investing activities	(12,699)	(12,385)	(8,599)	
Financing activities				
Common share repurchases	(5,500)	(4,500)	(1,500)	
Cash dividends paid	(3,932)	(3,320)	(2,773)	
Proceeds from common stock issuances	1,037	838	688	
Repayments of long-term debt	(1,750)	(2,600)	(4,398)	
Proceeds from (repayments of) commercial paper, net	300	(201)	(3,508)	
Proceeds from issuance of long-term debt	5,444	6,935	5,291	
Customer funds administered	13	(131)	3,172	
Other, net	(1,237)	(1,386)	(413)	
Cash flows used for financing activities	(5,625)	(4,365)	(3,441)	
Effect of exchange rate changes on cash and cash equivalents	(20)	(78)	(5)	
Increase (decrease) in cash and cash equivalents	119	(1,115)	1,551	
Cash and cash equivalents, beginning of period	10,866	11,981	10,430	
Cash and cash equivalents, end of period	\$ 10,985	\$ 10,866	\$ 11,981	
Supplemental cash flow disclosures				
Cash paid for interest	\$ 1,627	\$ 1,410	\$ 1,133	
Cash paid for income taxes	3,542	3,257	4,004	
Supplemental schedule of non-cash investing activities				
Common stock issued for acquisitions	\$ —	\$ —	\$ 2,164	

See Notes to the Consolidated Financial Statements

UnitedHealth Group Notes to the Consolidated Financial Statements

1. Description of Business

UnitedHealth Group Incorporated (individually and together with its subsidiaries, "UnitedHealth Group" and "the Company") is a diversified health care company dedicated to helping people live healthier lives and helping make the health system work better for everyone.

Through its diversified family of businesses, the Company leverages core competencies in data and health information; advanced technology; and clinical expertise. These core competencies are deployed within two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

2. Basis of Presentation, Use of Estimates and Significant Accounting Policies

Basis of Presentation

The Company has prepared the Consolidated Financial Statements according to U.S. Generally Accepted Accounting Principles (GAAP) and has included the accounts of UnitedHealth Group and its subsidiaries.

Use of Estimates

These Consolidated Financial Statements include certain amounts based on the Company's best estimates and judgments. The Company's most significant estimates relate to estimates and judgments for medical costs payable and revenues, valuation and impairment analysis of goodwill and other intangible assets and estimates of other current liabilities and other current receivables. Certain of these estimates require the application of complex assumptions and judgments, often because they involve matters that are inherently uncertain and will likely change in subsequent periods. The impact of any change in estimates is included in earnings in the period in which the estimate is adjusted.

Revenues

Premiums

Premium revenues are primarily derived from risk-based health insurance arrangements in which the premium is typically at a fixed rate per individual served for a one-year period, and the Company assumes the economic risk of funding its customers' health care and related administrative costs.

Premium revenues are recognized in the period in which eligible individuals are entitled to receive health care benefits. Health care premium payments received from the Company's customers in advance of the service period are recorded as unearned revenues. Fully insured commercial products of U.S. health plans, Medicare Advantage and Medicare Prescription Drug Benefit (Medicare Part D) plans with medical loss ratios as calculated under the definitions in the Patient Protection and Affordable Care Act (ACA) and related federal and state regulations and implementing regulation, that fall below certain targets are required to rebate ratable portions of their premiums annually. Medicare Advantage premium revenue includes the impact of the Centers for Medicare & Medicaid Services (CMS) quality bonuses based on plans' Star ratings.

Premium revenues are recognized based on the estimated premiums earned, net of projected rebates, because the Company is able to reasonably estimate the ultimate premiums of these contracts. The Company also records premium revenues from capitation arrangements at its OptumHealth businesses.

The Company's Medicare Advantage and Medicare Part D premium revenues are subject to periodic adjustment under CMS' risk adjustment payment methodology. CMS deploys a risk adjustment model that apportions

premiums paid to all health plans according to health severity and certain demographic factors. The CMS risk adjustment model provides higher per member payments for enrollees diagnosed with certain conditions and lower payments for enrollees who are healthier. Under this risk adjustment methodology, CMS calculates the risk adjusted premium payment using diagnosis and encounter data from hospital inpatient, hospital outpatient and physician treatment settings. The Company and health care providers collect, capture and submit the necessary and available data to CMS within prescribed deadlines. The Company estimates risk adjustment premium revenues based upon the data submitted and expected to be submitted to CMS. Risk adjustment data for the Company's plans are subject to review by the government, including audit by regulators. See Note 12 for additional information regarding these audits.

Products and Services

For the Company's OptumRx pharmacy care services business, the majority of revenues are derived from products sold through a contracted network of retail pharmacies or home delivery, specialty and community health pharmacies. Product revenues include ingredient costs (net of rebates), a negotiated dispensing fee and customer co-payments for drugs dispensed through the Company's home delivery, specialty and community pharmacies. In retail pharmacy transactions, revenues recognized exclude the member's applicable co-payment. Pharmacy products are billed to customers based on the number of transactions occurring during the billing period. Product revenues are recognized when the prescriptions are dispensed. The Company has entered into contracts in which it is primarily obligated to pay its network pharmacy providers for benefits provided to their customers regardless of whether the Company is paid. The Company is also involved in establishing the prices charged by retail pharmacies, determining which drugs will be included in formulary listings and selecting which retail pharmacies will be included in the network offered to plan sponsors' members and accordingly, are reported on a gross basis.

Services revenue consists of fees derived from services performed for customers that self-insure the health care costs of their employees and employees' dependents. Under service fee contracts, the Company receives monthly, a fixed fee per employee, which is recognized as revenue as the Company performs, or makes available, the applicable services to the customer. The customers retain the risk of financing health care costs for their employees and employees' dependents, and the Company administers the payment of customer funds to physicians and other health care professionals from customer-funded bank accounts. As the Company has neither the obligation for funding the health care costs, nor the primary responsibility for providing the medical care, the Company does not recognize premium revenue and medical costs for these contracts in its Consolidated Financial Statements. For these fee-based customer arrangements, the Company provides coordination and facilitation of medical services; transaction processing; customer, consumer and care professional services; and access to contracted networks of physicians, hospitals and other health care professionals. These services are performed throughout the contract period.

Revenues are also comprised of a number of services and products sold through Optum. OptumHealth's service revenues include net patient service revenues that are recorded based upon established billing rates, less allowances for contractual adjustments, and are recognized as services are provided. For its financial services offerings, OptumHealth charges fees and earns investment income on managed funds. OptumInsight provides software and information products, advisory consulting arrangements and managed services outsourcing contracts, which may be delivered over several years. OptumInsight revenues are generally recognized over time and measured each period based on the progress to date as services are performed or made available to customers.

As of December 31, 2019 and 2018, accounts receivables related to products and services were \$4.3 billion and \$3.9 billion, respectively. In 2019 and 2018, the Company had no material bad-debt expense and there were no material contract assets, contract liabilities or deferred contract costs recorded on the Consolidated Balance Sheets as of December 31, 2019 or 2018.

For the years ended December 31, 2019 and 2018, revenue recognized from performance obligations related to prior periods (for example, due to changes in transaction price) was not material.

Revenue expected to be recognized in any future year related to remaining performance obligations, excluding revenue pertaining to contracts that have an original expected duration of one year or less, contracts where revenue is recognized as invoiced and contracts with variable consideration related to undelivered performance obligations, is not material.

See Note 14 for disaggregation of revenue by segment and type.

Medical Costs and Medical Costs Payable

The Company's estimate of medical costs payable represents management's best estimate of its liability for unpaid medical costs as of December 31, 2019.

Each period, the Company re-examines previously established medical costs payable estimates based on actual claim submissions and other changes in facts and circumstances. As more complete claim information becomes available, the Company adjusts the amount of the estimates and includes the changes in estimates in medical costs in the period in which the change is identified. Approximately 90% of claims related to medical care services are known and settled within 90 days from the date of service and substantially all within twelve months.

Medical costs and medical costs payable include estimates of the Company's obligations for medical care services that have been rendered on behalf of insured consumers, but for which claims have either not yet been received, processed, or paid. The Company develops estimates for medical care services incurred but not reported (IBNR), which includes estimates for claims that have not been received or fully processed, using an actuarial process that is consistently applied, centrally controlled and automated. The actuarial models consider factors such as time from date of service to claim processing, seasonal variances in medical care consumption, health care professional contract rate changes, medical care utilization and other medical cost trends, membership volume and demographics, the introduction of new technologies, benefit plan changes, and business mix changes related to products, customers and geography.

In developing its medical costs payable estimates, the Company applies different estimation methods depending on which incurred claims are being estimated. For the most recent two months, the Company estimates claim costs incurred by applying observed medical cost trend factors to the average per member per month (PMPM) medical costs incurred in prior months for which more complete claim data are available, supplemented by a review of near-term completion factors (actuarial estimates, based upon historical experience and analysis of current trends, of the percentage of incurred claims during a given period that have been adjudicated by the Company at the date of estimation). For months prior to the most recent two months, the Company applies the completion factors to actual claims adjudicated-to-date to estimate the expected amount of ultimate incurred claims for those months.

Cost of Products Sold

The Company's cost of products sold includes the cost of pharmaceuticals dispensed to unaffiliated customers either directly at its home delivery and specialty pharmacy locations, or indirectly through its nationwide network of participating pharmacies. Rebates attributable to non-affiliated clients are accrued as rebates receivable and a reduction of cost of products sold, with a corresponding payable for the amounts of the rebates to be remitted to those non-affiliated clients in accordance with their contracts and recorded in the Consolidated Statements of Operations as a reduction of product revenue. Cost of products sold also includes the cost of personnel to support the Company's transaction processing services, system sales, maintenance and professional services.

Cash, Cash Equivalents and Investments

Cash and cash equivalents are highly liquid investments that have an original maturity of three months or less. The fair value of cash and cash equivalents approximates their carrying value because of the short maturity of the instruments.

Investments with maturities of less than one year are classified as short-term. Because of regulatory requirements, certain investments are included in long-term investments regardless of their maturity date. The Company classifies these investments as held-to-maturity and reports them at amortized cost. Substantially all other investments are classified as available-for-sale and reported at fair value based on quoted market prices, where available. Equity investments, with certain exceptions, are measured at fair value with changes in fair value recognized in net earnings.

The Company excludes unrealized gains and losses on investments in available-for-sale debt securities from net earnings and reports them as comprehensive income and, net of income tax effects, as a separate component of equity. To calculate realized gains and losses on the sale of debt securities, the Company specifically identifies the cost of each investment sold.

The Company evaluates an investment for impairment by considering the length of time and extent to which market value has been less than cost or amortized cost, the financial condition and near-term prospects of the issuer as well as specific events or circumstances that may influence the operations of the issuer and the Company's intent to sell the security or the likelihood that it will be required to sell the security before recovery of the entire amortized cost.

New information and the passage of time can change these judgments. The Company manages its investment portfolio to limit its exposure to any one issuer or market sector, and largely limits its investments to investment grade quality. Securities downgraded below policy minimums after purchase will be disposed of in accordance with the Company's investment policy.

Assets Under Management

The Company provides health insurance products and services to members of AARP under a Supplemental Health Insurance Program (the AARP Program) and to AARP members and non-members under separate Medicare Advantage and Medicare Part D arrangements. The products and services under the AARP Program include supplemental Medicare benefits, hospital indemnity insurance, including insurance for individuals between 50 to 64 years of age, and other related products.

Pursuant to the Company's agreement with AARP, program assets are managed separately from the Company's general investment portfolio and are used to pay costs associated with the AARP Program. These assets are invested at the Company's discretion, within investment guidelines approved by AARP. The Company does not guarantee any rates of return on these investments and, upon any transfer of the AARP Program contract to another entity, the Company would transfer cash equal in amount to the fair value of these investments at the date of transfer to that entity. Because the purpose of these assets is to fund the medical costs payable, the rate stabilization fund (RSF) liabilities and other related liabilities associated with this AARP contract, assets under management are classified as current assets, consistent with the classification of these liabilities.

The effects of changes in other balance sheet amounts associated with the AARP Program also accrue to the overall benefit of the AARP policyholders through the RSF balance. Accordingly, the Company excludes the effect of such changes in its Consolidated Statements of Cash Flows.

Other Current Receivables

Other current receivables include amounts due from pharmaceutical manufacturers for rebates and Medicare Part D drug discounts, accrued interest and other miscellaneous amounts due to the Company.

The Company's pharmacy care services businesses contract with pharmaceutical manufacturers, some of which provide rebates based on use of the manufacturers' products by its affiliated and non-affiliated clients. The Company accrues rebates as they are earned by its clients on a monthly basis based on the terms of the applicable contracts, historical data and current estimates. The pharmacy care services businesses bill these rebates to the manufacturers on a monthly or quarterly basis depending on the contractual terms and record rebates attributable to affiliated clients as a reduction to medical costs. The Company generally receives rebates two to five months after billing. As of December 31, 2019 and 2018, total pharmaceutical manufacturer rebates receivable included in other receivables in the Consolidated Balance Sheets amounted to \$4.7 billion and \$4.2 billion, respectively.

As of December 31, 2019 and 2018, the Company's Medicare Part D receivables amounted to \$2.3 billion and \$0.8 billion, respectively.

Property, Equipment and Capitalized Software

Property, equipment and capitalized software are stated at cost, net of accumulated depreciation and amortization. Capitalized software consists of certain costs incurred in the development of internal-use software, including external direct costs of materials and services and applicable payroll costs of employees devoted to specific software development.

The Company calculates depreciation and amortization using the straight-line method over the estimated useful lives of the assets. The useful lives for property, equipment and capitalized software are:

Furniture, fixtures and equipment	3 to 10 years
Buildings	35 to 40 years
Capitalized software	3 to 5 years

Leasehold improvements are depreciated over the shorter of the remaining lease term or their estimated useful economic life.

Operating Leases

The Company leases facilities and equipment under long-term operating leases that are non-cancelable and expire on various dates. At the lease commencement date, lease right-of-use (ROU) assets and lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term, which includes all fixed obligations arising from the lease contract. If an interest rate is not implicit in a lease, the Company utilizes its incremental borrowing rate for a period that closely matches the lease term.

The Company's ROU assets are included in other assets, and lease liabilities are included in other current liabilities and other liabilities in the Company's Consolidated Balance Sheet.

Goodwill

To determine whether goodwill is impaired, annually or more frequently if needed, the Company performs a multi-step impairment test. The Company may first assess qualitative factors to determine if it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value. The Company may also elect to skip the qualitative testing and proceed directly to the quantitative testing. When performing quantitative testing, the Company first estimates the fair values of its reporting units using discounted cash flows. To determine fair values, the Company must make assumptions about a wide variety of internal and external factors. Significant assumptions used in the impairment analysis include financial projections of free cash flow (including significant assumptions about operations, capital requirements and income taxes), long-term growth rates for determining terminal value and discount rates. Comparative market multiples are used to corroborate the results of the discounted cash flow test. If the fair value is less than the carrying value of the reporting unit, then the implied

value of goodwill would be calculated and compared to the carrying amount of goodwill to determine whether goodwill is impaired.

There was no impairment of goodwill during the year ended December 31, 2019.

Intangible Assets

The Company's intangible assets are subject to impairment tests when events or circumstances indicate that an intangible asset (or asset group) may be impaired. The Company's indefinite-lived intangible assets are also tested for impairment annually. There was no impairment of intangible assets during the year ended December 31, 2019.

Other Current Liabilities

Other current liabilities include health savings account deposits (\$8.3 billion and \$7.5 billion as of December 31, 2019 and 2018, respectively), deposits under the Medicare Part D program (\$0.5 billion as of December 31, 2019 and 2018), the RSF associated with the AARP Program, accruals for premium rebate payments under the ACA, the current portion of future policy benefits and customer balances.

Policy Acquisition Costs

The Company's short duration health insurance contracts typically have a one-year term and may be canceled by the customer with at least 30 days' notice. Costs related to the acquisition and renewal of short duration customer contracts are primarily charged to expense as incurred.

Redeemable Noncontrolling Interests

Redeemable noncontrolling interests in the Company's subsidiaries whose redemption is outside the control of the Company are classified as temporary equity. The following table provides details of the Company's redeemable noncontrolling interests' activity for the years ended December 31, 2019 and 2018:

(in millions)	2019	2018
Redeemable noncontrolling interests, beginning of period	\$1,908	\$2,189
Net earnings	115	123
Acquisitions	90	102
Redemptions	(618)	(90)
Distributions	(69)	(53)
Fair value and other adjustments	300	(363)
Redeemable noncontrolling interests, end of period	\$1,726	\$1,908

Share-Based Compensation

The Company recognizes compensation expense for share-based awards, including stock options and restricted stock and restricted stock units (collectively, restricted shares), on a straight-line basis over the related service period (generally the vesting period) of the award, or to an employee's eligible retirement date under the award agreement, if earlier. Restricted shares vest ratably, primarily over two to four years and compensation expense related to restricted shares is based on the share price on the date of grant. Stock options vest ratably primarily over four years and may be exercised up to 10 years from the date of grant. Compensation expense related to stock options is based on the fair value at the date of grant, which is estimated on the date of grant using a binomial option-pricing model. Under the Company's Employee Stock Purchase Plan (ESPP), eligible employees are allowed to purchase the Company's stock at a discounted price, which is 85% of the lower market

price of the Company's common stock at the beginning or at the end of the six-month purchase period. Share-based compensation expense for all programs is recognized in operating costs in the Consolidated Statements of Operations.

Net Earnings Per Common Share

The Company computes basic earnings per common share attributable to UnitedHealth Group common shareholders by dividing net earnings attributable to UnitedHealth Group common shareholders by the weighted-average number of common shares outstanding during the period. The Company determines diluted net earnings per common share attributable to UnitedHealth Group common shareholders using the weighted-average number of common shares outstanding during the period, adjusted for potentially dilutive shares associated with stock options, restricted shares and the ESPP (collectively, common stock equivalents), using the treasury stock method. The treasury stock method assumes a hypothetical issuance of shares to settle the share-based awards, with the assumed proceeds used to purchase common stock at the average market price for the period. Assumed proceeds include the amount the employee must pay upon exercise and the average unrecognized compensation cost. The difference between the number of shares assumed issued and number of shares assumed purchased represents the dilutive shares.

Health Insurance Industry Tax

The ACA includes an annual, nondeductible insurance industry tax (Health Insurance Industry Tax) to be levied proportionally across the insurance industry for risk-based health insurance products. A one year moratorium on the collection of the Health Insurance Industry Tax occurred in 2019. The Health Insurance Industry Tax will be levied in 2020, however, it was permanently repealed by Congress for subsequent years.

The Company estimates its liability for the Health Insurance Industry Tax based on a ratio of the Company's applicable net premiums written compared to the U.S. health insurance industry total applicable net premiums, both for the previous calendar year. The Company records in full the estimated liability for the Health Insurance Industry Tax at the beginning of the calendar year with a corresponding deferred cost that is amortized to operating costs on the Consolidated Statements of Operations using a straight-line method over the calendar year. The liability is recorded in accounts payable and accrued liabilities and the corresponding deferred cost is recorded in prepaid expenses and other current assets on the Consolidated Balance Sheets.

Recently Issued Accounting Standards

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standard Update (ASU) No. 2016-13, "Financial Instruments—Credit Losses (Topic 326)" (ASU 2016-13). ASU 2016-13 requires the use of the current expected credit loss impairment model to develop an estimate of expected credit losses for certain financial assets. ASU 2016-13 also requires expected credit losses on available-for-sale debt securities to be recognized through an allowance for credit losses and revises certain disclosure requirements. The Company adopted ASU 2016-13 using a cumulative effect upon adoption approach on January 1, 2020. The adoption resulted in no material impact to the Company's balance sheet, results of operations, equity or cash flows.

Recently Adopted Accounting Standards

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)" as modified by ASUs 2018-01, 2018-10, 2018-11, 2018-20 and 2019-01 (collectively, ASU 2016-02). Under ASU 2016-02, an entity is required to recognize assets and liabilities for the rights and obligations created by leases on the entity's balance sheet for both finance and operating leases. The Company adopted ASU 2016-02 using a cumulative-effect upon adoption approach as of January 1, 2019. Upon adoption, the Company recognized \$3.3 billion of ROU assets and lease liabilities for operating leases on its Consolidated Balance Sheet, of which, \$668 million were classified as current liabilities. The adoption of ASU 2016-02 was immaterial to the Company's consolidated results of operations, equity and cash flows. The Company has included the disclosures required by ASU 2016-02 above and in Note 12.

The Company has determined that there have been no other recently adopted or issued accounting standards that had, or will have, a material impact on its Consolidated Financial Statements.

3. Investments

A summary of debt securities by major security type is as follows:

(in millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2019				
Debt securities — available-for-sale:				
U.S. government and agency obligations		\$ 55	\$ (4)	\$ 3,553
State and municipal obligations	5,680	251	(5)	5,926
Corporate obligations	17,910	343	(11)	18,242
U.S. agency mortgage-backed securities	6,425	109	(6)	6,528
Non-U.S. agency mortgage-backed securities	1,811	37	(3)	1,845
Total debt securities — available-for-sale	35,328	795	(29)	36,094
Debt securities — held-to-maturity:				
U.S. government and agency obligations	402	2	_	404
State and municipal obligations	32	2	_	34
Corporate obligations	538		(1)	537
Total debt securities — held-to-maturity	972	4	(1)	975
Total debt securities	\$ 36,300	\$ 799	\$ (30)	\$ 37,069
December 31, 2018				
Debt securities — available-for-sale:				
U.S. government and agency obligations	\$ 3,434	\$ 13	\$ (42)	\$ 3,405
State and municipal obligations	7,117	61	(57)	7,121
Corporate obligations	15,366	14	(218)	15,162
U.S. agency mortgage-backed securities	4,947	11	(106)	4,852
Non-U.S. agency mortgage-backed securities	1,376	2	(20)	1,358
Total debt securities — available-for-sale	32,240	101	(443)	31,898
Debt securities — held-to-maturity:				
U.S. government and agency obligations	255	1	(2)	254
State and municipal obligations	11	_	_	11
Corporate obligations	355			355
Total debt securities — held-to-maturity	621	1	(2)	620
Total debt securities	\$ 32,861	\$ 102	\$ (445)	\$ 32,518

Nearly all of the Company's investments in mortgage-backed securities were rated AAA as of December 31, 2019.

The Company held \$2.0 billion of equity securities as of December 31, 2019 and December 31, 2018. The Company's investments in equity securities primarily consist of employee savings plan related investments, shares of Brazilian real denominated fixed-income funds and dividend paying stocks with readily determinable fair values. Additionally, the Company's investments included \$1.4 billion and \$1.5 billion of equity method investments in operating businesses in the health care sector, as of December 31, 2019 and 2018, respectively.

The amortized cost and fair value of debt securities as of December 31, 2019, by contractual maturity, were as follows:

	Available	e-for-Sale	H	aturity	
(in millions)	Amortized Cost	ed Fair Value		ortized Cost	Fair Value
Due in one year or less	\$ 3,382	\$ 3,388	\$	314	\$314
Due after one year through five years	11,966	12,159		391	392
Due after five years through ten years	8,307	8,643		144	144
Due after ten years	3,437	3,531		123	125
U.S. agency mortgage-backed securities	6,425	6,528		_	_
Non-U.S. agency mortgage-backed securities	1,811	1,845			
Total debt securities	\$ 35,328	\$36,094	\$	972	\$ 975

The fair value of available-for-sale debt securities with gross unrealized losses by major security type and length of time that individual securities have been in a continuous unrealized loss position were as follows:

	Less Than 12 Months 12 Months or Greater				Total				
(in millions)	Fair Value					Gross realized Losses	Fair Value	Gross Unrealized Losses	
December 31, 2019									
U.S. government and agency obligations	\$ 616	\$	(4)	\$ —	\$	_	\$ 616	\$	(4)
State and municipal obligations	440		(5)	_		_	440		(5)
Corporate obligations	1,903		(7)	740		(4)	2,643		(11)
U.S. agency mortgage-backed securities	657		(3)	333		(3)	990		(6)
Non-U.S. agency mortgage-backed									
securities	406		(3)				406		(3)
Total debt securities — available-for-sale	\$ 4,022	\$	(22)	\$ 1,073	\$	(7)	\$ 5,095	\$	(29)
December 31, 2018									
U.S. government and agency obligations	\$ 998	\$	(7)	\$ 1,425	\$	(35)	\$ 2,423	\$	(42)
State and municipal obligations	1,334		(11)	2,491		(46)	3,825		(57)
Corporate obligations	8,105		(109)	4,239		(109)	12,344		(218)
U.S. agency mortgage-backed securities	1,296		(22)	2,388		(84)	3,684		(106)
Non-U.S. agency mortgage-backed									
securities	622		(7)	459		(13)	1,081		(20)
Total debt securities — available-for-sale	\$12,355	\$	(156)	\$11,002	\$	(287)	\$23,357	\$	(443)

The Company's unrealized losses from all securities as of December 31, 2019 were generated from approximately 3,000 positions out of a total of 31,000 positions. The Company believes that it will collect the principal and interest due on its debt securities that have an amortized cost in excess of fair value. The unrealized losses were primarily caused by interest rate increases and not by unfavorable changes in the credit quality associated with these securities. At each reporting period, the Company evaluates securities for impairment when the fair value of the investment is less than its amortized cost. The Company evaluated the underlying credit quality and credit ratings of the issuers, noting no significant deterioration since purchase. As of December 31, 2019, the Company did not have the intent to sell any of the securities in an unrealized loss position. Therefore, the Company believes these losses to be temporary.

4. Fair Value

Certain assets and liabilities are measured at fair value in the Consolidated Financial Statements or have fair values disclosed in the Notes to the Consolidated Financial Statements. These assets and liabilities are classified into one of three levels of a hierarchy defined by GAAP. In instances in which the inputs used to measure fair value fall into different levels of the fair value hierarchy, the fair value measurement is categorized in its entirety based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular item to the fair value measurement in its entirety requires judgment, including the consideration of inputs specific to the asset or liability.

The fair value hierarchy is summarized as follows:

Level 1—Quoted prices (unadjusted) for identical assets/liabilities in active markets.

Level 2—Other observable inputs, either directly or indirectly, including:

- Quoted prices for similar assets/liabilities in active markets;
- Quoted prices for identical or similar assets/liabilities in inactive markets (e.g., few transactions, limited information, noncurrent prices, high variability over time);
- Inputs other than quoted prices that are observable for the asset/liability (e.g., interest rates, yield curves, implied volatilities, credit spreads); and
- Inputs that are corroborated by other observable market data.

Level 3—Unobservable inputs that cannot be corroborated by observable market data.

There were no transfers in or out of Level 3 financial assets or liabilities during the years ended December 31, 2019 or 2018.

Nonfinancial assets and liabilities or financial assets and liabilities that are measured at fair value on a nonrecurring basis are subject to fair value adjustments only in certain circumstances, such as when the Company records an impairment. There were no significant fair value adjustments for these assets and liabilities recorded during the years ended December 31, 2019 or 2018.

The following methods and assumptions were used to estimate the fair value and determine the fair value hierarchy classification of each class of financial instrument included in the tables below:

Cash and Cash Equivalents. The carrying value of cash and cash equivalents approximates fair value as maturities are less than three months. Fair values of cash equivalent instruments that do not trade on a regular basis in active markets are classified as Level 2.

Debt and Equity Securities. Fair values of debt and equity securities are based on quoted market prices, where available. The Company obtains one price for each security primarily from a third-party pricing service (pricing service), which generally uses quoted or other observable inputs for the determination of fair value. The pricing service normally derives the security prices through recently reported trades for identical or similar securities, and, if necessary, makes adjustments through the reporting date based upon available observable market information. For securities not actively traded, the pricing service may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. Inputs that are often used in the valuation methodologies include, but are not limited to, benchmark yields, credit spreads, default rates, prepayment speeds and nonbinding broker quotes. As the Company is responsible for the determination of fair value, it performs quarterly analyses on the prices received from the pricing service to determine whether the prices are reasonable estimates of fair value. Specifically, the Company compares the prices received from the pricing service to prices reported by a secondary pricing source,

such as its custodian, its investment consultant and third-party investment advisors. Additionally, the Company compares changes in the reported market values and returns to relevant market indices to test the reasonableness of the reported prices. The Company's internal price verification procedures and reviews of fair value methodology documentation provided by independent pricing services have not historically resulted in adjustment to the prices obtained from the pricing service.

Fair values of debt securities that do not trade on a regular basis in active markets but are priced using other observable inputs are classified as Level 2.

Fair value estimates for Level 1 and Level 2 equity securities are based on quoted market prices for actively traded equity securities and/or other market data for the same or comparable instruments and transactions in establishing the prices.

The fair values of Level 3 investments in corporate bonds, which are not a significant portion of our investments, are estimated using valuation techniques that rely heavily on management assumptions and qualitative observations.

Throughout the procedures discussed above in relation to the Company's processes for validating third-party pricing information, the Company validates the understanding of assumptions and inputs used in security pricing and determines the proper classification in the hierarchy based on that understanding.

Assets Under Management. Assets under management consists of debt securities and other investments held to fund costs associated with the AARP Program and are priced and classified using the same methodologies as the Company's investments in debt and equity securities.

Long-Term Debt. The fair values of the Company's long-term debt are estimated and classified using the same methodologies as the Company's investments in debt securities.

The following table presents a summary of fair value measurements by level and carrying values for items measured at fair value on a recurring basis in the Consolidated Balance Sheets:

(in millions)		Quoted Prices in Active Markets (Level 1)		Other Observable Inputs (Level 2)		observable Inputs (Level 3)	Total Fair and Carrying Value	
December 31, 2019								
Cash and cash equivalents	\$	10,837	\$	148	\$	_	\$10,985	
Debt securities — available-for-sale:								
U.S. government and agency obligations		3,369		184		_	3,553	
State and municipal obligations		_		5,926		_	5,926	
Corporate obligations		70		17,923		249	18,242	
U.S. agency mortgage-backed securities		_		6,528		_	6,528	
Non-U.S. agency mortgage-backed securities				1,845			1,845	
Total debt securities — available-for-sale		3,439		32,406		249	36,094	
Equity securities		1,734		22		_	1,756	
Assets under management		1,123		1,918		35	3,076	
Total assets at fair value	\$	17,133	\$	34,494	\$	284	\$51,911	
Percentage of total assets at fair value		33%	6	66%	6	1%	100%	
December 31, 2018								
Cash and cash equivalents	\$	10,757	\$	109	\$	_	\$10,866	
U.S. government and agency obligations		3,060		345		_	3,405	
State and municipal obligations		_		7,121		_	7,121	
Corporate obligations		39		14,950		173	15,162	
U.S. agency mortgage-backed securities		_		4,852		_	4,852	
Non-U.S. agency mortgage-backed securities				1,358			1,358	
Total debt securities — available-for-sale		3,099		28,626		173	31,898	
Equity securities		1,832		13		_	1,845	
Assets under management		1,086		1,938		8	3,032	
Total assets at fair value	\$	16,774	\$	30,686	\$	181	\$47,641	
Percentage of total assets at fair value		35%	6	65%	6	%	100%	

The following table presents a summary of fair value measurements by level and carrying values for certain financial instruments not measured at fair value on a recurring basis in the Consolidated Balance Sheets:

(in millions)	Quoted Prices in Active Markets (Level 1)		in Active Markets		in Active Markets		Ol	Other oservable Inputs Level 2)	observable Inputs (Level 3)		Total Fair Value	_	Total Carrying Value
December 31, 2019													
Debt securities — held-to-maturity	\$	541	\$	181	\$ 253	\$	975	\$	972				
Long-term debt and other financing													
obligations	\$	_	\$	45,078	\$ _	\$.	45,078	\$	40,278				
December 31, 2018													
Debt securities — held-to-maturity	\$	260	\$	65	\$ 295	\$	620	\$	621				
Long-term debt and other financing													
obligations	\$		\$	37,944	\$ _	\$	37,944	\$	36,554				

The carrying amounts reported on the Consolidated Balance Sheets for other current financial assets and liabilities approximate fair value because of their short-term nature. These assets and liabilities are not listed in the table above.

5. Property, Equipment and Capitalized Software

A summary of property, equipment and capitalized software is as follows:

(in millions)	December 31, 2019		Dec	December 31, 2018	
Land and improvements	\$	589	\$	566	
Buildings and improvements		4,705		4,470	
Computer equipment		2,015		1,984	
Furniture and fixtures		1,752		1,525	
Less accumulated depreciation		(3,328)		(2,787)	
Property and equipment, net		5,733		5,758	
Capitalized software		4,638		4,054	
Less accumulated amortization		(1,667)		(1,354)	
Capitalized software, net		2,971		2,700	
Total property, equipment and capitalized software, net	\$	8,704	\$	8,458	

Depreciation expense for property and equipment for the years ended December 31, 2019, 2018 and 2017 was \$995 million, \$924 million and \$799 million, respectively. Amortization expense for capitalized software for the years ended December 31, 2019, 2018 and 2017 was \$721 million, \$606 million and \$550 million, respectively.

6. Goodwill and Other Intangible Assets

Changes in the carrying amount of goodwill, by reportable segment, were as follows:

(in millions)	UnitedHealthcare		OptumHealth		OptumInsight		OptmRx	Consolidated	
Balance at January 1, 2018	\$	24,484	\$	11,488	\$	5,674	\$ 12,910	\$ 54	,556
Acquisitions		2,723		471		106	1,881	5	,181
Foreign currency effects and									
adjustments, net		(807)		(12)		(8)			(827)
Balance at December 31, 2018		26,400		11,947		5,772	14,791	58	,910
Acquisitions		1,022		3,395		2,521	6	6	,944
Foreign currency effects and									
adjustments, net		(194)				(1)			(195)
Balance at December 31, 2019	\$	27,228	\$	15,342	\$	8,292	\$ 14,797	\$ 65	,659

The gross carrying value, accumulated amortization and net carrying value of other intangible assets were as follows:

	I)ecen	nber 31, 201	19	December 31, 2018				
(in millions)	Gross Carrying Accumulated Value Amortization		Net Carrying Value			cumulated nortization	Net Carying Value		
Customer-related	\$12,968	\$	(4,319)	\$ 8,649	\$11,622	\$	(3,908)	\$7,714	
Trademarks and technology	1,186		(525)	661	1,122		(512)	610	
Trademarks and other indefinite-lived	726		_	726	745		_	745	
Other	541		(228)	313	428		(172)	256	
Total	\$15,421	\$	(5,072)	\$10,349	\$13,917	\$	(4,592)	\$9,325	

The acquisition date fair values and weighted-average useful lives assigned to finite-lived intangible assets acquired in business combinations consisted of the following by year of acquisition:

	2	019	2018		
(in millions, except years)	Fair Value	Weighted- Average Useful Life	Fair Value	Weighted- Average Useful Life	
Customer-related	\$1,750	13 years	\$1,355	17 years	
Trademarks and technology	163	5 years	122	4 years	
Other	119	11 years	97	9 years	
Total acquired finite-lived intangible assets	\$2,032	13 years	\$1,574	16 years	

Estimated full year amortization expense relating to intangible assets for each of the next five years ending December 31 is as follows:

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(in millions)	
2020	 \$1,017
2021	 933
2022	 826
2023	 763
2024	 718

Amortization expense relating to intangible assets for the years ended December 31, 2019, 2018 and 2017 was \$1.0 billion, \$898 million and \$896 million, respectively.

7. Medical Costs Payable

The following table shows the components of the change in medical costs payable for the years ended December 31:

(in millions)	2019	2018	2017
Medical costs payable, beginning of period	\$ 19,891	\$ 17,871	\$ 16,391
Acquisitions	679	339	83
Reported medical costs:			
Current year	157,020	145,723	130,726
Prior years	(580)	(320)	(690)
Total reported medical costs	156,440	145,403	130,036
Medical payments:			
Payments for current year	(137,155)	(127,155)	(113,811)
Payments for prior years	(18,165)	(16,567)	(14,828)
Total medical payments	(155,320)	(143,722)	(128,639)
Medical costs payable, end of period	\$ 21,690	\$ 19,891	\$ 17,871

For the years ended December 31, 2019 and 2017 medical cost reserve development was primarily driven by lower than expected health system utilization levels. For the year ended December 31, 2018, no individual factors significantly impacted medical cost reserve development.

Medical costs payable included IBNR of \$13.8 billion and \$13.2 billion at December 31, 2019 and 2018, respectively. Substantially all of the IBNR balance as of December 31, 2019 relates to the current year. The following is information about incurred and paid medical cost development as of December 31, 2019:

(in millions)	Net Incurred Medical Costs For the Years ended December 31,					
Year		2018		2019		
2018	\$	145,723	\$	145,293 157,020		
Total			\$	302,313		
(in millions)		et Cumulative N or the Years en				
Year		2018		2019		
2018 2019	\$	(127,155)	\$	(144,143) (137,155)		
Total Net remaining outstanding liabilities prior to 2018				(281,298) 675		
Total medical costs payable			\$	21,690		

8. Commercial Paper and Long-Term Debt

Commercial paper and senior unsecured long-term debt consisted of the following:

	December 31, 2019			Dec	December 31, 2018		
(in millions, except percentages)	Par Value	Carrying Value	Fair Value	Par Value	Carrying Value	Fair Value	
Commercial paper	\$ 400	\$ 400	\$ 400	\$ —	\$ —	\$ —	
1.700% notes due February 2019	_			750	750	749	
1.625% notes due March 2019	_	_		500	500	499	
2.300% notes due December 2019	_			500	494	497	
2.700% notes due July 2020	1,500	1,499	1,506	1,500	1,498	1,494	
Floating rate notes due October 2020	300	300	300	300	299	298	
3.875% notes due October 2020	450	450	455	450	443	456	
1.950% notes due October 2020	900	899	900	900	897	884	
4.700% notes due February 2021	400	403	410	400	398	412	
2.125% notes due March 2021	750	749	753	750	747	734	
Floating rate notes due June 2021	350	349	350	350	349	347	
3.150% notes due June 2021	400	399	407	400	399	400	
3.375% notes due November 2021	500	501	512	500	489	503	
2.875% notes due December 2021	750	753	765	750	735	748	
2.875% notes due March 2022	1,100	1,087	1,121	1,100	1,051	1,091	
3.350% notes due July 2022	1,000	998	1,036	1,000	997	1,005	
2.375% notes due October 2022	900	896	911	900	894	872	
0.000% notes due November 2022	15	13	14	15	12	13	
2.750% notes due February 2023	625	624	638	625	602	611	
2.875% notes due March 2023	750	770	770	750	750	739	
3.500% notes due June 2023	750	747	786	750	746	756	
3.500% notes due February 2024	750	746	792	750	745	755	
2.375% notes due August 2024	750	747	760	_	_	_	
3.750% notes due July 2025	2,000	1,990	2,161	2,000	1,989	2,025	
3.700% notes due December 2025	300	298	325	300	298	303	
3.100% notes due March 2026	1,000	996	1,048	1,000	995	965	
3.450% notes due January 2027	750	746	804	750	746	742	
3.375% notes due April 2027	625	620	667	625	619	611	
2.950% notes due October 2027	950	939	988	950	938	898	
3.850% notes due June 2028	1,150	1,142	1,269	1,150	1,142	1,163	
3.875% notes due December 2028	850	843	941	850	842	861	
2.875% notes due August 2029	1,000	993	1,029	_	_	_	
4.625% notes due July 2035	1,000	992	1,215	1,000	992	1,060	
5.800% notes due March 2036	850	838	1,129	850	838	1,003	
6.500% notes due June 2037	500	492	712	500	492	638	
6.625% notes due November 2037	650	641	940	650	641	841	
6.875% notes due February 2038	1,100	1,076	1,631	1,100	1,076	1,437	
3.500% notes due August 2039	1,250	1,241	1,313				
5.700% notes due October 2040	300	296	396	300	296	355	
5.950% notes due February 2041	350	345	475	350	345	426	
4.625% notes due November 2041	600	589	716	600	588	627	
4.375% notes due March 2042	502	484	580	502	484	503	
3.950% notes due October 2042	625	607	688	625	607	596	
4.250% notes due March 2043	750	735	856	750	734	744	
4.750% notes due July 2045	2,000	1,973	2,463	2,000	1,973	2,116	
4.200% notes due January 2047	750	738	861	750	738	745	
4.250% notes due April 2047	725	717	839	725	717	719	
3.750% notes due October 2047	950	934	1,023	950	933	869	
4.250% notes due June 2048	1,350	1,330	1,569	1,350	1,329	1,349	
4.450% notes due December 2048	1,100	1,086	1,316	1,100	1,087	1,132	
3.700% notes due August 2049	1,250	1,235	1,344	_	_	_	
3.875% notes due August 2059	1,250	1,228	1,350				
Total commercial paper and long-term debt	\$39,817	\$39,474	\$44,234	\$35,667	\$35,234	\$36,591	

The Company's long-term debt obligations also included \$1.2 billion and \$1.3 billion of other financing obligations, of which \$322 million and \$229 million were current as of December 31, 2019 and 2018, respectively.

Maturities of commercial paper and long-term debt for the years ending December 31 are as follows:

(in millions)	
2020	\$ 3,870
2021	
2022	3,190
2023	
2024	
Thereafter	26,660

Commercial Paper and Revolving Bank Credit Facilities

Commercial paper consists of short-duration, senior unsecured debt privately placed on a discount basis through broker-dealers.

The Company has \$4.4 billion five-year, \$4.4 billion three-year and \$3.8 billion 364-day revolving bank credit facilities with 25 banks, which mature in December 2024, December 2022 and December 2020, respectively. These facilities provide liquidity support for the Company's commercial paper program and are available for general corporate purposes. As of December 31, 2019, no amounts had been drawn on any of the bank credit facilities. The annual interest rates, which are variable based on term, are calculated based on the London Interbank Offered Rate (LIBOR) plus a credit spread based on the Company's senior unsecured credit ratings. If amounts had been drawn on the bank credit facilities as of December 31, 2019, annual interest rates would have ranged from 2.4% to 2.6%.

Debt Covenants

The Company's bank credit facilities contain various covenants, including requiring the Company to maintain a debt to debt-plus-shareholders' equity ratio of not more than 60%. The Company was in compliance with its debt covenants as of December 31, 2019.

9. Income Taxes

The current income tax provision reflects the tax consequences of revenues and expenses currently taxable or deductible on various income tax returns for the year reported. The deferred income tax provision or benefit generally reflects the net change in deferred income tax assets and liabilities during the year, excluding any deferred income tax assets and liabilities of acquired businesses. The components of the provision for income taxes for the years ended December 31 are as follows:

(in millions)	2019	2018	2017
Current Provision:			
Federal	\$2,629	\$2,897	\$3,597
State and local	319	219	314
Foreign	564	404	254
Total current provision	3,512	3,520	4,165
Deferred provision (benefit)	230	42	(965)
Total provision for income taxes	\$3,742	\$3,562	\$3,200

The reconciliation of the tax provision at the U.S. federal statutory rate to the provision for income taxes and the effective tax rate for the years ended December 31 is as follows:

(in millions, except percentages)	201	2019 2018		2018		<u>' </u>
Tax provision at the U.S. federal statutory rate	\$3,776	21.0%	\$3,348	21.0%	\$ 4,908	35.0%
Change in tax law	_	_	_		(1,199)	(8.6)
State income taxes, net of federal benefit	271	1.5	168	1.0	197	1.4
Share-based awards — excess tax benefit	(132)	(0.7)	(161)	(1.0)	(319)	(2.3)
Non-deductible compensation	119	0.7	117	0.7	175	1.3
Health insurance industry tax	_	_	552	3.5	_	_
Foreign rate differential	(214)	(1.2)	(203)	(1.3)	(282)	(2.0)
Other, net	(78)	(0.5)	(259)	(1.6)	(280)	(2.0)
Provision for income taxes	\$3,742	20.8%	\$3,562	22.3%	\$ 3,200	22.8%

Deferred income tax assets and liabilities are recognized for the differences between the financial and income tax reporting bases of assets and liabilities based on enacted tax rates and laws. The components of deferred income tax assets and liabilities as of December 31 are as follows:

(in millions)	2019	2018
Deferred income tax assets:		
Accrued expenses and allowances	\$ 654	\$ 551
U.S. federal and state net operating loss carryforwards	260	190
Share-based compensation	97	91
Nondeductible liabilities	184	184
Non-U.S. tax loss carryforwards	420	426
Lease liability	892	_
Other-domestic	179	306
Other-non-U.S.	329	337
Subtotal	3,015	2,085
Less: valuation allowances	(147)	(84)
Total deferred income tax assets	2,868	2,001
Deferred income tax liabilities:		
U.S. federal and state intangible assets	(2,370)	(2,131)
Non-U.S. goodwill and intangible assets	(735)	(709)
Capitalized software	(683)	(603)
Depreciation and amortization	(301)	(266)
Prepaid expenses	(172)	(152)
Outside basis in partnerships	(317)	(300)
Lease right-of-use asset	(887)	_
Other-domestic	(177)	_
Other-non-U.S.	(219)	(314)
Total deferred income tax liabilities	(5,861)	(4,475)
Net deferred income tax liabilities	\$(2,993)	<u>\$(2,474)</u>

Valuation allowances are provided when it is considered more likely than not that deferred tax assets will not be realized. The valuation allowances primarily relate to future tax benefits on certain federal, state and non-U.S. net operating loss carryforwards. Federal net operating loss carryforwards of \$62 million expire beginning in 2022 through 2037 and \$179 million have an indefinite carryforward period; state net operating loss carryforwards expire beginning in 2020 through 2039, with some having an indefinite carryforward period. Substantially all of the non-U.S. tax loss carryforwards have indefinite carryforward periods.

As of December 31, 2019, the Company's undistributed earnings from non-U.S. subsidiaries are intended to be indefinitely reinvested in non-U.S. operations, and therefore no U.S. deferred taxes have been recorded. Taxes payable on the remittance of such earnings would be minimal.

A reconciliation of the beginning and ending amount of unrecognized tax benefits as of December 31 is as follows:

(in millions)	2019	2018	2017
Gross unrecognized tax benefits, beginning of period	\$1,056	\$ 598	\$ 263
Gross increases:			
Current year tax positions	512	487	356
Prior year tax positions	2	87	40
Gross decreases:			
Prior year tax positions	(96)	(84)	(33)
Settlements	(46)	(20)	(24)
Statute of limitations lapses	(5)	(12)	(4)
Gross unrecognized tax benefits, end of period	\$1,423	\$1,056	\$ 598

The Company believes it is reasonably possible that its liability for unrecognized tax benefits will decrease in the next twelve months by \$90 million as a result of audit settlements and the expiration of statutes of limitations.

The Company classifies interest and penalties associated with uncertain income tax positions as income taxes within its Consolidated Statements of Operations. During the years ended December 31, 2019, 2018 and 2017, the Company recognized \$19 million, \$6 million and \$14 million of interest and penalties, respectively. The Company had \$76 million and \$95 million of accrued interest and penalties for uncertain tax positions as of December 31, 2019 and 2018, respectively. These amounts are not included in the reconciliation above. As of December 31, 2019, there were \$852 million of unrecognized tax benefits that, if recognized, would affect the effective tax rate.

The Company currently files income tax returns in the United States, various states and localities and non-U.S. jurisdictions. The U.S. Internal Revenue Service (IRS) has completed exams on the consolidated income tax returns for fiscal years 2016 and prior. The Company's 2017, 2018 and 2019 tax years are under review by the IRS under its Compliance Assurance Program. With the exception of a few states, the Company is no longer subject to income tax examinations prior to the 2013 tax year. In general, the Company is subject to examination in non-U.S. jurisdictions for years 2014 and forward.

10. Shareholders' Equity

Regulatory Capital and Dividend Restrictions

The Company's regulated insurance and HMO subsidiaries are subject to regulations and standards in their respective jurisdictions. These standards, among other things, require these subsidiaries to maintain specified levels of statutory capital, as defined by each jurisdiction, and restrict the timing and amount of dividends and other distributions that may be paid to their parent companies. In the United States, most of these state regulations and standards are generally consistent with model regulations established by the National Association of Insurance Commissioners. These standards generally permit dividends to be paid from statutory unassigned surplus of the regulated subsidiary and are limited based on the regulated subsidiary's level of statutory net income and statutory capital and surplus. These dividends are referred to as "ordinary dividends" and generally may be paid without prior regulatory approval. If the dividend, together with other dividends paid within the preceding twelve months, exceeds a specified statutory limit or is paid from sources other than earned surplus, it is generally considered an "extraordinary dividend" and must receive prior regulatory approval.

Optum Bank must meet minimum capital requirements of the Federal Deposit Insurance Corporation (FDIC) under the capital adequacy rules to which it is subject. At December 31, 2019, the Company believes that Optum Bank met the FDIC requirements to be considered "Well Capitalized."

For the year ended December 31, 2019, the Company's regulated subsidiaries paid their parent companies dividends of \$5.6 billion, including \$1.3 billion of extraordinary dividends. For the year ended December 31, 2018, the Company's regulated subsidiaries paid their parent companies dividends of \$3.7 billion, including \$1.1 billion of extraordinary dividends.

The Company's regulated subsidiaries had estimated aggregate statutory capital and surplus of \$22.7 billion as of December 31, 2019. The estimated statutory capital and surplus necessary to satisfy regulatory requirements of the Company's regulated subsidiaries was approximately \$9.7 billion as of December 31, 2019.

Share Repurchase Program

Under its Board of Directors' authorization, the Company maintains a share repurchase program. The objectives of the share repurchase program are to optimize the Company's capital structure and cost of capital, thereby improving returns to shareholders, as well as to offset the dilutive impact of share-based awards. Repurchases may be made from time to time in open market purchases or other types of transactions (including prepaid or structured share repurchase programs), subject to certain Board restrictions. In June 2018, the Board renewed the Company's share repurchase program with an authorization to repurchase up to 100 million shares of its common stock.

A summary of common share repurchases for the years ended December 31, 2019 and 2018 is as follows:

	Years Ended	December 31,
(in millions, except per share data)	2019	2018
Common share repurchases, shares	22	19
Common share repurchases, average price per share	\$ 245.97	\$ 236.72
Common share repurchases, aggregate cost	\$ 5,500	\$ 4,500
Board authorized shares remaining	72	94

Dividends

In June 2019, the Company's Board of Directors increased the Company's quarterly cash dividend to shareholders to an annual rate of \$4.32 compared to \$3.60 per share, which the Company had paid since June 2018. Declaration and payment of future quarterly dividends is at the discretion of the Board and may be adjusted as business needs or market conditions change.

11. Share-Based Compensation

The Company's outstanding share-based awards consist mainly of non-qualified stock options and restricted shares. As of December 31, 2019, the Company had 32 million shares available for future grants of share-based awards under the Plan. As of December 31, 2019, there were also 5 million shares of common stock available for issuance under the ESPP.

Stock Options

Stock option activity for the year ended December 31, 2019 is summarized in the table below:

	Shares	Ay Ex	eighted- verage kercise Price	Weighted- Average Remaining Contractual Life		ggregate insic Value			
	(in millions)	(in years)		dlions) (in years) (in			(in millions		
Outstanding at beginning of period	35	\$	131						
Granted	7		260						
Exercised	(9)		94						
Forfeited	(1)		212						
Outstanding at end of period	32		166	6.5	\$	4,106			
Exercisable at end of period	15		114	5.0		2,716			
Vested and expected to vest, end of period	31		165	6.4		4,068			

Restricted Shares

Restricted share activity for the year ended December 31, 2019 is summarized in the table below:

(shares in millions)	Shares	W	eighted-Average Grant Date Fair Value per Share
Nonvested at beginning of period	6	\$	163
Granted	2		259
Vested	(3)		147
Nonvested at end of period	5		207

Other Share-Based Compensation Data

			For the Years End December 31,					
(in millions, except per share amounts)	2019		2019		2019 2018			2017
Stock Options								
Weighted-average grant date fair value of shares granted, per share	\$	46	\$	43	\$	29		
Total intrinsic value of stock options exercised	1,	398	1	,431	1	1,473		
Restricted Shares								
Weighted-average grant date fair value of shares granted, per share		259		229		163		
Total fair value of restricted shares vested	\$	545	\$	521	\$	460		
Employee Stock Purchase Plan								
Number of shares purchased		1		2		2		
Share-Based Compensation Items								
Share-based compensation expense, before tax	\$	697	\$	638	\$	597		
Share-based compensation expense, net of tax effects		641		587		531		
Income tax benefit realized from share-based award exercises		201		239		431		
(in millions, except years)			_]	Decemb	er 31	1, 2019		
Unrecognized compensation expense related to share awards			. :	\$		714		
Weighted-average years to recognize compensation expense						1.3		

Share-Based Compensation Recognition and Estimates

The principal assumptions the Company used in calculating grant-date fair value for stock options were as follows:

	For the Years Ended December 31,			
	2019	2018	2017	
Risk-free interest rate	1.5% - 2.5%	2.6% - 3.1%	1.9% - 2.1%	
Expected volatility	19.4% - 21.6%	18.7% - 19.3%	18.5% - 20.7%	
Expected dividend yield	1.4% - 1.8%	1.3% - 1.5%	1.4% - 1.6%	
Forfeiture rate	5.0%	5.0%	5.0%	
Expected life in years	5.3	5.6	5.7	

Risk-free interest rates are based on U.S. Treasury yields in effect at the time of grant. Expected volatilities are based on the historical volatility of the Company's common stock and the implied volatility from exchange-traded options on the Company's common stock. Expected dividend yields are based on the per share cash dividend paid by the Company. The Company uses historical data to estimate option exercises and forfeitures within the valuation model. The expected lives of options granted represents the period of time that the awards granted are expected to be outstanding based on historical exercise patterns.

Other Employee Benefit Plans

The Company offers a 401(k) plan for its employees. Compensation expense related to this plan was not material for 2019, 2018 and 2017.

In addition, the Company maintains non-qualified, deferred compensation plans, which allow certain members of senior management and executives to defer portions of their salary or bonus and receive certain Company contributions on such deferrals, subject to plan limitations. The deferrals are recorded within long-term investments with an approximately equal amount in other liabilities in the Consolidated Balance Sheets. The total deferrals are distributable based upon termination of employment or other periods, as elected under each plan and were \$1.4 billion and \$988 million as of December 31, 2019 and 2018, respectively.

12. Commitments and Contingencies

Leases

Operating lease costs were \$1.0 billion, \$751 million and \$710 million for the years ended December 31, 2019, 2018 and 2017, respectively, and included immaterial variable and short-term lease costs for the year ended December 31, 2019. Cash payments made on the Company's operating lease liabilities were \$746 million for the year ended December 31, 2019, which were classified within operating activities in the Consolidated Statements of Cash Flows. As of December 31, 2019, the Company's weighted-average remaining lease term and weighted-average discount rate for its operating leases were 8.6 years and 3.9%, respectively.

As of December 31, 2019, future minimum annual lease payments under all non-cancelable operating leases were as follows:

(in millions)	re Minimum se Payments
2020	\$ 804
2021	723
2022	604
2023	499
2024	402
Thereafter	 1,671
Total future minimum lease payments	4,703
Less imputed interest	 (744)
Total	\$ 3,959

The Company provides guarantees related to its service level under certain contracts. If minimum standards are not met, the Company may be financially at risk up to a stated percentage of the contracted fee or a stated dollar amount. None of the amounts accrued, paid or charged to income for service level guarantees were material as of December 31, 2019, 2018 or 2017.

As of December 31, 2019, the Company had outstanding, undrawn letters of credit with financial institutions of \$98 million and surety bonds outstanding with insurance companies of \$1.2 billion, primarily to bond contractual performance.

Legal Matters

Because of the nature of its businesses, the Company is frequently made party to a variety of legal actions and regulatory inquiries, including class actions and suits brought by members, care providers, consumer advocacy organizations, customers and regulators, relating to the Company's businesses, including management and administration of health benefit plans and other services. These matters include medical malpractice, employment, intellectual property, antitrust, privacy and contract claims and claims related to health care benefits coverage and other business practices.

The Company records liabilities for its estimates of probable costs resulting from these matters where appropriate. Estimates of costs resulting from legal and regulatory matters involving the Company are inherently difficult to predict, particularly where the matters: involve indeterminate claims for monetary damages or may involve fines, penalties or punitive damages; present novel legal theories or represent a shift in regulatory policy; involve a large number of claimants or regulatory bodies; are in the early stages of the proceedings; or could result in a change in business practices. Accordingly, the Company is often unable to estimate the losses or ranges of losses for those matters where there is a reasonable possibility or it is probable that a loss may be incurred.

Government Investigations, Audits and Reviews

The Company has been involved or is currently involved in various governmental investigations, audits and reviews. These include routine, regular and special investigations, audits and reviews by CMS, state insurance and health and welfare departments, state attorneys general, the Office of the Inspector General, the Office of Personnel Management, the Office of Civil Rights, the Government Accountability Office, the Federal Trade Commission, U.S. Congressional committees, the U.S. Department of Justice, the SEC, the Internal Revenue Service, the U.S. Drug Enforcement Administration, the U.S. Department of Labor, the Federal Deposit Insurance Corporation, the Defense Contract Audit Agency and other governmental authorities. Similarly, our

international businesses are also subject to investigations, audits and reviews by applicable foreign governments, including South American and other non-U.S. governmental authorities. Certain of the Company's businesses have been reviewed or are currently under review, including for, among other matters, compliance with coding and other requirements under the Medicare risk-adjustment model. CMS has selected certain of the Company's local plans for risk adjustment data validation (RADV) audits to validate the coding practices of and supporting documentation maintained by health care providers and such audits may result in retrospective adjustments to payments made to the Company's health plans.

On February 14, 2017, the Department of Justice (DOJ) announced its decision to pursue certain claims within a lawsuit initially asserted against the Company and filed under seal by a whistleblower in 2011. The whistleblower's complaint, which was unsealed on February 15, 2017, alleges that the Company made improper risk adjustment submissions and violated the False Claims Act. On February 12, 2018, the court granted in part and denied in part the Company's motion to dismiss. In May 2018, DOJ moved to dismiss the Company's counterclaims, which were filed in March 2018, and moved for partial summary judgment. In March 2019, the court denied the government's motion for partial summary judgment and dismissed the Company's counterclaims without prejudice. The Company cannot reasonably estimate the outcome that may result from this matter given its procedural status.

13. Business Combinations

(in millions)

During the year ended December 31, 2019, the Company completed several business combinations for total cash consideration of \$9.9 billion.

The total consideration exceeded the estimated fair value of the net tangible assets acquired by \$8.9 billion, of which \$2.0 billion has been allocated to finite-lived intangible assets and \$6.9 billion to goodwill. The goodwill is not deductible for income tax purposes.

Acquired tangible assets (liabilities) at acquisition date were:

Cash and cash equivalents	\$ 1.542
Accounts receivable and other current assets	1,788
Property, equipment and other long-term assets	1,969
Medical costs payable	(679)
Accounts payable and other current liabilities	(1,869)

Accounts payable and other current liabilities(1,869)Other long-term liabilities(1,488)Total net tangible assets\$ 1,263

The preliminary purchase price allocations for the various business combinations are subject to adjustment as valuation analyses, primarily related to intangible assets and contingent and tax liabilities, are finalized. See Note 6 for a summary of the acquisition date fair values and weighted-average useful lives assigned to acquired finite-lived intangible assets.

The results of operations and financial condition of acquired entities have been included in the Company's consolidated results and the results of the corresponding operating segment as of date of acquisition. Through December 31, 2019, acquired entities' impact on revenues and net earnings was not material.

Unaudited pro forma revenues for the years ended December 31, 2019 and 2018 as if the acquisitions had occurred on January 1, 2018 were immaterial for both periods. The pro forma effects of the acquisitions on net earnings were immaterial for both years.

14. Segment Financial Information

Factors used to determine the Company's reportable segments include the nature of operating activities, economic characteristics, existence of separate senior management teams and the type of information used by the Company's chief operating decision maker to evaluate its results of operations. Reportable segments with similar economic characteristics, products and services, customers, distribution methods and operational processes that operate in a similar regulatory environment are combined.

The following is a description of the types of products and services from which each of the Company's four reportable segments derives its revenues:

- UnitedHealthcare includes the combined results of operations of UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global. The U.S. businesses share significant common assets, including a contracted network of physicians, health care professionals, hospitals and other facilities, information technology and consumer engagement infrastructure and other resources. UnitedHealthcare Employer & Individual offers an array of consumeroriented health benefit plans and services for large national employers, public sector employers, mid-sized employers, small businesses and individuals nationwide. UnitedHealthcare Medicare & Retirement provides health care coverage and health and well-being services to individuals age 50 and older, addressing their unique needs for preventive and acute health care services as well as services dealing with chronic disease and other specialized issues for older individuals. UnitedHealthcare Community & State's primary customers oversee Medicaid plans, the Children's Health Insurance Program and other federal, state and community health care programs. UnitedHealthcare Global is a diversified global health services business with a variety of offerings, including international commercial health and dental benefits and health care delivery.
- OptumHealth focuses on care delivery, care management, wellness and consumer engagement, and health
 financial services. OptumHealth serves the physical, emotional and health-related financial needs of
 individuals, enabling population health through programs offered by employers, payers, government entities
 and directly with the care delivery system. OptumHealth offers access to networks of care provider
 specialists, health management services, care delivery, consumer engagement and financial services.
- OptumInsight provides services, technology and health care expertise to major participants in the health care
 industry. Hospital systems, physicians, health plans, governments, life sciences companies and other
 organizations that comprise the health care industry depend on OptumInsight to help them improve
 performance, achieve efficiency, reduce costs, meet compliance mandates and modernize their core
 operating systems to meet the changing needs of the health system.
- OptumRx offers pharmacy care services and programs, including retail network contracting, home delivery, specialty and community health pharmacy services, purchasing and clinical capabilities, and develops programs in areas such as step therapy, formulary management, drug adherence and disease/drug therapy management.

The Company's accounting policies for reportable segment operations are consistent with those described in the Summary of Significant Accounting Policies (see Note 2). Transactions between reportable segments principally consist of sales of pharmacy care products and services to UnitedHealthcare customers by OptumRx, certain product offerings and care management and local care delivery services sold to UnitedHealthcare by OptumHealth, and health information and technology solutions, consulting and other services sold to UnitedHealthcare by OptumInsight. These transactions are recorded at management's estimate of fair value. Transactions with affiliated customers are eliminated in consolidation. Assets and liabilities that are jointly used are assigned to each reportable segment using estimates of pro-rata usage. Cash and investments are assigned such that each reportable segment has working capital and/or at least minimum specified levels of regulatory capital.

As a percentage of the Company's total consolidated revenues, premium revenues from CMS were 33%, 30% and 28% for 2019, 2018 and 2017, respectively, most of which were generated by UnitedHealthcare Medicare & Retirement and included in the UnitedHealthcare segment. U.S. customer revenue represented approximately 96% of consolidated total revenues for 2019, 2018 and 2017. Long-lived fixed assets located in the United States represented approximately 72% and 76% of the total long-lived fixed assets as of December 31, 2019 and 2018, respectively. The non-U.S. revenues and fixed assets are primarily related to UnitedHealthcare Global.

The following table presents the reportable segment financial information:

			(Optum				
(in millions)	UnitedHealthcare	OptumHealth	OptumInsight	OptumRx	Optum Eliminations	Optum	Corporate and Eliminations	
2019		<u> </u>	<u> </u>	<u> </u>		- Francis		
Revenues — unaffiliated customers:								
Premiums				-	\$	\$ 5,916	\$	\$ 189,699
Products		31 5,732	116 3,630	31,450 689	_	31,597 10,051	_	31,597 18,973
Total revenues — unaffiliated								
customers	192,705	11,679	3,746	32,139		47,564		240,269
Total revenues — affiliated customers	_	17,966	6,239	42,093	(1,661)	64,637	(64,637)	_
Investment and other income		672	21	56		749		1,886
Total revenues	\$ 193,842	\$ 30,317	\$ 10,006	\$ 74,288	\$ (1,661)	\$112,950	\$ (64,637)	\$ 242,155
Earnings from operations		\$ 2,963	\$ 2,494	\$ 3,902	\$ <u> </u>	\$ 9,359 —	\$(1,704)	. ,
Earnings before income taxes	\$ 10,326	\$ 2,963	\$ 2,494	\$ 3,902	\$	\$ 9,359	\$ (1,704)	\$ 17,981
Total assets	\$ 88,250	\$ 40,444	\$ 15,181	\$ 36,346	\$	\$ 91,971	\$ (6,332)	\$ 173,889
Purchases of property, equipment and capitalized software	841	573	495	162	_	1,230	_	2,071
Depreciation and amortization	926	565	672	557	_	1,794	_	2,720
2018 Revenues — unaffiliated								
customers: Premiums	\$ 174,282	\$ 3,805	s —	s —	\$ _	\$ 3,805	s –	\$ 178,087
Products		52	111	29,438 612	_	29,601 8,817	_	29,601 17,183
Services	6,300	4,925	3,280					17,165
customers	182,648	8,782	3,391	30,050		42,223		224,871
Total revenues — affiliated	_	14,882	5,596	39,440	(1,409)	58,509	(58,509)	
Investment and other income		481	21	46	(1,409)	548	(36,309)	1,376
Total revenues	\$ 183,476	\$ 24,145	\$ 9,008	\$ 69,536	\$ (1,409)	\$101,280	\$ (58,509)	\$ 226,247
Earnings from operations Interest expense		\$ 2,430	\$ 2,243	\$ 3,558	\$ <u> </u>	\$ 8,231	\$ — (1,400)	
Earnings before income taxes		\$ 2,430	\$ 2,243	\$ 3,558	\$	\$ 8,231		
Total assets	\$ 82,938	\$ 29,837	\$ 11,039	\$ 33,912	\$ —	\$ 74,788	\$ (5,505)	\$ 152,221
Purchases of property, equipment and capitalized software	761	593	517	192		1,302		2,063
Depreciation and amortization		439	654	490	_	1,583	_	2,428
2017 Revenues — unaffiliated								
customers: Premiums	\$ 154,709	\$ 3,744	s —	s —	\$ _	\$ 3,744	s —	\$ 158,453
Products		44 4,013	106	26,216 565	_	26,366	_	26,366
Services	7,890	4,015	2,849			7,427		15,317
customers	162,599	7,801	2,955	26,781	_	37,537	_	200,136
Total revenues — affiliated		12.420	5 107	26.054	(1.227)	£2.292	(52.202)	
customers		12,429 340	5,127 5	36,954 20	(1,227)	53,283 365	(53,283)	1,023
Total revenues	\$ 163,257	\$ 20,570	\$ 8,087	\$ 63,755	\$ (1,227)	\$ 91,185	\$ (53,283)	\$ 201,159
Earnings from operations Interest expense		\$ 1,823	\$ 1,770	\$ 3,118	\$ <u>_</u>	\$ 6,711	\$ — (1,186)	
Earnings before income taxes		\$ 1,823	\$ 1,770	\$ 3,118	\$ —	\$ 6,711		
	\$ 76,676					\$ 67,755		
and capitalized software Depreciation and amortization		510 380	588 614	188 493	_	1,286 1,487	_	2,023 2,245

15. Quarterly Financial Data (Unaudited)

Selected quarterly financial information for all quarters of 2019 and 2018 is as follows:

	For the Quarter Ended							
(in millions, except per share data)	N	Iarch 31	rch 31 June 30		September 30		December 31	
2019								
Revenues	\$	60,308	\$	60,595	\$	60,351	\$	60,901
Operating costs		55,476		55,851		55,337		55,806
Earnings from operations		4,832		4,744		5,014		5,095
Net earnings		3,557		3,385		3,629		3,668
Net earnings attributable to UnitedHealth Group common								
shareholders		3,467		3,293		3,538		3,541
Net earnings per share attributable to UnitedHealth Group common shareholders:								
Basic		3.62		3.47		3.73		3.74
Diluted		3.56		3.42		3.67		3.68
2018								
Revenues	\$	55,188	\$	56,086	\$	56,556	\$	58,417
Operating costs		51,135		51,882		51,966		53,920
Earnings from operations		4,053		4,204		4,590		4,497
Net earnings		2,924		3,010		3,284		3,164
Net earnings attributable to UnitedHealth Group common shareholders		2,836		2,922		3,188		3,040
Net earnings per share attributable to UnitedHealth Group common shareholders:								
Basic		2.94		3.04		3.31		3.16
Diluted		2.87		2.98		3.24		3.10

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (Exchange Act) that are designed to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms; and (ii) accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

In connection with the filing of this Annual Report on Form 10-K, management evaluated, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2019. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2019.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Management on Internal Control Over Financial Reporting as of December 31, 2019

Management of UnitedHealth Group Incorporated and Subsidiaries (the Company) is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company's internal control system is designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. The Company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2019. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework* (2013). Based on our assessment and the COSO criteria, we believe that, as of December 31, 2019, the Company maintained effective internal control over financial reporting.

The Company's independent registered public accounting firm has audited the Company's internal control over financial reporting as of December 31, 2019, as stated in the Report of Independent Registered Public Accounting Firm, appearing under Item 9A.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of UnitedHealth Group Incorporated and Subsidiaries:

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of UnitedHealth Group Incorporated and subsidiaries (the "Company") as of December 31, 2019, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2019, of the Company and our report dated February 14, 2020, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control Over Financial Reporting as of December 31, 2019. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/	DELOITTE & TOUCHE LLP

Minneapolis, Minnesota February 14, 2020

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

DIRECTORS OF THE REGISTRANT

The following sets forth certain information regarding our directors as of February 14, 2020, including their name and principal occupation or employment:

William C. Ballard, Jr.

Former Of Counsel

Bingham Greenebaum Doll LLP

Richard T. Burke

Lead Independent Director UnitedHealth Group

Timothy P. Flynn

Retired Chair

KPMG International

Stephen J. Hemsley

Chair

UnitedHealth Group

Michele J. Hooper

President and Chief Executive Officer

The Directors' Council

F. William McNabb III

Former Chairman and Chief Executive Officer

The Vanguard Group, Inc.

Valerie Montgomery Rice, M.D.

President and Dean

Morehouse School of Medicine

John H. Noseworthy, M.D.

Former Chief Executive Officer and President

Mayo Clinic

Glenn M. Renwick

Former Chairman and Chief Executive Officer

The Progressive Corporation

David S. Wichmann

Chief Executive Officer

UnitedHealth Group

Gail R. Wilensky, Ph.D.

Senior Fellow

Project HOPE

Pursuant to General Instruction G(3) to Form 10-K and the Instruction to Item 401 of Regulation S-K, information regarding our executive officers is provided in Item 1 of Part I of this Annual Report on Form 10-K under the caption "Executive Officers of the Registrant."

We have adopted a code of ethics applicable to our principal executive officer and other senior financial officers, who include our principal financial officer, principal accounting officer, controller and persons performing similar functions. The code of ethics, entitled Code of Conduct: Our Principles of Ethics and Integrity, is posted on our website at www.unitedhealthgroup.com. For information about how to obtain the Code of Conduct, see Part I, Item 1, "Business." We intend to satisfy the SEC's disclosure requirements regarding amendments to, or waivers of, the code of ethics for our senior financial officers by posting such information on our website indicated above.

The remaining information required by Items 401, 405, 406 and 407(c)(3), (d)(4) and (d)(5) of Regulation S-K will be included under the headings "Corporate Governance," "Proposal 1-Election of Directors" and "Delinquent Section 16(a) Reports" in our definitive proxy statement for our 2020 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Items 402 and 407(e)(4) and (e)(5) of Regulation S-K will be included under the headings "Executive Compensation," "Director Compensation," "Corporate Governance—Risk Oversight" and "Compensation Committee Interlocks and Insider Participation" in our definitive proxy statement for our 2020 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

Equity Compensation Plan Information

The following table sets forth certain information, as of December 31, 2019, concerning shares of common stock authorized for issuance under all of our equity compensation plans:

(-)

n category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights		Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))	
	(in millions)			(in millio	ons)
uity compensation plans approved by shareholders (1)	31	\$	169		37(3)
shareholders (2)			_		<u> </u>
tal (2)	31	\$	169		37
	31	\$	— 169		_

⁽¹⁾ Consists of the UnitedHealth Group Incorporated 2011 Stock Incentive Plan, as amended and the UnitedHealth Group 1993 Employee Stock Purchase Plan, as amended.

(3) Includes 5 million shares of common stock available for future issuance under the 1993 Employee Stock Purchase Plan as of December 31, 2019, and 32 million shares available under the 2011 Stock Incentive Plan as of December 31, 2019. Shares available under the 2011 Stock Incentive Plan may become the subject of future awards in the form of stock options, stock appreciation rights, restricted stock, restricted stock units, performance awards and other stock-based awards.

The information required by Item 403 of Regulation S-K will be included under the heading "Security Ownership of Certain Beneficial Owners and Management" in our definitive proxy statement for our 2020 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Items 404 and 407(a) of Regulation S-K will be included under the headings "Certain Relationships and Transactions" and "Corporate Governance" in our definitive proxy statement for our 2020 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

⁽²⁾ Excludes 824,000 shares underlying stock options assumed by us in connection with acquisitions. These options have a weighted-average exercise price of \$58 and an average remaining term of approximately 4 years. These options are administered pursuant to the terms of the plans under which the options originally were granted. No future awards will be granted under these acquired plans.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by Item 9(e) of Schedule 14A will be included under the heading "Disclosure of Fees Paid to Independent Registered Public Accounting Firm" in our definitive proxy statement for our 2020 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) 1. Financial Statements and Supplementary Data

The financial statements are included under Item 8 of this report:

- Reports of Independent Registered Public Accounting Firm.
- Consolidated Balance Sheets as of December 31, 2019 and 2018.
- Consolidated Statements of Operations for the years ended December 31, 2019, 2018, and 2017.
- Consolidated Statements of Comprehensive Income for the years ended December 31, 2019, 2018, and 2017.
- Consolidated Statements of Changes in Equity for the years ended December 31, 2019, 2018, and 2017.
- Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018, and 2017.
- Notes to the Consolidated Financial Statements.

2. Financial Statement Schedules

The following financial statement schedule of the Company is included in Item 15(c):

• Schedule I—Condensed Financial Information of Registrant (Parent Company Only).

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions, are inapplicable, or the required information is included in the consolidated financial statements, and therefore have been omitted.

(b) The following exhibits are filed or incorporated by reference herein in response to Item 601 of Regulation S-K. The Company files Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K pursuant to the Securities Exchange Act of 1934 under Commission File No. 1-10864.

EXHIBIT INDEX**

- 3.1 Certificate of Incorporation of UnitedHealth Group Incorporated (incorporated by reference to Exhibit 3.1 to UnitedHealth Group Incorporated's Registration Statement on Form 8-A/A, Commission File No. 1-10864, filed on July 1, 2015)
- 3.2 Bylaws of UnitedHealth Group Incorporated, effective August 15, 2017 (incorporated by reference to Exhibit 3.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on August 16, 2017)
- 4.1 Senior Indenture, dated as of November 15, 1998, between United HealthCare Corporation and The Bank of New York (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Registration Statement on Form S-3/A, SEC File Number 333-66013, filed on January 11, 1999)

- 4.2 Amendment, dated as of November 6, 2000, to Senior Indenture, dated as of November 15, 1998, between the UnitedHealth Group Incorporated and The Bank of New York (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001)
- 4.3 Instrument of Resignation, Appointment and Acceptance of Trustee, dated January 8, 2007, pursuant to the Senior Indenture, dated as of November 15, 1988, amended as of November 6, 2000, among UnitedHealth Group Incorporated, The Bank of New York and Wilmington Trust Company (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007)
- 4.4 Indenture, dated as of February 4, 2008, between UnitedHealth Group Incorporated and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Registration Statement on Form S-3, SEC File Number 333-149031, filed on February 4, 2008)
- 4.5 Description of Common Stock
- *10.1 UnitedHealth Group Incorporated 2011 Stock Incentive Plan, as amended and restated in 2018 (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2018)
- *10.2 Amendment to UnitedHealth Group Incorporated's Stock Option and Stock Appreciation Right Awards, effective November 6, 2014 (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2014)
- *10.3 Form of Agreement for Non-Qualified Stock Option Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.4 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
- *10.4 Form of Agreement for Non-Qualified Stock Option Award for International Participants under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2013)
- *10.5 Form of Addendum for Non-Qualified Stock Option Award Agreement for International Participants under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.37 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
- *10.6 Form of Agreement for Restricted Stock Unit Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.5 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
- *10.7 Form of Agreement for Restricted Stock Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.5 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
- *10.8 Form of Agreement for Stock Appreciation Rights Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.4 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
- *10.9 Form of Agreement for Performance-based Restricted Stock Unit Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.6 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)

- *10.10 Form of Agreement for Initial Deferred Stock Unit Award to Non-Employee Directors under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.7 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011) *10.11 Form of Agreement for Deferred Stock Unit Award to Non-Employee Directors under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.6 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011) 10.12 Form of Indemnification Agreement (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on July 1, 2015) *10.13 Amended and Restated UnitedHealth Group Incorporated Executive Incentive Plan (2009) Statement), effective as of December 31, 2008 (incorporated by reference to Exhibit 10.12 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008) *10.14 Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan, effective as of December 31, 2008 (incorporated by reference to Exhibit 10.13 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008) *10.15 Amendment, dated as of December 21, 2012, of Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan (incorporated by reference to Exhibit 10.11 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012) *10.16 Second Amendment, dated as of November 5, 2015, of Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015) *10.17 UnitedHealth Group Executive Savings Plan (2020 Statement) *10.18 Summary of Non-Management Director Compensation, effective as of November 8, 2019 *10.19 UnitedHealth Group Directors' Compensation Deferral Plan (2009 Statement) (incorporated by reference to Exhibit 10.18 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008) *10.20 Amendment to the UnitedHealth Group Directors' Compensation Deferral Plan, effective as of January 1, 2010 (incorporated by reference to Exhibit 10.20 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2009) *10.21 First Amendment to UnitedHealth Group Directors' Compensation Deferral Plan (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010)
- (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-205824, filed on July 23, 2015)

 *10.23 Catalyst Health Solutions, Inc. 2006 Stock Incentive Plan, as amended (incorporated by reference

Catamaran Corporation Third Amended and Restated Long-Term Incentive Plan, as amended

*10.22

- *10.23 Catalyst Health Solutions, Inc. 2006 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-205824, filed on July 23, 2015)
- *10.24 Audax Health Solutions, Inc. 2010 Equity Incentive Plan, as amended (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 to Registration Statement on Form S-8, SEC File Number 333-205826, filed on February 15, 2017)

*10.25 Surgical Care Affiliates, Inc. 2016 Omnibus Long-Term Incentive Plan (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017) *10.26 Surgical Care Affiliates, Inc. 2013 Omnibus Long-Term Incentive Plan (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017) *10.27 Surgical Care Affiliates, Inc. Management Equity Incentive Plan (incorporated by reference to Exhibit 4.5 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017) *10.28 Surgical Care Affiliates, Inc. Directors and Consultants Equity Incentive Plan (incorporated by reference to Exhibit 4.6 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017) *10.29 The Advisory Board Company Amended and Restated 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to The Advisory Board Company's Current Report on Form 8-K filed on June 15, 2015) *10.30 The Advisory Board Company 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to The Advisory Board Company's Current Report on Form 8-K filed on November 17, 2005) Employment Agreement, dated as of November 7, 2006, between UnitedHealth Group *10.31 Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 8, 2006) *10.32 Agreement for Supplemental Executive Retirement Pay, effective April 1, 2004, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10(b) to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2004) *10.33 Amendment to Agreement for Supplemental Executive Retirement Pay, dated as of November 7, 2006, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit A to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 8, 2006) *10.34 Amendment to Employment Agreement and Agreement for Supplemental Executive Retirement Pay, effective as of December 31, 2008, between United HealthCare Services, Inc. and Stephen J. Hemsley (incorporated by reference to Exhibit 10.22 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008) *10.35 Amendment to Agreement for Supplemental Executive Retirement Pay, dated as of June 7, 2016, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016) *10.36 Letter Agreement, effective as of February 19, 2008, by and between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.22 to UnitedHealth

*10.37

Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2007)

Amendment to Employment Agreement, dated as of December 14, 2010, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on December 15, 2010)

*10.38 Amended and Restated Employment Agreement, effective as of December 1, 2014, between United HealthCare Services, Inc. and David Wichmann (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015) *10.39 Amendment to Employment Agreement, effective as of August 16, 2017, between United HealthCare Services, Inc. and David Wichmann (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017) *10.40 Amended and Restated Employment Agreement, dated as of June 7, 2016, between United HealthCare Services, Inc. and John Rex (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016) *10.41 Amended and Restated Employment Agreement, effective as of March 24, 2015, between United HealthCare Services, Inc. and Steven H. Nelson (incorporated by reference to Exhibit 10.51 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2017) *10.42 Separation and Release Agreement, effective as of September 30, 2019, between Steven H. Nelson and United HealthCare Services, Inc. (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019) *10.43 Employment Agreement, effective as of June 3, 2018, between United HealthCare Services, Inc. and Andrew Witty (incorporated by reference to Exhibit 10.50 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2018) *10.44 Amended and Restated Employment Agreement, effective as of March 16, 2015, between United HealthCare Services, Inc. and Dirk McMahon *10.45 Amendment to Employment Agreement, effective as of May 31, 2017, between United HealthCare Services, Inc. and Dirk McMahon *10.46 Amendment to Employment Agreement, effective as of March 12, 2019, between United HealthCare Services, Inc. and Dirk McMahon *10.47 Employment Agreement, effective as of January 1, 2013, between United HealthCare Services, Inc. and Marianne D. Short (incorporated by reference to Exhibit 10.34 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2013) 11.1 Statement regarding computation of per share earnings (incorporated by reference to the information contained under the heading "Net Earnings Per Common Share" in Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data") 21.1 Subsidiaries of UnitedHealth Group Incorporated 23.1 Consent of Independent Registered Public Accounting Firm 24.1 Power of Attorney 31.1 Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 32.1 Certifications pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 101.INS XBRL Instance Document—the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document. 101.SCH Inline XBRL Taxonomy Extension Schema Document. 101.CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document. 101.DEF Inline XBRL Taxonomy Extension Definition Linkbase Document.

101.LAB Inline XBRL Taxonomy Extension Label Linkbase Document.

101.PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document.

104 Cover Page Interactive Data File (formatted as Inline XBRL and embedded within Exhibit 101).

Schedule I—Condensed Financial Information of Registrant (Parent Company Only).

^{*} Denotes management contracts and compensation plans in which certain directors and named executive officers participate and which are being filed pursuant to Item 601(b)(10)(iii)(A) of Regulation S-K.

^{**} Pursuant to Item 601(b)(4)(iii) of Regulation S-K, copies of instruments defining the rights of certain holders of long-term debt are not filed. The Company will furnish copies thereof to the SEC upon request.

⁽c) Financial Statement Schedule

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of UnitedHealth Group Incorporated and Subsidiaries:

Opinion on the Financial Statement Schedule

We have audited the consolidated financial statements of UnitedHealth Group Incorporated and Subsidiaries (the "Company") as of December 31, 2019 and 2018, and for each of the three years in the period ended December 31, 2019, and the Company's internal control over financial reporting as of December 31, 2019, and have issued our reports thereon dated February 14, 2020; such reports are included elsewhere in this Form 10-K. Our audits also included the financial statement schedule of the Company listed in the Index at Item 15. This financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statement schedule based on our audits. In our opinion, the financial statement schedule, when considered in relation to the consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota February 14, 2020

Condensed Financial Information of Registrant (Parent Company Only) UnitedHealth Group Condensed Balance Sheets

(in millions, except per share data)	D	ecember 31, 2019	De	cember 31, 2018
Assets Current assets: Cash and cash equivalents Other current assets	\$	46 787	\$	434 197
Total current assets Equity in net assets of subsidiaries Long-term notes receivable from subsidiaries Other assets		833 93,467 5,079 794		631 83,244 4,461 972
Total assets	\$	100,173	\$	89,308
Liabilities and shareholders' equity Current liabilities: Accounts payable and accrued liabilities Current portion of notes payable to subsidiaries Commercial paper and current maturities of long-term debt	\$	688 750 3,548	\$	618 714 1,744
Total current liabilities Long-term debt, less current maturities Long-term notes payable to subsidiaries Other liabilities		4,986 35,926 1,314 331		3,076 33,490 560 486
Total liabilities		42,557		37,612
Commitments and contingencies (Note 4) Shareholders' equity: Preferred stock, \$0.001 par value — 10 shares authorized; no shares issued or outstanding Common stock, \$0.01 par value — 3,000 shares authorized; 948 and 960 issued and outstanding Additional paid-in capital		— 9 7		
Retained earnings		61,178 (3,578)		55,846 (4,160)
Total UnitedHealth Group shareholders' equity	_	57,616	_	51,696
Total liabilities and shareholders' equity	\$	100,173	\$	89,308
-			_	

Condensed Financial Information of Registrant (Parent Company Only) UnitedHealth Group Condensed Statements of Comprehensive Income

	For the Years Ended December 31		
(in millions)	2019	2018	2017
Revenues: Investment and other income	\$ 209	\$ 194	\$ 527
Total revenues	209	194	527
Operating costs: Operating costs Interest expense	38 1,580	35 1,285	 1,114
Total operating costs	1,618	1,320	1,114
Loss before income taxes Benefit for income taxes	(1,409) 293	(1,126) 251	(587) 214
Loss of parent company	(1,116) 14,955	(875) 12,861	(373) 10,931
Net earnings Other comprehensive income (loss)	13,839 582	11,986 (1,517)	10,558 14
Comprehensive income	\$14,421	\$10,469	\$10,572

Condensed Financial Information of Registrant (Parent Company Only) UnitedHealth Group Condensed Statements of Cash Flows

	For the Ye	ars Ended De	ecember 31,
(in millions)	2019	2018	2017
Operating activities			
Cash flows from operating activities	\$9,275	\$6,099	\$2,021
Investing activities			
Issuances of notes to subsidiaries	(2,722)	(1,420)	_
Repayments of notes to subsidiaries	2,249	1,419	2,071
Cash paid for acquisitions	(9,645)	(4,066)	(2,313)
Return of capital to parent company	4,497	4,196	3,375
Capital contributions to subsidiaries	(803)	(1,259)	(959)
Other, net	490	4	_
Cash flows (used for) from investing activities	(5,934)	(1,126)	2,174
Financing activities			
Common stock repurchases	(5,500)	(4,500)	(1,500)
Proceeds from common stock issuances	1,037	838	688
Cash dividends paid	(3,932)	(3,320)	(2,773)
Proceeds from (repayments of) commercial paper, net	300	(201)	(3,508)
Proceeds from issuance of long-term debt	5,444	6,935	5,291
Repayments of long-term debt	(1,750)	(2,600)	(3,472)
Proceeds (repayments) of notes from subsidiaries	1,207	(1,127)	1,704
Other, net	(535)	(923)	(446)
Cash flows used for financing activities	(3,729)	(4,898)	(4,016)
(Decrease) increase in cash and cash equivalents	(388)	75	179
Cash and cash equivalents, beginning of period	434	359	180
Cash and cash equivalents, end of period	\$ 46	\$ 434	\$ 359
Supplemental cash flow disclosures			
Cash paid for interest	\$1,506	\$1,294	\$1,062
Cash paid for income taxes	2,590	2,379	3,455
Supplemental schedule of non-cash investing activities			
Common stock issued for acquisitions	\$ —	\$ —	\$2,164
Conversion of note receivable from subsidiaries to equity	_	_	4,378

Condensed Financial Information of Registrant (Parent Company Only) UnitedHealth Group Notes to Condensed Financial Statements

1. Basis of Presentation

UnitedHealth Group's parent company financial information has been derived from its consolidated financial statements and should be read in conjunction with the consolidated financial statements included in this Form 10-K. The accounting policies for the registrant are the same as those described in Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

2. Subsidiary Transactions

Investment in Subsidiaries. UnitedHealth Group's investment in subsidiaries is stated at cost plus equity in undistributed earnings of subsidiaries.

Dividends and Capital Distributions. Cash dividends received from subsidiaries and included in Cash Flows from Operating Activities in the Condensed Statements of Cash Flows were \$5.6 billion, \$5.6 billion and \$3.4 billion in 2019, 2018 and 2017, respectively. Additionally, \$4.5 billion, \$4.2 billion and \$3.4 billion in cash were received as a return of capital to the parent company during 2019, 2018 and 2017, respectively.

3. Commercial Paper and Long-Term Debt

Discussion of commercial paper and long-term debt can be found in Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data." Long-term debt obligations of the parent company do not include other financing obligations at subsidiaries that totaled \$1.2 billion and \$1.3 billion at December 31, 2019 and 2018, respectively.

Maturities of commercial paper and long-term debt for the years ending December 31 are as follows:

(in millions)	
2020	\$ 3,550
2021	3,150
2022	
2023	
2024	1,500
Thereafter	26,477

4. Commitments and Contingencies

For a summary of commitments and contingencies, see Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: February 14, 2020

UNITEDHEALTH GROUP INCORPORATED

By _____/s/ DAVID S. WICHMANN

David S. Wichmann Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

	Date
Director and Chief Executive Officer (principal executive officer)	February 14, 2020
Executive Vice President and Chief Financial Officer (principal financial officer)	February 14, 2020
Senior Vice President and Chief Accounting Officer (principal accounting officer)	February 14, 2020
Director	February 14, 2020
	Chief Executive Officer (principal executive officer) Executive Vice President and Chief Financial Officer (principal financial officer) Senior Vice President and Chief Accounting Officer (principal accounting officer) Director Director