GENERAL INFORMATION ABOUT THIS GROUP MANAGEMENT REPORT

In the following, we present a discussion and analysis of the Group Management Report of Fresenius Medical Care AG & CO. KGAA and its subsidiaries (together referred to as we, our, FMC AG & CO. KGAA, Fresenius Medical Care, the Group or the Company) prepared in accordance with sections 315 and 315e of the German Commercial Code and German Accounting Standards No. 17 and 20, as well as the consolidated financial statements and related notes contained elsewhere in this report. Some of the statements, including those concerning future revenue, costs and capital expenditures, possible changes in our industry as well as the competitive and financial conditions include forward-looking statements. We made these forward-looking statements based on the expectations and beliefs of the Management Board of the Company's General Partner (Management Board) pertaining to future events that may affect us, but which we cannot assure that such events will occur or that the results will be as anticipated. Because these statements involve opportunities, risks and uncertainties, the actual results may differ materially (positive as well as negative) from the results which the forward-looking statements express or imply. The statements cover the content of and are subject to the uncertainties described in the discussions in this report in chapters "Outlook" starting on PAGE 60 and "Risks and Opportunities Report" starting on PAGE 63 as well as in NOTE 2 AND 22 of the notes to the consolidated financial statements.

The Non-Financial Report is not part of the Group Management Report. It is part of a separate chapter of the Annual Report and will be disclosed together with the Group Management Report. The Non-Financial Group Report can be found starting on PAGE 81.

Due to rounding, individual numbers and percentages presented in this report may not precisely reflect the absolute figures.

Our business is also subject to other opportunities, risks and uncertainties that we describe in our public filings. Developments in any of these areas could cause our results to differ materially to those that we or others have projected or may project.

OVERVIEW OF THE GROUP

We provide high-quality health care solutions for patients with chronic kidney failure. Our innovative products and therapies set high standards in dialysis treatment.

BUSINESS MODEL

OPERATIONS AND COMPANY STRUCTURE

Fresenius Medical Care is the world's leading dialysis company based on publicly reported revenue and the number of patients treated. We provide dialysis care and related services to people with chronic kidney failure, as well as other health care services. The health care services that we offer in addition to dialysis are described by the term "Care Coordination". Together with dialysis services, these constitute our health care services. We also develop and manufacture a full range of dialysis machines, systems and disposable products, which we sell to customers in around 150 countries as well as using them in our own health care service operations. Our dialysis business is therefore vertically integrated.

To further strengthen this vertically integrated dialysis business and enhance clinical outcomes and patient empowerment, we acquired NxStage Medical, Inc. (NxStage) in 2019. NxStage develops, produces and markets an innovative product portfolio of medical devices for use in home dialysis and in the critical care setting. For further information on the acquisition of NxStage, please refer to NOTE 3 in the notes to the consolidated financial statements.

We continue to generate most of our revenue with dialysis products and dialysis care services. In our 3,994 own dialysis clinics in around 50 countries worldwide, we provide care for over 345,000 dialysis patients. We are continuously expanding this network of clinics, which is the largest in the world based on the number of patients treated, to accommodate the ever-rising number of dialysis patients. At the same time, we operate 45 production sites in more than 20 countries. The most important plants for dialyzer production are in St. Wendel (Germany), Ogden (U.S.), Changshu (China), L'Arbresle (France), and Buzen (Japan). Dialysis machines are manufactured in Schweinfurt (Germany) and in Concord (U.S.).

Fresenius Medical Care has a decentralized structure and is divided into the regions North America, Europe, Middle East and Africa (EMEA), Asia-Pacific and Latin America. Our operating segments correspond to this regional breakdown (the term "North America Segment" refers to our North America operating segment, the term "EMEA Segment" refers to the Europe, Middle East and Africa operating segment, the term "Asia-Pacific Segment" refers to our Asia-Pacific operating segment, and the term "Latin America Segment" refers to our Latin America operating segment).

Fresenius Medical Care's company headquarters is in Bad Homburg v. d. Höhe, Germany. The headquarters in North America, our most important region in terms of revenue, is in Waltham, Massachusetts (U.S.).

CHART 2.2 ON PAGE 21 provides an overview of our most important production sites and headquarters.

OUR PRODUCTS AND SERVICES

Fresenius Medical Care provides mainly dialysis products and services. We also offer non-dialysis services as part of Care Coordination as well as non-dialysis products. Our products and services for the fiscal year 2019 are shown in CHART 2.1 ON PAGE 20.

Approximately 3.5 M patients worldwide regularly underwent dialysis treatment at the end of 2019. Dialysis is a life-saving blood cleansing procedure that substitutes the function of the kidney in case of kidney failure. Healthy kidneys clean the blood of waste products, regulate water levels, and produce important hormones. If the kidneys are irreparably damaged and are therefore no longer able to function adequately over a longer period of time, this is known as chronic kidney failure or end-stage renal disease (ESRD). Many diseases can lead to chronic kidney failure, particularly diabetes, chronic nephritis or high blood pressure. There are currently two treatment options for ESRD: a kidney transplant and dialysis.

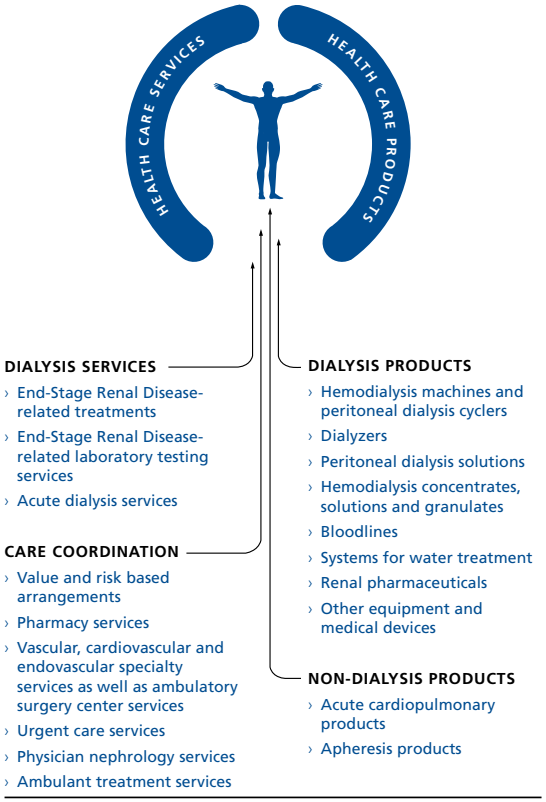
Our health care products

We develop, manufacture and distribute a wide variety of health care products, including both dialysis and non-dialysis products.

The dialysis products we offer in around 150 countries around the world focus on the following therapies:

› Hemodialysis (HD) – HD is by far the most common type of therapy for chronic kidney failure. Fresenius Medical Care provides a wide range of HD products in dialysis centers as well as for use at home. They include machines, dialyzers, bloodline systems, HD solutions and concentrates, water

C 2.1 **OUR PRODUCTS AND SERVICES**



treatment systems, as well as data processing and analysis systems.

› Peritoneal dialysis (PD) – In PD the peritoneum is used as a natural filter. We offer systems and solutions for continuous ambulatory peritoneal dialysis (CAPD) and automated peritoneal dialysis (APD) in dialysis centers as well as for use at home.
› Acute dialysis – In case of a sudden loss of renal function, continuous renal replacement therapy is used in intensive care units. Fresenius Medical Care also provides products for this.

We also offer non-dialysis products including acute cardiopulmonary products and products for apheresis therapy, which involves the removal of excess blood fats or pathogenic antibodies.

Our health care services

Dialysis services

Dialysis patients receive life-saving dialysis treatment and other associated services such as laboratory tests in our 3,994 (2018: 3,928) dialysis clinics worldwide. Dialysis treatment at our clinics is usually performed three times a week over a period of several hours by trained medical staff. We also provide advice on medical support and training for home dialysis patients in our dialysis centers.

In 2019, we treated most of our patients (61 %) in the North America Segment, followed by 19 % in the EMEA Segment, 10 % in the Latin America Segment and 10 % in the Asia-Pacific Segment.

Fresenius Medical Care is able to operate its own dialysis clinics in countries where the health care system allows private-sector companies to provide medical services and an appropriate reimbursement system is in place.

Care Coordination

Care Coordination allows us to further enhance our business beyond dialysis, for example in markets where the privatized dialysis market is relatively well developed and we already have a high market share. Although our Care Coordination business is geared to different geographical markets, we currently provide non-dialysis services mainly in North America and Asia-Pacific. In recent years, the health care system in the U.S. has started to move away from reimbursement of individual services toward holistic and coordinated care. Our Care Coordination activities and our experience in dialysis mean that we can participate in the development of the U.S. health care system. At the same time, patients can benefit from coordinated care, and health care systems from lower costs.

MAJOR MARKETS AND COMPETITIVE POSITION

According to our estimates, the number of dialysis patients worldwide reached around 3.5 M in 2019 (2018: 3.4 M) – a 6 % growth rate. In the same period, 345,096 patients were treated in Fresenius Medical Care's network of dialysis centers (2018: 333,331). This means that Fresenius Medical Care holds the leading position worldwide in dialysis care. More information on the number of patients can be found in CHART 2.3 ON PAGE 22.

Fresenius Medical Care is also the global market leader for dialysis products. Products made by Fresenius Medical Care for use in our own dialysis centers or for sale to third-party customers accounted for a market share of 36 % in 2019 (2018: 35 %). In the case of hemodialysis products, we had a

C 2.2 **MAJOR LOCATIONS**

North America

- **WALTHAM, U.S.**
  Regional headquarters North America
- **01 OGDEN, U.S.**
  Dialyzers
- **02 CONCORD, U.S.**
  Dialysis machines
- **03 OREGON, U.S.**
  Concentrates
- **04 MONTREAL, CA**
  Concentrates
- **05 IRVING, U.S.**
  Concentrates
- **06 ERIKA DE REYNOSA, MX**
  Bloodlines
- **07 GUADALAJARA, MX**
  Dialysis solutions
- **08 TIJUANA, MX**
  Cycler, concentrates

Latin America

- **RIO DE JANEIRO, BR**
  Regional headquarters Latin America
- **09 BOGOTÁ, CO**
  Dialysis solutions
- **10 JAGUARIÚNA, BR**
  Dialysis solutions
- **11 PILAR, AR**
  Concentrates

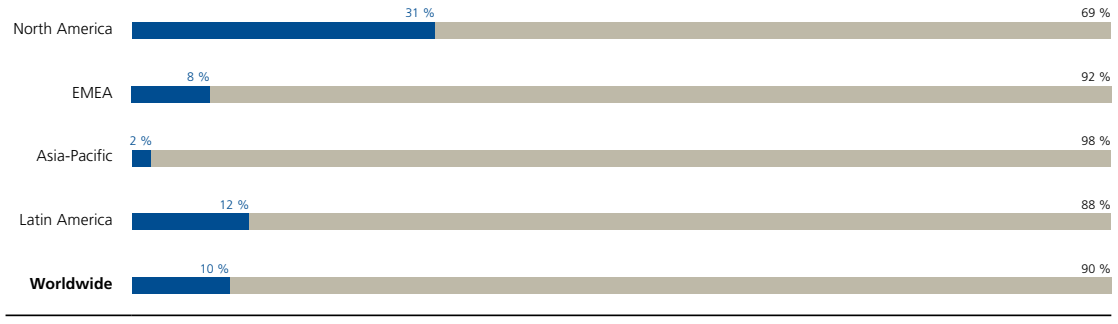
Europe

- **BAD HOMBURG, DE**
  Company headquarters and regional headquarters Europe, Middle East and Africa
- **12 SCHWEINFURT, DE**
  Dialysis machines
- **13 ST. WENDEL, DE**
  Dialyzers, PD solutions
- **14 L'ARBRESLE, FR**
  Dialyzers, concentrates
- **15 PALAZZO PIGNANO, IT**
  Bloodlines
- **16 KREMS, AT**
  Adsorbers
- **17 VRŠAC, RS**
  Dialyzers, bloodlines
- **18 ANTALYA, TR**
  Bloodlines

Asia-Pacific

- **HONG KONG, CN**
  Regional headquarters Asia-Pacific
- **19 INUKAI, JP**
  Fibers
- **20 BUZEN, JP**
  Dialyzers, PD bags
- **21 CHANGSHU, CN**
  Bloodlines, dialyzers
- **22 IPOH, MY**
  Systems for water treatment
- **23 ENSTEK, MY**
  Concentrates
- **24 SMITHFIELD, AU**
  Concentrates
- **25 SCORESBY, AU**
  Dialysis chairs, packs

C 2.3 **PATIENTS TREATED**



Source: Company data and estimates

41 % share of the global market (2018: 39 %), making us the world leader in this field as well.

Dialyzers for hemodialysis are the largest product group in the dialysis market with a worldwide sales volume of over 350 M units in 2019. More than 155 M (around 44 %) of these were made by Fresenius Medical Care, giving us by far the biggest market share. Hemodialysis machines constitute another key component of our product business. Here, too, we are the clear market leader. Of the estimated 102,000 machines installed in 2019, around 52,000, or more than 50 % (2018: more than 50 %), were produced by Fresenius Medical Care.

Furthermore, we hold a strong position in the market for peritoneal dialysis products: Around 16 % (2018: around 17 %) of all peritoneal dialysis patients use products made by Fresenius Medical Care.

Fresenius Medical Care is also the global leader in dialysis care, providing treatment to about 10 % of all dialysis patients. The market for dialysis care services in the U.S. is already highly consolidated. Fresenius Medical Care treats around 38 % of all dialysis patients here.

Outside the U.S., the dialysis services business is much more fragmented. With around 1,430 dialysis centers and approximately 137,000 patients in around 50 countries, Fresenius Medical Care operates by far the largest network of clinics.

MANUFACTURING, QUALITY AND SUPPLY

The Global Manufacturing, Quality and Supply (GMQS) division centrally manages all of Fresenius Medical Care's global activities relating to the procurement of raw materials and semi-finished goods as well as the manufacturing and distribution of renal products. In April 2019, Supply Chain Management was globalized in all regions under the responsibility of Global Manufacturing and Quality (GMQ). To reflect this integration in a single, unified organization, GMQ has been renamed GMQS.

GMQS strives to ensure reliable product quality and effective product supply at optimized total cost with efficient utilization of capital.

The objective of our production strategy is to manufacture high-quality products in the right place at the right time on the best possible terms. We are able to successfully implement this strategy thanks to a network of large production sites, where we make products for sale worldwide, as well as smaller production sites that primarily supply products regionally.

Strategic purchasing at Fresenius Medical Care is geared toward ensuring the availability, safety and quality of the materials used in production with the aim of further expanding our competitive and internationally balanced supplier network.

At the end of 2019, GMQS had 16,418 employees (full-time equivalents) (2018: 16,172). In total, we operate 45 production sites in more than 20 countries.

CORPORATE STRATEGY AND OBJECTIVES

Creating a future worth living. For patients. Worldwide. Every day. This purpose guides us in our efforts to give our patients around the world a better life by offering them high-quality products and outstanding health care. It is based on our corporate values: collaborative, proactive, reliable, excellent.

STRATEGIC CORE COMPETENCIES

Fresenius Medical Care aims to further consolidate its expertise as the world's leading provider of top-quality dialysis treatments and health care products and to apply them as a basis for sustainable, profitable growth. Moreover, in the area of Care Coordination, our goal is to provide holistic care and improve outcomes for patients as well as payors while increasing Fresenius Medical Care's corporate value in the long term. Our strategy is based on four core competencies (SEE CHART 2.4).

› Innovating products

Developing innovative products to achieve even better outcomes for our patients is an inherent part of our strategy of sustainable and profitable growth. We leverage our technology leadership position in dialysis to enhance treatment options in such a way that both patients and health care systems can benefit. This is also why we are committed to further expanding home dialysis. In addition, we are constantly striving to identify new business opportunities in value-added technologies and approaches, for example through our venture capital company Fresenius Medical Care Ventures.

› Operating outpatient facilities

By leveraging our experience gained in currently 3,994 proprietary dialysis clinics in around 50 countries, we have the knowledge to operate and manage stand-alone outpatient clinics efficiently and capture economies of scale. We are continuously optimizing and modernizing our processes and administrative structures.

› Standardizing medical procedures

Our goal is to standardize medical treatments and clinical processes while continuing to ensure high-quality clinical outcomes. In 2019, we established the Global Medical Office with the aim of enhancing knowledge transfer across the Company. By adding the Global Chief Medical Officer to the Management Board as of January 1, 2020, Fresenius Medical Care is underlining the importance of interlinking clinical science with therapy. With over 52 M dialysis treatments performed per year, we have one of the largest dialysis databases worldwide. We intend to use this information to standardize medical setups, open new clinics and integrate acquired clinics into our network based on proven and efficient concepts.

› Coordinating patients efficiently

In an environment of growing patient numbers and changing health care systems, Fresenius Medical Care sees significant potential in providing value-based care – especially in the U.S. This approach focuses on selling solutions, providing holistic care and receiving outcome-based reimbursement rather than offering single products or services.

Depending on the type of health care network in which we participate, we coordinate the care of our patients with other providers including physicians and other health care facilities. We then use the accumulated patient information to create predictive analytics.

GLOBAL EFFICIENCY PROGRAM

In 2017 we announced the second phase of our Global Efficiency Program (GEP II). The program's objectives are to identify and realize further efficiency potential and enhance the Company's overall competitiveness. The expected range of sustained cost improvements is €150 M to €200 M per annum by the end of 2020.

For further information on our goals, see the "Outlook" chapter starting on PAGE 60.

C 2.4 **CORPORATE STRATEGY**

PERFORMANCE MANAGEMENT SYSTEM

The Management Board oversees our Company by setting strategic and operational targets and measuring various financial key performance indicators used for internal management determined in euro based upon IFRS.

The key performance indicators used for internal management are the same in all the individual operating segments.

Each operating segment is evaluated based on target figures that reflect the revenue and expenses they control. The effects of certain transactions and income taxes are not included as we believe these items to be outside the operating segments' control. Financing is a corporate function, which the operating segments do not control. Therefore, we do not include interest expense relating to financing as an operating segment measurement. Similarly, we do not allocate certain costs which relate primarily to certain headquarters' overhead charges, including accounting and finance, global research and development, etc. because we believe that these costs are also not within the control of the individual operating segments.

Certain of the following key performance indicators and other financial information as well as discussions and analyses set out in this report include measures that are not defined by IFRS (Non-IFRS Measure). We believe this information, along with comparable IFRS measurements, is useful to our investors as it provides a basis for assessing our performance, payment obligations related to performance-based compensation as well as our compliance with financial covenants. Non-IFRS financial measures should not be viewed or interpreted as a substitute for financial information presented in accordance with IFRS.

Some key performance indicators and other financial measures used in this report such as changes in revenue, operating income and net income attributable to shareholders of FMC AG & CO. KGAA include the impact of translating local currencies to our reporting currency for financial reporting purposes. We calculate these Non-IFRS financial measures at constant exchange rates in our filings to show changes in our revenue, operating income, net income attributable to shareholders of FMC AG & CO. KGAA and other items without giving effect to period-to-period currency fluctuations. Under IFRS, amounts received in local (non-euro) currency are translated into euro at the average exchange rate for the period presented. Once we translate the local currency for the constant currency, we then calculate the change, as a percentage, of the current period calculated using the prior period exchange rates versus the prior period. This resulting percentage is a Non-IFRS Measure referring to a change as a percentage at constant currency. These currency-adjusted financial measures are identifiable by the designated terms "Constant Exchange Rates" or "Constant Currency."

We believe that the measures at Constant Currency are useful to investors, lenders and other creditors because such information enables them to gauge the impact of currency fluctuations on our revenue, operating income, net income attributable to shareholders of FMC AG & CO. KGAA and other items from period to period. In addition, under our long-term incentive plans, we measure the attainment of certain pre-determined financial targets for revenue growth and net income growth in Constant Currency. However, we limit our use of Constant Currency period-over-period changes to a measure for the impact of currency fluctuations on the translation of local currency into euro. We do not evaluate our results and performance without considering both:

1. period-over-period changes in revenue, operating income, net income attributable to shareholders of FMC AG & CO. KGAA and other items prepared in accordance with IFRS and

2. Constant Currency changes in revenue, operating income, net income attributable to shareholders of FMC AG & CO. KGAA and other items.

We caution the readers of this report to follow a similar approach by considering data on Constant Currency period-over-period changes only in addition to, and not as a substitute for or superior to, changes in revenue, operating income, net income attributable to shareholders of FMC AG & CO. KGAA and other items prepared in accordance with IFRS. We present the growth rate derived from non-IFRS measures next to the growth rate derived from IFRS measures such as revenue, operating income, net income attributable to shareholders of FMC AG & CO. KGAA and other items. As the reconciliation is inherent in the disclosure, we believe that a separate reconciliation would not provide any additional benefit.

REVENUE

The management of our operating segments is based on revenue as a key performance indicator. We believe that the key to continue growing our revenue is to attract new patients and increase the number of treatments performed each year. The number of treatments performed each year is therefore an indicator of continued revenue growth. For further information regarding revenue recognition and measurement, refer to NOTE 1 K of the notes to consolidated financial statements. Revenue is also benchmarked based on movement at Constant Exchange Rates.

OPERATING INCOME

Operating income is the most appropriate measure for evaluating the profitability of the operating segments and there-

fore is also a key performance indicator. Operating income is also benchmarked based on movement at Constant Exchange Rates.

OPERATING INCOME MARGIN

Operating income margin represents the ratio of operating income to revenue. We believe operating income margin shows the profitability of each of our operating segments or our consolidated company.

DELIVERED OPERATING INCOME (NON-IFRS MEASURE)

As a result of the significance of noncontrolling interest holders in our operations, we believe a measure that is meaningful to investors is operating income less noncontrolling interests (Delivered Operating Income). Delivered Operating Income approximates the operating income attributable to the shareholders of FMC AG & CO. KGAA. As such, we believe that operating income is the closest comparable IFRS measure. Delivered Operating Income is also benchmarked based on movement at Constant Exchange Rates.

TABLE 2.5 shows the reconciliation of operating income to Delivered Operating Income on a consolidated basis and for our reporting segments.

T 2.5 **DELIVERED OPERATING INCOME RECONCILIATION**
IN € M

	2019	2018
North America		
Operating income	1,794	2,665
less noncontrolling interests	(225)	(231)
Delivered Operating Income	1,569	2,434
Dialysis		
Operating income	1,737	1,752
less noncontrolling interests	(205)	(212)
Delivered Operating Income	1,532	1,540
Care Coordination		
Operating income	57	913
less noncontrolling interests	(20)	(19)
Delivered Operating Income	37	894
EMEA		
Operating income	448	399
less noncontrolling interests	(5)	(4)
Delivered Operating Income	443	395

	2019	2018
Asia-Pacific		
Operating income	329	304
less noncontrolling interests	(8)	(9)
Delivered Operating Income	321	295
Dialysis		
Operating income	300	270
less noncontrolling interests	(7)	(7)
Delivered Operating Income	293	263
Care Coordination		
Operating income	29	34
less noncontrolling interests	(1)	(2)
Delivered Operating Income	28	32
Latin America		
Operating income	43	29
less noncontrolling interests	(1)	0
Delivered Operating Income	42	29
Total		
Operating income	2,270	3,038
less noncontrolling interests	(239)	(244)
DELIVERED OPERATING INCOME	**2,031**	**2,794**

NET INCOME GROWTH AT CONSTANT CURRENCY (NON-IFRS MEASURE)

On a consolidated level, percentage growth in net income (net income attributable to shareholders of FMC AG & CO. KGAA) at Constant Currency is an additional key performance indicator used for internal management.

BASIC EARNINGS PER SHARE GROWTH AT CONSTANT CURRENCY (NON-IFRS MEASURE)

Percentage growth in basic earnings per share at Constant Currency is a key performance indicator to evaluate our profitability. This indicator helps to manage our overall performance. Basic earnings per share is calculated by dividing net income attributable to shareholders by the weighted-average number of outstanding shares over the course of the year.

CAPITAL EXPENDITURES

We manage our investments using a detailed coordination and evaluation process. The Management Board sets our complete investment budget as well as the investment tar-

gets. Before realizing specific investment projects or acquisitions, our internal Acquisition & Investment Committee examines the individual projects and measures considering the expected return on investment and potential yield. Investment projects are evaluated using common methods such as net present value, internal interest rate methods and payback periods. We utilize this evaluation methodology to ensure that we only make and implement investments and acquisitions that increase shareholder value. Capital expenditures for property, plant and equipment is an indicator used for internal management. It influences the capital invested for replacement and expansion.

CASH FLOW MEASURES

Net cash provided by (used in) operating activities in % of revenue

Our consolidated statement of cash flows indicates how we generated and used cash and cash equivalents. In conjunction with our other primary financial statements, it provides information that helps us evaluate changes to our net assets and our financial structure (including liquidity and solvency). Net cash provided by (used in) operating activities is applied to assess whether a business can generate the cash required to make the necessary replacement and expansion of investments. This indicator is impacted by the profitability of our business and the development of working capital, mainly receivables. Net cash provided by (used in) operating activities in percent of revenue shows the percentage of our revenue that is available in terms of financial resources. It is an indicator of our operating financial strength.

Free cash flow in % of revenue (Non-IFRS Measure)

Free cash flow (net cash provided by (used in) operating activities after capital expenditures, before acquisitions and investments) refers to the cash flow we have at our disposal, including cash flows that may be restricted for other uses. This indicator shows the percentage of revenue available for acquisitions and investments, dividends to shareholders, reducing debt financing or for repurchasing shares.

TABLE 2.6 shows the cash flow key performance indicators for 2019 and 2018 and reconciles free cash flow and free cash flow in percent of revenue to Net cash provided by (used in) operating activities and Net cash provided by (used in) operating activities in percent of revenue, respectively:

T 2.6 **CASH FLOW MEASURES**
IN € M

	2019	2018
Revenue	17,477	16,547
Net cash provided by (used in) operating activities	2,567	2,062
Capital expenditures	(1,125)	(1,057)
Proceeds from sale of property, plant and equipment	12	54
Capital expenditures, net	(1,113)	(1,003)
Free cash flow	1,454	1,059
Net cash provided by (used in) operating activities in % of revenue	14.7	12.5
Free cash flow in % of revenue	8.3	6.4

NET LEVERAGE RATIO (NON-IFRS MEASURE)

The net leverage ratio is a key performance indicator used for internal management. To determine the net leverage ratio, debt and lease liabilities less cash and cash equivalents (net debt) is compared to adjusted EBITDA (earnings before interest, taxes, depreciation and amortization) (adjusted for acquisitions and divestitures made during the year with a purchase price above a €50 M threshold as defined in the Amended 2012 Credit Agreement, non-cash charges and impairment loss). The ratio is an indicator of the length of time the Company needs to service the net debt out of its own resources. We believe that the net leverage ratio provides alternative information that management believes to be useful in assessing our ability to meet our payment obligations in addition to considering the absolute amount of our debt. We have a strong market position in a growing, global and mainly non-cyclical market. Furthermore, most of our customers have a high credit rating as the dialysis industry is characterized by stable and sustained cash flows. We believe this enables us to work with a reasonable proportion of debt, through the employment of an extensive mix of debt.

IFRS 16, Leases (IFRS 16) replaces the straight-line operating lease expense for former leases under IAS 17, Leases (IAS 17) with a depreciation charge for the lease asset and an interest expense on the lease liability as well as the classification of certain IAS 17 leases (such effects being, collectively "IFRS 16 Implementation"), SEE NOTE 1 of the notes to the consolidated financial statements. The adjustment to exclude the effects from the IFRS 16 Implementation is included solely for the purpose of increasing the comparability of previously reported information and is in conformity with the terms of the Amended 2012 Credit Agreement. This adjustment will only be made for the reporting periods included in this report and will not be included as an adjustment in the future.

TABLE 2.7 shows the reconciliation of adjusted EBITDA and net leverage ratio at December 31, 2019 and 2018.

T 2.7 RECONCILIATION OF ADJUSTED EBITDA AND NET LEVERAGE RATIO TO THE MOST DIRECTLY COMPARABLE IFRS FINANCIAL MEASURE
IN € M, EXCEPT FOR NET LEVERAGE RATIO

	Measure 2019	IFRS 16 Implementation	Measure (excluding IFRS 16)	Measure 2018
Debt and lease liabilities [1, 2]	13,782	(4,797)	8,985	7,546
Minus: Cash and cash equivalents	(1,008)	–	(1,008)	(2,146)
Net debt	**12,774**	**(4,797)**	**7,977**	**5,400**
Net income	1,439			2,226
Income tax expense	402			511
Interest income	(62)			(147)
Interest expense	491			448
Depreciation and amortization	1,553			725
Adjustments [3]	110			(722)
Adjusted EBITDA	**3,933**	**(774)**	**3,159**	**3,041**
NET LEVERAGE RATIO	**3.2**	**(0.7)**	**2.5**	**1.8**

[1] Debt includes the following balance sheet line items: short-term debt, short-term debt from related parties, current portion of long-term debt and long-term debt, less current portion.
[2] IFRS 16 Implementation includes lease liabilities and lease liabilities from related parties (€4,705 M), other financial liabilities resulting from changes in the accounting treatment for sale-leaseback transactions (€110 M) as well as the remaining balance of "liabilities from capital leases in accordance with IAS 17" at December 31, 2019, which are included in lease liabilities, but have already been included in debt as of December 31, 2018 (-€18 M).
[3] Acquisitions and divestitures made within the reporting period with a purchase price above a €50 M threshold as defined in the Amended 2012 Credit Agreement (2019: -€71 M; 2018: -€23 M), non-cash charges, primarily related to pension expense (2019: €46 M; 2018: €45 M), impairment loss (2019: €40 M; 2018: €65 M), (gain) loss related to divestitures of Care Coordination activities with a sales price above €50 M (2018: -€809 M) (SEE NOTE 4 C) of the notes to the consolidated financial statements) and NxStage related transaction costs (2019: €95 M).

TABLE 2.8 provides an overview of our key performance indicators.

T 2.8 KEY PERFORMANCE INDICATORS

	Results 2019		Results 2018
		adjusted for IFRS 16 Implementation	
Revenue in € M	17,477	17,592	16,547
Operating income in € M	2,270	2,195	3,038
Operating income margin in %	13.0	12.5	18.4
Delivered Operating Income in € M	2,031	1,956	2,794
Net income growth at Constant Currency in % [1]	(42)	(38)	60
Basic earnings per share growth at Constant Currency in % [1]	(41)	(38)	60
Capital expenditures in € BN	1.1	1.1	1.0
Acquisitions and investments in € BN [2]	2.2	2.2	0.4
Net cash provided by (used in) operating activities in % of revenue	14.7	11.1	12.5
Free cash flow in % of revenue	8.3	5.1	6.4
Net leverage ratio	3.2	2.5	1.8
ROIC in %	6.1	6.8	12.4

[1] Net income attributable to shareholders of FMC AG & Co. KGaA.
[2] Excluding investments in debt securities.

RETURN ON INVESTED CAPITAL (ROIC) (NON-IFRS MEASURE)

ROIC is the ratio of operating income after tax (net operating profit after tax or NOPAT) to the average invested capital of the last five quarter closing dates, including adjustments for acquisitions and divestitures made during the year with a purchase price above a €50 M threshold as defined in the Amended 2012 Credit Agreement, and expresses how efficiently we allocate the capital under our control or how well we employ our capital with regard to a specific investment project. An adjustment to exclude amounts related to the IFRS 16 Implementation is included for the purpose of increasing the comparability of previously reported information in accordance with our long-term incentive plans in 2019 (SEE NOTE 20 of the notes to the consolidated financial statements).

TABLE 2.9 STARTING ON PAGE 28 shows the reconciliation of average invested capital to total assets, which we believe to be the most directly comparable IFRS financial measure, and how ROIC is calculated.

T 2.9 RECONCILIATION OF AVERAGE INVESTED CAPITAL AND ROIC (BASED ON IFRS MEASURES) (CONTINUATION SEE NEXT PAGE)
IN € M, EXCEPT WHERE OTHERWISE SPECIFIED

2019	Dec. 31, 2019	Sept. 30, 2019	June 30, 2019	March 31, 2019	Dec. 31, 2018
Total assets	32,935	33,169	31,956	32,353	26,242
Plus: Cumulative goodwill amortization	420	432	416	419	413
Minus: Cash and cash equivalents	(1,008)	(965)	(922)	(959)	(2,146)
Minus: Loans to related parties	(72)	(65)	(62)	(81)	(80)
Minus: Deferred tax assets	(361)	(348)	(329)	(309)	(346)
Minus: Accounts payable	(717)	(655)	(680)	(708)	(641)
Minus: Accounts payable to related parties	(119)	(255)	(156)	(210)	(154)
Minus: Provisions and other current liabilities [1]	(2,452)	(2,546)	(2,524)	(2,604)	(2,727)
Minus: Income tax payable	(180)	(181)	(171)	(161)	(166)
Invested capital	28,446	28,586	27,528	27,740	20,395
Average invested capital as of December 31, 2019	**26,539**				
Operating income	2,270				
Income tax expense [2]	(565)				
NOPAT	1,705				

2018	Dec. 31, 2018	Sept. 30, 2018	June 30, 2018	March 31, 2018	Dec. 31, 2017
Total assets	26,242	25,587	25,045	24,157	24,025
Plus: Cumulative goodwill amortization	413	407	405	385	395
Minus: Cash and cash equivalents	(2,146)	(1,754)	(1,657)	(846)	(978)
Minus: Loans to related parties	(80)	(112)	(118)	(109)	(92)
Minus: Deferred tax assets	(346)	(328)	(334)	(325)	(315)
Minus: Accounts payable	(641)	(611)	(559)	(509)	(590)
Minus: Accounts payable to related parties	(154)	(194)	(183)	(236)	(147)
Minus: Provisions and other current liabilities [1]	(2,727)	(2,748)	(2,689)	(2,626)	(2,791)
Minus: Income tax payable	(166)	(209)	(330)	(239)	(194)
Invested capital	20,395	20,038	19,580	19,652	19,313
Average invested capital as of December 31, 2018	**19,796**				
Operating income	3,038				
Income tax expense [2]	(620)				
NOPAT	2,418				

[1] Including non-current provisions, non-current labor expenses and variable payments outstanding for acquisitions and excluding pension liabilities and noncontrolling interests subject to put provisions.
[2] Adjusted for noncontrolling partnership interests.

ADJUSTMENTS TO AVERAGE INVESTED CAPITAL AND ROIC (CONTINUATION OF THE PREVIOUS PAGE)
IN € M, EXCEPT WHERE OTHERWISE SPECIFIED

2019	Dec. 31, 2019	Sept. 30, 2019[3]	June 30, 2019[3]	March 31, 2019[3]	Dec. 31, 2018[3]
Total assets	–	156	149	151	2,092
Plus: Cumulative goodwill amortization	–	–	–	–	–
Minus: Cash and cash equivalents	–	(4)	(4)	(4)	(45)
Minus: Loans to related parties	–	–	–	–	–
Minus: Deferred tax assets	–	–	–	–	(1)
Minus: Accounts payable	–	–	–	–	(17)
Minus: Accounts payable to related parties	–	–	–	–	–
Minus: Provisions and other current liabilities[1]	–	(4)	(3)	(3)	(48)
Minus: Income tax payable	–	–	–	–	–
Invested capital	–	148	142	144	1,981
Adjustment to average invested capital as of December 31, 2019	**483**				
Adjustment to operating income[3]	(79)				
Adjustment to income tax expense[3]	20				
Adjustment to NOPAT	(59)				

2018	Dec. 31, 2018	Sept. 30, 2018	June 30, 2018	March 31, 2018[3]	Dec. 31, 2017[3]
Total assets	–	–	–	(1,066)	(1,095)
Plus: Cumulative goodwill amortization	–	–	–	–	–
Minus: Cash and cash equivalents	–	–	–	46	47
Minus: Loans to related parties	–	–	–	–	–
Minus: Deferred tax assets	–	–	–	–	–
Minus: Accounts payable	–	–	–	13	13
Minus: Accounts payable to related parties	–	–	–	–	–
Minus: Provisions and other current liabilities[1]	–	–	–	220	226
Minus: Income tax payable	–	–	–	–	–
Invested capital	–	–	–	(787)	(809)
Adjustment to average invested capital as of December 31, 2018	**(320)**				
Adjustment to operating income[3]	(14)				
Adjustment to income tax expense[3]	3				
Adjustment to NOPAT	(11)				

[1] Including non-current provisions, non-current labor expenses and variable payments outstanding for acquisitions and excluding pension liabilities and noncontrolling interests subject to put provisions.
[3] Including adjustments for acquisitions and divestitures made within the reporting period with a purchase price above a €50 M threshold as defined in the Amended 2012 Credit Agreement.

RECONCILIATION OF AVERAGE INVESTED CAPITAL AND ROIC (NON-IFRS MEASURE) (CONTINUATION OF THE PREVIOUS PAGE)
IN € M, EXCEPT WHERE OTHERWISE SPECIFIED

2019	Dec. 31, 2019	Sept. 30, 2019[3]	June 30, 2019[3]	March 31, 2019[3]	Dec. 31, 2018[3]
Total assets	32,935	33,325	32,105	32,504	28,334
Plus: Cumulative goodwill amortization	420	432	416	419	413
Minus: Cash and cash equivalents	(1,008)	(969)	(926)	(963)	(2,191)
Minus: Loans to related parties	(72)	(65)	(62)	(81)	(80)
Minus: Deferred tax assets	(361)	(348)	(329)	(309)	(347)
Minus: Accounts payable	(717)	(655)	(680)	(708)	(658)
Minus: Accounts payable to related parties	(119)	(255)	(156)	(210)	(154)
Minus: Provisions and other current liabilities[1]	(2,452)	(2,550)	(2,527)	(2,607)	(2,775)
Minus: Income tax payable	(180)	(181)	(171)	(161)	(166)
Invested capital	28,446	28,734	27,670	27,884	22,376
Average invested capital as of December 31, 2019	**27,022**				
Operating income[3]	2,191				
Income tax expense[2, 3]	(545)				
NOPAT	1,646				
ROIC IN %	**6.1**				

2018	Dec. 31, 2018	Sept. 30, 2018	June 30, 2018	March 31, 2018[3]	Dec. 31, 2017[3]
Total assets	26,242	25,587	25,045	23,091	22,930
Plus: Cumulative goodwill amortization	413	407	405	385	395
Minus: Cash and cash equivalents	(2,146)	(1,754)	(1,657)	(800)	(931)
Minus: Loans to related parties	(80)	(112)	(118)	(109)	(92)
Minus: Deferred tax assets	(346)	(328)	(334)	(325)	(315)
Minus: Accounts payable	(641)	(611)	(559)	(496)	(577)
Minus: Accounts payable to related parties	(154)	(194)	(183)	(236)	(147)
Minus: Provisions and other current liabilities[1]	(2,727)	(2,748)	(2,689)	(2,406)	(2,565)
Minus: Income tax payable	(166)	(209)	(330)	(239)	(194)
Invested capital	20,395	20,038	19,580	18,865	18,504
Average invested capital as of December 31, 2018	**19,476**				
Operating income[3]	3,024				
Income tax expense[2, 3]	(617)				
NOPAT	2,407				
ROIC IN %	**12.4**				

[1] Including non-current provisions, non-current labor expenses and variable payments outstanding for acquisitions and excluding pension liabilities and noncontrolling interests subject to put provisions.
[2] Adjusted for noncontrolling partnership interests.
[3] Including adjustments for acquisitions and divestitures made within the reporting period with a purchase price above a €50 M threshold as defined in the Amended 2012 Credit Agreement.

ADJUSTMENTS TO AVERAGE INVESTED CAPITAL AND ROIC FOR THE EFFECT FROM THE IFRS 16 IMPLEMENTATION (CONTINUATION OF THE PREVIOUS PAGE)
IN € M, EXCEPT WHERE OTHERWISE SPECIFIED

2019	Dec. 31, 2019	Sept. 30, 2019	June 30, 2019	March 31, 2019	Dec. 31, 2018
Total assets	(4,356)	(4,319)	(4,172)	(4,229)	-
Plus: Cumulative goodwill amortization	–	–	–	–	–
Minus: Cash and cash equivalents	–	–	–	–	–
Minus: Loans to related parties	–	–	–	–	–
Minus: Deferred tax assets	2	4	4	5	–
Minus: Accounts payable	–	–	–	–	–
Minus: Accounts payable to related parties	–	–	–	–	–
Minus: Provisions and other current liabilities [1]	(140)	(144)	(138)	(143)	–
Minus: Income tax payable	–	(4)	(4)	(1)	–
Invested capital	(4,494)	(4,463)	(4,310)	(4,368)	–
Adjustment to average invested capital as of December 31, 2019	**(3,527)**				
Adjustment to operating income	(75)				
Adjustment to income tax expense	18				
Adjustment to NOPAT	(57)				

RECONCILIATION OF AVERAGE INVESTED CAPITAL AND ROIC (NON-IFRS MEASURE, ADJUSTED FOR THE EFFECT FROM THE IFRS 16 IMPLEMENTATION) (CONTINUATION OF THE PREVIOUS PAGE)
IN € M, EXCEPT WHERE OTHERWISE SPECIFIED

2019	Dec. 31, 2019	Sept. 30, 2019 [3]	June 30, 2019 [3]	March 31, 2019 [3]	Dec. 31, 2018 [3]
Total assets	28,579	29,006	27,933	28,275	28,334
Plus: Cumulative goodwill amortization	420	432	416	419	413
Minus: Cash and cash equivalents	(1,008)	(969)	(926)	(963)	(2,191)
Minus: Loans to related parties	(72)	(65)	(62)	(81)	(80)
Minus: Deferred tax assets	(359)	(344)	(325)	(304)	(347)
Minus: Accounts payable	(717)	(655)	(680)	(708)	(658)
Minus: Accounts payable to related parties	(119)	(255)	(156)	(210)	(154)
Minus: Provisions and other current liabilities [1]	(2,592)	(2,694)	(2,665)	(2,750)	(2,775)
Minus: Income tax payable	(180)	(185)	(175)	(162)	(166)
Invested capital	23,952	24,271	23,360	23,516	22,376
Average invested capital as of December 31, 2019	**23,495**				
Operating income [3]	2,116				
Income tax expense [2, 3]	(527)				
NOPAT	1,589				
ROIC IN % (ADJUSTED FOR IFRS 16)	**6.8**				

[1] Including non-current provisions, non-current labor expenses and variable payments outstanding for acquisitions and excluding pension liabilities and noncontrolling interests subject to put provisions.
[2] Adjusted for noncontrolling partnership interests.
[3] Including adjustments for acquisitions and divestitures made within the reporting period with a purchase price above a €50 M threshold as defined in the Amended 2012 Credit Agreement.

RESEARCH AND DEVELOPMENT

Developing innovative products and continuously improving our dialysis treatments are intrinsic elements of our growth strategy. Our worldwide research and development activities, which are centrally managed by the Global Research and Development division (GRD), enable us to develop products efficiently and systematically promote the exchange of knowledge and technology between regions.

GLOBAL RESEARCH AND DEVELOPMENT STRATEGY

Health care systems face major financial challenges now and in the long term. This confirms our intention to gear our research and development activities toward developing innovative products that not only meet high quality standards, but are also affordable. As an operator of proprietary dialysis clinics and a provider of products for treating patients at home, we know that these are by no means incompatible aims.

Our research and development strategy is globally oriented, enabling us to respond even better to the worldwide rise in demand for high-quality yet cost-efficient treatment methods. In doing so, we also take regional market conditions into account and offer a differentiated product range.

In the future, we intend to deliver innovative, competitive products even more efficiently and strengthen our focus on developing countries. In addition to research and development activities within our Company, we collaborate with external partners with the aim of building a comprehensive innovation and technology network. These partners include numerous academic institutions, such as research institutes at prestigious universities in the U.S. Another partner is the Renal Research Institute (RRI) in New York. This subsidiary of Fresenius Medical Care North America is a renowned institution in the field of clinical research into all aspects of chronic kidney failure. Together, we are working on fundamental issues relating to dialysis treatment. We are also increasingly collaborating with start-ups with the objective of promoting an open culture of innovation and enabling access to the latest technologies.

INNOVATIONS IN 2019

To be able to continuously improve our patients' quality of life and the outcomes of their treatment and to ensure our growth in the medium to long term, we not only work on new products that are close to market launch, but also have an extensive portfolio of innovation projects. These focus on technologies in our core business as well as related areas of strategic interest.

New hemodialysis system in development

In 2019, the U.S. Food and Drug Administration (FDA) granted breakthrough device designation to a new hemodialysis system, currently in development, that aims to prevent blood clotting without the use of blood thinner medication. The novel system integrates the antithrombogenic additive Endexo into the manufacturing process of dialyzers and bloodlines. Endexo is a polymer made of surface modifying molecules that are designed to inhibit the adsorption of protein and platelets. When incorporated into the membrane, this additive creates a modified inner wall that allows blood to pass through more effectively. Citrasate dialysate would be used with the new dialyzers and bloodlines as part of this novel system. The hope is that the new system will help reduce the risk of coagulation and increase hemocompatibility thereby eliminating the need for blood thinners, such as heparin, in most standard dialysis treatments.

Digital health care

Digitization, connectivity and data analysis are key elements of our development strategy. In the future, our devices will be connected to a modern connectivity framework that takes full account of different user needs and therapy options. The aim is to make the processes more efficient and thus achieve ever better treatment outcomes. The data analysis of this framework enables us to offer intelligent products and solutions that illustrate the complexity of treatments and processes internally.

Application tailored to emerging markets

The number of dialysis patients worldwide is expected to increase. Emerging markets need cost-effective programs that help to better manage the entire dialysis treatment process. In response to this need, we are currently developing a digital application tailored to the Asian markets. The app is a cloud-based clinical information system that offers electronic treatment management at a reasonable price, thus increasing the efficiency of work processes in clinics. To test the digital app in its environment, Fresenius Medical Care launched a production pilot in a clinic in India in the third quarter of 2019. Market launch is planned mid/end of 2020.

Research in the field of regenerative medicine

We invest in promising technologies and research approaches in the area of regenerative medicine through our independent affiliate Unicyte AG as well as Fresenius Medical Care Ventures. In fiscal year 2019, we invested €60 M in Unicyte. Unicyte will primarily use this capital to start clinical trials and establish the corresponding manufacturing processes. Our continued investment in Unicyte shows our commitment to developing the best treatment options for our patients across the entire spectrum of renal therapy.

Our venture capital company Fresenius Medical Care Ventures is increasingly collaborating with start-ups with the aim of promoting an open culture of innovation and gaining access to the latest technologies. In 2019, Fresenius Medical Care Ventures invested in eGenesis, a leading player in the field of xenotransplantation of kidneys for patients with advanced renal disease. Xenotransplantation could significantly improve the lives of patients with kidney failure, reduce overall costs and dramatically increase the number of kidneys available for transplant.

RESEARCH AND DEVELOPMENT RESOURCES

In fiscal year 2019, Fresenius Medical Care spent a total of around €168 M on research and development (2018: €114 M), corresponding to around 5 % (2018: 3 %) of our health care product revenue. At the end of 2019, our patent portfolio comprised some 10,658 property rights in approximately 1,518 patent families, i.e. groups of patents linked to the same invention. Our research and development work in fiscal year 2019 produced around 163 additional patent families. Our broad portfolio of patents will provide us with a wide range of treatment options in this highly competitive field in the future.

At December 31, 2019, 1,157 highly qualified employees (full-time equivalents) worked for Fresenius Medical Care in research and development worldwide (December 31, 2018: 933). They come from various backgrounds: Physicians work side by side with software specialists, business economists and engineers in interdisciplinary teams. More than 680 employees – the majority of our research and development staff – are based in Europe. Most research and development activities are carried out at our facilities in Schweinfurt and Bad Homburg v. d. Höhe (Germany). Other development sites are located in St. Wendel (Germany), Bucharest (Romania) and Krems (Austria). In the U.S., the Company maintains centers of excellence for the development of devices in Concord (California) and for dialyzers and other disposable products in Ogden (Utah). Development activities in Shanghai and Changshu (China) are focused on the growing demand for cost-effective dialysis systems in Asia and emerging markets. The Global Research and Development organization coordinates collaboration and technology exchange among the various sites. Carrying out research and development responsibly is an intrinsic element of our innovation culture. More information is shown in TABLE 2.10 ON PAGE 34.

EMPLOYEES

Fresenius Medical Care owes its business success to the commitment of its employees. At a functional level, our human resources management is conducted globally to ensure a uniform strategic approach in line with the overriding corporate objectives.

At December 31, 2019, Fresenius Medical Care employed a total of 120,659 members of staff (full-time equivalents) in 64 countries worldwide. Our workforce therefore increased by 7 % year-on-year, or by 8,001 employees in absolute terms. This was primarily the result of our acquisition efforts, above all relating to the integration of NxStage.

TABLE 2.11 ON PAGE 34 shows the breakdown of employees by operating segment as well as by products and services.

Staff costs at Fresenius Medical Care increased to €6,799 M in 2019 (2018: €6,440 M), corresponding to 39 % (2018: 39 %) of revenue. Average staff costs per employee (annual average based on full-time equivalents) amounted to €56,740 (2018: €57,129).

More information about our employees can be found in the Non-Financial Group Report starting on PAGE 81. For more information on diversity, see the "Corporate Governance Report" starting on PAGE 118.

QUALITY MANAGEMENT

At Fresenius Medical Care, we believe in offering high-quality and reliable products and therapies to ensure the best possible medical care for our patients and customers. We operate production facilities worldwide to meet the demand for our dialysis products and other health care products.

QUALITY MANAGEMENT AT OUR PRODUCTION SITES

Over the last several years, GMQS has introduced a stable infrastructure with efficient processes and systems. All production sites follow the "Lean Manufacturing" approach which, in North America and our Schweinfurt plant, includes the "Lean Six Sigma" management system. The focus of Lean Manufacturing and Six Sigma is on the continuous improvement of all manufacturing processes to achieve a low defect rate resulting in improved product quality, while reducing manufacturing times. We have successfully harmonized all local Quality Management Systems (QMS) in all manufacturing and development sites of our EMEA Segment, Latin America Segment and Asia-Pacific Segment under one Consolidated QMS (CQMS). Every medical device plant within these segments has a local QMS directed by CQMS that is certified either to ISO 13485:2016 and/or ISO 9001:2015. The QMS of each site is reviewed through periodic management review, internal corporate and internal local audits.

T 2.10 RESEARCH AND DEVELOPMENT

	2019	2018	2017	2016	2015
Research and development expenditures in € M	168	114	111	134	116
Number of patents [1]	10,658	9,152	8,396	7,748	6,643
Employees [1, 2]	1,157	933	825	794	649

[1] As of December 31, for the respective period presented.
[2] Full-time equivalents.

T 2.11 EMPLOYEES BY OPERATING SEGMENT
FULL-TIME EQUIVALENTS

	December 31, 2019	December 31, 2018	Change	Share
NORTH AMERICA	**60,478**	**55,591**	**4,887**	**50 %**
Health care services	55,611	54,374		
Health care products	4,867	1,217		
EMEA	**20,103**	**19,658**	**445**	**17 %**
Health care services	16,298	15,895		
Health care products	3,805	3,763		
ASIA-PACIFIC	**11,836**	**10,827**	**1,009**	**10 %**
Health care services	9,296	8,444		
Health care products	2,540	2,383		
LATIN AMERICA	**10,469**	**9,287**	**1,182**	**9 %**
Health care services	9,224	8,255		
Health care products	1,245	1,032		
WORLDWIDE	**120,659**	**112,658**	**8,001**	**100 %**
Corporate [1]	17,773	17,295	478	14 %

[1] Including the divisions Global Manufacturing, Quality and Supply as well as Global Research and Development.

QUALITY MANAGEMENT IN OUR DIALYSIS CLINICS

Our clinics work in conformance with the generally accepted quality standards of the industry, particularly the U.S. Kidney Disease Outcomes Quality Initiative (KDOQI) guidelines, the European Renal Best Practice standard (ERBP), and increasingly the Kidney Disease: Improving Global Outcomes (KDIGO), an industry initiative for global clinical practice guidelines. Clinical data management systems are used to routinely collect certain medical parameters, which we evaluate in anonymized form in compliance with these guidelines.

More information about our quality management including our quality data can be found in the Non-Financial Group Report starting on PAGE 81.

QUALITY-BASED REIMBURSEMENT SYSTEMS

We participate in quality-based reimbursement models, which we describe in the section "Health care and reimbursement systems vary from country to country" in the chapter "Economic Report" starting on PAGE 37.

RESPONSIBILITY AND SUSTAINABILITY MANAGEMENT

Operating on a global scale means having global responsibility. Fresenius Medical Care is aware of this responsibility.

Over the past years, we have continuously stepped up our sustainability activities. For us, sustainability means acting responsibly to achieve business success as well as medical, environmental and social progress. We have established a global sustainability governance structure to further improve the coordination and management of sustainability topics across all regions and functions.

Acting in a responsible and sustainable manner is a fundamental component of our strategy; it secures our future as a globally operating company in the health care industry.

Further information can be found in the Non-Financial Group Report starting on PAGE 81.

ECONOMIC REPORT

The dialysis market is a sustainable growth market with steadily rising demand for products and services to treat patients with chronic kidney disease.

MACROECONOMIC AND SECTOR-SPECIFIC ENVIRONMENT

MACROECONOMIC ENVIRONMENT

Dependency on economic cycles

Our business is exposed to economic cycles only to a relatively small extent. This sets us apart from manufacturers of consumer goods, for instance, whose products are subject to more cyclical demand.

Our business is impacted more by government reimbursement rates and remuneration systems. Dialysis is a vital medical service, which is why it is usually paid for by the responsible health care system.

Exchange rate developments

The global exchange rate developments in fiscal year 2019 were characterized by a relatively constant exchange rate between the euro and the U.S. dollar, as well as partly stronger fluctuations in the emerging economies. Some currencies in emerging economies in particular depreciated significantly against the euro and the U.S. dollar. As Fresenius Medical Care has a worldwide presence, the results of its operations are impacted by exchange rate developments. Movements in the U.S. dollar and the euro are especially crucial as we generate a major part of our revenues in the U.S. On average over the course of the year, the euro traded weaker against the U.S. dollar than in fiscal year 2018.

In addition, Fresenius Medical Care's operating results are influenced by changes in the exchange rate between the euro and local currencies. This is partly due to intra-Group sales from large production sites in the euro zone to Group companies with different functional currencies, but also because the euro is the currency we use for financial reporting. Regarding intra-Group sales, individual subsidiaries are exposed to fluctuations in the exchange rate between the invoicing currencies and the currencies in which they conduct their local operations. Fresenius Medical Care reduces transaction risks, i.e. risks from foreign currency exposures or exchange rate fluctuations, through a global network of production facilities, which is geared toward demand in the Company's dialysis product business. As the production facilities are often based in the markets they serve, costs are incurred in the same currency in which revenue is generated. The risk of exchange rate fluctuations is relatively low for health care services because they are provided locally and are therefore invoiced in the respective currency.

SECTOR-SPECIFIC ENVIRONMENT

Chronic kidney failure (end-stage renal disease, ESRD) is a global disease. The number of patients requiring renal replacement therapy is increasing worldwide: At the end of 2019, approximately 4.3 M patients underwent dialysis treatment or received a donor organ.

Further information can be found in TABLE 2.12.

For many years now, the number of donated organs worldwide has been significantly lower than the number of patients on transplant waiting lists. Despite extensive efforts by regional initiatives to increase awareness of kidney donation and the willingness to donate, the share of patients receiving kidney transplantation compared with other treatment methods has remained relatively unchanged over the past ten years.

The prevalence of chronic kidney failure varies between regions. There are several reasons for this:

- The countries differ demographically, as age structures in the population vary worldwide.
- The prevalence of risk factors for kidney disease, such as diabetes and high blood pressure, varies widely.
- The genetic predisposition for kidney disease also differs significantly around the world.
- Access to dialysis remains restricted in many countries, meaning that many patients suffering from chronic kidney failure are not treated and therefore do not appear in prevalence statistics.
- Cultural factors, such as nutrition, play a role.

The number of dialysis patients rose by around 6 % in 2019. The growth rate was lower in countries such as the U.S., Japan, and Western and Central Europe than in economically weaker regions, where it is generally above 6 %.

T 2.12 **PATIENTS WITH CHRONIC KIDNEY FAILURE**

	2019	Share
Patients with chronic kidney failure	**4,348,000**	**100 %**
Of which patients with transplants	815,000	19 %
Of which dialysis patients	**3,533,000**	**81 %**
Hemodialysis (HD)	3,143,000	72 %
Peritoneal dialysis (PD)	390,000	9 %

Source: Company information and estimates

Comparison of dialysis treatment methods

In 2019, most dialysis patients were treated in one of approximately 45,600 dialysis centers worldwide, with an average of more than 75 patients per center. However, this figure varies considerably from country to country.

Hemodialysis is by far the most common form of therapy for chronic kidney failure. A total of 88 % of dialysis patients were treated in this way at a dialysis center in 2019. Home hemodialysis is an alternative to treatment at a dialysis center. Although take-up has been limited to date, the number of home hemodialysis patients is rising continuously. A total of 1 % of all patients are currently treated in this way. In the year under review, 11 % of all dialysis patients were treated with peritoneal dialysis, usually at home. As a result, 12 % of our dialysis patients were treated with home dialysis.

CHART 2.13 shows a comparison of in-center and home dialysis.

Volume of the dialysis market

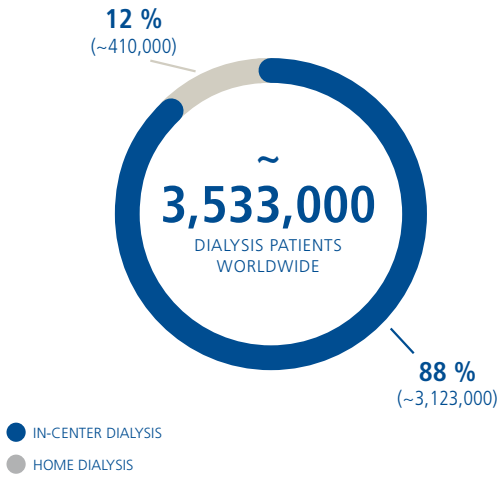
According to our estimates, the volume of the global dialysis market increased to around €80 BN in 2019 (2018: €74 BN). The market grew by 4 % over the past year at Constant Currency. We expect the following approximate breakdown for this market volume: around €14 BN for dialysis products and approximately €66 BN for dialysis services (including dialysis drugs).

Care Coordination

Chronic conditions such as diabetes and cardiovascular diseases are becoming increasingly common and are responsible for approximately two out of three deaths worldwide. In many countries, a large proportion of health care spending goes toward treating chronic diseases. To counteract the resultant increase in cost pressure, more and more health care systems, such as that in our largest market, the U.S., are starting to promote coordinated, holistic care rather than reimbursing individual services.

Due to the large number of different services offered in the area of Care Coordination, we cannot provide a meaningful estimate of the market volume. We currently offer medical services in Care Coordination primarily in the North America and Asia-Pacific Segments and have adapted our services in this area to these markets. The extent to which we roll out our Care Coordination services outside the U.S. may vary in individual countries and regions depending on the respective reimbursement system and market environment.

C 2.13 **IN-CENTER VS. HOME DIALYSIS**



Our customers are mostly health insurers and companies

Fresenius Medical Care's most important customers are state-owned or public health insurers, private health insurers, and companies.

Health care and reimbursement systems vary from country to country

As renal replacement therapy is a life-saving medical service, patients often do not have to pay for dialysis themselves. Instead, the costs are borne by the responsible health care system. The reimbursement systems for dialysis treatment – in other words, the structures used by health care systems to regulate reimbursement for dialysis services – differ from country to country and sometimes even within countries. The business activities of dialysis service providers and the reimbursement of dialysis therapy are affected by various factors including regional conditions, the treatment method, regulatory issues, and the type of provider (public or private).

Our ability to influence the reimbursement of our services is limited.

The reimbursement system in the U.S.

The environment for reimbursement and the conditions for prescribing ancillary services significantly influence our business. In the U.S., our biggest market, most of our patients are insured by the governmental health authority, the so-called Centers for Medicare and Medicaid (CMS). In fiscal year 2019, around 33 % of our revenue was attributable to reimburse-

ments by CMS, which also determines the reimbursement rates for its patients (Medicare/Medicaid patients).

Due to pressure to reduce health care costs, increases in the reimbursement rate were limited in the U.S. in the past. As a consequence, the reimbursement rate set by CMS as part of its prospective payment system (PPS) for chronic kidney failure treatments (known as the ESRD PPS rate) barely changed year-on-year. The ESRD PPS rate for 2019 amounted to $235.27, up 1.3 % on the 2018 base rate including an adjustment for the wage index budget neutrality factor. A reimbursement rate of $239.33 has been determined for 2020. This represents a 1.7 % increase on the 2019 base rate including an adjustment for the wage index budget neutrality factor and a productivity-adjusted market basket increase of 1.7 %.

Any significant reduction in Medicare reimbursement rates could have a material adverse effect on our health care services business. As demand for dialysis products is affected by Medicare reimbursement rates, this could have consequences for the development of our product business. To the extent that inflation, for example in the form of higher costs for personnel and disposables, is not fully compensated by an increase in reimbursement rates, our business and results of operations may also be adversely affected.

More information can be found in the "Results of operations, financial position and net assets" section starting on PAGE 42 and in the "Risks and Opportunities Report" starting on PAGE 63.

In the U.S., reimbursement by private insurers and managed care organizations is higher than reimbursement by government institutions. At the same time, payments from private insurers constitute a substantial portion of our profits, meaning our business is directly influenced by changes in the share of reimbursements by private insurers in North America. In fiscal year 2019, 34 % of the Group's health care revenue was related to private insurers in the North America Segment.

Transitional add-on payments for new drugs and devices in the U.S.

CMS included calcimimetics in the PPS rate with effect from January 1, 2018, following the FDA's announcement of approval for the intravenous calcimimetic Parsabiv for adult dialysis patients. Calcimimetics had previously been available in oral form only. To gather sufficient analytical data in order to determine the reimbursement rates, CMS has extended the period for transitional add-on payments for calcimimetics to 2020. In addition, for 2020 and beyond, CMS will reduce the basis of reimbursement for transitional add-ons, including the transitional add-on for calcimimetics, from an average sales price of 6 to 0 %.

The introduction of Parsabiv also affects the way in which some insurers – not including CMS – distribute calcimimetics to their patients. While some patients still obtain calcimimetics from their pharmacy, others are given them by their dialysis provider as a medical service. We receive additional reimbursements from several insurers for the calcimimetics administered at our dialysis clinics. However, as this is the first time there has been a transition from an exclusively oral drug to an intravenous one, the reimbursement landscape for non-CMS insurers is still evolving.

From 2021, CMS will also make transitional add-on payments for certain new and innovative dialysis equipment and supplies that are approved after January 1, 2020 and provided by dialysis facilities. These new machines and supplies must satisfy defined material clinical improvement criteria and will be reimbursed at 65 % of the invoice price, as determined by each Medicare Administrative Contractor.

Quality-based reimbursement

The health care debate in some countries is currently focused on establishing reimbursement structures based on treatment quality (pay for performance). In this case, more responsibility is transferred to the medical service provider. The goal of reimbursement models of this kind is to maintain a high quality of care combined with lower overall costs for the health care system.

The reimbursement system in the U.S. is also an example of a model based on qualitative criteria. For example, CMS defines quality standards for dialysis centers as part of its quality improvement program (QIP). Failure to reach these standards can lead to a reduction in annual reimbursements of up to 2 %.

Reimbursement in Care Coordination in the U.S.

We are also working closely with CMS in the area of Care Coordination. One example is our participation in a CMS ESRD care model: To improve the health of patients with chronic kidney failure while reducing CMS's costs, dialysis providers and physicians can join together to form entities known as ESCOS (End-Stage Renal Disease (ESRD) Seamless Care Organizations). We are currently participating through 23 ESCOS in this pilot project. ESCOS that fulfill the minimum quality standards specified by the program while generating reductions in the cost of care above certain thresholds for dialysis patients covered by the model receive a portion of the cost savings as reimbursement. ESCOS that involve dialysis chains with more than 200 clinics are required to share in the risk of cost increases and reimburse part of any such increases to CMS if the actual costs exceed the agreed thresholds. Approximately 45,000 patients participated in our ESCOS as at January 1, 2020. The ESCO pilot program will run until the end of 2020.

We have also concluded agreements on per capita reimbursements (subcapitations) as well as risk-based and value-based agreements with certain insurers, which form the basis for the health care services we offer to private and Medicare Advantage patients with chronic kidney failure. These agreements determine a basic amount per patient per month. If we provide complete care at a cost below this amount, we retain the difference. However, if the cost of complete care exceeds the basic amount, we may be obliged to pay the difference to the insurer.

Executive Order of the U.S. President on new reimbursement models

On July 10, 2019, the U.S. President signed an Executive Order (EO) on advancing kidney health. Among other things, the EO directs the Department of Health and Human Services (HSS) to develop new Medicare reimbursement models that enable diagnosis and treatment earlier in the course of kidney disease and support the expansion of home dialysis as well as promoting kidney transplants. One of these, the ESRD Treatment Choices Model (ETC Model), is a mandatory model that creates financial incentives for home dialysis treatments and kidney transplants. It envisages both positive and negative payment adjustments to the reimbursement for home dialysis treatments for a period of three years, as well as a performance-based reimbursement adjustment. The performance-based reimbursement adjustment is based on the rates of home dialysis and kidney transplants and will amount to between -8 and 5 % in the first reimbursement year and between -13 and 10 % in the final reimbursement year. The start date was originally scheduled for January 2020 but has been postponed. HHS has not yet set a new implementation date. However, it has signaled that participants will have 60 days after the final model has been released to start implementation. The program is proposed to run for six years. Participants in the model will be selected at random.

The Executive Order also announced voluntary Medicare reimbursement models aimed at providing financial incentives for health care providers in the area of chronic kidney disease and transplantation. Applications for the voluntary models were submitted in January 2020, but CMS has not provided a timeline for acceptance of the applications. It is still too early to predict the consequences of the ETC reimbursement model and the voluntary models for our business activities.

Charitable Premium Assistance

At the end of the Obama administration, HHS issued an Interim Final Rule (IFR) that limited patients' ability to use charitable premium assistance (CPA) to enroll in a private plan. In 2017, this IFR was temporarily enjoined after Fresenius Medical Care (along with DaVita, US Renal, and Dialysis Patients Citizens) sued CMS. The judge ruled that CMS had not shown good cause in bypassing the notice and comment process, and that the IFR was "arbitrary and capricious", noting that HHS had failed to consider the benefits of private qualified health plans and ignored the disadvantages of the IFR.

The Trump administration continues to work on this issue and sent a notice of proposed rulemaking addressing CPA to the Office of Management and Budget for review in June 2019. We do not yet know how this new proposed rule will impact CPA. The HHS identified a target date of November 2019 (11/00/19) for publication, but the proposed rule has not yet been published for comment. Additionally, there have been attempts to curtail the usage of CPA or reduce commercial reimbursement for dialysis patients receiving CPA by state legislatures.

OVERALL BUSINESS DEVELOPMENT

HIGHLIGHTS

Acquisitions and divestitures

On February 21, 2019, Fresenius Medical Care has successfully completed the acquisition of NxStage, which was announced in 2017, following approval by antitrust authorities in the United States. We acquired all of the outstanding shares of NxStage for $30.00 per common share. The total acquisition value of this business combination, net of cash acquired, is $1,976 M (€1,741 M at date of closing). NxStage is a leading medical technology company that develops, produces and markets an innovative product portfolio of medical devices for use in home dialysis and in the critical care setting. For further information SEE NOTE 3 of the notes to the consolidated financial statements.

Share buyback program

In February 2019, Fresenius Medical Care has resolved to repurchase shares of the Company with an aggregate volume of up to €1 BN via the capital markets over the next two years. On March 11, 2019 we announced to commence our share buyback program on the basis of the authorization by the General Meeting 2016. In the context of this share buyback program, we repurchased 3.7 M ordinary shares at a total purchase price (excluding ancillary transaction costs) of €270 M in the period from March 12, 2019 until and including May 10, 2019. Up to a maximum of 12 M ordinary shares will be repurchased at a total purchase price (excluding ancillary transaction costs) of up to €660 M (approximately $745 M) in the period from June 17, 2019 until and including June 17, 2020. As of December 31, 2019, 5.1 M ordinary shares had been repurchased at a total purchase price (excluding ancillary transaction costs) of €320 M. The own shares

repurchased by the Company will be used for the sole purpose of reducing the registered share capital by cancellation of the repurchased own shares. For further information SEE NOTE 17 of the notes to the consolidated financial statements.

Financing

Fresenius Medical Care successfully placed bonds with an aggregate principal amount of $500 M on June 13, 2019. The bonds have a maturity of ten years and an annual coupon of 3.750 %. The issue price is 98.461 %, resulting in a yield of 3.938 %. The proceeds will be used for general corporate purposes, including the refinancing of outstanding indebtedness.

On November 20, 2019, Fresenius Medical Care additionally placed bonds in three tranches with an aggregate volume of €1.75 BN: a €650 M bond with a four-year maturity and a coupon of 0.250 % at an issuing price of 99.901 % and with a yield of 0.275 %; a €600 M bond with a seven-year maturity and a coupon of 0.625 % at an issuing price of 99.238 % and with a yield of 0.737 %; and a €500 M bond with a ten-year maturity and a coupon of 1.250 % at an issuing price of 99.832 % and with a yield of 1.268 %. The proceeds will again be used for general corporate purposes, including refinancing of existing bonds. We issued the bonds under our European Medium-Term Note (EMTN) program.

Foreign Corrupt Practices Act (FCPA) agreement

On March 29, 2019, Fresenius Medical Care entered into a non-prosecution agreement with the United States Department of Justice (DOJ) and a separate agreement with the Securities and Exchange Commission (SEC) intended to resolve fully and finally the claims against us arising from the investigations. We paid a combined total in penalties and disgorgement of approximately $232 M to the DOJ and the SEC in connection with these agreements. The entire amount paid to DOJ and the SEC was reserved for in charges that we recorded in 2017 and 2018 and announced in 2018. As part of the settlement, we agreed to retain an independent compliance monitor for a period of at least two years and to an additional year of self-reporting. As of July 26, 2019, the monitor was appointed and the monitorship period commenced. For further information on these investigations SEE NOTE 22 of the notes to the consolidated financial statements.

COMPARISON OF ACTUAL BUSINESS RESULTS WITH THE OUTLOOK

The environment for our core business of dialysis evolved as expected in 2019. We met the outlook we set ourselves for the financial year 2019 to a great extent.

Our 2019 outlook did not include the effects of the FCPA related charge, the IFRS 16 Implementation, the contributions from Sound in the first half year of 2018 (Sound H1), the (gain) loss related to divestitures of Care Coordination activities, costs associated with the sustainable improvement of our cost base (Cost Optimization Costs) as well as all effects from the acquisition of NxStage. We have therefore adjusted the actual results for 2019 accordingly to make them comparable with the 2019 outlook. The basis 2018 for the outlook 2019 was adjusted for the (gain) loss related to divestitures of Care Coordination activities, the FCPA related charge as well as Sound H1. A reconciliation of the results 2019 and 2018 to the respective results 2019 and 2018 adjusted is given at TABLES 2.15 AND 2.16 ON PAGE 42.

The outlook for the 2019 financial year was based on the prevailing exchange rates at the beginning of the year 2019. We expected adjusted revenue growth in the range of 3 to 7 % at Constant Currency at the beginning of the year. We generated adjusted revenue of €17.3 BN. At Constant Currency, revenue increased by 5 % on an adjusted basis. We therefore met our expectations.

All operating segments, but above all the North America and Asia-Pacific Segments contributed to the expansion of our business. Further details on the development of revenue can be found in the section "Results of operations, financial position and net assets" starting on PAGE 42.

We expected our adjusted operating income to develop in the range of -1 to 3 % at Constant Currency in the 2019 financial year. The adjusted operating income for 2019 was €2.3 BN. Compared to the prior year the operating income decreased by 4 % on an adjusted basis. We therefore did not meet our expectations.

We expected adjusted Delivered Operating Income to develop in the range of -1 to 3 % at Constant Currency in 2019. The Delivered Operating Income for 2019 was €2.1 BN on an adjusted basis and decreased at Constant Currency by 3 % on an adjusted basis. We therefore did not meet our expectations.

At the beginning of the year, we set a target range for adjusted net income development of -2 to 2 % at Constant Currency for the 2019 financial year. On an adjusted basis, net income for 2019 decreased by 2 % to €1.4 BN at Constant Currency, which is within the range of our expectations.

Basic earnings per share decreased by 1 % at Constant Currency on an adjusted basis. This decrease is in line with the development of net income and shares outstanding, as we expected.

We earmarked €1.0 BN to €1.2 BN for capital expenditures. With an outlay of €1.1 BN, we remained within our outlook. We expected to spend around €0.4 BN to €0.6 BN on acquisitions and investments (adjusted for the acquisition of

NxStage). The adjusted actual figure was €0.5 BN with respect to acquisitions and investments (excluding investments in debt securities) and we therefore met our expectations. For further information, see the section "Results of operations, financial position and net assets" starting on PAGE 42.

Driven by earnings development and the good development in Days Sales Outstanding, adjusted net cash provided by (used in) operating activities in percent of revenue was high at 12.0 %, meeting our expectation of greater than 10 %.

Adjusted Free cash flow in percent of revenue was 5.9 % in 2019, which is also in line with our expectation of greater than 4 %.

According to our forecast, the adjusted net leverage ratio should have been below 2.5 at the end of 2019. Adjusted net leverage ratio was at 1.9 at the balance sheet date and is therefore as expected.

The adjusted ROIC was at 8.0 %. Therefore, ROIC was within our expectation of at least 8.0 %.

The proposed dividend per share of €1.20 to be approved by the Annual General Meeting on May 19, 2020 is within our expectation (in line with the development of the adjusted net income and shares outstanding).

The number of employees at Fresenius Medical Care (full-time equivalents) increased from 112,658 at the end of 2018 to 120,659 at the end of 2019. Exlcuding the acquisition of NxStage the number was 117,009. The number of employees therefore met our expectations of more than 117,000 full-time equivalents.

Research and development expenditures aimed at boosting Fresenius Medical Care's ability to adapt to future requirements amounted to €141 M on an adjusted basis, so that we did not achieve our expected range of €160 M to €170 M. Our research and development activities are focused on further developing existing product groups.

TABLE 2.14 shows the actual results and our outlook for 2019.

TABLES 2.15 AND 2.16 ON PAGE 42 provide a reconciliation of the results 2019 and 2018 to the respective results 2019 and 2018 adjusted. For further information see also section "Consolidated operating performance on an adjusted basis" in chapter "Results of operations, financial position and net assets" starting on PAGE 45.

T 2.14 RESULTS AND OUTLOOK FOR 2019

	Results 2019	Results 2019 adjusted[1]	Outlook 2019 Constant Currency[1]
Revenue growth at Constant Currency[2]	2 %	5 %	3–7 %
Operating income growth at Constant Currency[2]	(28 %)	(4 %)	(1)–3 %
Delivered Operating Income growth at Constant Currency[2]	(30 %)	(3 %)	(1)–3 %
Net income growth at Constant Currency[2, 3]	(42 %)	(2 %)	(2)–2 %
Basic earnings per share growth at Constant Currency[2, 3]	(41 %)	(1 %)	assessed based on expected development of net income and shares outstanding
Capital expenditures	€1.1 BN	€1.1 BN	€1.0–1.2 BN
Acquisitions and investments[4]	€2.2 BN	€0.5 BN	€0.4–0.6 BN
Net cash provided by (used in) operating activities in % of revenue[2]	14.7	12.0	> 10
Free cash flow in % of revenue[2]	8.3	5.9	> 4
Net leverage ratio	3.2	1.9	< 2.5
ROIC in %	6.1	8.0	≥ 8.0
Dividend per share[5]	€1.20	€1.20	assessed based on expected development of net income and shares outstanding
Employees[6]	120,659	117,009	> 117,000
Research and development expenses	€168 M	€141 M	€160–170 M

[1] Results 2019 adjusted and Outlook 2019 includes adjustments in order to make the business performance comparable in the corresponding period to Outlook 2019 for items such as: FCPA Related Charges, the IFRS 16 Implementation, the gain (loss) related to divestitures of Care Coordination activities and the Cost Optimization Costs. All effects from the pending acquisition of NxStage are excluded as well.
[2] For a reconciliation of results 2019 to results 2019 adjusted and results 2018 to results 2018 adjusted as a basis for targets 2019 see the following tables.
[3] Net income attributable to shareholders of FMC AG & Co. KGaA.
[4] Excluding investments in debt securities.
[5] Results 2019: proposal to be approved by the Annual General Meeting on May 19, 2020.
[6] Full-time equivalents.

T 2.15 **RECONCILIATION OF RESULTS 2019 TO RESULTS 2019 ADJUSTED**
IN € M

	Results 2019	IFRS 16 Implementation	NxStage operations[1]	NxStage costs[2]	Cost Optimization Costs	(Gain) loss related to divestitures of Care Coordination activities	FCPA related charge	Results 2019 adjusted
Revenue	17,477	115	(263)	–	–	–	–	17,329
Operating income	2,270	(75)	15	24	91	(29)	–	2,296
Delivered Operating Income	2,031	(75)	15	24	91	(29)	–	2,057
Net income[3]	1,200	70	63	18	67	(49)	–	1,369
Net cash provided by (used in) operating activities	2,567	(620)	(18)	–	6	(20)	160	2,075
Free Cash Flow	1,454	(560)	(14)	–	6	(20)	160	1,026

[1] Contribution of NxStage (NxStage Operations).
[2] Integration costs related to the acquisition of NxStage (NxStage Costs).
[3] Net income attributable to shareholders of FMC AG & Co. KGaA.

T 2.16 **RECONCILIATION OF RESULTS 2018 TO RESULTS 2018 ADJUSTED AS BASIS FOR TARGETS 2019**
IN € M

	Results 2018	(Gain) loss related to divestitures of Care Coordination activities	FCPA related charge	Sound H1	Results 2018 adjusted
Revenue	16,547	–	–	(521)	16,026
Operating income	3,038	(809)	77	(14)	2,292
Delivered Operating Income	2,794	(809)	77	(14)	2,048
Net income[1]	1,982	(673)	28	4	1,341

[1] Net income attributable to shareholders of FMC AG & Co. KGaA.

RESULTS OF OPERATIONS, FINANCIAL POSITION AND NET ASSETS

The following sections summarize our results of operations, financial position and net assets as well as key performance indicators by reporting segment, as well as Corporate, for the periods indicated.

We prepared the information consistent with the manner in which management internally disaggregates financial information to assist in making operating decisions and evaluating management performance.

RESULTS OF OPERATIONS

For further information on the results of operations of Fresenius Medical Care, SEE TABLE 2.17 ON PAGE 43.

Revenue and operating income generated in countries outside the eurozone are subject to currency fluctuations. The year ended December 31, 2019 was positively impacted by the development of the euro against the U.S. dollar whereas the year ended December 31, 2018 was negatively impacted by the development of the euro against the U.S. dollar. In the twelve-month period ended December 31, 2019, approximately 70 % of revenue and approximately 79 % of operating income were generated in U.S. dollars.

T 2.17 **SEGMENT DATA (INCLUDING CORPORATE)**
IN € M

	2019	2018
Total revenue		
North America Segment	12,195	11,570
EMEA Segment	2,693	2,587
Asia-Pacific Segment	1,859	1,689
Latin America Segment	709	686
Corporate	21	15
TOTAL	**17,477**	**16,547**
Operating income		
North America Segment	1,794	2,665
EMEA Segment	448	399
Asia-Pacific Segment	329	304
Latin America Segment	43	29
Corporate	(344)	(359)
TOTAL	**2,270**	**3,038**
Interest income	62	147
Interest expense	(491)	(448)
Income tax expense	(402)	(511)
NET INCOME	**1,439**	**2,226**
NET INCOME ATTRIBUTABLE TO NONCONTROLLING INTERESTS	**(239)**	**(244)**
NET INCOME ATTRIBUTABLE TO SHAREHOLDERS OF FMC AG & CO. KGAA	**1,200**	**1,982**

Consolidated financial statements

For an overview of the key indicators for the consolidated financial statements, SEE TABLE 2.18 ON PAGE 44.

Health care services revenue increased by 5 %. In addition to a 4 % positive impact from foreign currency translation, health care services revenue increased by 1 % as growth in same market treatments (4 %), contributions from acquisitions (2 %) and increases in organic revenue per treatment (1 %), were largely offset by decreases attributable to prior year revenue associated with the divested Sound activities as well as the effect of closed or sold clinics (5 %) and a revenue recognition adjustment of €170 M for accounts receivable in legal dispute (1 %) (SEE NOTE 22 of the notes to the consolidated financial statements).

Dialysis treatments increased by 4 % as a result of growth in same market treatments (4 %) and contributions from acquisitions (1 %), partially offset by the effect of closed or sold clinics (1 %).

At December 31, 2019, we owned, operated or managed 3,994 dialysis clinics (excluding those managed but not consolidated in the U.S.) compared to 3,928 dialysis clinics at December 31, 2018. In the year ended December 31, 2019, we acquired 47 dialysis clinics, opened 123 dialysis clinics and combined or closed 104 clinics. The number of patients treated in dialysis clinics that we own, operate or manage (excluding patients of dialysis clinics managed but not consolidated in the U.S.) increased by 4 % to 345,096 at December 31, 2019 (December 31, 2018: 333,331).

Health care product revenue increased by 10 %, including a 2 % positive impact from foreign currency translation. At Constant Exchange Rates, health care product revenue increased by 8 %. Dialysis product revenue increased by 10 %. In addition to a 2 % positive impact from foreign currency translation, dialysis product revenue increased by 8 % driven by higher sales of home hemodialysis products (largely as a result of the acquisition of NxStage), dialyzers, hemodialysis solutions and concentrates, renal pharmaceuticals, bloodlines, peritoneal dialysis products and products for acute care treatments, partially offset by lower sales of machines as a result of changes in the accounting treatment for sale-leaseback transactions due to the IFRS 16 Implementation. Non-dialysis product revenue increased by 3 % to €76 M from €74 M with virtually no foreign currency translation effects. Non-dialysis product revenue increased due to higher sales of acute cardiopulmonary products.

The decrease period over period in the gross profit margin was 0.3 percentage points. Foreign currency translation effects represented a 0.1 percentage point increase in the current period. The decrease primarily reflects decreases in the EMEA Segment, the North America Segment and an unfavorable mix effect from the varying margins across our reporting segments, partially offset by an increase in the Asia-Pacific Segment. The decrease in the EMEA Segment was mainly driven by higher personnel expense in certain countries. The decrease in the North America Segment was mainly attributable to higher personnel expense, a revenue recognition adjustment for accounts receivable in legal dispute (SEE NOTE 22 of the notes to the consolidated financial statements included in this report) and the effect of a reduction in patient attribution and a decreasing savings rate for ESCOs (loss rate for 2019) based on recent reports for current and prior plan years ("ESCO effect"), partially offset by a positive impact from higher utilization of oral based ancillaries with favorable margins, a favorable effect from the IFRS 16 Implementation, the positive current year effect from the divestiture of Sound which operated at lower margins and the impact from the acquisition of NxStage. The increase in the Asia-Pacific Segment was largely due to favorable impacts from business

T 2.18 KEY INDICATORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

	2019	2018	Change in %		
			As reported	Currency translation effects	Constant Currency[1]
Revenue in € M	17,477	16,547	6	4	2
Health care services	13,872	13,264	5	4	1
Health care products	3,605	3,283	10	2	8
Number of dialysis treatments	52,148,107	50,027,579	4		
Same market treatment growth in %	3.5	2.8			
Gross profit as a % of revenue	30.9	31.2			
Selling, general and administrative costs as a % of revenue	17.5	17.4			
Operating income in € M	2,270	3,038	(25)	3	(28)
Operating income margin in %	13.0	18.4			
Delivered Operating Income in € M[2]	2,031	2,794	(27)	3	(30)
Net income attributable to shareholders of FMC AG & Co. KGaA in € M	1,200	1,982	(39)	3	(42)
Basic earnings per share in €	3.96	6.47	(39)	2	(41)

[1] For further information on Constant Currency, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.
[2] For further information on Delivered Operating Income, including a reconciliation of Delivered Operating Income to operating income on a consolidated basis and for each of our operating segments, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.

growth and the IFRS 16 Implementation, partially offset by an unfavorable impact from acquisitions with lower margins.

The increase period over period in the selling, general and administrative ("SG&A") expenses as a percentage of revenue was 0.1 percentage points with virtually no impact from foreign currency translation. The increase was primarily driven by increases in the North America Segment and the Asia-Pacific Segment, partially offset by favorable impacts in the EMEA Segment and Corporate. The increase in the North America Segment was mainly driven by the effect from the integration and operational costs associated with NxStage, costs associated with the sustainable improvement of our cost base ("Cost Optimization Costs"), higher personnel expense as well as higher stock compensation expense, partially offset by the remeasurement effect on the fair value of the Humacyte investment, the prior year effects from U.S. Ballot Initiatives and the discontinuation of a non-IFRS policy with no associated cash flow effect. The increase in the Asia-Pacific Segment was due to the impact from business growth, an unfavorable impact from Care Coordination and an unfavorable effect from Cost Optimization Costs, partially offset by favorable foreign currency transaction effects. The decrease in the EMEA Segment was largely due to a reduction of a contingent consideration liability related to Xenios AG ("Xenios"), higher other income related to a favorable outcome in a legal proceeding, favorable foreign currency transaction effects and a positive impact from acquisitions, partially offset by higher bad debt expense and Cost Optimization Costs. The favorable impact in Corporate was driven by an accrual for FCPA related charge in the prior year (SEE NOTE 22 of the notes the consolidated financial statements included in this report).

The gain related to divestitures of Care Coordination activities decreased to €29 M from €809 M primarily due to the divestiture of Sound in 2018.

Research and development expenses increased by 47 % to €168 M from €114 M. The period over period increase as a percentage of revenue, was 0.3 percentage points, largely driven by research and development activities at NxStage, in-center and home program development as well as higher costs related to pre-development activities and research activities in the field of regenerative medicine.

Income from equity method investees increased slightly to €74 M from €73 M. The slight increase was primarily driven by higher income from Vifor Fresenius Medical Care Renal Pharma Ltd., an entity in which we have ownership of 45 %, mainly due to higher sales of renal pharmaceuticals.

The decrease period over period in the operating income margin was 5.4 percentage points. Foreign currency translation effects represented a 0.1 percentage point increase in the current period. The decrease in the current period was largely driven by the lower gain related to divestitures of Care Coordination activities as discussed above.

Delivered Operating Income decreased by 27 %. In addition to a 3 % positive impact from foreign currency translation, Delivered Operating Income decreased by 30 % largely driven by decreased operating income.

Net interest expense increased by 43 % to €429 M from €301 M. In addition to a 6 % negative impact from foreign currency translation, net interest expense increased by 37 % primarily due to the IFRS 16 Implementation and a higher debt level, partially offset by the replacement of high interest-bearing bonds by debt instruments at lower interest rates.

Income tax expense decreased by 21 % to €402 M from €511 M. The effective tax rate increased to 21.8 % from 18.7 % for the same period of 2018 largely driven by prior year impacts from favorable implications of the U.S. tax reform, the gain related to the divestiture of Care Coordination activities in 2018 and favorable prior year tax impacts from the FCPA related charge, partially offset by non-tax deductible expenses related to U.S. Ballot Initiatives.

Net income attributable to noncontrolling interests decreased by 2 % to €239 M from €244 M. In addition to a 5 % negative impact from foreign currency translation, net income attributable to noncontrolling interests decreased by 7 % due to lower performance in entities in which we have less than 100 % ownership.

Net income attributable to shareholders of FMC AG & CO. KGAA decreased by 39 % to €1,200 M from €1,982 M. In addition to a 3 % positive impact from foreign currency translation, net income attributable to shareholders of FMC AG & CO. KGAA decreased by 42 % driven by the combined effects of the items discussed above.

Basic earnings per share decreased by 39 %. In addition to a 2 % positive impact from foreign currency translation, basic earnings per share decreased by 41 % primarily due to the decrease in net income attributable to shareholders of FMC AG & CO. KGAA described above. The average weighted number of shares outstanding for the period decreased to approximately 302.7 M in 2019 (2018: 306.5 M), primarily as a result of our share buyback program.

We employed 120,659 people (full-time equivalents) as of December 31, 2019 (December 31, 2018: 112,658). This 7 % increase was primarily due to the NxStage acquisition.

Consolidated operating performance on an adjusted basis

Management believes that there are certain distinct transactions or events for which the operating results should be adjusted to enhance transparency and comparability. We believe the following results (adjusted to exclude these items) should be analyzed in connection with the results presented above. For the years ended December 31, 2019 and 2018, we identified the following transactions which, when excluded from the results disclosed above, may provide a reader with further useful information in assessing our performance:

- an adjustment to the 2019 presentation to remove the effects of the IFRS 16 Implementation
- an adjustment to the 2019 presentation to remove the contribution of NxStage to conform to the 2018 presentation (NxStage Operations)
- an adjustment to the 2019 presentation to remove the integration costs related to the acquisition of NxStage on February 21, 2019 (NxStage Costs)
- an adjustment to the 2019 presentation to remove the Cost Optimization Costs
- an adjustment to the 2018 presentation to remove the contribution of Sound to conform to the 2019 presentation (Sound H1)
- an adjustment to remove the gain related to divestitures of Care Coordination activities (SEE NOTE 4 of the notes to the consolidated financial statements) ((Gain) loss related to divestitures of Care Coordination activities)
- an adjustment to the 2018 presentation to remove the FCPA related charge

TABLE 2.19 ON PAGE 46 reconciles the key indicators for the consolidated financial statements in accordance with IFRS to the key indicators adjusted for the items described above, as the adjustments allow for a better comparison of these key indicators to our Outlook 2019 presented in the section "Comparison of actual business results to the outlook" in the chapter "Overall business development" starting on PAGE 40. While we believe these adjustments provide additional clarity to the discussion of our operating results, TABLE 2.19 ON PAGE 46 should only be viewed as a supplement to our results disclosed in accordance with IFRS above.

Segment reporting

The following discussions pertain to the North America Segment, the EMEA Segment, the Asia-Pacific Segment and the Latin America Segment and the measures we use to manage these segments.

With regards to our Care Coordination services, we use additional business metrics, which are defined below.

Business metrics for Care Coordination

The measures for the North America Segment and the Asia-Pacific Segment discussed below include prior programs in which we participated and current and future programs that we will be participating in and will be reflected in the discussion of our business. Currently, in our North America Segment, sub-capitation, Bundled Payments for Care Improvement (BPCI) (until June 28, 2018 - SEE NOTE 4 of the notes to the consolidated financial statements), ESCO programs, Medicare Advantage ESRD Chronic Condition Special Needs Plans (MA-CSNPS) (until December 31, 2018) and other shared savings programs are included within the member months and

T 2.19 **CONSOLIDATED OPERATING PERFORMANCE ON AN ADJUSTED BASIS**
IN € M, EXCEPT WHERE OTHERWISE SPECIFIED

	Results 2019	IFRS 16 Implementation	NxStage Operations	NxStage Costs	Cost Optimization Costs	(Gain) loss related to divestitures of Care Coordination activities	Results 2019 adjusted	Change in % as adjusted	
								Current rate	Constant Currency [1]
TOTAL REVENUE	**17,477**	**115**	**(263)**	**–**	**–**	**–**	**17,329**	**8**	**5**
Health care services	13,872	–	(12)	–	–	–	13,860	9	5
Health care products	3,605	115	(251)	–	–	–	3,469	6	4
TOTAL OPERATING INCOME	**2,270**	**(75)**	**15**	**24**	**91**	**(29)**	**2,296**	**0**	**(4)**
OPERATING INCOME MARGIN IN %	**13.0**						**13.2**		
Interest expense, net	(429)	172	71	–	–	–	(186)	(33)	(35)
Income tax expense	(402)	(27)	(23)	(6)	(24)	(20)	(502)	18	13
Net income attributable to noncontrolling interests	(239)	–	–	–	–	–	(239)	(2)	(7)
NET INCOME [2]	**1,200**	**70**	**63**	**18**	**67**	**(49)**	**1,369**	**2**	**(2)**
Basic earnings per share in €	3.96	0.23	0.21	0.06	0.22	(0.16)	4.52	3	(1)

	Results 2018	Sound H1 [3]	(Gain) loss related to divestitures of Care Coordination activities	FCPA related charge	Results 2018 adjusted
TOTAL REVENUE	**16,547**	**(521)**	**–**	**–**	**16,026**
Health care services	13,264	(521)	–	–	12,743
Health care products	3,283	-	–	–	3,283
TOTAL OPERATING INCOME	**3,038**	**(14)**	**(809)**	**77**	**2,292**
OPERATING INCOME MARGIN IN %	**18.4**				**14.3**
Interest expense, net	(301)	21	–	–	(280)
Income tax expense	(511)	(3)	136	(49)	(427)
Net income attributable to noncontrolling interests	(244)	0	–	–	(244)
NET INCOME [2]	**1,982**	**4**	**(673)**	**28**	**1,341**
Basic earnings per share in €	6.47	0.01	(2.20)	0.09	4.37

[1] For further information on Constant Currency, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.
[2] Attributable to shareholders of FMC AG & Co. KGaA.
[3] Contribution of Sound Physicians.

medical cost under management calculations below. In the future, other programs may be included in the metrics below, including BPCI Advanced, a similar initiative to BPCI that began October 1, 2018 and is scheduled to extend through December 31, 2023. We commenced participation under the BPCI Advanced in January 2020 through a physician practice, which is majority-owned by National Cardiovascular Partners. Note that due to the timing required by CMS to review the BPCI and ESCO program data that we provide, estimates have been used to report these metrics in a timely manner. The Asia-Pacific Segment Care Coordination metric currently used for discussion purposes is patient encounters.

These metrics may be developed further in future periods. These metrics are neither IFRS measures nor non-IFRS measures and are therefore not accompanied by or reconciled to IFRS measures.

Member months under medical cost management

In our North America Segment, member months under medical cost management is calculated by multiplying the number of members included in value-based reimbursement programs, such as Medicare Advantage plans or other value-based programs in the U.S., by the corresponding number of months these members participate in those programs (Member Months). In the aforementioned programs, we assume the risk associated with generating savings. The financial results are recorded in earnings as our performance is determined. The membership offerings within Care Coordination are sub-capitation arrangements, MA-CSNPS (until December 31, 2018), ESCO and BPCI (until June 28, 2018 - SEE NOTE 4 of the notes to the consolidated financial statements) programs as well as other shared savings programs. An increase in patient membership may indicate future earnings or losses as our performance is determined through these managed care programs.

Medical cost under management

In our North America Segment, medical cost under management represents the management of medical costs associated with our patient membership in value-based programs. For ESCO, BPCI (until June 28, 2018 - SEE NOTE 4 of the notes to the consolidated financial statements) and other shared savings programs, this is calculated by multiplying the Member Months in each program by the benchmark of expected medical costs per member per month. The sub-capitation and MA-CSNPS calculation multiplies the premium per member of the program per month by the number of member months associated with the plan, as noted above.

Care Coordination patient encounters

In the North America Segment and the Asia-Pacific Segment, Care Coordination patient encounters represents the total patient encounters and procedures conducted by certain of our Care Coordination activities and, we believe, is an indicator of the revenue generated. Care Coordination patient encounters in the North America Segment is the sum of all encounters and procedures completed during the period by Sound until June 28, 2018 (SEE NOTE 4 of the notes to the consolidated financial statements), MedSpring Urgent Care Centers, Azura Vascular Care, and National Cardiovascular Partners, the trade name of Laurus Healthcare L.P., as well as patients in our Fresenius Medical Care Rx Bone Mineral Metabolism (Rx BMM) program.

Care Coordination patient encounters in the Asia-Pacific Segment is the sum of all encounters for the following services: ambulant treatment services in day care hospitals, comprehensive and specialized health check-ups, inpatient and outpatient services, vascular access and other chronic treatment services.

North America Segment

Information about key indicators and business metrics for the North America Segment can be found in TABLE 2.20 ON PAGE 48.

Dialysis

Revenue

Dialysis revenue increased by 11 % including a 6 % positive impact resulting from foreign currency translation. At Constant Exchange Rates, dialysis revenue increased by 5 %. Dialysis revenue is comprised of dialysis care revenue and health care product revenue.

Dialysis care revenue increased by 10 % to €9,973 M from €9,089 M. In addition to a 6 % positive impact from foreign currency translation, dialysis care revenue increased by 4 % mainly due to growth in same market treatments (3 %), increases in organic revenue per treatment (2 %) and contributions from acquisitions (1 %), partially offset by a revenue recognition adjustment of €170 M for accounts receivable in legal dispute (2 %) (SEE NOTE 22 of the notes to the consolidated financial statements).

Dialysis treatments increased by 4 % largely due to growth in same market treatments (3 %) and contributions from acquisitions (1 %). At December 31, 2019, 211,064 patients, an increase of 3 % (December 31, 2018: 204,107), were treated in the 2,579 dialysis clinics (December 31, 2018: 2,529) that we own or operate in the North America Segment.

In the U.S., the average revenue per treatment decreased to $352 (€298 at Constant Exchange Rates) from $354 (€300) largely due to a revenue recognition adjustment of €170 M for accounts receivable in legal dispute and lower revenue from commercial payors, partially offset by higher utilization

of oral based ancillaries and the impact from an increase in the ESRD PPS base rate.

Cost per treatment in the U.S., adjusted for the effects from the IFRS 16 Implementation, increased to $296 (€250 at Constant Exchange Rates) from $289 (€245). This increase was largely driven by higher personnel expense, higher costs for medical supplies, the integration and operational costs associated with NxStage and higher depreciation expense, partially offset by lower costs for renal pharmaceuticals.

Health care product revenue increased by 23 %. In addition to a 7 % positive impact from foreign currency translation, health care product revenue increased by 16 % driven by higher sales of home hemodialysis products, renal pharmaceuticals, dialyzers, peritoneal dialysis products, and hemodialysis solutions and concentrates, partially offset by lower sales of machines as a result of changes in the accounting treatment for sale-leaseback transactions in accordance with the IFRS 16 Implementation.

Operating income margin

The decrease period over period in the dialysis operating income margin was 1.8 percentage points including a 0.1 percentage point negative impact from foreign currency translation in the current period. The decrease was due to higher personnel expense, a revenue recognition adjustment for accounts receivable in legal dispute (SEE NOTE 22 of the notes the consolidated financial statements included in this report), the integration and operational costs associated with NxStage, and Cost Optimization Costs, partially offset by a favorable impact from higher utilization of oral based ancillaries with favorable margins, the remeasurement effect on the fair value of our Humacyte investment, a positive effect from the IFRS 16 Implementation, the prior year effect from the U.S. Ballot Initiatives, and discontinuation of a non-IFRS policy with no associated cash flow effect.

T 2.20 KEY INDICATORS AND BUSINESS METRICS FOR THE NORTH AMERICA SEGMENT

			Change in %		
	2019	2018	As reported	Currency translation effects	Constant Currency[1]
Total North America Segment					
Revenue in € M	12,195	11,570	5	5	(0)
Health care services	11,157	10,725	4	5	(1)
Health care products	1,038	845	23	7	16
Operating income in € M	1,794	2,665	(33)	3	(36)
Operating income margin in %	14.7	23.0			
Delivered Operating Income in € M[2]	1,569	2,434	(36)	3	(39)
Dialysis					
Revenue in € M	11,011	9,934	11	6	5
Number of dialysis treatments	32,138,448	30,843,876	4		
Same market treatment growth in %	3.3	2.5			
Operating income in € M	1,737	1,752	(1)	4	(5)
Operating income margin in %	15.8	17.6			
Delivered Operating Income in € M[2]	1,532	1,540	(1)	4	(5)
Care Coordination					
Revenue in € M	1,184	1,636	(28)	3	(31)
Operating income in € M	57	913	(94)	0	(94)
Operating income margin in %	4.8	55.8			
Delivered Operating Income in € M[2]	37	894	(96)	0	(96)
Member months under medical cost management[3, 4]	645,273	639,329	1		
Medical cost under management in € M[3, 4]	4,226	4,196	1	6	(5)
Care Coordination patient encounters[3, 4]	1,004,250	4,407,598	(77)		

[1] For further information on Constant Currency, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.
[2] For further information on Delivered Operating Income, including a reconciliation of Delivered Operating Income to operating income for each of our operating segments, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.
[3] For further information on these metrics, please refer to the discussion above of our Care Coordination measures under "Segment reporting – Business metrics for Care Coordination" starting on PAGE 45.
[4] Data presented for the ESCO metrics are subject to finalization by CMS, which may result in changes from previously reported metrics.

Delivered Operating Income

Dialysis Delivered Operating Income decreased by 1 %. In addition to a 4 % positive impact from foreign currency translation, Delivered Operating Income decreased by 5 % mainly as a result of decreased operating income.

Care Coordination

Revenue

Care Coordination revenue decreased by 28 %. In addition to a 3 % positive impact from foreign currency translation, Care Coordination revenue decreased by 31 % largely driven by decreases attributable to prior year revenue associated with the divested Sound activities (33 %) and a decrease in organic revenue, including the ESCO effect (1 %), partially offset by contributions from acquisitions (3 %).

Operating income margin

The decrease period over period in the Care Coordination operating income margin was 51.0 percentage points, including a 0.1 percentage point negative impact from foreign currency translation in the current period. The decrease was mainly due to lower gains related to divestiture of Care Coordination activities, the ESCO effect, lower volumes for pharmacy services as well as unfavorable margins for oral based ancillaries, partially offset by a positive effect from the IFRS 16 Implementation.

Delivered Operating Income

Care Coordination Delivered Operating Income decreased by 96 % with virtually no impact from foreign currency translation. Delivered Operating Income decreased mainly as a result of decreased operating income.

Care Coordination business metrics

Member months under medical cost management remained relatively stable as the expansion of our existing ESCOs through the addition of new physician practice partners and dialysis facilities since the beginning of 2018 was mostly offset by the divestment of our controlling interest in Sound on June 28, 2018 and, as a result, the conclusion of our participation in BPCI. SEE NOTE 4 of the notes to consolidated financial statements and note 4 to TABLE 2.20 ON PAGE 48.

Care Coordination's medical cost under management increased by 1 %. Including a 6 % positive impact from foreign currency translation, Care Coordination's medical cost under management decreased by 5 % primarily due to the divestment of our controlling interest in Sound on June 28, 2018 (SEE NOTE 4 of the notes to consolidated financial statements) and, as a result, the conclusion of our participation in BPCI as well as a decrease in member months attributable to MA-CSNPS, which we no longer provide as of January 2019. This decrease was partially offset by the expansion of our existing ESCOs through the addition of new physician practice partners and dialysis facilities since the beginning of 2018 as well as an increase in member months attributable to sub-capitation programs. See note 4 to TABLE 2.20 ON PAGE 48.

The decrease in patient encounters was primarily driven by decreased encounters for hospital related physician services as a result of the divestiture of our controlling interest in Sound on June 28, 2018. SEE NOTE 4 of the notes to consolidated financial statements and note 4 to TABLE 2.20 ON PAGE 48.

North America Segment operating performance on an adjusted basis

Management believes that there are certain distinct transactions or events for which the operating results should be adjusted to enhance transparency and comparability. We believe the following results (adjusted to exclude these items) should be analyzed in connection with the results presented above. For the years ended December 31, 2019 and 2018, we identified the following transactions that, when excluded from the results disclosed above, may provide a reader with further useful information in assessing our performance:

- an adjustment to the 2019 presentation to remove the effects of the IFRS 16 Implementation
- an adjustment to the 2019 presentation to remove the NxStage Operations
- an adjustment to the 2019 presentation to remove the NxStage Costs
- an adjustment to the 2019 presentation to remove the Cost Optimization Costs
- an adjustment to the 2018 presentation to remove Sound H1
- an adjustment to remove the (Gain) loss related to divestitures of Care Coordination activities

TABLE 2.21 ON PAGE 50 reconciles the key indicators for the North America Segment in accordance with IFRS to the key indicators adjusted for the items described above as the adjustments allow for a better comparison of these key indicators to our Outlook 2019 presented in the section "Comparison of actual business results to the outlook" in the chapter "Overall business development". While we believe these adjustments provide additional clarity to the discussion of our operating results, TABLE 2.21 ON PAGE 50 should only be viewed as a supplement to our results disclosed in accordance with IFRS above.

T 2.21 **NORTH AMERICA OPERATING PERFORMANCE ON AN ADJUSTED BASIS**
IN € M, EXCEPT AS OTHERWISE SPECIFIED

	Results 2019	IFRS 16 Implementation	NxStage Operations	NxStage Costs	Cost Optimization Costs	(Gain) loss related to divestitures of Care Coordination activities	Results 2019 adjusted	Change in % as adjusted	
								Current rate	Constant Currency[1]
REVENUE	**12,195**	**115**	**(263)**	**–**	**–**	**–**	**12,047**	**9**	**3**
Health care services	11,157	–	(12)	–	–	–	11,145	9	4
Thereof Dialysis Care	9,973	–	(12)	–	–	–	9,961	10	4
Thereof Care Coordination	1,184	–	–	–	–	–	1,184	6	1
Health care products	1,038	115	(251)	–	–	–	902	7	1
OPERATING INCOME	**1,794**	**(59)**	**19**	**24**	**83**	**(29)**	**1,832**	**(1)**	**(5)**
OPERATING INCOME MARGIN IN %	**14.7**						**15.2**		
Dialysis	1,737	(51)	19	24	83	–	1,812	3	(1)
Operating income margin in %	15.8						16.7		
Care Coordination	57	(8)	–	–	–	(29)	20	(78)	(79)
Operating income margin in %	4.8						1.7		

	Results 2018	Sound H1[2]	(Gain) loss related to divestitures of Care Coordination activities	Results 2018 adjusted
REVENUE	**11,570**	**(521)**	**–**	**11,049**
Health care services	10,725	(521)	–	10,204
Thereof Dialysis Care	9,089	–	–	9,089
Thereof Care Coordination	1,636	(521)	–	1,115
Health care products	845	–	–	845
OPERATING INCOME	**2,665**	**(14)**	**(809)**	**1,842**
OPERATING INCOME MARGIN IN %	**23.0**			**16.7**
Dialysis	1,752	–	–	1,752
Operating income margin in %	17.6			17.6
Care Coordination	913	(14)	(809)	90
Operating income margin in %	55.8			8.0

[1] For further information on Constant Currency, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.
[2] Contribution of Sound Physicians.

T 2.22 **KEY INDICATORS FOR THE EMEA SEGMENT**

			Change in %		
	2019	2018	As reported	Currency translation effects	Constant Currency[1]
Revenue in € M	2,693	2,587	4	0	4
Health care services	1,354	1,274	6	(1)	7
Health care products	1,339	1,313	2	0	2
Number of dialysis treatments	10,042,109	9,731,941	3		
Same market treatment growth in %	3.4	3.0			
Operating income in € M	448	399	12	(1)	13
Operating income margin in %	16.6	15.4			
Delivered Operating Income in € M[2]	443	395	12	(1)	13

[1] For further information on Constant Currency, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.
[2] For further information on Delivered Operating Income, including a reconciliation of Delivered Operating Income to operating income for each of our operating segments, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.

EMEA Segment

Information about key indicators for the EMEA Segment can be found in TABLE 2.22.

Revenue

Health care service revenue increased by 6 %. Including a 1 % negative impact resulting from foreign currency translation, health care service revenue increased by 7 % largely as a result of growth in same market treatments (3 %), increases in organic revenue per treatment (3 %), and contributions from acquisitions (2 %), partially offset by the effect of closed or sold clinics (1 %).

Dialysis treatments increased by 3 % mainly due to growth in same market treatments (3 %) and contributions from acquisitions (2 %), partially offset by the effect of closed or sold clinics (2 %). As of December 31, 2019, 66,217 patients, an increase of 2 % (December 31, 2018: 65,061) were treated at the 781 dialysis clinics (December 31, 2018: 776) that we own, operate or manage in the EMEA Segment.

Health care product revenue increased by 2 %, with virtually no impact from foreign currency translation. Dialysis product revenue increased by 2 % due to higher sales of machines, products for acute care treatments, bloodlines and peritoneal dialysis products. Non-Dialysis product revenue increased by 3 % to €76 M from €74 M largely due to higher sales of acute cardiopulmonary products.

Operating income margin

The increase period over period in the operating income margin was 1.2 percentage points. Foreign currency translation effects represented a 0.1 percentage point decrease in the operating income margin. The increase was mainly due to a reduction of a contingent consideration liability related to Xenios, a positive impact from the IFRS 16 Implementation, higher other income related to a favorable outcome in a legal proceeding, and a favorable impact from acquisitions, partially offset by higher personnel expense in certain countries as well as higher bad debt expense.

Delivered Operating Income

Delivered Operating Income increased by 12 %. Including a 1 % negative impact resulting from foreign currency translation, Delivered Operating Income increased by 13 % primarily due to increased operating income.

Asia-Pacific Segment

Information about key indicators and business metrics for the Asia-Pacific Segment can be found in TABLE 2.23 ON PAGE 52.

Dialysis

Revenue

Dialysis revenue increased by 9 % including a 3 % positive impact resulting from foreign currency translation. At Constant Exchange Rates, dialysis revenue increased by 6 %. Dialysis revenue is comprised of dialysis care revenue and health care product revenue.

Dialysis care service revenue increased by 9 % to €621 M from €568 M. Including a 5 % positive impact resulting from foreign currency translation, dialysis care service revenue increased by 4 % as a result of growth in same market treatments (7 %) and contributions from acquisitions (1 %), partially offset by the effect of closed or sold clinics (3 %) and a decrease in organic revenue per treatment (1 %).

Dialysis treatments increased by 5 % mainly due to growth in same market treatments (7 %) and contributions from acqui-

sitions (1 %), partially offset by the effect of closed or sold clinics (3 %). As of December 31, 2019, 33,005 patients, an increase of 5 % (December 31, 2018: 31,476) were treated at the 400 dialysis clinics (December 31, 2018: 394) that we own, operate or manage in the Asia-Pacific Segment.

Health care product revenue increased by 9 %. Including a 1 % positive impact resulting from foreign currency translation, health care product revenue increased by 8 % as a result of increased sales of dialyzers, bloodlines, hemodialysis solutions and concentrates products as well as for acute care treatments, partially offset by lower sales of machines.

Operating income margin

The increase period over period in the operating income margin was 0.3 percentage points. Foreign currency translation effects represented a 0.1 percentage point decrease in the operating income margin. The increase was primarily due to favorable impacts from foreign currency transaction effects as well as a positive effect from the IFRS 16 Implementation, partially offset by an effect from Cost Optimization Costs.

Delivered Operating Income

Delivered Operating Income increased by 11 %. Including a 2 % positive impact resulting from foreign currency translation, Dialysis Operating Income increased by 9 % mainly due to increased operating income.

Care Coordination

Revenue

Care Coordination revenue increased by 16 %. Including a 3 % positive impact resulting from foreign currency translation, Care Coordination revenue increased by 13 % driven by organic revenue growth (7 %) and contributions from acquisitions (6 %).

T 2.23 **KEY INDICATORS AND BUSINESS METRICS FOR THE ASIA-PACIFIC SEGMENT**

			Change in %		
	2019	2018	As reported	Currency translation effects	Constant Currency[1]
Total Asia-Pacific Segment					
Revenue in € M	1,859	1,689	10	3	7
Health care services	862	776	11	4	7
Health care products	997	913	9	1	8
Operating income in € M	329	304	8	2	6
Operating income margin in %	17.7	18.0			
Delivered Operating Income in € M[2]	321	295	9	3	6
Dialysis					
Revenue in € M	1,618	1,481	9	3	6
Number of dialysis treatments	4,579,220	4,371,742	5		
Same market treatment growth in %	7.1	6.4			
Operating income in € M	300	270	11	3	8
Operating income margin in %	18.5	18.2			
Delivered Operating Income in € M[2]	293	263	11	2	9
Care Coordination					
Revenue in € M	241	208	16	3	13
Operating income in € M	29	34	(13)	1	(14)
Operating income margin in %	12.1	16.2			
Delivered Operating Income in € M[2]	28	32	(11)	1	(12)
Care Coordination Patient Encounters[3]	1,010,238	982,169	3		

[1] For further information on Constant Currency, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.
[2] For further information on Delivered Operating Income, including a reconciliation of Delivered Operating Income to operating income for each of our operating segments, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.
[3] For further information on patient encounters, please refer to the discussion of our Care Coordination measures under "Segment reporting – Business metrics for Care Coordination" starting on PAGE 45.

Operating income margin

The decrease period over period in the Care Coordination operating income margin was 4.1 percentage points. Foreign currency translation effects represented a 0.2 percentage point decrease in the operating income margin. The decrease was driven by higher start-up and operating costs as well as an unfavorable mix effect from acquisitions with lower margins, partially offset by a positive effect from the IFRS 16 Implementation.

Delivered Operating Income

Care Coordination Delivered Operating Income decreased by 11 %. Including a 1 % positive impact resulting from foreign currency translation, Care Coordination Delivered Operating Income decreased by 12 % mainly as a result of decreased operating income.

Care Coordination business metrics

The number of patient encounters increased due to increased encounters for comprehensive and specialized health check-ups as well as ambulant treatment services, inpatient and outpatient services, vascular access and other chronic treatment services.

Latin America Segment

Information about key indicators for the Latin America Segment can be found in TABLE 2.24.

Revenue

Health care service revenue increased by 2 %. Including a 23 % negative impact resulting from foreign currency translation, health care service revenue increased by 25 % as a result of increases in organic revenue per treatment (18 %), contributions from acquisitions (5 %) and growth in same market treatments (2 %).

Dialysis treatments increased by 6 % mainly due to contributions from acquisitions (4 %) and growth in same market treatments (2 %). As of December 31, 2019, 34,810 patients, an increase of 6 % (December 31, 2018: 32,687) were treated at the 234 dialysis clinics (December 31, 2018: 229) that we own, operate or manage in the Latin America Segment.

Health care product revenue increased by 6 %. Including a 6 % negative impact resulting from foreign currency translation, health care product revenue increased by 12 % due to higher sales of hemodialysis solutions and concentrates, machines, peritoneal dialysis products and products for acute care treatments, partially offset by lower sales of dialyzers.

Operating income margin

The increase period over period in the operating income margin was 1.8 percentage points. Foreign currency translation effects represented a 1.3 percentage point increase in the operating income margin in the current period. The increase was mainly due to favorable foreign currency transaction effects, a reimbursement rate increase in Chile and a positive impact from acquisitions, partially offset by the impact from hyperinflation and an increase in bad debt.

Delivered Operating Income

Delivered Operating Income increased by 47 %. Including a 12 % positive impact resulting from foreign currency translation, Delivered Operating Income increased by 35 % due to increased operating income.

FINANCIAL POSITION

Our investment and financing strategy did not change substantially in the past fiscal year as our business model, which is based on stable and high cash flows, allows for a reason-

T 2.24 **KEY INDICATORS FOR THE LATIN AMERICA SEGMENT**

			Change in %		
	2019	2018	As reported	Currency translation effects	Constant Currency [1]
Revenue in € M	709	686	3	(18)	21
Health care services	499	489	2	(23)	25
Health care products	210	197	6	(6)	12
Number of dialysis treatments	5,388,330	5,080,020	6		
Same market treatment growth in %	2.4	1.3			
Operating income in € M	43	29	47	12	35
Operating income margin in %	6.0	4.2			
Delivered Operating Income in € M [2]	42	29	47	12	35

[1] For further information on Constant Currency, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.
[2] For further information on Delivered Operating Income, including a reconciliation of Delivered Operating Income to operating income for each of our operating segments, see chapter "Overview of the Group" section "Performance management system" starting on PAGE 24.

able proportion of debt, through the employment of an extensive mix of debt. We still regard our refinancing options as being very stable and flexible. During the fiscal year, the focus of our investing activities was on our health care services business.

Financial management policies and goals

Besides optimizing our financial costs, our financing strategy gives top priority to ensuring financial flexibility. We remain flexible by using a wide range of financial instruments and being highly diversified with regard to our investors and banks. Our financing profile is characterized by a wide range of maturities up to 2029.

Our main mid- and long-term financing instruments are the Amended 2012 Credit Agreement (a syndicated credit agreement with revolving credit facilities and long-term loans in U.S. dollar and euro) as well as bonds in U.S. dollar and euro. Short-term financing needs are covered by issuances under our commercial paper program in euro, the Accounts Receivable Facility in U.S. dollar and bilateral credit facilities.

In our long-term financial planning, we focus primarily on the net leverage ratio, a non-IFRS measure. At December 31, 2019, the net leverage ratio was 3.2 (2018: 1.8). Adjusted for the IFRS 16 Implementation, the net leverage ratio was 2.5 at December 31, 2019. See "Performance management system" – "Net leverage ratio (Non-IFRS measure)" starting on PAGE 26.

The key financial risks we are exposed to include foreign exchange risk and interest rate risk. To manage these risks, we enter into various hedging transactions with banks that have been authorized by the Management Board and which generally have ratings in the "A" category or better. We do not use financial instruments for trading or other speculative purposes (for financial risks, see section "Other risks" in chapter "Risks and Opportunities Report" starting on PAGE 72 as well as NOTE 23 of the notes to the consolidated financial statements).

Fresenius SE, under a service agreement, conducts financial instrument activities for us under the control of a single centralized department. We have established guidelines for risk management procedures and controls including the use of financial instruments. These guidelines include a clear segregation of duties with regards to execution on the one hand and administration, accounting and controlling on the other.

We also utilize Fresenius SE's cash management system as well as an unsecured loan agreement with Fresenius SE (SEE NOTE 13 of the notes to the consolidated financial statements).

Rating

We are rated investment grade by the three leading rating agencies, Moody's, Standard & Poor's and Fitch - (SEE TABLE 2.25).

T 2.25 **RATING** [1]

	Standard & Poor's	Moody's	Fitch
Corporate credit rating	BBB	Baa3	BBB-
Outlook	stable	stable	stable

[1] A rating is not a recommendation to buy, sell or hold securities of the Company, and may be subject to suspension, change or withdrawal at any time by the assigning rating agency.

Effect of off-balance-sheet financing instruments on our financial position and assets and liabilities

We are not involved in off-balance-sheet transactions that are likely to materially affect our financial position, results of operations, liquidity, capital expenditures, assets or capitalization.

Sources of liquidity

Our primary sources of liquidity are typically cash provided by operating activities, cash provided by short-term debt from third parties and related parties, proceeds from the issuance of long-term debt and divestitures. We require this capital primarily to finance working capital needs, fund acquisitions, operate clinics, develop free-standing renal dialysis clinics and other health care facilities, purchase equipment for existing or new renal dialysis clinics and production sites, repay debt, pay dividends and repurchase shares, (see "Net cash provided by (used in) investing activities" starting on PAGE 56 and "Net cash provided by (used in) financing activities" starting on PAGE 56).

At December 31, 2019, we had cash and cash equivalents of €1,008 M (December 31, 2018: €2,146 M).

Free cash flow (net cash provided by (used in) operating activities, after capital expenditures, before acquisitions and investments) in 2019 amounted to €1,454 M (2018: €1,059 M). Free cash flow is a Non-IFRS Measure and is reconciled to net cash provided by (used in) operating activities, the most directly comparable IFRS measure in chapter "Performance management system" starting on PAGE 24. Free cash flow in percent of revenue was 8.3 % in 2019 (2018: 6.4 %).

Net cash provided by (used in) operating activities

During 2019 we generated net cash provided by operating activities of €2,567 M (2018: €2,062 M). Net cash provided by operating activities in percent of revenue was 15 % for 2019 (2018: 12 %). Cash provided by (used in) operating activities is impacted by the profitability of our business, the

development of our working capital, principally inventories, receivables and cash outflows that occur due to a number of specific items as discussed below. The increase in net cash provided by operating activities was largely driven by the IFRS 16 Implementation leading to a reclassification of the repayment portion of rent to financing activities in the amount of €669 M.

The profitability of our business depends significantly on reimbursement rates for our services. Approximately 79 % of our revenue is generated by providing health care services, a major portion of which is reimbursed by either public health care organizations or private insurers. In 2019, approximately 33 % of our consolidated revenue was attributable to reimbursements from U.S. federal health care benefit programs, such as Medicare and Medicaid. Legislative changes could affect Medicare reimbursement rates for a significant portion of the services we provide, as well as the scope of Medicare coverage. A decrease in reimbursement rates or the scope of coverage could have a material adverse effect on our business, financial position and results of operations and thus on our capacity to generate cash flow.

In recent years, the stability of reimbursement in the U.S. has been affected by (i) the implementation of the ESRD PPS in January 2011, (ii) across-the-board spending cuts in payments to Medicare providers by the U.S. federal government, commonly referred to as "U.S. Sequestration", (iii) the phased reduction to the ESRD PPS rate to account for the decline in utilization of certain drugs and biologicals associated with dialysis pursuant to the American Taxpayer Relief Act of 2012 ("ATRA") as subsequently modified under the Protecting Access to Medicare Act of 2014 ("PAMA") and (iv) CMS's 2017 final rule on the Physician Fee Schedule, which partially corrected reimbursement for certain procedures that were materially undervalued in 2016.

We intend to continue to address our current cash and financing requirements using cash provided by operating activities, our existing and future credit agreements, issuances under our commercial paper program (SEE NOTE 13 of the notes to the consolidated financial statements) as well as from the use of our Accounts Receivable Facility. In addition, to finance acquisitions or meet other needs, we expect to successfully complete long-term financing arrangements, such as the issuance of bonds. We aim to preserve financial resources with a minimum of €500 M of committed and unutilized credit facilities.

Net cash provided by (used in) operating activities depends on the collection of accounts receivable. Commercial customers and government institutions generally have different payment cycles. Lengthening their payment cycles could have a material adverse effect on our capacity to generate cash flow. In addition, we could face difficulties in enforcing and collecting accounts receivable under the legal systems and due to the economic conditions in some countries. Accounts receivable balances, net of valuation allowances, represented Days Sales Outstanding (DSO) of 73 days at December 31, 2019, a decrease as compared to 75 days at December 31, 2018.

DSO by segment is calculated by dividing the segment's accounts and other receivable and contract liabilities, converted to euro using the average exchange rate for the period presented, less any sales or value added tax included in the receivables, by the average daily sales for the last twelve months of that segment, converted to euro using the average exchange rate for the period. Receivables and revenues are adjusted for amounts related to acquisitions and divestitures made within the reporting period with a purchase price above a €50 M threshold as defined in the Amended 2012 Credit Agreement.

The development of DSO by reporting segment is shown in TABLE 2.26.

The DSO decrease in the North America Segment was largely due to a revenue recognition adjustment for accounts receivable in legal dispute (SEE NOTE 22 of the notes to the consolidated financial statements), partially offset by business growth. The decrease in the DSO for the EMEA Segment primarily related to increased bad debt reserves in the region. The decrease in the Asia-Pacific Segment was driven by an improvement of payment collections in China. The increase in the Latin America Segment reflects periodic delays in payment of public health care organizations in certain countries.

T 2.26 **DEVELOPMENT OF DAYS SALES OUTSTANDING**
IN DAYS, DECEMBER 31

	2019	2018
North America Segment	58	60
EMEA Segment	96	98
Asia-Pacific Segment	113	116
Latin America Segment	127	119
FMC AG & CO. KGAA AVERAGE DAYS SALES OUTSTANDING	**73**	**75**

Due to the fact that a large portion of our reimbursement is provided by public health care organizations and private insurers, we expect that most of our accounts receivable will be collectible.

We are subject to ongoing and future tax audits in the U.S., Germany and other jurisdictions. With respect to these potential adjustments and disallowances of tax matters currently under review, we do not anticipate that an unfavorable ruling could have a material impact on our results of operations. We are not currently able to determine the timing of these potential additional tax payments.

T 2.27 **CAPITAL EXPENDITURES (NET), ACQUISITIONS, INVESTMENTS AND PURCHASES OF INTANGIBLE ASSETS**
IN € M

	Capital expenditures, net		Acquisitions, investments and purchases of intangible assets	
	2019	2018	2019	2018
North America Segment	567	495	2,080	768
thereof investments in debt securities			11	480
EMEA Segment	130	140	41	77
Asia-Pacific Segment	58	43	28	21
Latin America Segment	26	24	50	36
Corporate	332	301	34	23
TOTAL	**1,113**	**1,003**	**2,233**	**925**

Net cash provided by (used in) investing activities

Net cash used in investing activities was €3,286 M for 2019 (2018: €245 M). TABLE 2.27 ON PAGE 56 shows our capital expenditures for property, plant and equipment, net of proceeds from sales of property, plant and equipment as well as acquisitions, investments and purchases of intangible assets for 2019 and 2018.

The majority of our capital expenditures were used for maintaining existing clinics, equipping new clinics, maintaining and expanding production facilities (primarily in the North America Segment, Germany and France), capitalization of machines provided to our customers and for Care Coordination as well as capitalization of certain development costs. Capital expenditures were approximately 6 % of total revenue in 2019 (2018: 6 %).

Acquisitions during 2019 were primarily driven by the acquisition of NxStage on February 21, 2019 (SEE NOTE 3 of the notes to the consolidated financial statements included in this report) as well as dialysis clinics.

In 2019, we received €60 M from divestitures. These divestitures were mainly related to the divestment of MedSpring Urgent Care Centers in Texas, sales of debt securities, the divestment of a California-based cardiovascular business and B.Braun Medical Inc.'s purchase of NxStage's bloodlines business in connection with our acquisition of NxStage.

Investments in 2018 were primarily driven by debt securities and an equity investment in Humacyte within the North America Segment. The remaining investments in the North America Segment, the EMEA Segment and the Latin America Segment were largely in acquisitions of dialysis clinics as well as license agreements and distribution rights in the North America Segment. In 2018, we received €1,683 M from divestitures mainly related to the divestment of Sound on June 28, 2018 (SEE NOTE 4 C) of the notes to the consolidated financial statements), as well as the sale of debt securities in the amount of €150 M.

In 2020 we anticipate capital expenditures of €1.1 to €1.3 BN and expect to make acquisitions and investments, excluding investments in debt securities, of approximately €0.5 to €0.7 BN (see the chapter "Outlook" starting on PAGE 60).

Net cash provided by (used in) financing activities

Net cash used in financing activities was €467 M in 2019 (2018: €682 M).

In 2019, cash was mainly used in the repayments of long-term debt (including the current portion of long-term debt primarily driven by the repayment of bonds due in July 2019), repayments of short-term debt (including short-term debt from related parties), repayment of lease liabilities, shares repurchased as part of a share buyback program, payment of dividends, and distributions to noncontrolling interests, partially offset by proceeds from long-term debt (including the issuance of bonds with a volume of €1,750 M and $500 M as well as additional drawings under the revolving credit facilities of the Amended 2012 Credit Agreement), proceeds from short-term debt (including short-term debt from related parties) and the utilization of the Accounts Receivable Facility.

In 2018, cash was mainly used in the repayments of long-term debt including the repayment of Bonds due in September 2018, the payment of dividends, the complete repayment of amounts drawn under the Accounts Receivable Facility, distributions to noncontrolling interests and repayments of short-term debt, partially offset by proceeds from short-term debt (including drawings under the commercial paper program), long-term debt through an issuance under the newly established debt issuance program and short-term debt from related parties.

On May 21, 2019, we paid a dividend of €1.17 per share for 2018 (€1.06 per share for 2017 paid in 2018). The total dividend payment was €355 M in 2019 (2018: €325 M).

C 2.28 **MATURITY STRUCTURE OF OUR SIGNIFICANT LONG-TERM FINANCING INSTRUMENTS (BASED ON NOMINAL AMOUNTS OUTSTANDING)**
IN € M

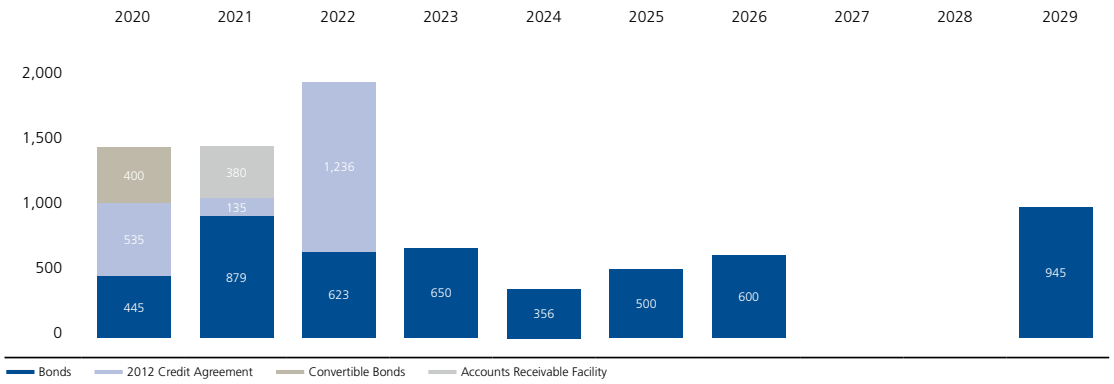


CHART 2.28 ON PAGE 57 summarizes our significant long-term financing instruments as well as their maturity structure at December 31, 2019.

For a description of our short-term debt including the commercial paper program, SEE NOTE 13 of the notes to the consolidated financial statements. For a description of our long-term sources of liquidity, including the Amended 2012 Credit Agreement, bonds, equity-neutral convertible bonds and the Accounts Receivable Facility, SEE NOTE 14 of the notes to the consolidated financial statements.

TABLE 2.29 ON PAGE 58 summarizes our available sources of liquidity at December 31, 2019.

An additional source of liquidity is our commercial paper program under which up to €1,000 M of short-term notes can be issued on a flexible and continuous basis. As of December 31, 2019 and December 31, 2018, we fully utilized the commercial paper program.

The amount of guarantees and other commercial commitments at December 31, 2019 was not significant.

At December 31, 2019, we had short-term debt (excluding the current portion of long-term debt) and short-term debt from related parties in the total amount of €1,172 M.

TABLE 2.30 ON PAGE 58 summarizes our obligations and commitments to make future payments under our long-term debt and other long-term obligations, and our commitments and obligations under lines of credit and letters of credit as of December 31, 2019.

Our debt instruments, including the Amended 2012 Credit Agreement, outstanding bonds and the Accounts Receivable Facility contain covenants restricting or limiting our ability to dispose of assets, incur additional debt, create liens or engage in sale-leaseback transactions. However, these are subject to a number of exceptions and qualifications or may be suspended based on a ratings trigger. In addition, under our Amended 2012 Credit Agreement and Accounts Receivable Facility, we are obligated to not exceed a maximum consolidated net leverage ratio as defined in these financing agreements.

As of December 31, 2019, we were in compliance with all covenants under the Amended 2012 Credit Agreement and our other financing agreements. For information regarding our Amended 2012 Credit Agreement, bonds and the Accounts Receivable Facility, SEE NOTE 14 of the notes to consolidated financial statements.

Although current and future economic conditions could adversely affect our business and our profitability, we believe that we are well positioned to continue to grow our business while meeting our financial obligations as they come due. Due to the non-discretionary nature of the health care services we provide, the need for health care products utilized to provide such services and the availability of government reimbursement for a substantial portion of our health care services, our business is generally not cyclical. A substantial portion of our accounts receivable is generated by governmental payors. While payment and collection practices vary significantly between countries and even between agencies within one country, government payors usually represent low to moderate, credit risks. However, limited or expensive access to capital could make it more difficult for our customers to do business with us, or to do business generally, which could adversely affect our business by causing our customers to reduce or delay their purchases of our health care products (see "Results of operations" starting on PAGE 42). If the conditions in the capital markets worsen, this could increase our financing costs and limit our financial flexibility.

T 2.29 AVAILABLE SOURCES OF LIQUIDITY
IN € M

		Expiration per period of			
	Total	Less than 1 year	1–3 years	3–5 years	Over 5 years
Accounts Receivable Facility [1]	400	–	400	–	–
Amended 2012 Credit Agreement [2]	1,277	–	1,277	–	–
Other unused lines of credit	518	518	–	–	–
	2,195	**518**	**1,677**	**–**	**–**

[1] Subject to availability of sufficient accounts receivable that meet funding criteria. At December 31, 2019, the Company had letters of credit outstanding in the amount of $23 M (€21 M) which reduces the availability under the Accounts Receivable Facility to the amount shown in this table.
[2] At December 31, 2019, the Company had letters of credit outstanding in the amount of $1 M (€1 M) which reduces the availability under the revolving credit facility to the amount shown in this table.

T 2.30 CONTRACTUAL OBLIGATIONS AND COMMITMENTS [1]
IN € M

		Payments due by period of			
	Total	Less than 1 year	1–3 years	3–5 years	Over 5 years
Long-term debt [2]	8,624	1,657	3,566	1,185	2,216
Lease liabilities	5,442	770	1,443	1,076	2,153
Lease liabilities from related parties	130	19	37	36	38
Unconditional purchase obligations for inventory	444	209	166	56	13
Other long-term obligations [3]	159	106	38	15	–
Letters of credit	22	22	–	–	–
	14,821	**2,783**	**5,250**	**2,368**	**4,420**

[1] Our pension liabilities are not included in the table of contractual obligations and commitments. The regular or special funding of our pension plans may adversely affect our liquidity in the future periods. The liability recognized in our consolidated financial statements may fluctuate significantly in future periods due to changes in assumptions, in particular to the discount rate, the rate of future compensation increases and pension progression. Actual results could differ from assumptions due to changing market, economic and governmental regulatory conditions, thereby resulting in an increase or decrease of the liability. Employer contributions expected to be paid to the defined benefit plans during fiscal year 2020 are €1 M. For additional information regarding our pension plans and expected payments for the next ten years, SEE NOTE 16 of the notes to the consolidated financial statements. Further unconditional purchase agreements exist with an equity method investee of the Company. For further information on these agreements, SEE NOTE 5 of the notes to the consolidated financial statements.
[2] Includes expected interest payments which are based upon the principal repayment schedules and fixed interest rates or estimated variable interest rates considering the applicable interest rates (e.g. Libor, Euribor), the applicable margins, and the effects of related interest rate swaps.
[3] Other long-term obligations consist mainly of production asset acquisition commitments.

At our Annual General Meeting on May 19, 2020, our General Partner and our Supervisory Board will propose to the shareholders a dividend of €1.20 per share for 2019, payable in 2020 (for 2018 paid in 2019: €1.17). The total expected dividend payment is approximately €358 M compared to dividends of €355 M for 2018 paid in 2019.

Our principal financing needs in 2020 relate to repayments of the equity-neutral convertible bonds due in January 2020, which were refinanced via bonds in November 2019, and of bonds due in October 2020, to the share buyback program as well as amortizations under our Amended 2012 Credit Agreement. These payments as well as our dividend payment in May 2020, anticipated capital expenditures, and further acquisition payments are expected to be covered by our cash flow, using existing credit facilities and, if required, additional debt financing. We currently have sufficient flexibility under our debt covenants to meet our financing needs in the near future. Generally, we believe that we will have sufficient financing to achieve our goals in the future and to continue to promote our growth.

NET ASSETS

Our total consolidated assets in the past fiscal year were €32,935 M, an increase of €6,692 M (26 %) over the prior year, including a positive foreign exchange impact of 2 %.

Non-current assets increased by €7,374 M (40 %) to €25,770 M in 2019 and represented 78 % of total assets (2018: 70 %). Besides a positive foreign exchange impact of 2 %, this increase was primarily a result of the recognition of right-of-use assets due to the implementation of IFRS 16 in 2019 of €4,325 M. Additionally, the increase in goodwill and intangible assets, which was mainly due to the acquisition of NxStage in February 2019, contributed to the increase in non-current assets.

Current assets decreased by 9 % to €7,165 M. This was mainly the result of decreased cash and cash equivalents, primarily in connection with the acquisition of NxStage, partially offset by a positive foreign exchange impact of 1 %, higher finished goods, trade accounts and other receivables as well as increased other current assets.

On the liability side of the balance sheet, our total liabilities were €19,708 M at December 31, 2019, an increase of €6,368 M (48 %) from €13,340 M in 2018. This increase was primarily the result of the recognition of lease liabilities due to the implementation of IFRS 16 in 2019 of €4,705 M, higher short-term and long-term debt as well as pension liabilities. Foreign exchange impact represented 1 % of the increase of total liabilities.

Current liabilities account for €2,619 M of our debt, an increase of 118 M (5 %) from €2,501 M in the prior year. Foreign exchange impact represented 1 % of this increase. Furthermore, the increase of short-term debt was mainly a result of the reclassification of U.S. dollar-denominated bonds, the equity-neutral convertible bonds and an euro-denominated term loan under the Amended 2012 Credit Agreement to the current portion of long-term debt, as these will mature in 2020. The increase was partially offset by the repayment of bonds denominated in U.S. dollar and euro at their maturity in July 2019 and the decrease of short-term debt from related parties.

Long-term debt increased to €6,458 M from €5,045 M in the prior year, an increase of 1,413 M (28 %). Foreign exchange impact represented 1 % of this increase. Furthermore, the increase of long-term debt was mainly a result of the issuance of bonds with a total volume of €1,750 M and $500 M, the utilization of the Accounts Receivable Facility and additional drawings under the revolving credit facilities of the Amended 2012 Credit Agreement. It was partially offset by the reclassification of U.S. dollar-denominated bonds, the equity-neutral convertible bonds and an euro-denominated term loan under the Amended 2012 Credit Agreement as well as the quarterly repayments of the remaining term loans under the Amended 2012 Credit Agreement to the current portion of long-term debt.

Shareholders' equity increased by 3 % to €13,227 M. The increase was driven by a positive foreign exchange impact of 2 %, net income attributable to noncontrolling interests generated for the year, the purchase/sale of noncontrolling interests and proceeds from exercised stock options. It was partially offset by purchases of treasury stock as part of a share buyback program, dividend payments, distributions to noncontrolling interests, the valuation of noncontrolling interests subject to put options at fair value and changes in actuarial (gains) losses from changes in assumptions for pension obligations. The equity to assets ratio decreased to 40 % at December 31, 2019 from 49 % at December 31, 2018, primarily as a result of the recognition of right-of-use assets following the implementation of IFRS 16 in 2019. Adjusted for effect from the Implementation of IFRS 16, equity to assets ratio was 47 % at December 31, 2019.

At Group level, ROIC decreased to 6.1 % at December 31, 2019 from 12.4 % at December 31, 2018. Adjusted for the Implementation of IFRS 16, ROIC was 6.8 % at December 31, 2019 (see reconciliation in chapter "Performance management system" section "Return on invested capital" starting on PAGE 27). The decrease was mainly due to the positive effect from the gain related to divestitures of Care Coordination activities in the prior year. Goodwill, included in the item invested capital, has a significant impact on the calculation of the ROIC. The weighted average cost of capital (WACC) was 6.3 %.

For supplementary information on capital management and our capital structure, see also NOTE 18 of the notes to the consolidated financial statements.

MANAGEMENT'S GENERAL ASSESSMENT

2019 was a successful year for Fresenius Medical Care. We achieved our revenue and net income targets and are therefore proposing our 23rd consecutive dividend increase. Last year we also invested more strongly in our future growth, particularly in the area of home dialysis and in developing economies. In addition, our measures to increase efficiency and optimize our cost base are progressing according to plan. As a consequence, we expect growth to accelerate, and confirm the 2020 outlook that we issued early last year.

At the time this Management Report was prepared, the Management Board continued to assess the development of Fresenius Medical Care as positive. Demand for our products and services continue to grow steadily around the world.

SUBSEQUENT EVENTS

Refer to NOTE 27 of the notes to the consolidated financial statements.

OUTLOOK

The outlook describes how Fresenius Medical Care expects to perform in fiscal year 2020. These statements take into account all events known at the time the financial statements were prepared which could affect the development of our business in 2020.

BUSINESS POLICY

Fresenius Medical Care is the world's leading dialysis company based on publicly reported revenue and the number of patients treated. We aim to further expand this position in the years ahead. As always, the basic principle of our corporate strategy is to fully capture the potential of being a vertically integrated company. This means consistently making use of the advantages that arise from covering the complete value chain of dialysis. Fresenius Medical Care intends to make steady progress in the provision of holistic care to dialysis patients and dialysis-related treatments. In addition to our products and dialysis treatment itself, we will continue to offer additional services in the future, such as supplementary medical services for the treatment of our patients in the area of Care Coordination. We have no plans to make significant changes to our business policy.

SECTOR-SPECIFIC ENVIRONMENT – DIALYSIS MARKET

The Company expects the number of dialysis patients worldwide to grow by about 6 % in 2020. Some significant regional differences are likely to remain: The Company anticipates an increase in the U.S., Japan and Western and Central Europe of less than 1 % to slightly above 3 %. The number of patients with chronic kidney disease is already relatively high in these countries and regions and patients generally have reliable access to treatment, normally dialysis. In economically weaker regions, the growth rates will be higher. We expect patient numbers to continue growing in the coming years – SEE TABLE 2.31.

T 2.31 **EXPECTED GROWTH IN PATIENT NUMBERS**

	Growth 2020
North America Segment	~3 %
EMEA Segment	~4 %
Asia-Pacific Segment	~8 %
Latin America Segment	~3 %
WORLDWIDE	**~6 %**

Source: Internal estimates

Our growth strategy is based on an in-depth analysis of the major trends affecting Fresenius Medical Care:

- Demographic factors: Demographic factors are one of the main reasons for the continued growth of dialysis markets. As average life expectancy rises worldwide, the share of older people in the population is also growing. However, kidney function deteriorates with age. Therefore, demographic change is an important indicator for the future number of dialysis patients, which is expected to increase from around 3.7 M worldwide in 2020 to about 4.9 M in 2025.
- Increase in lifestyle diseases: Diseases such as high blood pressure and diabetes are on the rise around the world. They can cause damage to the entire organism and also often impair kidney function in the long-term.
- Improved access to medical care: Thanks to ongoing efforts to establish and expand balanced and sustainable health care systems in many countries around the globe, a growing number of patients are gaining access to suitable dialysis treatments for the first time. We expect this trend to continue and drive demand for high-quality products and treatments.
- Changes in the health care industry: The health care industry is constantly changing. We believe that demand for the holistic care of chronic patients will continue to rise. In future, the focus when treating kidney patients will no longer be simply on offering individual dialysis products or services, but also on combining all fields of application related to dialysis and coordinating them more effectively.

Hemodialysis will remain the treatment of choice, accounting for about 89 % of all dialysis therapies. Peritoneal dialysis will continue to be the preferred treatment for about 11 % of all dialysis patients.

The volume of the worldwide dialysis market, which amounted to about €80 BN last year according to preliminary estimates, is expected to increase by around 4 % per year. This is based on the assumption that exchange rates will remain stable in the forecasting period. The overall volume of the dialysis market could thus reach around €83 BN by 2020.

In addition, the reimbursement and ancillary services utilization environment significantly influences our business. In the U.S., our biggest sales market, the reimbursements of governmental institutions are lower than the reimbursements of private insurers. Therefore, a change in the portion of reimbursements by private insurers in the U.S. influences our business.

THE COMPANY'S BUSINESS PERFORMANCE IN 2020

Fresenius Medical Care's outlook for 2020 is at Constant Exchange Rates. Outlook 2020 is excluding special items. Special items are effects that are unusual in nature and have not been foreseeable or not foreseeable in size or impact at the time of giving guidance. The growth rates are based on the results in 2019 adjusted for Cost Optimization Costs, the (gain) loss related to divestitures of Care Coordination activities and NxStage costs. For a reconciliation of the results 2019 to the results 2019 adjusted as a basis for the targets 2020, SEE TABLE 2.33 ON PAGE 62.

REVENUE

We aim revenue to incease at a mid to high single digit growth rate at Constant Exchange Rates in 2020.

RESULT OF OPERATIONS

Operating income

We expect operating income and Delivered Operating Income to develop at a mid to high single digit growth rate at Constant Exchange Rates in 2020. This growth for 2020 is based on operating income and Delivered Operating Income in 2019 adjusted for Cost Optimization Costs, the (gain) loss related to divestitures of Care Coordination activities and NxStage costs.

Net income

We aim to achieve a development in net income (net income attributable to shareholders of FMC AG & CO. KGAA) at a mid to high single digit growth rate at Constant Exchange Rates as well in 2020. This growth rate is based on net income in 2019 adjusted for Cost Optimization Costs, the (gain) loss related to divestitures of Care Coordination activities and NxStage costs.

Earnings per share

Basic earnings per share are expected to develop in the same way as net income in 2020 compared to 2019 assessed based on the expected development of net income and shares outstanding.

CAPITAL EXPENDITURES AND ACQUISITIONS AND INVESTMENTS

In 2020, we intend to spend around €1.6 BN to €2.0 BN on capital expenditures, acquisitions and investments (excluding investments in debt securities). Capital expenditures should account for €1.1 BN to €1.3 BN. Around 40 % of this amount is earmarked for expansion investments. €0.5 BN to €0.7 BN is to be used for mainly bolt-on acquisitions and equity investments in health care.

Capital expenditures will primarily be used to expand our production capacities and rationalize production processes, to equip new dialysis clinics and distributors as well as for maintenance.

LIQUIDITY

Cash flow

In 2020, net cash provided by operating activities in percent of revenue is expected to account for more than 12.5 %.

In 2020, free cash flow in percent of revenue is expected to account for more than 5 %.

Net leverage ratio

Fresenius Medical Care uses the net leverage ratio as a guideline in its long-term financial planning. The ratio was 3.2 at the end of 2019. The target figure is expected to be better than 3.5 at the end of 2020.

Profitability

We expect ROIC to be at least 6.0 % in 2020 compared to 6.1 % in 2019.

DIVIDEND

Fresenius Medical Care intends to continue its profit-oriented dividend policy in principle. Information on the proposed dividend increase can be found in the "Net cash provided by (used in) financing activities" section in chapter "Economic report" starting on PAGE 36.

NON-FINANCIAL PERFORMANCE INDICATORS

Employees

Due to the anticipated expansion of our business, we expect the number of employees to grow in all regions in 2020, particularly in the area of health care. By the end of 2020, the number of employees working for Fresenius Medical Care is estimated to increase to more than 124,000 (full-time equivalents).

Research and development

We aim to spend €210 M to €230 M on research and development in 2020. The number of personnel concerned (currently 1,157 full-time equivalents) should not change significantly.

The expected developments might be influenced by developments described in the "Risks and Opportunities Report" starting on PAGE 63.

Our Outlook for the financial year 2020 is summarized in TABLE 2.32.

For a reconciliation of the results 2019 to the results 2019 adjusted as a basis for the targets 2020, SEE TABLE 2.33. For further details on the consolidated operating performance on an adjusted basis see section "Results of operations, financial position and net assets" starting on PAGE 42.

GLOBAL EFFICIENCY PROGRAM

In 2017 we announced the second phase of our GEP II. The program's objectives are to identify and realize further efficiency potential and enhance our overall competitiveness. The expected range of sustained cost improvements is €150 M to €200 M per annum by the end of 2020.

MANAGEMENT'S GENERAL ASSESSMENT

In the financial year 2020 and beyond, we intend to continue Fresenius Medical Care's profitable growth track. We also aim to accelerate growth in 2020 by leveraging the effects of established initiatives to boost efficiency and reduce costs. A further priority will be on investing in expanding our clinic network as well as additional production capacities – especially in developing economies and growth markets. In addition, we plan to continuously improve our cost base. The conclusion of our Global Efficiency Program by the end of the year will provide us with a sustainable basis for improving our profitability.

T 2.32 OUTLOOK 2020

	Results 2019	Outlook 2020 (at Constant Currency)
Revenue [1]	€17,477 M	mid to high single digit growth rate
Operating income [1]	€2,356 M	mid to high single digit growth rate
Delivered Operating Income [1]	€2,117 M	mid to high single digit growth rate
Net income [1, 2]	€1,236 M	n.a.
Net income growth at Constant Currency [1, 2]	–	mid to high single digit growth rate
Basic earnings per share growth at Constant Currency [1, 2]	–	assessed based on expected development of net income and shares outstanding
Capital expenditures	€1.1 BN	€1.1–€1.3 BN
Acquisitions and investments [3]	€2.2 BN	€0.5–€0.7 BN
Net cash provided by (used in) operating activities in % of revenue	14.7	> 12.5
Free cash flow in % of revenue	8.3	> 5
Net leverage ratio	3.2	< 3.5
ROIC in %	6.1	≥ 6.0
Dividend per share [4]	€1.20	assessed based on expected development of net income and shares outstanding
Employees [5]	120,659	> 124,000
Research and development expenses	€168 M	€210–€230 M

[1] Outlook 2020 excl. special items. Special items are effects that are unusual in nature and have not been foreseeable or not foreseeable in size or impact at the time of giving guidance. Growth rates based on results 2019 adjusted for Cost Optimization Costs, the (Gain) loss related to divestitures of Care Coordination activities and NxStage costs. For a reconciliation of results 2019 to results 2019 adjusted as a basis for targets 2020 SEE TABLE 2.33.
[2] Net income attributable to shareholders of FMC AG & Co. KGaA.
[3] Excluding investments in debt securities.
[4] Results 2019: proposal to be approved by the Annual General Meeting on May 19, 2020.
[5] Full-time equivalents.

T 2.33 RECONCILIATION OF RESULTS 2019 TO RESULTS 2019 ADJUSTED AS A BASIS FOR TARGETS 2020
IN € M

	Results 2019	Cost Optimization Costs	(Gain) loss related to divestitures of Care Coordination activities	NxStage costs	Results 2019 adjusted
Revenue	17,477				17,477
Operating income	2,270	91	(29)	24	2,356
Delivered Operating Income	2,031	91	(29)	24	2,117
Net income [1]	1,200	67	(49)	18	1,236

[1] Net income attributable to shareholders of Fresenius Medical Care AG & Co. KGaA.

RISKS AND OPPORTUNITIES REPORT

As a company with global operations, Fresenius Medical Care is naturally exposed to risks in connection with its business activities. Ultimately, we can leverage opportunities for our business only if we are willing to take certain risks. Thanks to our many years of experience and our extensive knowledge of the markets, we are able to identify and assess risks and opportunities for our business.

RISKS AND OPPORTUNITIES MANAGEMENT

We see risk management as the ongoing task of determining, analyzing and evaluating the spectrum of actual and potential risks arising from our business operations in our environment, and, where possible, taking pre-emptive and corrective measures. The risk management system provides us with a basis for these activities. It enables management to identify risks that could jeopardize the Company's growth or going concern, and to take steps to minimize any negative impact. As such, it is an important component of Fresenius Medical Care's management and governance.

In addition, the Company ensures its long-term success by actively managing opportunities. The aim here is to identify and assess opportunities as early as possible, and initiate appropriate measures so that opportunities can be turned into business success for Fresenius Medical Care. Long-term and medium-term opportunities are taken into account in our strategy and budget planning. Short-term opportunities are seized as part of ongoing business operations, provided this is meaningful and in line with business targets.

RISK MANAGEMENT

RISK MANAGEMENT SYSTEM

The main objective of the risk management system is to identify potential risks as early as possible to assess their impact on the business activities and, where necessary, to take appropriate countermeasures. Due to constantly changing external as well as internal requirements and conditions, risk management at Fresenius Medical Care is continuously evolving. In the past financial year, the Company's risk management approach was strengthened regarding the completeness and validity of risk information by the implementation of risk committees on regional, functional and corporate level.

The structure of the internal risk management system is based on the internationally recognized framework for company-wide risk management, the "Enterprise Risk Management - Integrated Framework" of the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Opportunities are not covered by the implemented risk management system.

As part of the risk management system, regional risk coordinators assume the task of coordinating risk management activities within the regions and selected functions with the help of risk management software. These activities relate to existing and potential emerging short-term as well as medium-term risks. Semiannually, identified risk information is processed by the risk coordinators and discussed in regional/functional risk committees. Subsequently the central risk management function gathers the risks from regions and functions, analyses and discusses them in the corporate risk committee and communicates the compiled results to the executive management board. The focus during this process is on significant risks, which are above a defined threshold.

The Management Board and central risk management are promptly informed of new risks that are estimated to be high or develop into high risks in order to ensure appropriate responses. The effectiveness of the risk management system is monitored by the Audit and Corporate Governance Committee of the Supervisory Board.

The organizational structure of risk management at Fresenius Medical Care as well as the previously described processes are shown in CHART 2.34 ON PAGE 64.

In addition to risk reporting, standard reporting to management is an important tool for managing and controlling risks, as well as for taking preventive measures in a timely manner. Therefore, the Management Board of the Company is informed on a monthly basis about the industry situation, the Company's operating and non-operating business, and the outcome of analyses of the Company's earnings and financial position, as well as of the assets position on a quarterly basis.

The Global Internal Audit department is regularly informed about the results of the risk management system. This department determines risk focus areas and audits a selected number of Company departments, subsidiaries and IT applications worldwide each year. Determined risk focus areas are audited across all business segments. The department works according to the internationally accepted standards of the Institute of Internal Auditors ("IIA"), which was confirmed by a quality assessment in 2017. The scope of internal auditing is widespread and involves, among other activities, periodic assessment of the effectiveness of controls (including legal compliance controls) over business processes, IT security, the

reliability of financial reporting and compliance with accounting regulations and internal policies. The Company's locations and units to be audited are determined annually on the basis of a selection model taking various risks into consideration. This annual audit plan is reviewed and approved by the Management Board and the Audit and Corporate Governance Committee of the Supervisory Board. All audit reports with material observations are presented to the Management Board. The Global Internal Audit department is also responsible for monitoring the implementation of measures mitigating identified deficiencies. The Management Board is informed about the mitigation status on a quarterly basis. The Audit and Corporate Governance Committee of the Supervisory Board is also informed of the audit results. In 2019, a total of 45 audits were carried out.

Nevertheless, it is important to note that even a functioning and adequate risk management system like the Company's cannot guarantee that all risks are fully identified and controlled.

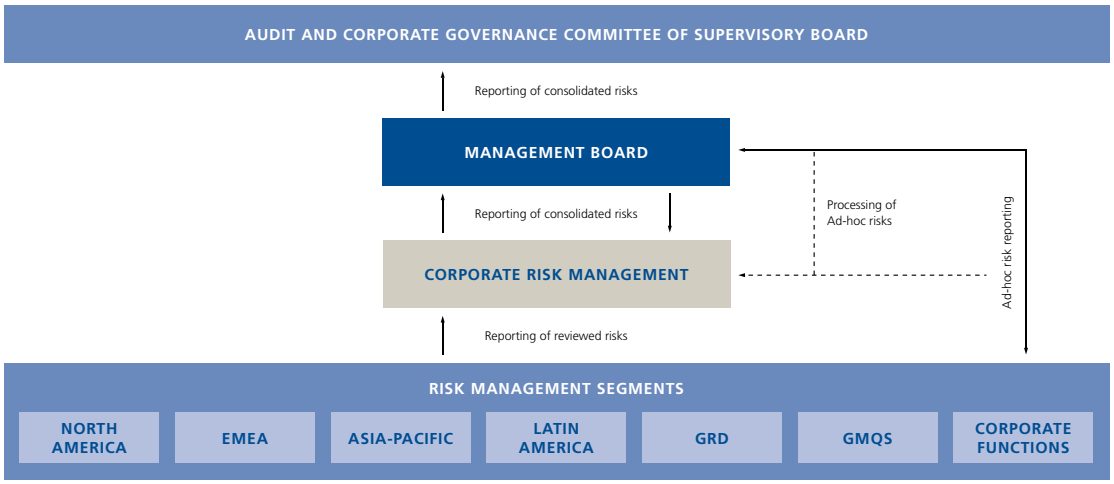
INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM FOR THE GROUP'S ACCOUNTING PROCESS

The Company´s internal control system over financial reporting ensures compliance with applicable accounting standards. The goal is to provide reasonable assurance that the Group financial statements are issued in accordance with appropriate accounting principles. The Company's internal reporting process is generally carried out at four levels and ensures that financial data and key figures are reliably recorded, processed and controlled. At each of these four reporting levels – the local entity, the region, the segment and the entire Group – the figures and data are compared regularly on a monthly and quarterly basis with the previous year's values, budget targets, and the latest projections. In addition, the Management Board and the departments responsible for preparing the annual and consolidated Group financial statements discuss all parameters, assumptions and estimates that substantially affect the Group and segment results reported externally. The Audit and Corporate Governance Committee of the Supervisory Board also reviews current quarterly results and compares them with budgets and projections.

The internal control system contains guidelines and instructions that ensure that all Company transactions are recorded appropriately and presented accurately.

Further control mechanisms to ensure reliable financial reporting and correct recording of transactions within the accounting and the consolidation process include automated and manual reconciliations, as well as the separation of certain personnel functions to prevent potential conflicts of interest. The fact that all process owners assess the risks of their respective processes in terms of their implications for accounting also ensures that risks with a direct impact on financial reporting are identified and that controls are in place to minimize these risks. Changes to accounting standards are discussed on an ongoing basis and considered in the preparation of the financial statements. Employees responsible for financial reporting are given regular training to be up to date with changes regarding accounting standards. The consolidation is performed centrally by the department which is responsible for the group accounting. The basis for the consolidation is derived from reporting packages and sub-group consolidated financial statements prepared and submitted by the local group entities. The preparation of the reporting

C 2.34 **RISK REPORTING**



packages and the sub-group consolidated financial statements is performed according to central requirements and guidelines.

As the Company is also listed on the New York Stock Exchange, it is required to adhere to the requirements of the U.S. Sarbanes-Oxley Act ("SOX"). Section 404 of this federal law stipulates that the management boards of companies listed in the U.S. must take responsibility for implementing and adhering to an appropriate internal control system to produce reliable financial reporting. Based on this requirement, the design and operating effectiveness of the internal control system over financial reporting are routinely tested and considered in regular internal audits. These criteria are also included in the review by the Company's independent auditors.

The internal control system over financial reporting follows the criteria of the COSO model. This was developed by the Committee of Sponsoring Organizations ("COSO") of the Treadway Commission and is recognized as a standard by the Securities and Exchange Commission ("SEC"). In accordance with the COSO model, the internal control system over financial reporting is divided into the five components: control environment, risk assessment, control activities, information and communication, as well as the monitoring of the internal control system. Each of these components is regularly documented, tested and assessed. The Company aligned its internal controls to fulfil the requirements of the COSO model.

The Company's review of the internal control system over financial reporting complies with a specific SEC guideline (Guidance Regarding Management's Report on Internal Control Over Financial Reporting) and is conducted with software support. In a first step, regional project teams coordinate the assessment of the internal control system in each region, after which the results are consolidated for the whole Group. Based on this, management then evaluates the effectiveness of the internal control system for the current fiscal year. External advisers are consulted as needed. A corporate steering committee meets several times a year to review changes and new requirements of SOX, to discuss possible control deficiencies, and derive further measures. In addition, in its meetings, the Audit and Corporate Governance Committee of the Supervisory Board is informed regularly of the results of management's assessment.

As of December 31, 2019, management assessed the Company's internal control system over financial reporting and determined a control deficiency representing a material weakness. The material weakness relates to the design and operating effectiveness of internal controls for revenue recognition, specifically for estimating the transaction price and constraining the variable consideration of the transaction price for certain fee-for-service revenue arrangements under legal consideration and timely adjusting the constraint of variable consideration when new information arises. This control deficiency did not result in a material misstatement of the Company's consolidated financial statements and disclosures for any periods through and including the fiscal year ended December 31, 2019. However, this control deficiency could have resulted in a material misstatement to our annual or interim consolidated financial statements that would not be prevented or detected. Accordingly, the Company has determined that this control deficiency constitutes a material weakness.

Internal control systems over financial reporting are subject to inherent limitations, no matter how carefully they are designed. As a result, there is no absolute assurance that financial reporting objectives can be met, nor that misstatements will always be prevented or detected.

RISKS

The following section describes significant risks which could have an impact on our business operations. In the course of the risk assessment an estimation of the risks takes place regarding the likelihood of occurrence and the potential impact in the respective assessment period, allowing a prioritization of the risks into the classifications "low" "medium" and "high". Besides quantitative factors, especially qualitative factors are applied. For the identification of strategic developments, besides the short-term consideration (one year), risks can also be assessed in terms of a medium-term impact within the subsequent five years.

The scales for classification of potential impact and likelihood as well as the localization of the risks within the risk matrix are depicted in CHART 2.35 ON PAGE 66.

The risk areas in CHART 2.35 ON PAGE 66 as well as measures for mitigating the impact or the probability of occurrence of risks within these areas are described in the following section.

Sector-specific risks

Regulatory environment, product quality

The Company's operations in both its health care services business and products business are subject to extensive governmental regulation in virtually every country in which the Company operates. The Company is also subject to other laws of general applicability, including anti-trust laws. The applicable regulations, which differ from country to country, cover areas that include:

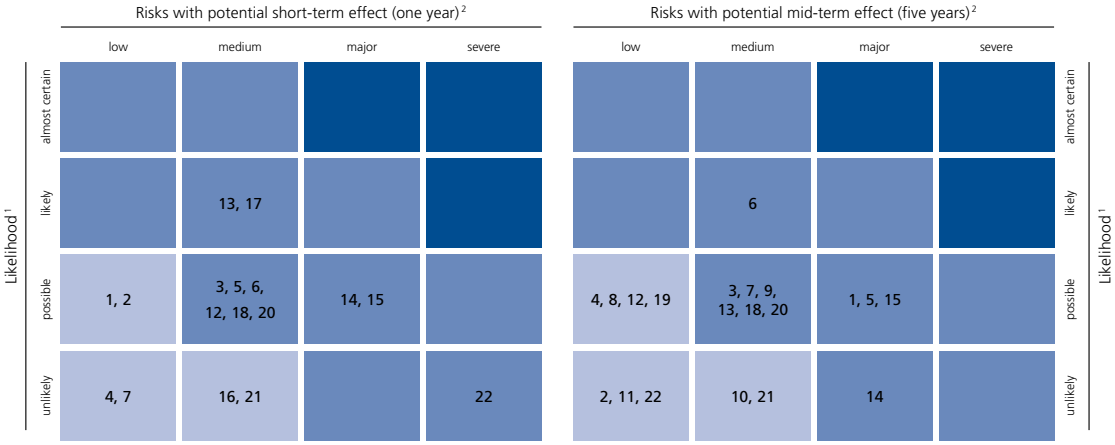
› the quality, safety and efficacy of medical and pharmaceutical products and supplies;

› regulatory approvals and oversight of clinical and certain non-clinical research and development activities;
› product approvals and regulatory approvals for new products or product improvements;
› the operation and licensure of manufacturing facilities, laboratories, dialysis clinics and other health care facilities;
› audits and reviews by enforcement authorities, including the Food and Drug Administration ("FDA"), for compliance with applicable drug regulations;
› product labeling, advertising and other promotion;
› accurate reporting and billing for government and third-party reimbursement including accurate and complete medical records to support such billing;
› the discounting of reimbursed drug and medical device products and the reporting of drug prices to government authorities;
› the collection, dissemination, access, use, security and privacy of protected health information and other protected data;
› compliance with due diligence, warranty obligations and product liability rules and
› compensation of medical directors and other financial arrangements with physicians and other referral sources.

In addition to the risks from non-compliance with the regulatory environment, as a manufacturing company we face the risk that products, as a result of unsuitable product designs or issues in the production process, do not fulfill our standards of quality and could lead to the possibility of not achieving expected treatment results which may result in product recalls that might lead to significant adverse financial results or reputational damage.

If the Company fails to comply with one or more of these laws or regulations or incurs a quality incident, this may give rise to a number of adverse legal and financial consequences. These include, in particular, loss or suspension of governmen-

C 2.35 RISKS WITH POTENTIAL SHORT-TERM EFFECT (ONE YEAR) AND MID-TERM EFFECT (FIVE YEARS)



RISK AREA

1	Regulatory environment
2	Product quality
3	U.S. federal health care programs
4	Composition of our customer base
5	Reimbursement by private insurers
6	Health care reforms
7	Growth
8	Competitors
9	Research and development
10	Patents
11	Referral practices
12	Procurement
13	Personnel
14	Corruption and fraud
15	Information systems and business processes
16	Liquidity and financing
17	Currencies and interests
18	Litigation and potential exposures
19	Taxes
20	International operations
21	Unpredictable events
22	Global economic conditions and disruptions in financial markets

low risk medium risk high risk

[1] Likelihood: **unlikely:** 0 to 10 %, **possible:** > 10 to 50 %, **likely:** > 50 to 90 %, **almost certain:** > 90 to 100 %.
[2] Potential impact: **low:** small negative impact, **medium:** moderate negative impact, **major:** significant negative impact, **severe:** material negative impact.

tal certifications, loss or suspension of licenses under the laws of governmental authority from which we generate substantial revenues, monetary and administrative penalties, recall actions and claims for damages, increased costs for compliance with government orders, complete or partial exclusion from government reimbursement programs, refunds of payments received from government payors and government health care program beneficiaries due to any failures to meet applicable requirements or complete or partial curtailment of the Company's authority to conduct business. In the end, these types of risks could no longer be insured. Including the considerable costs of legal defense, all the consequences mentioned above could have a material adverse effect on the Company's business, results of operations and financial condition.

A number of the health care businesses in the U.S., that the Company operates is owned, or managed, by joint ventures in which one or more hospitals, physicians or physician practice groups hold an interest. While the Company has structured its joint venture arrangements with physicians to comply with many of the criteria for safe harbor protection under the federal and state Anti-Kickback Statutes, its investments in these joint venture arrangements do not satisfy all elements of such safe harbor. If one or more of its joint ventures were found to be in violation of the Anti-Kickback Statute or the Stark Law, the Company could be required to restructure or terminate them. The Company also could be required to repay to Medicare, Medicaid as well as other federal health care amounts pursuant to any prohibited referrals, and the Company could be subject to monetary penalties and exclusion from federal and state health care programs. Imposition of any of these penalties could have a material adverse impact on its business, results of operations and financial condition.

Compliance programs implemented in the regions reduce the risk of legal violations by providing general and specific rules of conduct and procedures as well as regular training of the employees according to the specifications. To ensure that our products and services comply with the quality requirements, we implemented quality management systems in the different regions. The employees have access to procedures and work instructions to ensure that the applicable quality requirements are met. In addition, we conduct internal reviews of the production sites and clinics to monitor compliance with quality standards of our products and services. Furthermore, our plants and hospitals are also subject to external reviews by the relevant supervisory authorities.

U.S. federal health care programs

As stated in the report in section "Macroeconomic and sector-specific environment" of chapter "Economic Report" starting on PAGE 36, our dialysis clinics in the US participate in the Quality Incentive Program ("QIP") within the End-Stage Renal Disease ("ESRD") prospective payment system ("PPS"). Payment reductions of up to 2 % of Medicare reimbursements based on previous year's performance can be made if the quality standards of the QIP are not met in the clinics. Should Fresenius Medical Care fail to meet the QIP's minimum requirements to a greater extent, this could have a material adverse effect on our business, financial condition and results of operations.

Through our value-based agreements and shared risk products, we assume the risk of both medical and administrative costs for certain patients in return for fixed periodic payments from governmental and commercial insurers. The Company currently participates in the "Comprehensive ESRD Care initiative" of the Centers for Medicare and Medicaid Services ("CMS") as well as remuneration agreements with insurers under which the Company receives a fixed remuneration to cover all, or a defined amount of treatment costs, for a defined quantity of patients (Details and detailed descriptions of the above mentioned and other programs in which the Company participates can be found in the report in section "Macroeconomic and sector-specific environment" of chapter "Economic Report" starting on PAGE 36).

Under CMS's Comprehensive ESRD Care Model, dialysis providers and physicians can form entities known as ESRD Seamless Care Organizations ("ESCOs"). ESCOs that achieve the program's minimum quality thresholds and generate reductions in CMS's cost of care above certain thresholds for the ESRD patients covered by the ESCO will receive a share of the cost savings. However, ESCOs that include dialysis chains with more than 200 facilities are required to share in the risk of cost increases and reimburse CMS a share of any such increases.

The profitability in our value-based agreements and shared risk products is dependent in part upon our ability to manage a patient's care, to collaborate with our payer partners, to coordinate with other health care providers and to find cost efficient, medically appropriate sites of service for our patients. Any failure to do so would limit our ability to improve the quality of patient care and health outcomes and to reduce medically unnecessary costs, which could lead to poorer performance under value-based payment arrangements.

The reserves that we establish in connection with the operation of our value-based arrangements and shared risk products as well as estimations of the amount of revenues from health care services that we recognize in a reporting period are based upon assumptions and judgments concerning a number of factors which are subject to uncertainties. Those factors include trends in health care costs, expenses, the complicated billing and collection process, complex and changing laws and regulations subject to interpretation, determination of primary and secondary coverage and other factors. Additionally, collections, refunds and payor retrac-

tions may continue to occur for up to three years or longer after services are provided. To the extent the actual claims experience is less favorable than estimated based on our underlying assumptions, the timing and amount of our recognition of revenues as well as future earnings could be adversely affected or incurred losses could increase.

Although efforts to repeal the Affordable Care Act ("ACA") have been unsuccessful, further efforts to repeal or revise the ACA the posture of CMS in the current administration toward projects of this sort and litigation seeking the termination of the ACA may affect the project's future prospects in ways we currently cannot quantify or predict. In addition, while we have applied for participation in CMS' Comprehensive Kidney Care Contracting ("CKCC") model, we do not yet know whether or to what extent our applications will be accepted, whether the terms of such model will be developed by CMS in a manner acceptable to warrant our continued participation, and whether, if we do decide to participate, we and our partners will be able to deliver better health outcomes while lowering CMS' costs.

We cannot give any assurance that we will achieve the cost savings required or contemplated by these programs, which could have a material adverse effect on our operating results. In addition, we may experience higher write-offs of Medicare deductibles and other amounts due to uninsured and underinsured patients, resulting in an increase in uncollectible accounts.

The Company mitigated the impact of the ESRD PPS and the other legislative initiatives referenced above with two broad measures. First, it works with medical directors and treating physicians to make clinical protocol changes used in treating patients consistent with the QIP and good clinical practices, and it negotiates pharmaceutical acquisition cost savings. In addition, the Company achieved greater efficiencies and better patient outcomes by introducing new initiatives to improve patient care upon initiation of dialysis, increase the percentage of patients using home therapies and achieve additional cost reductions in its clinics.

Composition of our customer base

Our health care product business and our dialysis services business differ across the regions in which we operate. In many cases, our products and services are paid, either directly or indirectly, by government institutions. We believe the risk of default from a government payor is generally low to moderate worldwide. On a country level, the payor base is characterized by distinct customer or payor groups which can range in volume from a few customers to a considerable amount of customer types which have varying levels of risk associated with default or non-payment of receivables as well as risks for dependencies based upon the competition within low volume customer base environments. In certain cases, a resulting dependency on the payment behavior and decision-making of our business partners can affect the collectability of accounts receivable and can adversely affect our business, results of operations and financial condition.

The Company's measures aim to mitigate these risks by actively negotiating long-term contracts with major customers, targeted marketing activities, developing new product and pricing models as well as improving the quality of our services and products.

Reimbursement by private insurers

In the U.S. a portion of the dialysis treatments is reimbursed by private insurers and integrated care organizations; these reimbursements are in general higher than the reimbursements of the public health care systems. As a result, the payments we receive from private payors contribute a substantial portion of our profit. In 2019, approximately 34 % of our consolidated Health Care revenues were attributable to private payors in the North America Segment. If these payors succeed in lowering reimbursement rates in the USA, change the extent or conditions of their networks or if the portion of reimbursements by private insurers in general drops, this could result in a significant reduction in Company revenue and operating profit. In addition, the health care insurance industry is experiencing continuing consolidation among insurers and pharmacy benefit managers, including increasing buyer power and impacts on referral streams. This may have an adverse impact on our ability to negotiate favorable coverage terms and commercially reasonable rates with such insurers.

We monitor the relationships with private health insurance companies continuously and try to hedge the business through long-term contracts to maintain profitability.

A portion of our patients who are currently covered by private insurers may be unable to continue to pay the premiums and may become uninsured for dialysis services or elect to transition to government funded reimbursement programs that reimburse us at lower rates for our services if efforts to restrict or eliminate the charitable funding of patient insurance premiums are successful.

Health care reforms

A number of governments have been considering proposals to modify their current health care systems to improve quality of and access to health care and to control costs. Policymakers in several countries are also considering reforms that could change the methodology used to reimburse providers of health care services. Furthermore, standards and regulations compulsory for providing dialysis service can be subject to extensive changes.

In fiscal year 2019, the Company derived approximately 33 % of its worldwide revenue from Medicare and Medicaid reimbursements in the U.S. Consequently, changes in legislation or reimbursement practices regarding e.g. the End-Stage Renal Disease Prospective Payment System ("ESRD PPS"), the Physician Fee Schedule, the Clinical Laboratory Fee Schedule, and the Ambulatory Surgical Center Payment System could influence the volume of Medicare and Medicaid reimbursements for services provided and the insurance coverage.

A decrease in reimbursement rates, covered services or changes to standards, regulations or state funding in countries in which the Group operates, especially significant changes in the U.S. Medicare and Medicaid programs could reduce the Company's revenue and profitability and have a material adverse effect on its business, financial condition and results of operations.

In this context it might happen that the annually adjusted ESRD PPS rates may not provide fully compensating reimbursement for the services or products consumed during service. This especially refers to the reimbursement of pharmaceuticals depending on their status as outside of or as part of the bundled rate. Pharmaceuticals included within the bundled rate are subjected to increased reimbursement pressure. If we are unable to secure appropriate reimbursement arrangements for the pharmaceuticals we provide in our dialysis clinics, we could experience a material adverse effect on our operating results. Further, an increased utilization of bundled pharmaceuticals or decreases in reimbursement for pharmaceuticals outside the bundled rate may result in a material adverse impact on our results of operations.

The U.S. administration has publicly announced its intention to pursue significant changes to existing health care insurance programs, especially programs in connection with the Affordable Care Act, although the administration has recently stated that any efforts on its part to do so are likely to be deferred after the 2020 elections in the U.S. In addition, options to restructure the Medicare program in the direction of a defined-contribution, "premium support" model and to shift Medicaid funding to a block grant or per capita arrangement, with greater flexibility for the states, are also being considered.

In October of 2017, the U.S. administration discontinued making cost-sharing reduction ("CSR") reimbursements to insurers, arguing that Congress had failed to appropriate funding for them. In response, many state departments of Insurance ("DOIS") either allowed or required insurers to mitigate their losses by increasing the 2018 premiums on their ACA plans. Many insurers also mitigated the impact to consumers by "silver loading", a practice whereby the full premium increase attributable to the loss of CSR payments is applied to their silver-level plans. Silver loading mitigated the impact of premium increases to consumers. In 2019 and 2020, all states either permit or required silver loading. It is not predictable, how the ongoing litigation might be determined. As a result, a reduction in the availability of insurance through such exchanges could reduce the number of our commercially insured patients and shift such patients to Medicare and Medicaid.

Changes of this nature could have significant effects on our businesses, both positive and negative, but the outcomes are impossible to predict.

Risks relating to the Company's business

Growth

The health care industry experiences continuing consolidation particularly among health care providers. This development could adversely affect our ability to find suitable acquisition targets and to increase future growth and product sales. Additionally, our ability to make future acquisitions as well as develop our core dialysis business, in part, on the availability of financial resources and the current restrictions imposed by competition laws as well as existing credit agreements. The integration of acquired businesses may cause problems, e.g. by assuming unknown liabilities, underperformance subsequent to integration, associated requirements from competition authorities or non-compliant business practices not disclosed by the seller or not uncovered during due diligence. We also compete with other health care companies in seeking suitable acquisition targets and developing our core dialysis business. Any or all of these factors generally could have a material adverse effect on our future growth, including growth of our product sales.

Competitors

The Company faces numerous competitors in both its health care services business and dialysis products business, some of which may possess substantial financial, marketing or research and development resources. Competition from new and existing competitors and especially new competitive developments such as increasing disruption in the health care industry as well as innovations in technology and care delivery models could materially adversely affect the future pricing and sale of our products and services.

In particular, technological innovation has historically been a significant competitive factor in the dialysis products business. The introduction of new products or services by competitors could render one or more of the Company's products or services less competitive or even obsolete, which could also affect the Company's sales and distribution of pharmaceuticals for which, to some extent, the Company is obligated to make certain minimum annual royalty payments.

To ensure our permanent competitiveness, we work closely together with physicians and scientists. Important technological and pharmaceutical innovations are intended to be quickly identified and further developed, if necessary also by adapting our business strategy. Moreover, we secure our competitiveness by ongoing analyzes of our market environment as well as the regulatory framework. The market activity, especially our competitors' products and newly launched dialysis-related products are thoroughly monitored. The cooperation between the various technical, medical and academic institutions within our company also ensures our competitiveness, which is finally further enhanced by our consequent conduction of programs devoted to cost saving and efficiency increase.

Research and development

The development of new products and therapies proposes a risk that the desired development goal will not be achieved or achieved significantly later than planned. Costly and extensive preclinical and clinical examinations are necessary until admission. All products, packaging, applications and technologies are constantly and systematically monitored, tested and improved. We address potential risks in the area of research and development ("R&D") by continually analyzing, evaluating and assessing whether the R&D projects fit into the overall strategy of Fresenius Medical Care. As a vertically integrated company, we also benefit from direct contact with our patients and medical professionals. Due to this close proximity to the market, we have the potential to gather important information to develop and offer products and therapies that meet the needs of our customers.

Referral practices

In providing services within our health care business, we depend upon patients choosing our health care facilities as the location for their care. Patients may select a facility based, in whole or in part, on the recommendation of their physician. Physicians and other clinicians typically consider a number of factors when recommending a particular dialysis facility, pharmacy, physician practice, vascular surgery center or urgent care center to an ESRD patient, including, the quality of care, the competency of staff, convenient scheduling, location and physical condition. Physicians may change their recommendations, which may result in the movement of new or existing patients to competing facilities, including facilities established by the physicians themselves. At most of our dialysis clinics, a relatively small number of physicians often account for the referral of all or a significant portion of the patient base. We have no ability to control these recommendations and referrals. If a significant number of physicians or other referral sources cease referring their patients to our facilities or stop purchasing or prescribing our dialysis products, this would reduce our health care revenue and could materially adversely affect our overall operations.

Patents

One of the typical patent risks faced by the Company is inadequate protection in the form of patents for technologies and products developed by the Company. This means that competitors could copy the Company's products without incurring comparable development costs. In addition, the Company could infringe the patent of a competitor and thus be liable for damages; this could result in a ban on the Company further selling the affected product. An inadequate protection of the Company's patents could have an adverse impact on the Company's financial condition and results of operations.

Procurement

The Company's business is dependent on the reliable supply of several raw materials for production and service purposes. If the Company is unable to counteract the risk of bottleneck situations at times of limited availability of goods and other materials in spite of our purchasing strategy in combination with ongoing monitoring of market developments, this could result in delays in production and hence have an adverse effect on the Company's results of operations. Similarly, price increases by suppliers and the inability to access new products or technology could also adversely affect the Company's results of operations.

Our purchasing strategy is aimed at developing partnerships with strategic suppliers through long-term contracts and at the same time ensuring, where reasonably practicable, that we have at least two sources for all supply and price-critical primary products (dual sourcing, multiple sourcing). To prevent loss of suppliers, we monitor our supplier relationships on a regular basis. Suppliers which are integral to our procurement functions are also subject to performance and risk analyses as well as continuous supply chain monitoring. Through constant market analyses, a demands-based design of supplier-relationships and -contracts, as well as the use of financial instruments, we seek to mitigate disruptive goods shortages and potential price increases and to provide access to new product and technology developments.

Personnel

The Company's continued growth in the health care business will depend upon the ability to attract and retain skilled workforce, including highly skilled nurses and other medical personnel. Competition for those employees is intense and shortages for these sought-after employees, such as nurses, or skilled engineers and research and development personnel, may increase the Company's personnel and recruiting costs and/or impair our reputation for production of technologically advanced products. Moreover, the Company considers that future success in the provider business depends on

the ability to attract and retain qualified physicians to serve as employees of or consultants to the Company's health care services businesses. The Company's health care products business depends on the development of new products, technologies and treatment concepts to be competitive. Additionally, in recruiting, employing and retaining personnel we may be exposed to increasing risks relating to various labor and staffing laws, legislative, union or other labor-related activities or changes. Further, these factors could impact the integration of acquired companies into our operations, which could increase our costs, decrease our productivity and prevent us from realizing synergies from acquisitions. If we are unable to manage the risks mentioned, then our growth and results of operations could be adversely impacted.

Corruption and fraud

The Company operates many facilities and engages with other business associates to help it carry out its health care activities. In such a decentralized system, it is difficult to maintain the desired level of oversight and control over the thousands of persons employed by many affiliated companies and its business associates. Training, oversight and compliance programs cannot assure protection from deliberate, reckless or inadvertent acts of employees that violate the Company's compliance policies or anti-corruption laws. Such violations could disrupt the Company's business and result in a material adverse effect on results of operations or financial condition.

Beginning in 2012, the Company received certain communications alleging conduct in countries outside the United States that might violate the Foreign Corrupt Practices Act ("FCPA") or other anti-bribery laws. The Company conducted investigations with the assistance of outside counsel and, in a continuing dialogue, advised the SEC and the United States Department of Justice ("DOJ") about these investigations. The DOJ and the SEC also conducted their own investigations, in which the Company cooperated.

In the course of this dialogue, the Company identified and reported to the DOJ and the SEC, and took remedial actions with respect to, conduct that resulted in the DOJ and the SEC seeking monetary penalties including disgorgement of profits and other remedies. This conduct revolved principally around the Company's products business in countries outside the U.S.

In 2015, the Company self-reported to the German prosecutor conduct with a potential nexus to Germany and continues to cooperate with government authorities in Germany in their review of the conduct that prompted the Company's and government investigations.

Since 2012, the Company has made and continues to make further significant investments in its compliance and financial controls and in its compliance, legal and financial organizations. The Company's remedial actions included separation from those employees responsible for the above-mentioned conduct. The Company is dealing with post-FCPA review matters on various levels. The Company continues to be fully committed to compliance with the FCPA and other applicable anti-bribery laws.

Further information on these investigations can be found in NOTE 22 of notes to the consolidated financial statements.

Information systems and business processes

As the Company continues to grow and introduces more international operations, the processes within the Company are increasingly complex. Accordingly, it is more and more dependent on information and communication technologies and -systems to structure its processes and harmonize them between different regions. An insufficient design of those systems and business processes as well as insufficient resources could lead to non-availability of certain information, causing inefficient workflows, deficient internal and external communication and intransparencies regarding operations. A breakdown of these systems could temporarily lead to standstill of parts of our business and consequently cause heavy damages. As of December 31, 2019, management assessed the Company's internal control system over financial reporting and determined a control deficiency representing a material weakness. For details, reference is made to the section "Internal control and risk management system for the Group's accounting process" in the "Risks and Opportunities Report", starting on PAGE 64.

Additionally, cyber-attacks or privacy and data breaches regarding both our internal systems as well as systems of third-party service providers could result in the misappropriation or compromise of sensitive information. We gather and handle personal information of our patients in many regions of the world and thus need to adhere to various data protection and privacy regulations. Any loss, impermissible use, access or disclosure of this sensitive information or non-compliance with data protection and privacy related laws, regulations and standards could threat our position in competition, our reputation as well as our whole business.

Using its Information Security Management System ("ISMS"), which is based on the internationally recognized security standard ISO 27002, the security guidelines and processes within the Company are enhanced continuously. Business data is backed up regularly and disaster recovery plans, which are regularly tested and improved, are in place. The Company operates three data centers at geographically separate locations to maximize the availability and data security of IT systems. A mirrored infrastructure that creates a copy of critical systems is in use. In general, we continue to enhance our

internal information and reporting systems to ensure that their structure meets evolving needs.

Furthermore, among others, company guidelines relating to data protection and privacy, which also regulate the assignment of access rights and third-party collaboration, must be considered, trainings for employees are conducted and governance structures are continuously adapted. Compliance is monitored with controls including those relating to Section 404 of SOX. Operational and security audits are carried out every year both internally and by external auditors. The existing IT security architecture with different layers of security measures protects the systems in our data centers. The access to sensitive or critical data from outside of the secured data center networks is protected by the usage of secure protocols and cryptographic measures. Besides that, annual penetration tests for applications with critical data (e.g. patient or personnel data) are conducted.

Other risks

Liquidity and financing

The liquidity risk is defined as the risk that a company is potentially unable to meet its financial obligations. The Management Board of the Company manages the liquidity of the Group by means of effective working capital and cash management as well as an anticipatory evaluation of refinancing alternatives. The Management of the Company believes that existing credit facilities, cash flow from operating activities and additional short-term borrowings are sufficient to meet the Company's foreseeable demand for liquidity.

At December 31, 2019 respectively December 31, 2018, the Group had financial debt and lease liabilities of €13.78 BN respectively €7.55 BN. The Company's credit agreements and notes include covenants that require maintaining certain financial ratios or meeting other financial tests. The covenants also restrict the Company's ability to dispose of assets, incur debt, pay dividends and other restricted payments, create liens or make investments or acquisitions. The breach of any of the covenants could result in a default and acceleration of payments of the indebtedness, which would have an adverse effect on the Company's business, financial condition and results of operations. The Company considers itself able to maintain the required financial ratios at present and in the near future.

Currencies and interests

The Company actively manages foreign currency and interest rate exposures that are part of its normal business activities. Risk management procedures for foreign currencies and interest rate exposures are based on strategies defined and, if necessary, adapted in close cooperation with the Management Board, including, for example, guidelines that cover all steps and levels of the risk management process. They define responsibilities for the determination of risks, the careful use of financial instruments for hedging purposes and for accurate financial reporting. The use of derivative instruments is restricted to micro hedges which are used in order to hedge exposures that arise in the ordinary course of business. The Company does not enter into transactions for trading or other speculative purposes. The Company enters into transactions with banks, which generally have ratings in the "A" Category or better, as approved by the Management Board. The effectiveness of the hedging relationships of the hedging instruments and the hedged items is tested on a quarterly basis.

The Company enters into derivatives, particularly interest rate swaps and to a certain extent, interest rate options to protect against the risk of rising interest rates. These interest rate derivatives are designated as cash flow hedges and have been entered into in order to effectively convert payments based on variable interest rates into payments at a fixed interest rate. At December 31, 2019 no interest rate swaps were in place. At December 31, 2018, the notional amount of the euro-denominated interest rate swaps in place was €204 M.

Derivative foreign currency contracts are entered into for the purpose of limiting the exchange rate exposure from sales and purchases as well as lendings and borrowings between the Company's subsidiaries located in different countries and reporting in different currencies. A large portion of the transaction exposures arise from sales of products from the Company's subsidiaries in the euro region to other international business units. The aggregate notional amount of foreign currency hedge contracts as of December 31, 2019 was €742 M, primarily for hedging Euro exposure to the U.S. dollar and various other currencies. Economic hedges, which are used by the Company, are accounted for as recognized hedges in the consolidated financial statements, when necessary.

The estimation and quantification of transaction risks from foreign currencies is determined according to the statistical model Cash Flow at Risk ("CFaR"). CFaR indicates the maximum amount of a potential loss of the forecasted foreign exchange cash flow of the next twelve months that occurs with a probability of 95 %. As of December 31, 2019, the Company's CFaR amounts to €41.3 M.

Further information on market, default and liquidity risks is included in NOTE 23 of notes to the consolidated financial statements.

Litigation and other exposures

Risks associated with investigations and litigations are continuously identified, assessed and reported within the Company. The Company is involved in various legal proceedings and investigations resulting from its business operations. A nega-

tive outcome of these legal proceedings or investigations leading to legal proceedings could have an adverse impact on the Company's financial condition and results of operations.

External legal consulting support is always used to defend the Company against risks associated with litigations. If necessary accounting measures like accruals are used.

For the matters in which the Company believes a loss is both reasonably possible and assessable, an estimate of the loss or range of loss exposure is provided in NOTE 22 of notes to the consolidated financial statements. For other proceedings the Company believes that the loss probability is remote and/or the loss or range of possible losses cannot be reasonably estimated at this time.

For details on ongoing proceedings and further information on material legal risks to which the Company is exposed, reference is made to NOTE 22 of notes to the consolidated financial statements.

Taxes

The Company is subject to ongoing tax audits in the U.S., Germany and other jurisdictions. The Company could potentially receive notices of unfavorable adjustments and disallowances in connection with certain of these audits. If the Company is unsuccessful in contesting unfavorable determinations we could be required to make additional tax payments, which could have a material adverse impact on our business, financial condition and results of operations in the relevant reporting period.

In general, tax-relevant issues are, as necessary, coordinated with internal tax experts regarding compliance with applicable tax laws. If necessary, statements and opinions by external consultants are obtained to minimize tax risks.

International operations

The Company operates dialysis clinics in around 50 countries and sells a range of equipment, products and services to customers in around 150 countries. The Company's international operations are subject to a number of risks, including but not limited to the following:

- The economic and political situation in certain countries could deteriorate or become unstable.
- The Company could face difficulties in enforcing and collecting accounts receivable under some countries' legal systems.
- Local regulations could restrict the Company's ability to obtain a direct ownership interest in dialysis clinics or other operations.
- Some countries or economic unions may impose charges or restrictions, such as local content requirements, which restrict the importation of our products.
- Potential increases in tariffs and trade barriers that could result from withdrawal by the United States or other countries from unions, including the exit from major multilateral trade agreements or the imposition of retaliatory tariffs and other countermeasures in the wake of trade disputes.
- Transport delays or interruptions.
- International growth and expansion into emerging markets could cause us difficulty due to greater regulatory barriers than in the United States or Western Europe, the necessity of adapting to new regulatory systems, and problems related to entering new markets with different economic, social, legal and political systems and conditions.
- Failure to prevail in competitive contract tenders.

We conduct humanitarian-related business directly or indirectly in sanctioned countries. In case of violation of applicable economic sanctions or export controls laws and regulations, the Company could be subject to enforcement actions, which vary between jurisdictions and depend on the factual circumstances of the given violation, but could include criminal penalties, imprisonment of responsible individuals, administrative or civil penalties, restricted access to certain markets and reputational harm, among others.

The Company's internal control policies and procedures may not protect it from deliberate, reckless or inadvertent acts of our employees or agents that contravene our compliance policies or violate applicable laws.

Any one or more of these or other factors relevant to international operations could increase the Company's costs, reduce revenues, or disrupt operations, with possible material adverse effects on the Company's business and financial condition.

Developments of this nature are continuously monitored and analyzed and response measures like the extension of local production capacities, the adaptation of product designs, organizational changes and various others are set in place based on case by case decisions.

Unpredictable events

Fresenius Medical Care operates dialysis facilities or manufacturing facilities in many regions of the world, with diverse geographic, societal and economic conditions. Events such as natural disasters, terrorist attacks, political instability, epidemics as well as other unforeseeable events, could affect our services and our ability to deliver in a limited time and place.

Through forward-looking planning and prevention programs, Fresenius Medical Care is trying to limit possible effects of such events already in advance. In addition, to maintain operations in the event of an onset and to reduce potential impact on our patients and the organization, we have spare capacity

and safety stock of certain resources as well as emergency and recovery plans in place. Residual risks are eventually covered when necessary and expedient by taking out insurance.

Global economic conditions and disruptions in financial markets

The Company is dependent on the conditions of the financial markets and the global economy. In order to pursue its business, the Company is reliant on capital, as are its renal product customers and commercial health care insurers. Limited or more expensive access to capital in the financial markets could adversely affect the Company's business and profitability.

Among other things, the potential decline in federal and state revenues may create additional pressures to contain or reduce reimbursements for the Company's services from public payors around the world, including Medicare, Medicaid in the United States and other government sponsored programs in the United States and other countries around the world.

Job losses or increases in the unemployment rate in the U.S. may result in a smaller percentage of the Company's patients being covered by an employer group health plan and a larger percentage being covered by lower paying Medicare and Medicaid programs. To the extent that payors are negatively impacted by a decline in the economy, the Company may experience further pressure on commercial rates, a further slowdown in collections and a reduction in the amounts it expects to collect. Any or all of these factors, or other consequences of the continuation, or worsening, of domestic and global economic conditions which cannot currently be predicted, could continue to have an adverse effect on our businesses and results of operations.

Changes in the risk situation

Fresenius Medical Care operates in a constantly changing environment. Accordingly, the risk situation is also subject to constant change.

Regarding the classification of single risks in terms of probability and potential impact, the following significant changes occurred compared to the previous year:

One-year period:

Due to the fact that regulatory requirements currently discussed with regard to production processes can have an impact mainly in the medium to long term, the risk relating to the regulatory environment (1) has been reduced to a low risk from a short-term perspective.

The risks arising from international operations (20) have increased to a medium risk level due to deteriorating circumstances in terms of increasing protectionism and current trade conflicts.

Five-year period:

Due to predominantly strategic effects from regulatory requirements currently under discussion with regard to production processes, the risk from the regulatory environment (1) has increased to a medium risk in the medium term.

Due to significant acquisitions made last year, risks from growth (7) are now rated as medium risk.

The first-time identification of procurement risks (12) with regard to a five-year period has resulted in an assessment as low risk.

In addition, further developments in litigation and other exposures (18) lead to a medium risk assessment.

The risks arising from international operations (20) have increased to a medium risk level due to deteriorating circumstances in terms of increasing protectionism and current trade conflicts.

OPPORTUNITIES MANAGEMENT

OPPORTUNITIES MANAGEMENT SYSTEM

As much of our business is organized on a decentralized basis, we are able to identify industry-specific trends and requirements as well as the resultant opportunities in the different regions at an early stage and gear our actions to them. We also perform comprehensive quantitative and qualitative analyses to enable us to capture business opportunities. This involves systematically evaluating relevant market data, closely examining research projects and taking general social trends into consideration. Our analyses focus on general economic, industry-specific, regional and local developments as well as regulatory changes. In addition, close cooperation between our Strategy and Planning departments and the managers of other divisions allows us to identify global opportunities as early as possible.

OPPORTUNITIES

As a vertically integrated dialysis company, Fresenius Medical Care can offer almost all of the products and services that a patient with chronic kidney failure requires for treatment. Our network of 3,994 dialysis clinics in around 50 countries is the largest of its kind in the world. As a result, we possess valuable dialysis expertise that is unique in the industry. Thanks to this wealth of experience, we know that high qual-

ity is not only the key to a better quality of life for patients, but can also make a significant contribution to reducing the costs of health care. Based on this understanding and our business model, major opportunities arise that could have a positive impact on the results of operations, financial position and net assets of Fresenius Medical Care as things stand today.

Industry-specific opportunities

Patient growth and demographic development

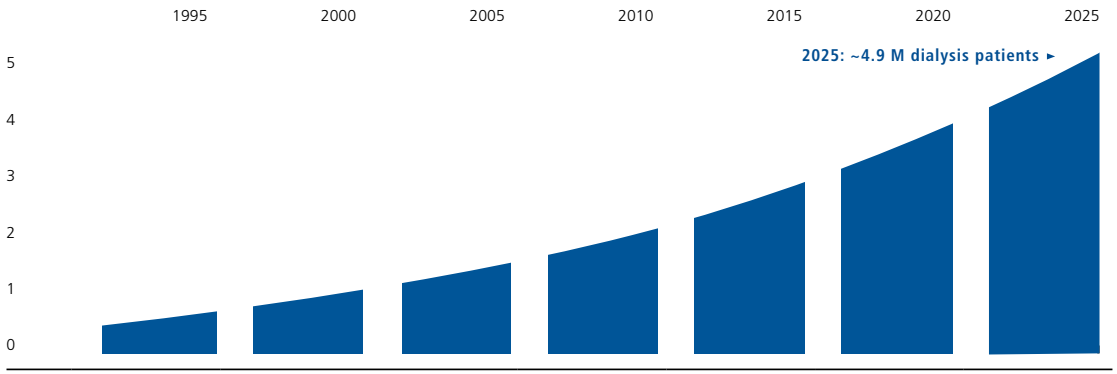
The dialysis market is a growth market that is largely unaffected by macroeconomic influences. According to estimates, the number of people worldwide suffering from chronic kidney failure and requiring dialysis treatment is rising at a relatively constant rate of around 6 % annually. It is expected to reach around 3.7 M patients in 2020 and approximately 4.9 M by 2025 (SEE CHART 2.36). Social trends play a role in this increase in patient numbers. In Europe and the U.S. in particular, they include the aging population and the increasing incidence of diabetes and hypertension, two illnesses that frequently precede the onset of chronic kidney failure. In developing and emerging countries, the growing population and gradually improved access to dialysis as a result of increasing wealth are key factors that further boost demand for dialysis products and services. We want to continue to make a significant contribution to meeting this demand in the future.

Changes in legal and political conditions

Whether private companies can offer dialysis treatment and in what form depends on a country's health care system and its legal framework. For Fresenius Medical Care, opportunities arise to tap into new markets or to expand its market share whenever a country opens up to private dialysis providers. These decisions are also increasingly influenced by the following factors:

- Health care systems are under pressure to deliver ever more comprehensive medical care (longer life expectancy, increase in concomitant diseases, fully-functioning health care provision still being established).
- Dialysis is a complex life-sustaining procedure, which places high demands on health care systems in terms of expertise and efficiency. Therefore, public health care providers are increasingly looking for solutions together with private providers.

C 2.36 **NUMBER OF DIALYSIS PATIENTS WORLDWIDE – FORECAST TO 2025**
IN M



Source: Internal estimates

Public-private partnerships

In some countries, public-private partnerships (PPP) are an attractive business model for Fresenius Medical Care. These are contractually defined project alliances between the public sector and private companies in which both partners share the financing, tasks, risks and opportunities of a project. Our extensive dialysis expertise gives us a competitive edge here, as it enables us to flexibly offer various levels of care for hospitals, health insurers, local or national authorities. Depending on the contract, we set up new dialysis clinics and install the equipment, train medical personnel in quality, hygiene and nutrition, or manage the clinics ourselves on the terms agreed. This enables the public sector to care for more patients more effectively and less expensively. The PPP model allows Fresenius Medical Care to tap into new markets, expand its market share, and extend its range of products and services with new forms of health care.

Growing demand for holistic, value-oriented health care

As a result of increasing cost pressure and the growing number of patients, demand for holistic and value-oriented health care concepts for patients with chronic kidney failure is grow-

ing worldwide. Value-oriented models are changing the role of health care providers: In systems of this kind, we not only take care of dialysis, but also take responsibility for the patient's medical well-being beyond dialysis. Value-oriented health care models help to deliver higher-quality treatment outcomes for patients at a lower cost.

We have supported this development from the start, because we know the needs of our dialysis patients best. We have bundled coordination of all aspects of medical care in our Care Coordination business. This encompasses all services that help us to offer our dialysis patients holistic treatment.

Growing importance of home therapies

If patient numbers grow as strongly as anticipated, cost pressure continues to rise, and clinics reach full capacity, home therapies are expected to take on a more important role in dialysis. This development could be advantageous for Fresenius Medical Care, as it presents us with growth opportunities. We offer a host of different products and innovative solutions for home dialysis. By acquiring the U.S. company NxStage, which develops, produces, and markets dialysis machines and further products for home dialysis and intensive care, we have further expanded our home dialysis portfolio. We focus firmly on the needs of our patients by offering them the widest possible range of therapy options. This gives them the freedom to choose what treatment they prefer. Self-determination is a key pillar of our vision of improving our patients' quality of life.

Opportunities related to our business operations

New products and technologies

Developing innovative products and technologies that deliver lasting added value for patients and remuneration systems until they are market-ready is another crucial factor in our long-term success. We advance dialysis-related innovations through our in-house research and development activities. In addition, we are able to enhance existing products ourselves and adapt them to the markets in which we operate. We will continue to add innovative products and technologies to our range in the future in order to capture growth opportunities and meet the demand for integrated care as effectively as possible.

Internal organization and procedures

Fresenius Medical Care benefits from a number of long-term opportunities in the way it is organized and designs its business operations. For example, all production sites follow the "Lean Manufacturing" approach which, in North America and our Schweinfurt plant, includes the "Lean Six Sigma" management system. The focus of Lean Manufacturing and Six Sigma is on the continuous improvement of all manufacturing processes to achieve a low defect rate resulting in improved product quality, while reducing manufacturing times. In addition, constantly improving business processes and rigorously optimizing cost structures helps to make Fresenius Medical Care even more profitable and competitive. With its global efficiency program, the Company has laid the foundation for a continuous and sustainable increase in efficiency.

Capital expenditure and acquisitions

We generate ideas for growth initiatives from market analyses and evaluate them as part of our annual budget planning, or more frequently if necessary. We manage the investments required for implementing projects using a detailed coordination and evaluation process. The Management Board sets the investment budget for the Group as well as the focus of investment. Before realizing investment projects, an internal committee examines the individual projects and measures, taking into account their yield requirements and potential return on investment. Projects are undertaken only if they help to increase the Company's value.

We are investing in our future growth by expanding our health care services business through acquisitions and purchasing expertise and relevant technologies in the area of R&D. Thanks to close collaboration between our Strategy and Planning departments and the managers responsible for our acquisitions, we are able to identify suitable potential purchases worldwide at an early stage.

Fresenius Medical Care's business model

Our business model itself also provides opportunities for Fresenius Medical Care's future growth. As a vertically integrated dialysis company, we not only offer almost all of the products and services that a patient with chronic kidney failure requires for treatment, but also use these on a daily basis in our own clinics. As a result, we can incorporate the feedback from our patients, physicians and nurses worldwide in developing and manufacturing new products as well as in organizing our clinic management. This gives us a crucial competitive edge.

ASSESSMENT OF THE OVERALL RISK POSITION AND THE OPPORTUNITIES BY THE MANAGEMENT

The risk management system implemented at Fresenius Medical Care forms the basis for assessing the overall risk position of the Group. The overall risk position of Fresenius Medical Care is determined by the individual risks described above. Changes in the Group's risk situation compared to the previous year occurred as stated in the paragraph of the same name, starting on PAGE 74. As far as we are aware, there are currently no risks that could endanger the continued existence of Fresenius Medical Care. As part of the Company-wide review of the integrated management system, we monitor the effectiveness of the implemented risk management system and make improvements where necessary. The Management Board will continue to expand our risk management as well as the review of the related management system to be able to identify, examine and evaluate potential risks even more quickly and initiate appropriate countermeasures. We believe that we have taken all necessary organizational steps to recognize potential risks early on and to respond to them appropriately.

We remain confident that our integrated global business model and our earning power provide us with a sound basis for our business development, allowing us to capture the potential arising for the Company. In view of our leading position in the dialysis market, our innovative strength, our dedicated staff, and our structured processes for identifying risks early on and managing opportunities, we are convinced that we can continue to make the most of any opportunities that arise for our business in a responsible manner in the future.

CORPORATE GOVERNANCE FUNDAMENTALS

Fresenius Medical Care has the legal form of a partnership limited by shares (KGaA). The Company's corporate structure is set out in the appendix of the notes to the consolidated financial statements starting on page 160. The Company's management and supervisory structure is set out in the "Corporate Governance Report" starting on page 118.

CORPORATE GOVERNANCE DECLARATION

In fiscal year 2019, the Company made use of the option to publish the Corporate Governance Declaration (Erklärung zur Unternehmensführung) on the Company's website pursuant to sec. 315d German Commercial Code (HGB) in conjunction with sec. 289f para. 1 HGB. The Corporate Governance Declaration is available on the Company's website at http://www.freseniusmedicalcare.com/en/home/investors/corporate-governance/declaration-on-corporate-governance/. It is also set out in the "Corporate Governance Report" starting on PAGE 118.

CHANGE IN MANAGEMENT STRUCTURE

Effective November 1, 2019, Helen Giza was appointed as Chief Financial Officer (CFO). She succeeded Michael Brosnan who announced his retirement from the Company earlier in 2019 after serving as CFO since January 2010.

On October 29, 2019, the Company appointed Franklin W. Maddux, MD, the Company's Global Chief Medical Officer, to the Management Board. He started in his new position on January 1, 2020.

COMPENSATION REPORT

The description of both the compensation system and individual amounts paid to the Management Board and the Supervisory Board of Fresenius Medical Care Management AG and the Supervisory Board of FMC AG & CO. KGAA are included in the compensation report which is part of the "Corporate Governance Report" starting on PAGE 118. The compensation report is an appendix of the group management report and is part of Fresenius Medical Care's Group Management Report.

TAKEOVER-RELATED DISCLOSURES

Share capital held by the Company's shareholders (excluding treasury shares held by the Company) at December 31, 2019 totals approximately €298 M, divided into 298,329,247 non-par bearer shares, and a nominal value of €1 each. On the basis of the authorization granted by the Company's Annual General Meeting on May 12, 2011 to conduct a share buyback program, the Company repurchased 7,548,951 shares in 2013. The Company redeemed 6,549,000 of these repurchased shares on February 16, 2016. On the basis of the authorization granted by the Company's Annual General Meeting on May 12, 2016 to conduct a share buyback program, the Company repurchased further 660,000 shares between December 11, 2017, and December 21, 2017 (including) and further 431,000 shares between May 28, 2018 and June 8, 2018 (including). The company redeemed the 1,091,000 shares repurchased in 2017 and 2018 on December 12, 2018. In the period from March 12, 2019 to May 10, 2019 (including) the Company repurchased further 3,770,772 shares for an average weighted stock price of €71.55 on the basis of the authorization granted by the Company's Annual General Meeting on May 12, 2016. The company redeemed the 3,770,772 shares repurchased in the period from March 12, 2019 to May 10, 2019 (including) on June 28, 2019. In the period from June 17, 2019 to December 31, 2019 (including) the Company repurchased further 5,107,678 shares for an average weighted stock price of 62.55 on the basis of the authorization granted by the Company's Annual General Meeting on May 12, 2016. As of December 31, 2019, the Company therefore holds 6,107,629 treasury shares. Treasury shares held correspond to approximately €6.1 M or 2.01 % of the Company's share capital. Voting rights may not be exercised on treasury shares. The treasury shares were acquired in the course of share buyback programs on the stock exchange via the XETRA trading system and/or – for the share buyback program since June 17, 2019 - via selected multilateral trading facilities (MTF). Including treasury shares, the Company's share capital therefore amounted to €304 M at December 31, 2019, divided into 304,436,876 shares. The acquired treasury shares will only be used to reduce the Company's share capital (by cancellation of the relevant shares) or to service employee incentive plans.

The rights of the shareholders are governed by the German Stock Corporation Act (AktG) and the Company`s Articles of Association. This stipulates that each share shall be entitled to one vote at the Company's Annual General Meeting.

The General Partner, Fresenius Medical Care Management AG, is responsible for managing and representing the Company. Similarly, it does not participate in the profit or loss or net assets of the Company. The General Partner's manage-

ment authority also encompasses exceptional management measures, which do not require approval by the shareholders. Vis-à-vis the General Partner, the Company is represented by its Supervisory Board.

The General Partner will cease to be General Partner of the Company if and when all shares in the General Partner entity are no longer held directly or indirectly by one party, which at the same time must hold, directly or indirectly by means of a controlled company as defined by sec. 17 para.1 AktG, more than 25 % of the Company's share capital. This does not apply if all the shares of the General Partner entity are held directly or indirectly by the Company. Additionally, the General Partner will cease to be the Company's General Partner if the shares in the General Partner entity are acquired by another person

- who does not at the same time acquire shares of the Company in the amount of more than 25 % of the Company's capital or
- who has not, within three months after the effectiveness of such acquisition, submitted a voluntary or mandatory takeover offer to the Company's shareholders according to the rules of the German Securities Acquisition and Takeover Act (WpÜG); the fair consideration offered to the shareholders must also reflect the consideration which the purchaser pays for the shares in the General Partner entity, if the amount for such consideration is above the amount of its equity capital.

The other grounds for withdrawal as provided by the law remain unaffected with respect to the General Partner.

As at December 31, 2019, Fresenius SE & CO. KGAA, Bad Homburg v. d. Höhe, Germany holds 94,380,382 shares of the Company, corresponding to 31.00 % holding and hence in excess of 10 % of the Company's total share capital. After deduction of treasury shares held by the Company in accordance with sec. 16 para. 2 HGB sentence 2 AktG, Fresenius SE & CO. KGAA holds 31.64 % of the Company's voting rights.

The appointment and removal of members of the Management Board of the General Partner entity are governed by sec. 84 and sec. 85 AktG. Changes in the Articles of Association of the company must be made in accordance with sec. 278 para. 3 AktG, sec. 179 AktG in conjunction with sec. 133 AktG unless otherwise provided for in the Articles of Association. The Articles of Association entitle the Company's Supervisory Board, without resolution of the General Meeting, to make amendments to the Articles of Association which concern only its wording.

The General Partner is entitled, subject to approval by the Supervisory Board, to increase the Company's share capital as follows in accordance with the resolutions passed by the shareholders' at the General Meeting:

- Authorization, in the period up to May 18, 2020 to increase, on one or more occasions, the Company's share capital by up to a total of €35 M by issuing new bearer ordinary shares in return for cash contributions (Authorized Capital 2015/I).
- Authorization, in the period up to May 18, 2020 to increase, on one or more occasions, the Company's share capital by up to a total of €25 M by issuing new bearer ordinary shares in return for non-cash contributions (Authorized Capital 2015/II).

In both cases, the General Partner is entitled, with the approval of the Supervisory Board and in accordance with the resolutions passed at the General Meeting, to decide on the exclusion of shareholders' pre-emption rights.

In addition to the above, the following conditional capital is in place:

- A conditional increase of up to €9.728 M. This conditional share capital increase will only be carried out to the extent that options were issued in accordance with the Stock Option Plan 2011 based on the shareholders' resolutions taken on May 12, 2011 and May 12, 2016, the holders of such options exercise their rights and the Company does not issue any own (treasury) shares to settle the options; in the case of options issued to members of the Management Board of the General Partner entity, the Supervisory Board of that entity shall be responsible.

In accordance with the resolution taken at the Annual General Meeting on May 12, 2016, the general partner is authorized to acquire treasury shares until May 11, 2021 and up to a maximum of 10 % of the share capital in place at the date of the resolution. At no stage shall the acquired shares together with other treasury shares held by the Company or attributable to it pursuant to sec. 71a ff. AktG exceed 10 % of the Company's share capital. The acquisition can be made via the stock exchange or by means of a public invitation to submit offers for sale. The authorization may not be used for the purposes of trading in its own shares. The general partner is authorized to use the shares of the Company acquired on the basis of this or an earlier authorization for all legally admissible purposes, in particular (i) to withdraw them from circulation without any requirement for a further resolution to be taken at the Annual General Meeting, (ii) to sell them to third parties in return for contributions in kind, (iii) rather than using conditional capital, to award them to employees of the Company and its affiliates (including to members of the executive managements of affiliates) and to use them to service rights or commitments to acquire shares of the Company and (iv) to service bonds with option or conversion rights issued by the Company or by dependent companies as defined by sec. 17 AktG.

A change of control resulting from a takeover offer could, under certain circumstances, have an impact on several of the Company's long-term financing arrangements, in which market standard change of control clauses are in place. These clauses give creditors the right to call for early repayment of outstanding amounts in the event of a change in control. In most of these financing agreements – in particular in case of the bonds which are placed in the capital markets – the right to terminate only exists, however, if the change of control involves the Company's rating or the corresponding financing instrument being downgraded.

Hof an der Saale, February 19, 2020

Fresenius Medical Care AG & CO. KGAA

Represented by the General Partner
Fresenius Medical Care Management AG

Management Board