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SFK

Facts and Figures 2012

On pharmaceutical care in The Netherlands



SFK

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Introduction

Foundation for Pharmaceutical Statistics

The Foundation for Pharmaceutical Statistics (*Stichting Farmaceutische Kengetallen*, SFK) has been collecting, monitoring and analysing detailed data on the use of medicines in the Netherlands since 1990. SFK obtains its information from a panel of pharmacists who currently represent 95% of all community pharmacies in the Netherlands. Based on this panel, the national figures are calculated using a stratification technique developed by SFK that separates data supplied by the pharmacies affiliated with SFK and available data on non-participating pharmacies, taking into account factors such as the size of the patient population and the location of the pharmacy. Every time a pharmacy dispenses a prescription, SFK gathers and records data on the dispensed medicines and/or materials, the dispensing pharmacy, the reimbursing (or non-reimbursing) health insurer, the prescribing doctor and the patient for whom the prescription was issued. Thorough validation processes and proven statistical procedures guarantee the high quality and representativeness of SFK data. As a result, SFK has the most comprehensive and up-to-date set of data in this field in the Netherlands.

The data collected serves to support the pharmacy practice and is used for scientific research. SFK periodically publishes the most important statistics and news in this annual report and in "Pharmacy in figures" (*Farmacie in cijfers*), a permanent section in the *Pharmaceutisch Weekblad*. In addition to the professional association of pharmacists, the Royal Dutch Pharmacists Association (*Koninklijke Nederlandse Maatschappij ter bevordering der Pharmacie*, KNMP), the Dutch Ministry of Health, Welfare and Sport (*Ministerie van Volksgezondheid, Welzijn en Sport*, VWS) frequently makes use of the data on the use of medicines.

About this report

The figures published in this report show the national use of medicines dispensed by community pharmacists. This report does not provide information on the use of medicines in hospitals or through dispensing general practitioners.

Within the context of this report, 'cost of medicines' means either the pharmacy reimbursement price (for medicines that come under the Health Care Market Regulation Act (*Wet Marktordening Gezondheidszorg*, WMG)) or the pharmacy purchase price (for medicines that do not come under the WMG) as listed in the G Standard of the Z Index. The cost of medicines includes the patient contributions in the context of the Drug Reimbursement System (*Geneesmiddelenvergoedingssysteem*, GVS).

The expenditure on medicines concerns the total of the cost of medicines and the pharmacy fees, including patient contributions in the context of the GVS.

All figures in this publication concern the statutorily insured drug package covered by statutory health insurance and unless otherwise indicated, none of amounts stated include VAT. Prescription medicines are subject to 6% VAT in the Netherlands.



Facts and Figures

2012 overview

Expenditure on medicines virtually remained the same

For the pharmacy industry, 2011 was a year in which there was a limited increase in expenditure, as was the case in the three previous years. In 2011, € 5,001 million was spent through community pharmacies on medicines covered by statutory health insurance. This was € 78 million (1.6%) more than in 2010. The restrictions on entitlement to reimbursement of contraceptives and the lowering of the prices of generic medicines in response to health insurers' increasingly extensive preference policies are the main reason for the limited increase in expenditure. Especially the increasing use of expensive medicines accounted for the increase in expenditure. Expensive medicines are medicines that cost more than € 500 per prescription.

Revenues under pressure

Based on the amounts reported by community pharmacies in the first half of 2012, SFK anticipates that the expenditure on pharmaceutical care will decline by a little more than € 500 million to € 4,500 million. This considerable decline is on the one hand caused by the transfer of TNF alpha inhibitors to the hospital budget and on the other hand by the contracts offered by the health insurers under the regime of uncontrolled fees and prices, which cause a decline in revenues in both fields.

Pricing policy is maintained

The combined effects of the Medicines Pricing Act (Wet geneesmiddelenprijzen, WGP) and voluntary price cuts, both in the context of the industry agreements on medicine pricing and in response to health insurers' preference policies, have meant that the

prices of prescription medicines have more than halved from 1996 to 2012. In spite of the system of uncontrolled prices introduced as from 1 January 2012, the Medicines Pricing Act (WGP) still remains applicable. The maximum prices set in April 2012 contributed in part to a 1.4% fall in the price level of prescription medicines. In spite of the fact that the price level declined in April, the WGP also offers room for price increases for a number of medicines. Some manufacturers have made use of this option. Through the contractual agreements with pharmacists, some health insurers have charged these price increases entirely on to the pharmacy. Implemented price increases can result in a fall in revenues for pharmacies that can amount to more than € 10,000 on an annual basis.

Pharmacy fees stagnating

Not taking into account the contraceptives, the use of medicines increased by 6.4% in 2011. In spite of the increase in the use of medicines and the associated increase in activity, the fees for services provided by community pharmacies stagnated. The pharmacy fees in 2011 amounted to € 1,281 million. This is barely more than in 2010. The most important cause of the stagnation, in spite of increased use of medicines, is the reduction in maximum fees for the provision of pharmaceutical care from € 7.91 in 2010 to € 7.50 in 2011. This fee income plus purchasing advantages (minus the clawback) and the margin revenues from the sale of over-the-counter medicines, medical devices, and other widely available products must cover the pharmacy practice costs. Relative to each other, pharmacies show considerable differences in realised revenues, depending on the composition of the pharmaceutical care services provided.

From January 2012, the pharmacy industry has a new treatment-related pricing with uncontrolled prices for services by pharmacies and dispensing general practitioners. For these services, the contracts offered by health insurers to an average pharmacy show a decline of 4.4% in fees. For the average pharmacy, this comes down to a fall in revenues of more than € 27,000.

Increase in generic medicines continues

As in previous years, Dutch pharmacists continued to dispense more generic medicines. In 2011, 126 million pharmacy-dispensed prescriptions were dispensed as generic products (an increase of 14%). This meant that the share of prescriptions dispensed as generic medicines increased to 63%. Despite the increase in the number of generic medicines dispensed by pharmacists, expenditure on medicines in this group decreased by 4.4% to € 371 million. Due to the expiry of patents, the segment of generic medicines will further expand in 2012. In addition, the government has made agreements with umbrella organisations of medical associations on more effective prescriptions in order to promote increasing the share of generic medicines.

More expensive medicines

In recent years, there has been a sharp increase in expenditure on medicines that cost more than € 500 per prescription. In 2011, revenues generated by the sale of these expensive medicines increased by € 107 million to € 1,114 million. An increasing share of the expenditure on these products bypasses regular (local) pharmacies. This phenomenon is also known as exclusive distribution of specialist medicines. There has been a steep increase in both the number of medicines that are selectively distributed and the corresponding revenues. Almost all of this increase in revenues is reported by companies involved in direct supply and very little of it is reported by regular community pharmacists. Two of the medicines distributed exclusively to the patient (the TNF-alpha inhibitors adalimumab and etanercept) occupy the top two spots on the list of the top ten medicines that generated the highest expenditures. In 2012, the expenditure on expensive medicines within pharmaceutical care will experience a steep

decline due to the transfer of the financing of the TNF-alpha inhibitors and associated medicines to the hospital budget. The Minister has also announced that some oncology medicines and growth hormones will be transferred to the hospital financing from 2013.

Omeprazole most frequently dispensed medicine

In 2011, pharmacies dispensed a medicine included in the statutorily insured drug package covered by statutory health insurance 209 million times. At 7.3 million prescriptions, the gastric acid suppressant omeprazole is the new front runner of the top ten most frequently dispensed medicines. As a result, this medicine pushes the beta blocker metoprolol, which has topped the ranking six years in a row, to second place. Due to the restrictions on entitlement to reimbursement of contraceptives, these products have disappeared from the list of most frequently dispensed medicines included in the statutorily insured drug package.

Expenditure per group of medicines

Oncology medicines and immunomodulators is the group of medicines with the highest expenditures in 2011, namely € 701 million. This group also includes the TNF-alpha inhibitors, which also topped the list with medicines that generated the highest expenditures in 2011. In second place, we find the drugs for cardiovascular risk management (CVRM), on which € 965 million has been spent. This amount also includes the expenditure on anticoagulants. Sales within this group were 1% lower than in 2010, while their use increased by 5%. The expenditure on medicines that influence the gastrointestinal tract and metabolism increased by 3% to € 663 million. The highest expenditures in this group were for diabetes medicines and gastric acid inhibitors. The fourth group comprises medicines that impact the central nervous system. € 724 million was spent on these medicines (+8%) and their use increased by 6%. The last large group of medicines concerns medicines for respiratory diseases. In 2011, pharmacists dispensed a medicine for respiratory diseases 17.8 million times (+4.3%). The corresponding expenditure increased by 4% to € 572 million.

Higher expenditure on medicines not covered by statutory health insurance

As a rule, prescription medicines are eligible for reimbursement by basic health insurance in the Netherlands. Medicines available without a prescription are not eligible for reimbursement. There are a few exceptions to this rule. Contraceptives (€ 64 million not reimbursed) and sleep-inducing medication and sedatives (€ 50.7 million not reimbursed) assume the top positions on the list of medicines for which the patient must pay himself or herself. In 2011, community pharmacies dispensed in total more than € 150 million in prescription medicines not eligible for reimbursement. This amount has been increasing in recent years.

Dutch expenditure on medicines 14% below Western European average

Compared with other Western European countries, the Dutch spend relatively little on medicines: Expenditure on medicines accounts for less than 10% of the total expenditure on care in the Netherlands. In 2010, the Dutch spent € 347 on medicines (including expensive medicines) per capita, which is 14% below the Western European average (€ 401). The average per capita spend on medicines in neighbouring countries ranges from 13 to 60% more (Belgium: € 393, Germany: € 487, France: € 556). The proportionally expensive countries (Switzerland and France) experienced a smaller increase in expenditure in 2010, while traditionally lower-priced England experienced a strong increase. This had a levelling effect, causing the expensive and inexpensive Western European countries to approach each other.

Slight increase in number of pharmacies

On 1 January 2012, there were 1,997 pharmacies in the Netherlands, 17 more than the year before. This slight increase in the number of pharmacies lags behind the increase in the use of medicines. Community pharmacists supply more than 92% of the Dutch population with medicines. The remainder of the population have to rely on a dispensing general practitioner (usually in rural areas). The average community pharmacy has a patient population of 7,700 persons. In 2011, the average pharmacy practice filled

105,000 prescriptions worth a total of € 2,515,000. This is a moderate increase of € 26,000 or 1% in comparison with 2010. The deregulation of the maximum fees set by the Dutch Health Care Authority (Nederlandse Zorgautoriteit, NZa) is anticipated to result in a decline in the average pharmacy's fee revenues in 2012.

Higher processing rate in pharmacy

On 1 January 2012, 16,458 persons were employed as pharmacy assistants in community pharmacies (255 more than in 2010). Despite the increase in the number of pharmacy assistants, the total number of contractual hours remained the same as in 2010. The average working week did also shorten to 24.1 hours in the past year. As of the end of last year, community pharmacies employed a total of 26,587 persons (598 more than in 2010). The increase in national medicine use (+6.4%) is larger than the increase in the number of employed pharmacy personnel (+2.3%). The processing rate, an indicator of the productivity in a pharmacy, increased to 22,185 prescriptions in 2011. On average, the revenues of community pharmacies did not increase in the past year, which prevents many pharmacies from increasing their number of employees. This also translates into an effectively higher workload in pharmacies, which has an increasingly negative effect on pharmacy patient care.

Stagnation in the labour market

In 2011, 199 people graduated as pharmacists. With a growing interest in the study of pharmacy and growing numbers of first-year pharmacy students from 2002 onwards, there have been an increasing number of graduates since 2008. Approximately 70% (140 people) of those who qualified as pharmacists choose to go into community pharmacy. However, overall, the number of employed community pharmacists remained the same in the past year, because almost as many pharmacists left (one less) as entered the profession. Given the increasing need for pharmaceutical care, it remains to be seen to what extent the current and future generation of pharmacists will be able to adequately meet this need.



The Netherlands

1.1 Pharmaceutical care in the Dutch health insurance system

Freedom in restraint

The lion's share of pharmaceutical care in the Netherlands is covered by the basic health insurance which every inhabitant is obliged to take out. With effect from 2012, the pharmacy sector has been decontrolled and uncontrolled prices apply for medicines and for services provided by pharmacists. However, the term 'uncontrolled prices' is misleading, since all measures to control expenditure on medicines have remained in place.

Everyone who lives or works in the Netherlands is required by law to take out basic health insurance. The cover provided under the basic health insurance is stipulated by the government and is the same for everyone. The basic health insurance covers most of the total healthcare costs. To fund the care, everyone aged 18 and older pays a fixed sum to the health insurer. This premium varies between insurers, but is the same for everyone insured with any given health insurer. Children under 18 are exempt from paying premiums. The insurers have an obligation to accept all applicants and may not discriminate on the basis of risk factors. In addition to the premium paid to the health insurer, there is also an income-related contribution which the employer deducts from the person's wages at source and pays to the government along with the payroll tax. The Ministry of Health, Welfare and Sport (Ministerie van Volksgezondheid, Welzijn en Sport, VWS) partitions the healthcare costs in terms of ministerial responsibility using the Healthcare Budgetary Framework (Budgettair Kader Zorg, BKZ). (Potential) budget overruns must be offset with prescribed savings, for example by restricting the insured package.

In 2012, everyone aged 18 and above must pay a general policy excess of € 220 per person for the healthcare covered by the basic statutorily insured drug package (with the exception of general practitioner services and natal care). Certain groups of patients with chronic conditions receive a partial refund of the policy excess. In addition to the basic health insurance, people can voluntarily take out additional insurance policies for healthcare not covered by the basic package. The insurer is permitted to make these supplementary insurance policies subject to medical approval.

Drug Reimbursement System

The government decides which medicines are allowed onto the market and also whether they are included in the Drug Reimbursement System (Geneesmiddelenvergoedingssysteem, GVS). Medicines which have roughly the same effect are grouped in clusters. For each cluster, there is a reimbursement limit based on the average price. If the costs of a medicine are higher than this reimbursement limit, the patient must pay the difference in price themselves. Since the introduction of the GVS in 1991, the reimbursement limits have only been

recalculated once, namely in 1999. Because most manufacturers do not want the users of the medicines to have to pay a part themselves, there are comparatively few medicines for which a patient contribution must be paid. There is no reimbursement limit for medicines which cannot be clustered.

Pricing Act

The Minister of VWS sets maximum prices for medicines twice a year under the Medicines Pricing Act (Wet Geneesmiddelenprijzen, WGP). This maximum price is the average price of a medicine in Belgium, Germany, France and the UK. Suppliers of medicines may not charge a higher price for a medicine than the maximum price. Since it was introduced in 1996, the WGP has been the government's most important instrument for price control. In recent years, the price level of medicines has fallen by an average of 3 to 4% annually under the influence of this act.

Preference policy

Since 2003, health insurers have been allowed to adopt a preference policy which restricts the insured persons' entitlement to one medicine per active ingredient. Prior to that, insured persons were entitled to all the medicine variants which were included in the Drug Reimbursement System (GVS). The restriction on the entitlement does not apply if treatment with a preferred medicine is not medically advisable (medical necessity). Insurers use

two methods to designate preferred medicines. Some of the insurers designate preferred therapies on the basis of the (lowest) price on a public price list. Since June 2008, this system has resulted in sharp drops in the prices of medicines for which generic variants are available. Other insurers designate a preferred medicine on the basis of a private tender, and receive a discount from the manufacturer of the designated medicine afterwards. This means that the preferred medicine can also be a more expensive brand name medicine.

Uncontrolled prices

From 2012, prices of medicines are uncontrolled. The term 'uncontrolled prices' is thereby somewhat misleading. All government regulations to control spending on medicines remain in place, as does the preference policies adopted by the insurers. Some insurers also pass the risk of any increases in the price of medicines on to the pharmacists by fixing the reimbursement prices at the level set some months before the contracts start. From 1 January, there is also a new treatment-related pricing in the pharmacy sector to reimburse the services provided by the pharmacy. The prices for these services are no longer set centrally by the Dutch Health Care Authority (Nederlandse Zorgautoriteit, NZa), but are freely negotiable. The contracts offered by healthcare insurers show a decline in fees of over 4% for the average pharmacy.

1.2 Development of expenditure

Expenditure on medicines virtually unchanged

Expenditure on community-pharmacy dispensed medicines covered by statutory health insurance increased moderately to € 5 billion in 2011. Especially the increasing use of expensive medicines accounted for the increase in expenditure. The restrictions on entitlement to reimbursement of contraceptives and the lowering of the prices had an opposite effect.

In 2011, Dutch community pharmacists dispensed € 5,001 million of prescription medicines covered by basic health insurance. This meant that the level of expenditure was € 78 million (1.6%) higher than in 2010. In view of the anticipated structural increase in expenditure for pharmaceutical care and in comparison with increases in the past, this is the fourth consecutive year with a moderate increase in expenditures. In the years from 2008 up to and including 2011, the annual increase was on average 1.8%. That average was still 6.0% in the period from 2004 up to including 2007 and even 8.7% in the four years before that. There are also very moderate increases in costs in many other care sectors.

Expensive medicines

The increase in total expenditure on medicines can be attributed entirely to the increasing use of expensive medicines. In the absence of this increase, the expenditure would have diminished. The SFK defines expensive medicines as medicines that cost more than € 500 per prescription. The total expenditure on these medicines rose by € 107 million, from € 1,007 million in 2010 to € 1,114 million in 2011, an increase of 10.6%. However, a considerable portion

of this increase in expenditure bypasses regular (local) pharmacies. Many manufacturers choose to supply their expensive medicines via a single national pharmacy chain, instead of via the usual wholesale channel. The share of expensive medicines as part of the total expenditure increased from 10.0% in 2004 to 22.3% in 2011. In 2012, the expenditure on expensive medicines within pharmaceutical care, including their share in the total expenditure, will experience a steep decline. From 1 January of this year, the financing of the TNF-alpha inhibitors and related medicines was transferred by the Minister of VWS to the hospital budget. In 2011, the expenditure on these medicines, without exception part of the expensive medicines, amounted to € 373 million.

Contraceptives

From 2011, the entitlement to reimbursement of contraceptives for women aged 21 and older is restricted. For these women, these medicines only qualify for reimbursement in the case of two specific indications, in which contraception is not the objective. Consequently, the expenditure for contraceptives covered by basic health insurance amounted to € 10 million in 2011. That is € 66 million less than the preceding year.

Price cuts

Not taking into account the contraceptives, the number of defined daily doses (DDDs) increased by 6.4%.

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This relatively strong increase in the use of medicines did however not engender an equivalent increase in the expenditure.
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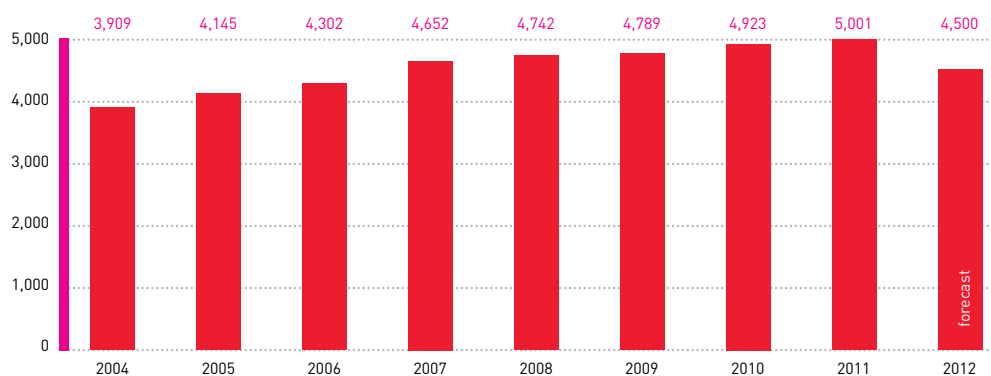
The price cuts forced by the health insurers' preference policies and the Medicines Pricing Act mitigate the increase in expenditures. In December 2011, the price level of medicines was namely on average 3.8% lower than in December 2010. The price level of generic medicines was even 17.0% lower. The increase in the share of pharmacy-dispensed generic medicines created furthermore a reinforcing cost-reducing effect. NZa's reduction of maximum fees from € 7.91 in 2010 to € 7.50 in 2011 had a constricting effect on the increase in expenditure. Despite the increase in the use of medicines and the associated increase in workload of the pharmacies, the fee revenues of pharmacies only increased by 0.5%.

Forecast

Based on the amounts reported by community pharmacies in the first half of 2012, SFK anticipates that the expenditure on pharmaceutical care will decline by a little more than € 500 million to € 4,500 million.

This considerable decline is on the one hand caused by the transfer of TNF alpha inhibitors to the hospital budget and on the other hand by the contracts offered by the health insurers under the regime of uncontrolled fees and prices, which cause a decline in revenues in both fields. In addition to agreements contained in earlier contracts, such as lowest-price guarantees (with and without margin) and package prices, a number of health insurers have for the first time included historical prices in their pharmacy contracts. Through these contractual agreements, the health insurers are transferring the price increases introduced by the manufacturers to the expense and risk of the pharmacies. For instance, Achmea and VGZ have offered contracts with reimbursement prices that do not exceed the price level of October 2011. Even though only a limited number of medicines have experienced price increases, this has already resulted in an additional loss of more than € 10,000 for several pharmacies in the first half of 2012 alone. In addition, health insurers are still enforcing a mandatory margin on the cost of medicines, even though the legal basis for the clawback has vanished. The abandonment of the maximum fees set by the NZa for the services provided by pharmacies is anticipated to lead to a decline of more than 4% in the average fee. These developments are exerting additional pressures on the financial situation of pharmacies.

1.1 Total expenditure on pharmaceuticals: community pharmacies (1 = 1 million euros)



Without the increasing use of expensive medicines, there would have been a decline in expenditure in 2011.

Source: Foundation for Pharmaceutical Statistics

1.3 Structural increase in expenditure on medicines

Limited impact of ageing on structural increase in expenditure

Changes in the composition of the population and the increase in use of medicines account for a structural increase in expenditure on medicines of approximately 4% per year. In addition, shifts in the use of medicines account for an additional impact.

The combined effects of the Medicines Pricing Act, more stringent clawback, industry agreements on medicine pricing, the Pharmaceutical Care Transition Agreement, and health insurers' preference policies have resulted in a limited increase in expenditure on medicines in recent years. However, there are still a number of underlying factors that ensure that the increase in use of medicines translates into a structural increase in expenditure on medicines of 9 to 10% per year. The expiry of patents, price modifications in the Medicines Pricing Act, and the health insurers' preference policy create a structural price-dampening effect. The Dutch government is assuming an annual increase of 6% in the next years on the advice of the Dutch Health Care Insurance Board (*College voor Zorgverzekeringen, CVZ*).

Changes in prescription and medicine-taking patterns

Compared with other European citizens, the average Dutch person uses relatively little medication. Patients who consult general practitioners in the Netherlands are prescribed medicines in approximately two-thirds of cases. In more southern

European countries, this percentage can rise as high as 90%. According to the market intelligence agency IMS Health, in countries such as Belgium, France and Spain, a visit to the doctor results in the prescription of an average of 15 to 40% more medicines than in the Netherlands. Nevertheless, per capita medicine use is clearly increasing in the Netherlands.

Expressed in defined daily doses (DDDs) and taking into account the change in health insurance cover for contraceptives, the use of medicines increased by 6.4% in 2011. This percentage is higher than the average rate of increase achieved in the past 10 years. In the last 10 years, the average number of defined daily doses (DDDs) dispensed per patient increased by more than 4% per year. Chronic use of medicines is also increasing, as is evident from the growing number of repeat prescriptions filled by pharmacists. The vast majority of prescriptions issued by doctors are repeat prescriptions. In 82% of cases, the same pharmacy dispenses the same recently dispensed prescription medicine to the same patient. Measured in terms of the number of DDDs, the share of repeat prescriptions is as high as 88%.

Population growth and ageing

A part of the increasing chronic use of medicines is caused by population growth and the increase in the number of senior citizens. Figures released by Statistics Netherlands (*Centraal Bureau voor de Statistiek*, CBS) show that the Dutch population increased by 0.5% in 2011. The number of inhabitants increased from 16,654,000 in 2011 to 16,733,000 as of 1 January 2012. According to Statistics Netherlands, the population growth will slightly decline in the next years and amount to 0.4% per year. In addition to the growth of the population, the catchment area of community pharmacists is also growing. In thinly populated areas where it is not economically viable to operate a community pharmacy, pharmacy care is provided by dispensing general practitioners. Together, they serve almost 8% of the population.

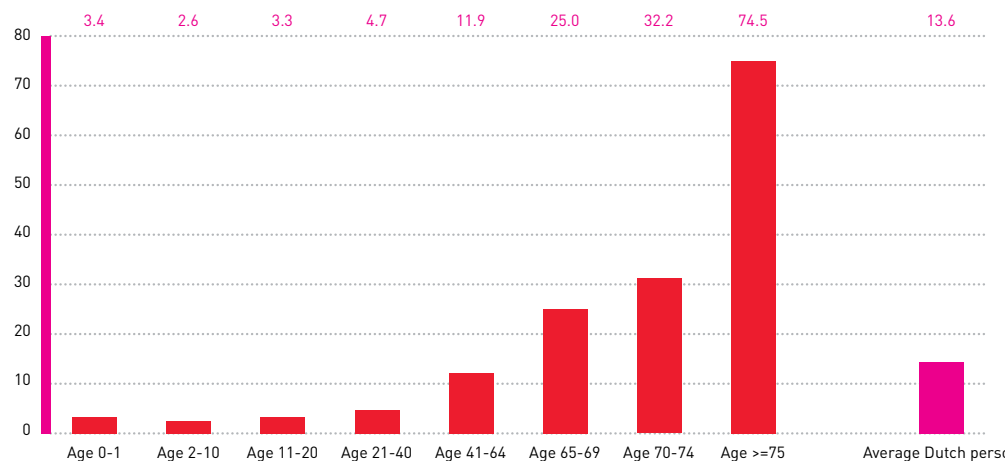
The population of the Netherlands includes 2,655,000 people who are 65 years of age or older. This is 16% of the population. According to Statistics Netherlands, by the year 2020, the number of senior citizens in the Netherlands will have risen to 3,281,000 (20% of the total population). In addition to the increase in the number of senior citizens, the life expectancy of the average Dutch citizen is also increasing. In the last ten years, life expectancy increased by 2.7 years and Statistics Netherlands anticipates a further increase in the next years. At the current rate of medicine use and cost, the changing composition of the population will cause the total expenditure on medicines to increase by 0.9% per year through to 2020. If the increase in the use of medicines as a consequence of the population growth is also accounted for, then the annual increase due to demographic developments is 1.2% per year. If the changes in prescription and medicine-taking patterns continue, this will have an additional reinforcing effect. According to the population growth forecasts produced by Statistics Netherlands, population aging will peak in around 2040. Dutch people in the 65-plus age group use three times as much medication as the average Dutch person. People who are 75 years of age or older use up to almost five times the amount of medication used

by the average Dutch person. People in this age group also tend to take medicines on an ongoing basis (chronic medicine use): more than four out of every five prescriptions that senior citizens present at their pharmacies are repeat prescriptions. The average senior citizen takes three different medicines on a daily basis.

Shift toward the use of more expensive medicines

The reduction in the number of hospital days and the number of hospital beds in recent years is symptomatic of the progressive shift in the provision of health care from the hospital to the home. From a financial point of view, the pharmacy industry serves as a valve within the health care chain: savings and cuts elsewhere within the chain frequently lead to more costs in the pharmacy industry. Some new medicines also contribute to the shift from the hospital to the home, as they can replace treatment in the hospital in some cases. Many of these medicines can be categorised as so-called expensive medicines. In recent years, there has been a sharp increase in expenditure on medicines that cost more than € 500 per prescription. Revenues derived from the sale of these products increased from € 389 million in 2004 to € 1,114 million in 2011. This works out at an annual average growth rate of 22% during the said period. As part of the total expenditure on medicines, the increase in expenditure on expensive medicines generates a structural increase of almost 3% per year. It is increasingly common for these expensive medicines to find their way to the patient via channels other than regular (local) pharmacies. This phenomenon is also known as exclusive distribution. The medicines that find their way to the patient in this manner have certain defining characteristics: they are produced for a relatively small patient group, they usually have to be administered via injection, and they are expensive. Rather than supplying these medicines via all wholesalers, as would normally be the case, the manufacturers of these products choose to do business with a single supplier. Red Swan, ApotheekZorg, Klinerva, MediZorg and Alloga are all examples of national suppliers in this market.

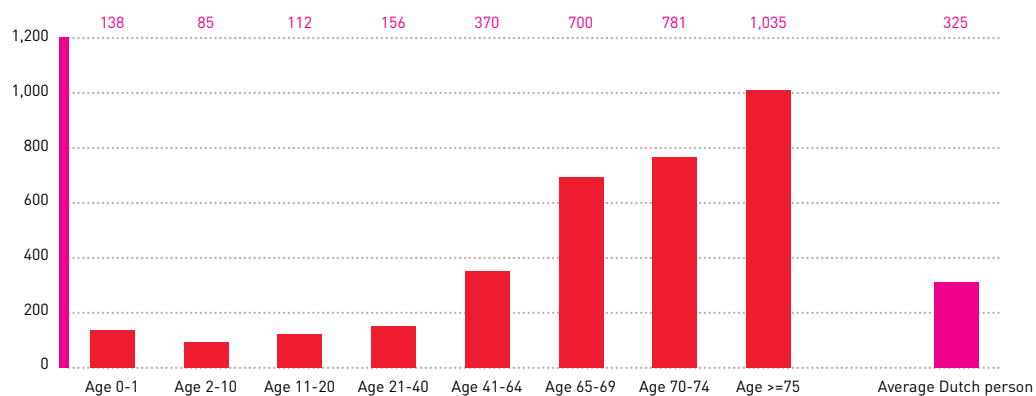
1.2 Use of medicines by age group in 2011 (in prescriptions)



Community pharmacies dispense five times as much medication to people in the 75-plus age group as to the average Dutch person.

Source: Foundation for Pharmaceutical Statistics

1.3 Expenditure on medicines by age group in 2011 (in euros)



Higher medicine use among senior citizens correlates with proportionally higher expenditure.

Source: Foundation for Pharmaceutical Statistics

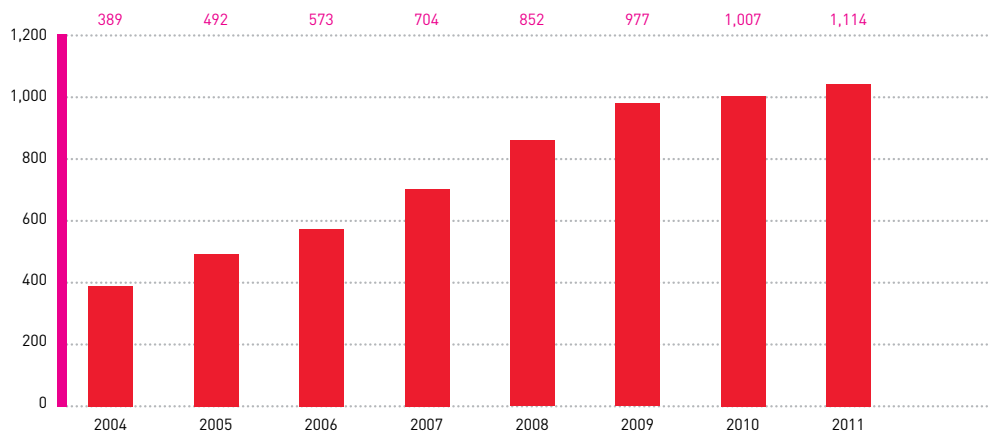
The fact that they supply medicines directly to the patient makes it impossible for regular pharmacies to supply the medicines in question. In some cases, the patient can collect a prescription for a medicine supplied directly to the patient from the pharmacy of their choice. Both the number of medicines that are selectively distributed and the corresponding revenues continued to increase relatively strongly. Almost all of the corresponding increase in revenues was reported by companies that engage in direct supply.

As the Minister of VWS is of the opinion that hospitals can negotiate a lower price for expensive medicines than community pharmacies, she has decided

to only reimburse TNF-alpha inhibitors as a part of the hospital budget as from 1 January 2012.

This means that the hospitals are also responsible for the cost of using these medicines outside the hospitals. In 2011, the expenditure on these TNF-alpha inhibitors and related medicines amounted to € 373 million. Even though the impact of the proposed policy is not clear, the Minister has announced that other medicines will also be transferred to the hospital financing, including oncology medicines and growth hormones. This concerns not just specialist medicines, but also medicines that are frequently dispensed in the pharmacy. In that respect, this measure seems to be contrary to the Minister's policy to offer the care close to home and to make it more accessible.

1.4 Expenditure on medicines that cost more than € 500 per prescription (1 = 1 million euros)



The expenditure on expensive medicines increased from € 389 million in 2004 to € 1,114 million in 2011.

Source: Foundation for Pharmaceutical Statistics

1.4 Pharmacy fees

Revenues from dispensing fees virtually unchanged

In 2011, community pharmacies were paid a total of € 1,281 million for their services. This includes the dispensing fees for medicines covered by the WMG (€ 1,240 million) and the pharmacy mark-up on medicines not covered by the WMG (€ 41 million). The dispensing fees are by far the most important component of pharmacy fees.

The Healthcare Market Regulation Act (*Wet Markt-ordering Gezondheidszorg*, WMG), which entered into effect on 1 October 2006, replacing the Healthcare Charges Act (*Wet Tarieven Gezondheidszorg*, WTG), sets the maximum fees that pharmacies can charge the medicine user and the medicine user's insurer. Even though the WMG makes a distinction between dispensing fees for services provided by pharmacies and reimbursement fees for prescription medicines supplied by the pharmacies, these have in practice always been linked. NZa always deducted the benefits derived by pharmacists from the reimbursement fees from the dispensing fees.

Dispensing fees

The dispensing fee is the amount that a pharmacy can charge for each prescription medicine it dispenses. Dispensing fees were originally determined on the basis of realistic reimbursement of pharmacy practice costs and the standard income for an established pharmacist as stipulated by the government. Dispensing fees were set until 2012 by the Dutch Health Care Authority (*Nederlandse Zorgautoriteit*, NZa). From 1 January 2012, a new treatment-related pricing for services by pharmacies applies.

The prices for services prescribed by NZa are no longer set centrally, but are freely negotiable. Up until 1 July 2008, there was a standard dispensing fee for each item dispensed as part of a prescription. On 1 July 2008, NZa introduced differentiated dispensing fees. As well as a basic fee for each item dispensed as part of a prescription, there was a further fee for additional services if a prescription was dispensed for the first time or if the pharmacist had to prepare a (special) formula, or a surcharge for prescriptions dispensed in the evening, at night or on a Sunday. NZa also introduced a separate fee for prescription medicines supplied via a weekly dosage system. In 2008, the target average of these differentiated fees was € 6.10. As a consequence of the considerable price cuts in the second half of 2008 and the associated reduction in purchasing advantages, NZa adjusted the target average to € 7.28 as from 1 January 2009. In addition, NZa surprised the pharmacy industry at the end of December 2008 by introducing a so-called 'flexible fee'. A higher fee (up to € 7.91) could be charged if an insurer and a pharmacy agree so in writing. The amount of the clawback was also supposed to be negotiable. The suddenness of the announcement and the imminent start of the new

(contract) year meant that pharmacists and insurers were unable to prepare for the introduction of this flexible fee. At the end of April, NZa announced that a new set of dispensing fees were to be introduced with effect from 1 May 2009. In particular, the fee for dispensing a prescription for the first time was adjusted upwards. The increase in the fee was intended to reflect the extra work involved in dispensing a medicine for the first time. Due to the increase of the fee for dispensing a prescription for the first time, the other dispensing fees were reduced accordingly. NZa namely adhered to the principle that the average maximum fee had to remain € 7.28.

At the beginning of December 2009, NZa increased maximum fees for pharmaceutical care that would apply from 1 January 2010 by 9% to an average of € 7.91. As in 2009, in addition to the maximum fee, the NZa fee system also included a maximally increased fee and the amount of the clawback also remained negotiable. The amounts of the maximally increased fees were 26% higher than the maximum fees with a target average of € 10.00. The potential difference between the maximum fee and the maximally increased fee therefore increased from € 0.64 to € 2.09. NZa gave no explanation for this considerable increase and, unlike previous years, it did not define the amount of a cost-covering fee. In the middle of December 2010, NZa set the maximum fees for 2011 at a target average of € 7.50. As a result, the average fee was 5.2% lower than in 2010, when the fee was set at an average of € 7.91. The maximally increased fee was not reduced and remained at an average amount of € 10.00. Hence the difference between the maximum fee and the maximally increased fee increased to € 2.50. The amount of the clawback also remained negotiable at the same conditions as for the maximally increased fee.

.....
The lower fee in 2011 resulted in the total revenues from the dispensing fees (€ 1,240 million) in that year being barely higher than in 2010.
.....

The slight increase of 0,6% was mainly caused by an increase in the use of medicines, and to a lesser

extent by an increase in the number of medicines dispensed in a weekly dosage system and agreements between insurers and pharmacists on the use of the difference between the maximum fee and the maximally increased fee.

From 2012, the prices for services performed by pharmacies and dispensing general practitioners are no longer set centrally by NZa, but are freely negotiable. The contracts offered by health insurers show a decline of 4.4% in fees. The underlying principle of most insurers here is that they strive for a budget-neutral transition from 2011 to 2012 and that pharmacies must compensate for the decline in fees by means of a higher number of prescriptions dispensed. As higher medicine use in the pharmacy translates into proportionally higher costs, this transition will certainly not be budget-neutral for the pharmacy.

Purchase price reimbursement fees

In principle, the purchase price reimbursement fee that a pharmacy can charge for a prescription medicine it dispenses is based on the list price specified by the supplier of the medicine (the manufacturer or the importer). In practice, pharmacies can agree discounts on these list prices with their suppliers. These purchasing advantages have often been a subject of debate in recent years. Up until 1 October 1991, the statutory ruling was that pharmacists were entitled to charge the net purchase price they paid for a prescription medicine plus a margin of 4% of the corresponding list price for the prescription medicines they supplied. On 1 October 1991, in order to achieve savings, Hans Simons, then State Secretary of Health, decided to reduce dispensing fees. In connection with this measure, pharmacies were allowed to charge the list prices for the prescription medicines they dispensed, which meant that they retained all of their purchasing advantages and could offset these purchasing advantages against the loss of revenues due to the reduced dispensing fees. As pharmacists began to adopt a more commercial approach and as medicine patents expired (which increased competition as new suppliers of generic versions of the medicines in question entered the market),

pharmacies negotiated more substantial purchasing advantages. Yet at the same time, pharmacy dispensing fees lagged behind the development of pharmacy practice costs. Hence, purchasing advantages became an essential element in the financing of pharmacy practices. In May 2008, having seen the extent to which prices were being affected by the introduction of preference policies, KNMP urged NZa and the Dutch Ministry of VWS to set dispensing fees at a level that would cover costs, given that the revenues derived from purchasing advantages was rapidly evaporating. However, the government insisted that another audit would have to be conducted before such a decision could be considered. KNMP indicated that the continuity of pharmacy businesses was threatened to such an extent by the changed market conditions that the fees needed to be adjusted with immediate effect. The Dutch Trade and Industry Appeals Tribunal (*College van Beroep voor het bedrijfsleven*, CBb) ruled in favour of KNMP, which meant that the clawback scheme was suspended with effect from 1 July 2008. NZa subsequently had a new audit performed in the period of July-October 2008, the third audit in just under one year. Predictably, the audit did not yield a definite explanation of the consequences of the introduction of the preference policy in May of 2008. After all, the financial year 2008 had not yet been closed. As an audit only provides insight in the past, NZa extrapolated the audit data on the basis of assumptions. Based on these assumptions, NZa decided to increase the dispensing fees to a limited extent as from 1 January 2009. At the same time, NZa was of the opinion that the clawback scheme could again be applied. Moreover, NZa decided that the suspension of the clawback scheme during the second half of 2008 was not justified and that pharmacists were required to make up the difference via a temporary increase in the clawback in 2009 and 2010. It was in fact these assumptions, as well as the alternating principles of NZa, that were contested by KNMP at the Dutch Trade and Industry Appeals Tribunal (CBb). The Tribunal granted the benefit of the doubt to NZa. KNMP also continued to contest the assumptions and always alternating principles in the 2008 and 2009 audits in appeal procedures.

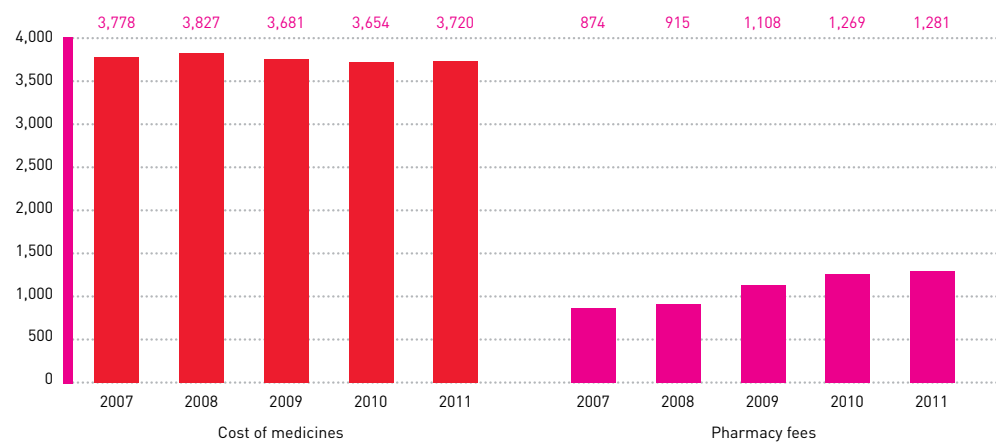
Clawback

The so-called clawback was introduced in 1998. Following the example set in the UK, Els Borst, then Minister of VWS, introduced a statutory regulation that made it compulsory for pharmacies to pass a percentage of their purchasing advantages on to the medicine user and the insurer in the form of lower prices. The clawback was initially limited to an effective rate of 3%. In 1999, the Minister of Health signed an agreement with KNMP for the period 2000-2002. The agreement provided for a gradual increase in the dispensing fees in line with an increase in the clawback from 3% to an effective rate of 6% (the clawback was officially increased to 6.82% with a maximum of € 6.80 per dispensed medicine). The calculation of the clawback was based on the findings of an audit by PriceWaterhouseCoopers, which revealed the extent of the purchasing advantages negotiated by pharmacies. The parties involved subscribed to the principle that a trading margin of 4% was a realistic fee to cover the costs and risks involved in running a pharmacy. This was in keeping with the original situation at the start of the nineties, when purchasing advantages of 4% were legally defined as a standard trading margin. After the temporary increase in the clawback in 2009 and 2010 up to 8.53% with a maximum of € 6.80 per prescription dispensed, the clawback for 2011 was reduced to 6.82% with a maximum of € 6.80 per prescription dispensed.

.....
Even though the legal basis for the clawback vanished as from 2012 under the regime of uncontrolled prices, most insurers' contracts maintained the clawback scheme.
.....

After deducting the clawback, the cost of medicines rose by € 66 million to € 3,720 million in 2011. The increase is mainly attributable to the so-called expensive medicines. Price cuts as a consequence of the further expansion of the preference policy and the restrictions on reimbursement of contraceptives caused a declining effect.

1.5 Cost of medicines and community pharmacy fees (1 = 1 million euros)



Source: Foundation for Pharmaceutical Statistics

1.5 Development of medicine prices

Medicine prices have halved in the last 15 years

The combined effects of the Medicines Pricing Act (*Wet geneesmiddelenprijzen*, WGP) and voluntary price cuts, both in the context of the industry agreements on medicine pricing and in response to health insurers' preference policies, have meant that the prices of prescription medicines have more than halved from 1996 to 2012.

SFK determines the development of the price level of medicines by comparing the total cost of medicines dispensed by community pharmacies one month with the total cost of the same quantity of the same medicines dispensed by community pharmacists the next month. This creates a price index that is unaffected by changes in the number and nature of the dispensed medicines.

Maximum prices

Since its introduction in 1996, the Medicines Pricing Act (*Wet geneesmiddelenprijzen*, WGP) is the government's most important instrument for price control. Pursuant to this Act, the Minister of VWS can set maximum prices for medicines. This is the maximum price that a supplier can charge for a medicine. This maximum price is based on the average price of the concerned medicine in Belgium, Germany, France, and the UK. The government sets these maximum prices twice annually. This has caused the price level to fall by an average of 3 to 4% per year in recent years. Further to two motions, the outgoing Minister Schippers promised the House of Representatives of the Dutch Parliament to investigate the future-proofing on the WGP and to assess whether and

how the WGP must be amended. She submitted the report of her investigation to the Dutch House of Representatives just before the summer of 2012, but left it to her successor to draw conclusions.

Industry agreement years

In addition to the impact of the maximum prices set by the government, the years from 2004 to 2009 were characterised by industry agreements regarding the lowering of medicine prices. This period began with an agreement between the Ministry of VWS, KNMP, the Association of Dutch Health Insurers (*Zorgverzekeraars Nederland*, ZN), and the Association of the Dutch Generic Medicines Industry (*Bond van de generieke geneesmiddelenindustrie in Nederland*, Bogin). The most significant aspect of this agreement was the decision to reduce the prices of generic medicines to an average of 40% below the list price stipulated by the manufacturers with effect from 1 January 2004. In addition to this, the price of new generic medicines was to be at least 40% below the price of the corresponding original brand name medicine. From 1 January 2005, Nefarma, the Association for innovative medicines in the Netherlands, also signed the industry agreement and the agreements

made in 2006 and 2007 were continued. In September 2007, the Minister of VWS, Ab Klink, signed a similar agreement with Bogin, KNMP, Nefarma, and ZN in the form of a Transition Agreement. On the one hand, this agreement was a continuation and refinement of the cutback agreements enshrined in earlier industry agreements. Hence, the parties agreed that the prices of generic medicines were to be reduced by a further 10% in 2008 and that, from then on, new generic medicines would cost no more than half the price of the corresponding original brand name medicine. It was also agreed that, from December 2007 to June 2008, the clawback would be increased from 6.82% to 11.3% as a transition surcharge. On the other hand, a phased plan would be developed to achieve a more normal market situation. With the lowering of the maximum prices under the Medicines Pricing Act and the expiry of the patents of various medicines, the savings objectives defined in the industry agreements have been achieved every year since 2005 and have even been exceeded considerably in 2008 and 2009, in part under the influence of health insurers' preference policies.

Preference policies

At the beginning of 2008, several insurers (Menzis, VGZ, CZ and AGIS) announced their intention to expand the implementation of the preference policy on a large scale from 1 July 2008. The Association of Dutch Health Insurers (ZN) had been experimenting with the preference policy for several years, but it had not had much impact at a national level. The preference policy means that an insurer indicates that only one or certain products within a specific group of medicines will be covered by their basic health insurance. Medicines produced by suppliers (labels) not covered by the insurer are not reimbursed. Contrary to the patient contribution regulations of the Drug Reimbursement System, this means that patients have to pay for any alternatives entirely out of their own pocket. The insurers' national 'call for tenders' in June 2008 sparked a real price war between suppliers of generic medicines. The prices of the most important generic medicines fell by 90%. In addition to the preference policy,

the insurers also made lowest-price agreements (the insurer pays the pharmacy the price of the cheapest alternative to a particular medicine irrespective of whether the pharmacy dispenses the medicine in question) or so-called 'margin agreements' (the insurer only covers medicines that are up to 3 to 5% more expensive than the cheapest alternative), which forced all suppliers of generic medicines to reduce their prices to the lowest level to avoid pricing themselves out of the market. Throughout the course of the year, the price war led to costs reductions of € 355 million. Earlier the same year, the prices of generic medicines had already been reduced by € 125 million as a result of the Pharmaceutical Care Transition Agreement that Minister Ab Klink had signed with the pharmacy industry. Hence, revenues derived from the sale of generic medicines halved in just under six months.

Concealed price policy

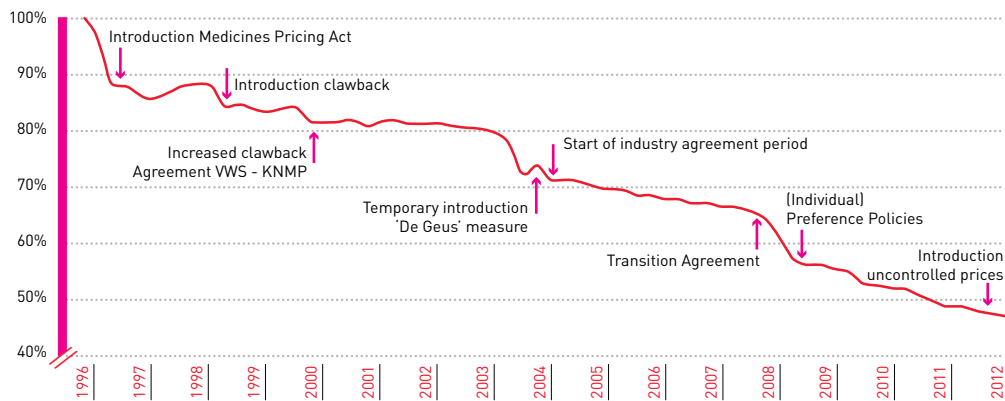
The Dutch Ministry of VWS 'cashed in' on the effects of the price cuts by reducing the insurers' medicines budgets accordingly. Dissatisfied with this development, in 2009, the insurance concern VGZ (formerly UVIT) introduced a system of privately negotiated prices in the form of the so-called concealed price model, in which the medicine supplier does not reduce the publicly announced prices of medicines, but offers VGZ a privately negotiated discount. The model met with severe criticism, because it was not clear how the purchasing advantage gained by VGZ benefitted the insured, and also because pharmacists were obliged to supply certain generic products or even brand products when cheaper versions were available. During the course of 2009, VGZ therefore announced that medicines covered by the concealed price policy would not count towards the compulsory policy excess. However, VGZ did not change the higher clawback for the pharmacy.

Uncontrolled prices

In spite of the system of uncontrolled prices introduced as from 1 January 2012, the Medicines Pricing Act (WGP) still remains applicable. The maximum prices set in April 2012 contributed in part to a 1.4%

fall in the price level of prescription medicines. In spite of the fact that the price level declined in April, the WGP also offers room for price increases for a number of medicines. Some manufacturers have made use of this option. Through the contractual agreements with pharmacists, some health insurers have charged these price increases entirely on to the pharmacy. For most pharmacies, the contracts of VGZ and Achmea constitute the largest risk in that case. Both insurers limit the amount of the reimbursement to the pharmacy to the price in October 2011. Implemented price increases can result in a fall in revenues for pharmacies that can amount to more than € 10,000 on an annual basis.

1.6 Price development of prescription medicines based on the SFK price index (January 1996 = 100, sales weighted average)



Source: Foundation for Pharmaceutical Statistics

1.6 Market shares per product group

Two out of three medicines are generic

The number of dispensed prescriptions of generic medicines covered by basic health insurance increased in 2011 by 14% to € 126 million. The share of these medicines is therefore 63% of the total number of dispensed prescriptions in this group of medicines. In the first half of 2012, this share further increased to 66%.

Generic medicines are identical variants of brand name medicines. They can be made by other manufacturers as soon as the patent of the brand name medicine expires. The name almost always consists of the name of the active ingredient, often supplemented by the name of the manufacturer. Generic medicines are less expensive than the brand name medicines. Especially in recent years, the prices of generic medicines have declined considerably due to the preference policies.

Strong increase in generic

The share of generic medicines in the total number of dispensed prescription medicines covered by basic health insurance increased in 2011 from 60.6% to 63.3%. This percentage is anticipated to further increase in 2012, as the share was already 65.6% in the first half of this year. The number of generic medicines dispensed amounted to 126 million in 2011. Despite the increase in the number of generic medicines dispensed by pharmacists, expenditure on medicines in this group decreased by 4.4% to € 371 million. The increased availability of new generic variants contributes to the expansion of the share of generic medicines dispensed. Another important contribution is made by the prescribers, who increasingly often opt for prescribing a multi-source medicine

instead of a medicine that is only available as a brand name medicine (single-source). The share of multi-source medicines increased from 64.1% in 2010 to 65.8% in 2011.

Degree of substitution

A multi-source medicine is a medicine that is available in the market not only as a brand name medicine, but also as a selection of one or more generic and equivalent variants. When prescribers prescribed a multi-source medicine in 2011, Dutch pharmacists dispensed a generic medicine in 96.3% of the cases. This percentage is also referred to as the degree of substitution. In 2010, the degree of substitution was still 94.6%. For the calculation, it is important to know that the classification into multi-source/single-source medicines takes place each month.

Regulations allow health insurers to restrict reimbursement to (preferred) medicines they choose to cover in accordance with their preference policy. However, health insurers must reimburse at least one variant of each active ingredient. In practice, due to the price, these are almost always generic medicines. The insured is only entitled to reimbursement of non-preferred medicines if there is a medical necessity. This is determined by the prescriber. In this manner, health insurers exert significant

influence on the degree of substitution via their preference policies. The package pricing model introduced by Achmea in 2010 exerts influence on the degree of substitution. In this model, for the multi-source medicines designated by the health insurer, pharmacists receive a fixed price for the quantity of medicine in one defined daily dose. In that model, dispensing a generic, and thus less expensive, medicine is more advantageous for a pharmacist.

Effective prescriptions

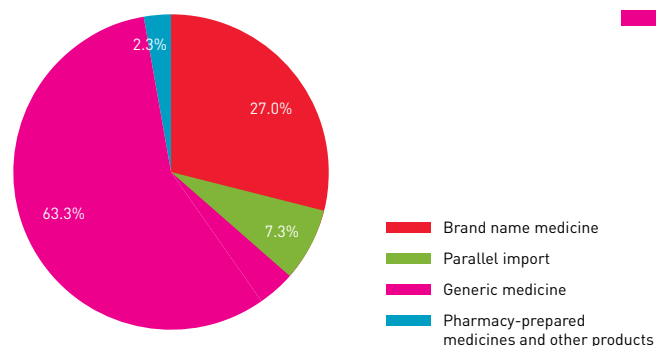
In June 2012, the outgoing Minister Schippers concluded an agreement with the Dutch General Practitioners Association (*Landelijke Huisartsen Vereniging, LHV*) on general practitioner services, which includes that general practitioners will cut the expenditure on medicines by € 50 million by prescribing more effectively, among other aspects. This means that prescribers will have to select multi-source medicines more often and avoid single-source medicines as much as possible. This agreement is comparable to an agreement concluded earlier by the Minister with the Dutch Medical Specialists Association (*Orde van Medisch Specialisten, OMS*).

More parallel import

The number of parallel-imported medicines dispensed also increased significantly by 14.8% to 14.7 million. Parallel-imported medicines are brand name medicines that are imported outside the manufacturer's official distribution channel from countries within the European Union where the price level is lower than in the Netherlands. The increase in the number of parallel-imported medicines was at the expense of the Dutch brand name medicines, causing the total number of brand name medicines dispensed to decline by 1.8% to 53.9 million.

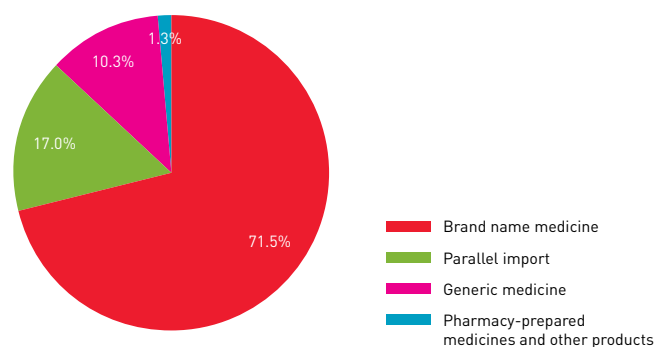
The number of medicines dispensed in the category 'pharmacy-prepared medicines and other products' increased slightly to 4.6 million. In this category, SFK includes medicines prepared in accordance with a national WINAp protocol which have been listed with a national identification number in the G Standard of the Z Index.

1.7 Use of medicines per product group: prescriptions 2011



Source: Foundation for Pharmaceutical Statistics

1.8 Use of medicines per product group: cost of medicines 2011



Source: Foundation for Pharmaceutical Statistics

1.7 Drug Reimbursement System

Half of patient contributions towards cost of ADHD medication

The total amount of patient contributions to prescription medicines declined from € 50 million to € 41 million due to the restrictions on entitlement to reimbursement of contraceptives. Almost two-thirds of that total is spent on ADHD medicines.

In the Netherlands, there is a reimbursement limit for medicines that are interchangeable. This limit is set by the government and included in the Drug Reimbursement System (*Geneesmiddelenvergoedingsstelsel*, GVS). A patient contribution is required for medicines that have been priced above the limit by the manufacturer. This contribution is equal to the difference between the reimbursement limit and the official purchase price of the medicine and is not covered by basic health insurance. The number of medicines subject to a patient contribution is relatively low. This is because the limits of most medicines are based on the price level of October 1998 and have not been reviewed since then. In 2010, the Dutch House of Representatives passed a motion to review the GVS and this intention has also been included in the coalition agreement. New recalculated limits will lead to stiff patient contributions on the basis of the current prices if prescription and supply patterns remain the same. The Minister has indicated that these patient contributions are unacceptably high. For that matter, patients do not always pay the current GVS contributions themselves. Health insurers offer additional insurance policies that cover full or partial reimbursement of the patient contributions for

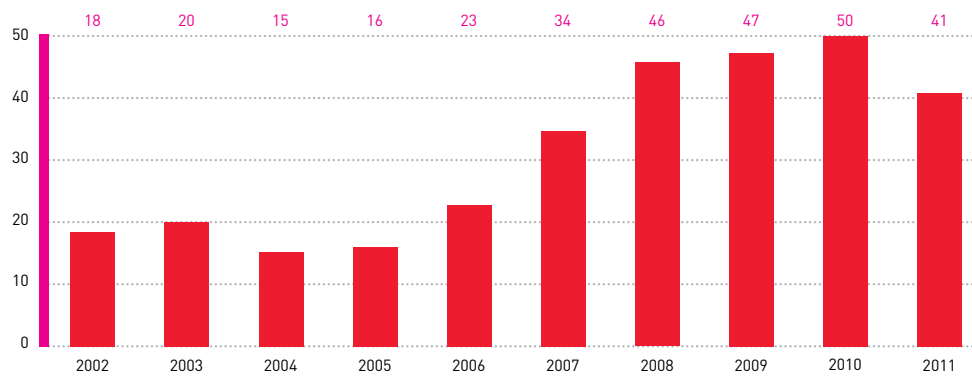
medicines. For a number of medicines, the manufacturer offers to pay the patient contribution. For strategic reasons (in an international perspective), the manufacturers prefer not to price the concerned products below the reimbursement limit, nor do they want the users of their medicines to have to pay the patient contributions. For medicines that are not interchangeable, the government does not set a limit. The GVS and the associated reimbursement limits also remain applicable under the regime of uncontrolled prices with effect from 1 January 2012.

ADHD

In 2011, Dutch community pharmacies dispensed € 40.7 million in prescription medicines subject to a statutory patient contribution, almost € 10 million less than in 2010. This was mainly due to the restrictions with effect from 2011 on the entitlement to reimbursement of contraceptives for women aged 21 and older. For these women, these medicines only qualify for reimbursement in the case of two specific indications, in which contraception is not the objective. Almost two-thirds of the total of patient contributions can be attributed to the ADHD medicines methylphenidate and atomoxetine, in the amount of € 25.6 million. That is € 1.9 million (8%) more than in 2010.

This increase is entirely attributable to methylphenidate. These patient contributions were payable for that part of the dispensed medicines that involved a form of slow release (Concerta, Medikinet, and Equasym). For atomoxetine (Strattera), the amount of patient contributions declined slightly.

1.9 Total GVS patient contributions paid via community pharmacists (1 = 1 million euros)



Source: Foundation for Pharmaceutical Statistics

1.8 Health insurers' market shares

Insurers still firmly established in regions

The four large insurers Achmea, UVIT, CZ and Menzis account for nearly 91% of the expenditure on medicines in 2011. This has remained virtually unchanged since the introduction of the basic health insurance in 2006. The former health insurance funds still have a strong market position in their original regions.

Health insurance has been compulsory for all inhabitants of the Netherlands since January 2006. For the basic health insurance, there is not only an obligation for citizens to insure themselves, but also a obligation for the health insurer to accept them. The Health Insurance Act (zorgverzekeringswet) also stipulates a duty of care for health insurers. They must ensure that the people they insure have access to sufficient, high quality, and affordable healthcare. Insured persons can switch to a different health insurer once a year.

Few shifts

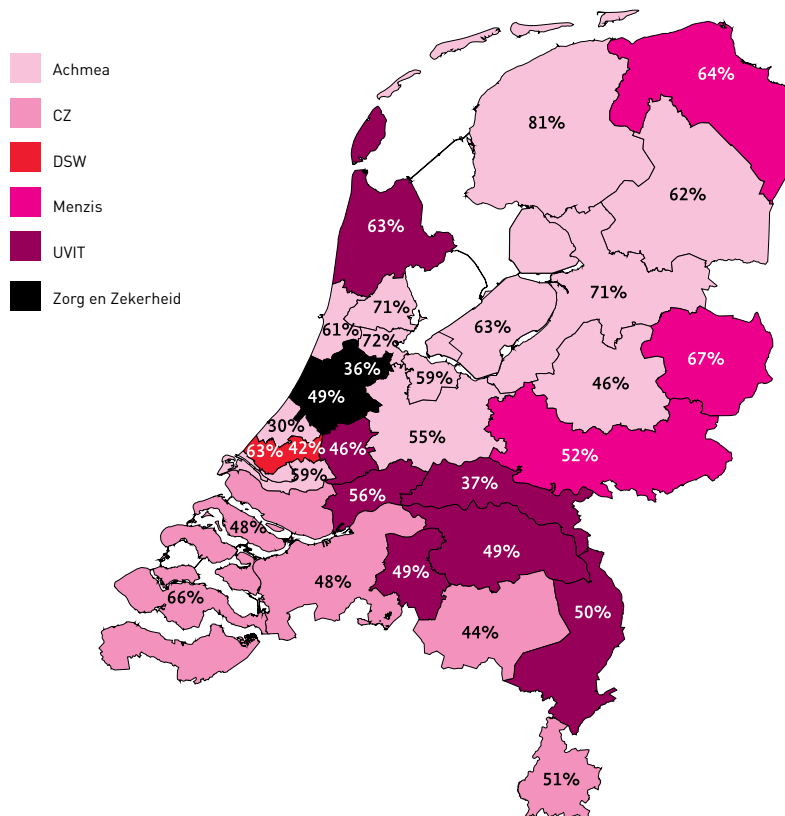
On the basis of a survey, it is anticipated that 1.6 million people will switch insurers in 2012. Up to then, the figure has been around 600,000 a year. It is debatable whether these switches have any consequences at group level. Someone who switches from Zilveren Kruis to Interpolis will still be insured within the Achmea group. The four large insurers have become significantly larger in recent years. However, they have grown through mergers and acquisitions, and not because they managed to lure away more customers on balance from the smaller independent health insurers. If we look at the current make-up of these groups, the market shares in the turnover in prescription medicines from the insured statutorily insured drug package have hardly changed over the past five years. This applies both to

the combined total and to the individual groups. The four large insurers had a combined share of between 90.7% and 90.8% in each of the past five years. Based on the current labels and brands within these groups, Achmea's share over the past five years has consistently been 33%. For VGZ the figure is 25%, for CZ it is 20% and for Menzis it is 13%.

Former health insurance funds

Despite the fact that most insurers operate nationwide, they are still heavily regionally concentrated. The biggest insurer in the region had an average market share of 52% in 2011. Here too, the situation has hardly changed compared to five years ago. At that time, this percentage was 54%. The former health insurance funds which originated in the regions are still strongly represented there. The concentration is greatest in Friesland. Achmea has an average share of 81% of the pharmacy revenues in this region following the recent incorporation of De Friesland. Achmea is also the largest insurer in the Amsterdam, Zaanstreek and Zwolle regions with a relatively high market share of slightly over 70%. The concentration of the largest insurers is smallest in the Haaglanden (CZ), Amstelland (Zorg & Zekerheid), Nijmegen (VGZ) and Delft (DSW) regions. In these regions, the market share has remained stuck between 30% and 42%.

1.10 Insurers with the largest market share per region in 2011



The operating areas of the former health insurance funds are still reflected in the regional concentrations of the health insurers.

Source: Foundation for Pharmaceutical Statistics

1.9 Medicine use in Western Europe

West-European expenditure on medicines levelling off

The average amount spent by Dutch people on medicines rose to € 347 in 2010. This is 14% below the Western European average (€ 401). As the relatively expensive countries experienced a lower increase in expenditure and the inexpensive countries a moderate to strong increase, the Western European expenditure on medicines is levelling off.

The consumption of medicines is 13 to 60% higher in the countries neighbouring the Netherlands. In 2010, the per capita expenditure in Belgium, Germany and France was € 393, € 487 and € 556 respectively. The country that spends on average the most on medicines is Switzerland, as was the case in 2009. The average resident of Switzerland spent € 579 on medicines. England is situated at the other end of the expenditure spectrum. There is no current data for the UK as a whole, so the SFK can only report on medicine consumption in England, where the per capita spend increased from € 209 to € 244 in 2010. As has been the case in recent years, this relatively low per capita spend puts England right at the bottom of the list. However, expensive medicines are confined to hospital settings in the UK, so expenditure on expensive medicines falls outside the extramural arena. The average per capita cost of medicines in the Netherlands does include the costs involved in supplying expensive medicines (an average of € 66 per person in 2010).

Levelling off

The per capita spend in the Netherlands is more than 25% higher than the average per capita spend in ever-frugal Denmark. The inhabitants of Southern European countries also traditionally spend relatively little on medicines. In 2010, the average spend in Netherlands was more than in Portugal (€ 309), Italy (€ 322), and Spain (€ 344). The figures of the expenditure on medicines in Western European countries reveal that the countries with a traditionally above-average annual increase in expenditure (Switzerland, Austria, France, and Belgium) experienced a lower increase in 2010 or in a single case a decline in the total expenditure on medicines. In countries with a historically low increase in expenditure (Denmark, England, the Netherlands), the per capita expenditure on medicines experienced a moderate (Denmark +1.4%, the Netherlands +2.3%) to strong increase (England +17% in comparison with 2009).

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This levelling effect caused the expensive and inexpensive Western European countries to approach each other.
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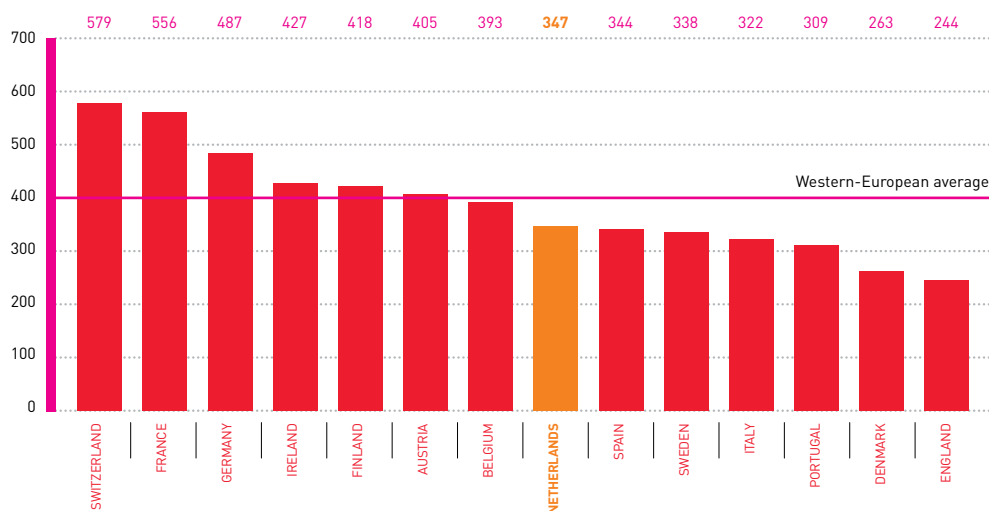
Share in care costs

When public expenditure on pharmaceuticals is related to the total cost of health care, the Netherlands continues to occupy a modest position in the middle of the list of Western European countries. In 2010, expenditure on dispensed (benefit-package and non-benefit package) medicines dispensed by pharmacies and general practitioners accounted for 9.7% of the total care costs in the Netherlands. Hence, the Netherlands maintained the relatively low level of 2009. Generally speaking, the share of expenditure on pharmaceuticals is greater in countries that are situated further south, with Finland being an exception.

Explanations

The differences in medicine consumption are partly accounted for by population ageing. In the Netherlands, 15.5% of the population is in the 65-plus age group. In France, Belgium, and Germany, the percentage of senior citizens is considerably higher at 16.6%, 17.2%, and 20.7% respectively. In the Netherlands, senior citizens use three times as much medication as the average user. Another reason for the relatively low expenditure in the Netherlands is the use of generic medicines. In 2010, Dutch pharmacists filled 61% of prescriptions with generic equivalents. This is a similar situation in countries such as Germany (63%) and the UK (67%). In most other countries, including France, Spain, Belgium, and Italy, the

1.11 Per capita spend on medicines dispensed by pharmacies and general practitioners in 2010

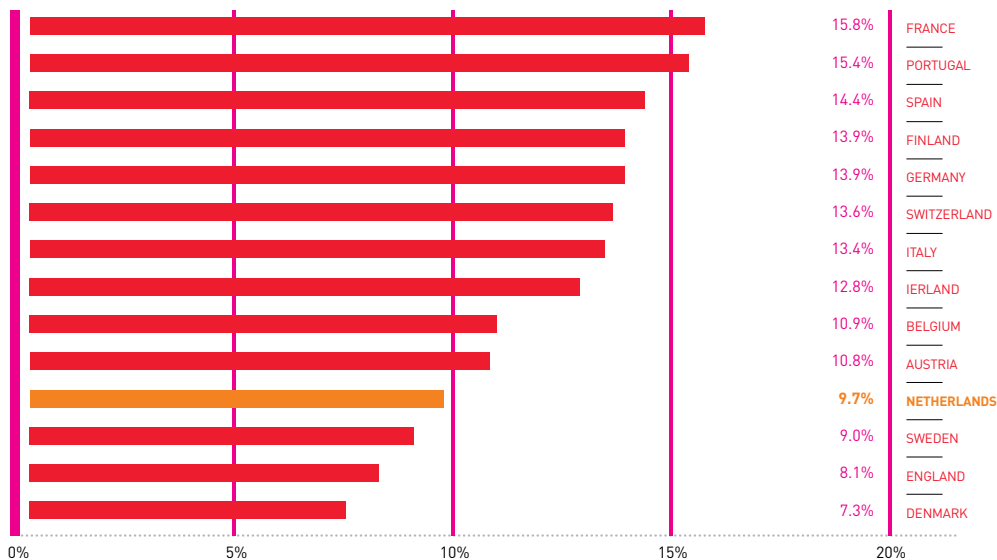


Spending on medicines in the Netherlands is on a par with the low level of expenditure on medicines in the traditionally frugal Southern European countries. In 2010, the expensive and inexpensive Western European countries shifted more towards each other.

Source: Foundation for Pharmaceutical Statistics

percentage ranges from 10 to 25%. The main reasons for the relatively low expenditure on medicines in the Netherlands are on the one hand the conservative prescription and medicine-taking patterns that are typical in the Netherlands and on the other hand the impact of the price cuts prompted by the health insurers' preference policies.

1.12 Expenditure on pharmaceuticals dispensed by pharmacies and general practitioners as a share of the total expenditure on health care in 2010



Expenditure on medicines accounts for less than 10% of the total expenditure on care in the Netherlands.

Source: Foundation for Pharmaceutical Statistics



Medicines

2.1 Expenditure on medicines

Ten medicines, 20% of the expenditure

In 2011, the TNF-alpha inhibitors adalimumab and etanercept were at the top of the list of the medicines that generated the highest expenditure, as was the case in 2010. The growth hormone somatropin is the only newcomer in the top 10, at the expense of metoprolol.

In 2011, € 198 million and € 160 million were spent on the TNF-alpha inhibitors adalimumab (Humira) and etanercept (Enbrel) respectively. Hence, they were at the top of the list of top ten medicines that generated the highest expenditure, as was the case in 2010. SFK annually compiles a top 10 of community pharmacy-dispensed medicines that generate the highest expenditure. The expenditure consists of the cost of the medicines and the fees for the services of the pharmacy. The cost of the medicines is based on the pharmacy's purchase prices (*apothekinkoop-prijzen*, AIP) less the statutory clawback (for the last time in 2011). All together, the total expenditures on medicines in the top 10 amount to slightly more than € 1 billion. That is 21% of the total expenditure on medicines in 2011. The various contractual forms can cause the expenditure to be lower or higher for health insurers. For instance, the actual expenditure for health insurer Achmea on medicines of which the AIP is higher than the Integral Efficiency Contract for Excellent Pharmacists (*Integraal Doelmatigheidscontract Excellente Apothekers*, IDEA contract) reimbursement is lower than stated here (atorvastatin and esomeprazole, among other medicines). If the AIP is lower than that reimbursement, then the expenditure is higher (omeprazole, among other medicines).

To hospital budget

As the Minister of VWS is of the opinion that hospitals can negotiate a lower price for TNF-alpha inhibitors than community pharmacies, she has decided to only reimburse these medicines as a part of the hospital budget as from 1 January 2012. This means that the hospitals are also responsible for the cost of using these medicines outside the hospitals. Consequently, when SFK takes stock of the medicines with the highest expenditure next year, these medicines will no longer appear in the top 10. The sales of this group of medicines already largely bypassed regular pharmacies, as manufacturers distribute these medicines mostly via national pharmacy chains. The most widely known uses of TNF alpha inhibitors are to treat severe forms of rheumatoid arthritis.

Atorvastatin

The seven highest-ranked medicines in the top 10 of 2010 assumed the same positions in the top 10 of 2011. In 2011, the expenditures on the cholesterol-lowering medicine atorvastatin, ranked 3rd, increased by 1% to € 136 million, compared to a decline of 8% in 2010 to € 134 million. Atorvastatin is anticipated to rank lower on the list next year. This is because the patent on the brand name medicine Lipitor expired in May 2012 in the Netherlands. The generic manufacturer Ranbaxy was already given the opportunity to

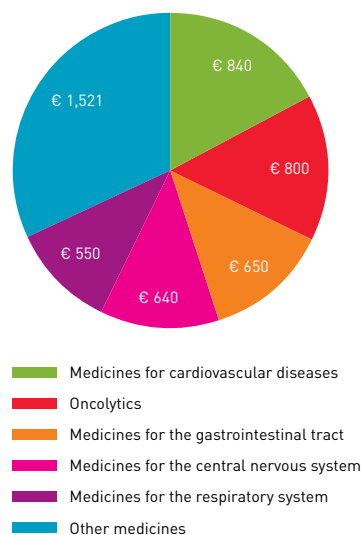
launch their generic variant in the market from the middle of March 2012. Patentee Pfizer also introduced a generic variant. Various generic manufacturers subsequently also offered a more inexpensive variant.

Below the top

Ranked fourth in the top 10 with € 128 million (+4%) is the combination product salmeterol with fluticasone, used to treat respiratory diseases. The expenditure on tiotropium and the combination product formoterol with budesonide, used to treat respiratory diseases, ranked fifth and sixth respectively, increased by 12%.

For esomeprazole, a medicine for gastric issues, a strong decline of € 8.2 million (-12%) in the expenditure had no impact on its ranking. The most important cause of the decline in expenditure is the expiry of the patent on the brand name medicine Nexium. Gastric acid suppressant omeprazole assumes 8th place with € 58.7 million. After a year of absence, the growth hormone somatropin returns to the top 10 in 9th place.

2.1 Expenditure per medicine group (1 = 1 million euros)



Source: Foundation for Pharmaceutical Statistics

2.2 Top 10 medicines that generated the highest expenditures in 2011

	ACTIVE INGREDIENT (RANKING IN 2010)	BRAND NAME	USED TO TREAT	EXPENDITURE (MILLION €)	IN COMPARISON WITH 2010
1	Adalimumab (1)	Humira	Rheumatoid arthritis	198	12%
2	Etanercept (2)	Enbrel	Rheumatoid arthritis	160	8%
3	Atorvastatin (3)	Lipitor	Cholesterol-lowering	136	1%
4	Salmeterol with fluticasone (4)	Seretide	Respiratory diseases	128	4%
5	Tiotropium (5)	Spiriva	Respiratory diseases	93	12%
6	Formoterol with budesonide (6)	Symbicort	Respiratory diseases	80	12%
7	Esomeprazole (7)	Nexium	Gastric acid suppressant	62	-12%
8	Omeprazole (9)	Losec	Gastric acid suppressant	59	7%
9	Somatropin (-)	Genotropin int. al.	Growth hormone	53	11%
10	Rosuvastatin (10)	Crestor	Cholesterol-lowering	52	10%

As in previous years, 20% of the total expenditure on medicines covered by statutory health insurance is attributable to the top 10 medicines that generate the highest expenditure.

Source: Foundation for Pharmaceutical Statistics

2.2 Medicine prescriptions

Omeprazole is the most prescribed medicine

After having topped the list for six years, metoprolol had to cede the top spot on the list of most prescribed medicines to gastric acid inhibitor omeprazole in 2011. The restriction on the entitlement to reimbursement of gastric acid inhibitors makes it questionable whether omeprazole will remain at the top of the list in 2012.

In 2011, community pharmacists dispensed a medicine covered by the statutory health insurance 209 million times (nearly 9% more than in the previous year). Of these prescriptions, 50 million (24%) were for the ten most prescribed medicines. Expressed in defined daily doses (DDD) there was a drop of one and a half percent. This decline was the result of the restriction of the entitlement to reimbursement of contraceptives in 2011. If we correct for this, there was an increase of over 5%.

New leader

Over the past six years metoprolol has been the most prescribed medicine, but in 2011 this beta-blocker dropped to second place. The gastric acid inhibitor omeprazole has become the most dispensed medicine in the Netherlands for the first time with a total of 7.3 million prescriptions. The number of prescriptions rose by 18% compared to 2010. The lead over the number 2, metoprolol, was only 127,000 prescriptions. The number of prescriptions for metoprolol also rose comparatively strongly by 16%. Because the percentage increase in the number of DDDs of metoprolol lagged behind the number of prescriptions, the obvious conclusion is that this medicine was dispensed more often in weekly dosing systems

in 2011. This also applies to the platelet aggregation inhibitor acetylsalicylic acid, which displaced the cholesterol-lowering medicine simvastatin from third place on the list of most prescribed medicines with a 23% increase in the number of prescriptions. There were virtually no changes in the remainder of the top 10. Only amlodipine, which is used for angina pectoris and hypertension, gained a place in the top 10 for the first time at the expense of the painkiller diclofenac. However, the difference between the number of prescriptions for these two medicines was minimal. It is questionable whether the gastric acid inhibitor omeprazole will continue to top the list in 2012, since the entitlement to gastric acid inhibitors has been restricted since 1 January of this year to people with a long-term dependence on gastric acid inhibitors.

Climbers and fallers

The medicines for which the number of prescriptions rose most rapidly in 2011 included almost all of the 10 most prescribed medicines from 2010, albeit in a slightly different order. The only exception to this was combination preparations of calcium with vitamin D or other medicines. The number of prescriptions of these medicines rose by 680,000 to 2.5 million.

.....
Contraceptives are the biggest faller in the list of most prescribed medicines covered by basic health insurance.

From January 2011, the entitlement to contraceptives under the basic health insurance has been restricted to women aged 20 and younger. The pill is now only covered by statutory health insurance for women aged 21 and above if one of two specific indications applies, whereby contraception is not the goal. Another notable faller is carbasalate calcium. The number of prescriptions for this platelet aggregation inhibitor fell by 7.3% in 2011 to 2.2 million. The comparatively strong increase in the number of acetylsalicylic acid is undoubtedly linked to this.

2.3 Top 10 medicine prescriptions 2011

	MEDICINE NAME	BRAND NAME	USED TOT TREAT	PRE- SCRIPTIONS (X MILLION)	VIS-À-VIS 2010
1	Omeprazole (2)	Losec	Inhibiting gastric acid production	7.3	(+18%)
2	Metoprolol (1)	Selokeen, Lopressor	For angina pectoris, raised blood pressure and heart failure	7.2	(+16%)
3	Acetylsalicylic acid (4)	Aspirin	Inhibiting platelet aggregation	6.7	(+23%)
4	Simvastatin (3)	Zocor	Lowering cholesterol	6.5	(+20%)
5	Metformin (5)	Glucophage	For diabetes	4.8	(+18%)
6	Pantoprazole (6)	Pantozol	Inhibiting gastric acid production	4.3	(+24%)
7	Furosemide (7)	Lasix	Diuretic	3.7	(+12%)
8	Hydrochlorothiazide (8)	Various	Diuretic	3.5	(+14%)
9	Levothyroxine (9)	Various	Thyroid hormone	3.2	(+13%)
10	Amlodipine (11)	Norvasc	For angina pectoris and raised blood pressure	2.8	(+19%)

Source: Foundation for Pharmaceutical Statistics

2.3 Medicines for cardiovascular risk management

Use of CVRM medication continues to rise

The use of medicines for cardiovascular risk management (CVRM) increased by 5% in 2011, measured in numbers of DDDs. The expenditure on these medicines has decreased by 1%.

The SFK uses a classification based on the second level of the ATC classification system to define the group of CVRM medicines. The CVRM group consists of anticoagulants (B01), cardiac therapy (C01), cholesterol-lowering medicines (C10) and medicines for high blood pressure. The latter group broadly comprises diuretics (C03), beta-blockers (C07), calcium antagonists (C08), medicines which act on the renin-angiotensin system (RAAS inhibitors, C09) and specific antihypertensives (C02).

Dutch community pharmacists dispensed a CVRM medicine nearly 73 million times in 2011. That is nearly 9 million times (14%) more often than in the previous year. This trend has been ongoing for several years. Over the past five years this increase, which is partly due to the number of weekly dose packs, has averaged 14% per year. The total expenditure on this group was € 965 million.

Primary CVRM medication

Prescribers' primary focus with CVRM is aimed at optimising the prescription of cholesterol-lowering statins to prevent cardiovascular diseases. A patient who takes cholesterol-lowering statins will generally continue to take them for the rest of their lives. The ageing population is one of the causes of the increase in the number of users of these medicines. The total expenditure on cholesterol-lowering medicines saw

a limited rise from € 279 million in 2010 to € 291 million in 2011. The number of dispensed DDDs rose by 8% to 619 million. The number of users of cholesterol-lowering medicines rose from over 1.7 million to over 1.8 million (+6%).

In 2011, the expenditure on cholesterol-lowering medicines saw a limited rise (+4%) from € 134 million to € 136 million. The rise in the use of statins was particularly due to simvastatin (DDD +12%). The cholesterol-lowering medicine on which most money was spent was atorvastatin (Lipitor) once again in 2011. After simvastatin, with 6.5 million prescriptions, atorvastatin is the most commonly prescribed statin with 2.4 million prescriptions.

Manufacturer Pfizer's patent on Lipitor (atorvastatin) expired at the beginning of May 2012. Immediately afterwards, nine suppliers offered a generic variant. However, manufacturer Ranbaxy had already acquired the right to sell a generic variant of atorvastatin in mid-March. Patentee Pfizer also marketed a generic variant alongside the brand name version. Insurers encouraged the prescription of the generic variants of atorvastatin to their insured persons, partly through their inclusion in the preference policies. Many insurers did this as soon as atorvastatin became available as a generic medicine. In March 2012, 3% of all prescriptions (DDD) for atorvastatin were generic.

Still 67% in April, this substitution level had already risen to 80% by May of this year. By way of illustration, the SFK compared the speed of introduction of generic variants of atorvastatin with those of other generic introductions over the past three years. Compared to other generic introductions, atorvastatin is part of the group of medicines where the introduction was rapid. It can also be anticipated that this level of substitution will rise even further.

Secondary CVRM medication

The secondary aim of the CVRM programme is to optimise other preventive medication such as antithrombotics and antihypertensives, promoting therapy compliance and optimising the regime for existing patients with cardiovascular diseases or diabetes mellitus type 2 (DM2).

Antithrombotics

In 2010, the use of antithrombotics rose by 5%, measured in DDDs. The most prescribed medicine was acetylsalicylic acid, followed by carbasalate calcium. Use of acetylsalicylic acid rose by 8%. One of the reasons for the rise may be that both the CBO guidelines and the NHG standards recommend that all patients with angina pectoris should be treated with acetylsalicylic acid in order to inhibit platelet aggregation. The use of carbasalate calcium in 2011 was comparable to 2010.

Antihypertensive medicines

Various groups of medicines are included in the antihypertensives groups: diuretics, beta-blockers, calcium antagonists and RAAS inhibitors. Doctors do not prescribe all the medicines in these groups for high blood pressure, and the medicines which they do use also have other applications. Because the reason for prescribing is not disclosed to SFK, antihypertensive medicines are grouped somewhat arbitrarily on the basis of ATC codes¹.

Use of antihypertensives rose to over 1.6 billion DDDs in 2011. That is 5% more than in 2010. The expenditure on these medicines fell from € 415 million to € 390 million, a drop of 6%.

Diuretics

Diuretics help to lower blood pressure through the excretion of fluid and minerals. Two important groups can be distinguished within the diuretics: the thiazides (and related diuretics) and the loop diuretics. Only the first group is generally used to treat hypertension; doctors usually prescribe the loop diuretics for heart failure. The most prescribed diuretic by far is hydrochlorothiazide. Use of this medicine rose by 5% in 2011. The total expenditure on diuretics rose by 4% over the same period.

Beta-blockers

The use of beta-blockers for hypertension is based on reducing the frequency and force of the heartbeat. Only the selective beta-blockers are thereby included in the group of antihypertensives. Beta-blockers are also used to treat angina pectoris. A lot of patients who use antihypertensives take a selective beta-blocker. Metoprolol is the second most prescribed medicine in Dutch communal pharmacies, and thereby the most prescribed beta-blocker. Around 1.1 million Dutch people take metoprolol.

¹ Thiazides and related diuretics (C03A and C03B), combinations of diuretics and potassium-sparing agents (C03E), selective beta-blockers (C07AB), combinations of beta-blockers and diuretics (C07B and C07C), dihydropyridines (C08CA) and RAAS inhibitors including combinations (C09).

Dihydropyridines

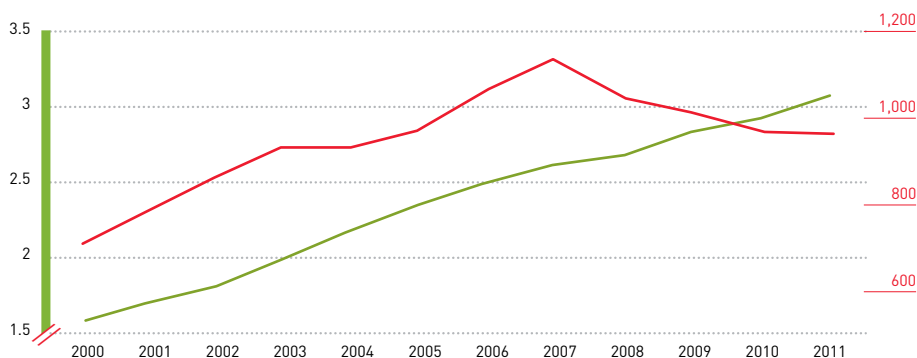
Dihydropyridines are used to treat hypertension and angina pectoris. Some 685,000 people took a dihydropyridine last year. Its use rose by 7% to 266 million DDDs. Amlodipine thereby made up the lion's share with 61% of all daily doses. Expenditure on dihydropyridines fell by 1% to over € 45.5 million.

RAAS inhibitors

RAAS inhibitors inhibit the renin angiotensin-aldosterone system, which results in a lowering of blood pressure through a complex mechanism. The group can be divided into the ACE inhibitors which were introduced in the 1980s, and angiotensin-II antagonists which followed 10 years later. In 2010, 2 million people in the Netherlands took a RAAS inhibitor. The use of RAAS inhibitors rose by 5% in that year. The associated expenditure fell by 4% to € 235 million.

.....
Consumption of aliskiren, introduced in 2008,
rose by 50% in 2011.
.....

2.4 CVRM medicines over the past decade: daily doses (in billions, left) and expenditure (in million €, right)



Initially both lines follow the same trend, until expenditure fell in 2007, primarily due to a substantial decrease in medicine prices.

Source: Foundation for Pharmaceutical Statistics

2.4 Antibiotics

The Netherlands has the lowest antibiotics consumption in Europe

Use of antibiotics through Dutch community pharmacies is showing moderate growth of 2% per year on average. Within Europe, the Netherlands is one of the countries with the lowest per capita consumption of antibiotics.

Prescribers are expected to prescribe antibiotics cautiously, since overuse increases the risk of resistance. The use of antibiotics dispensed by community pharmacies has been consistently under 10 defined daily doses (DDDs) per 1,000 inhabitants per day until 2005. Since 2005, usage has consistently risen slightly to 11.4 DDD per 1,000 inhabitants per day in 2011.

Moderate growth

Last year, community pharmacies dispensed antibiotics for systemic use 7.2 million times. This is 2% more than the preceding year. Over the period from 2000 to 2005, use of antibiotics declined slightly every year. The number of prescriptions rose by 6.6% in 2005. This rise is not attributable to a specific group of antibiotics. With the exception of the sulphonamides group and trimethoprim, the number of prescriptions for antibiotics rose substantially on the whole in that period. Since 2006, the growth in antibiotic use has moderated again, and the number of prescriptions has risen by some 2% a year since then. However, the picture is different for each group of antibiotics: there are antibiotics where usage is rising more rapidly than the aforementioned 2%, there are antibiotics which are

showing declining use and there are groups of antibiotics where the usage remains unchanged.

Climbers and fallers

Antibiotics can be divided into a number of groups, each with a similar chemical structure and mechanism. Bacteria which are resistant to one antibiotic in a particular group are usually also unresponsive to the other antibiotics in the same group. Penicillins, tetracyclines and macrolides are particularly used for bacterial infections of the airways. Trimethoprim and nitrofurantoin are the most commonly used medicines for the treatment of urinary tract infections. Quinolones can be used for various bacterial infections. The antibiotic which is most dispensed through Dutch pharmacies is amoxicillin. With nearly 2.4 million prescriptions in 2011, of which 42% in fixed combination with the β -lactamase inhibitor clavulanic acid, use of this medicine is 3.6% higher than a year earlier. The biggest riser in 2011 is nitrofurantoin, prescriptions for which were up 9% from 2010. In total, this antibiotic was dispensed 1.1 million times through the community pharmacies. Amongst the macrolides, the use of azitromycin is rising steadily (485,000 prescriptions, +11%). This is at the expense of claritromycin (-4.8%), which was

the most dispensed medicine within this group until 2007. Use of tetracyclines has been declining since 2009. The most commonly used medicine within this group, doxycycline (1.1 million prescriptions), showed a 4.9% decline last year in comparison with 2010. The use of quinolones (558,000 prescriptions, -3%) has been declining since 2009.

Quinolones are viewed as 'fall-back' antibiotics. In order to prevent resistance from developing, prescribers should keep them in reserve and use them only if insufficient result is achieved with other antibiotics.

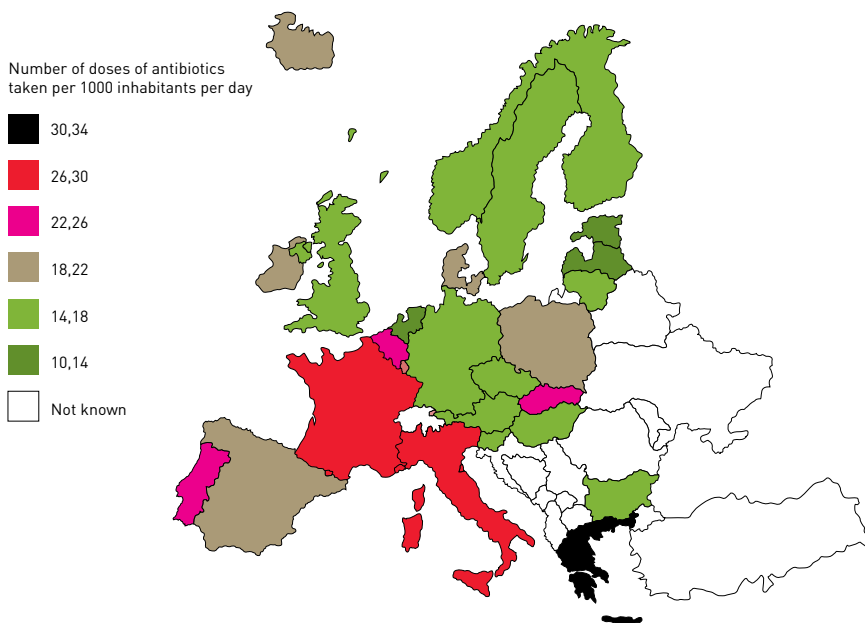
Restrained prescribing policy

In a European context, the Netherlands is traditionally one of the leaders when it comes to low consumption of antibiotics per head of population. In 2011, the number of DDDs of antibiotics per 1,000 inhabitants per day was 11.4 for the Netherlands. Belgium and France consume around two to three times as much,

and in Southern Europe antibiotics are prescribed up to four times as much (ESAC, 2010). Dutch doctors adopt a more restrained prescribing policy than in other European countries. They generally follow the guidelines on the use of antibiotics. In line with the restrained use of antibiotics, the Netherlands also has one of the lowest resistance rates in Europe (EARSS, 2009).

In the Netherlands, the Dutch Working Party on Antibiotic Policy (Stichting Werkgroep Antibiotica Beleid, SWAB) works with the Foundation for Pharmaceutical Statistics (Stichting Farmaceutische Kengetallen, SFK) to chart the use of antibiotics. SWAB and SFK annually deliver data about the extramural use of antibiotics in the Netherlands to ESAC, a project which is designed to create a European network of surveillance systems for antibiotics usage. For more information see www.swab.nl.

2.5 Antibiotics dispensed (in DDDs) per 1,000 inhabitants per day (source: RIVM in collaboration with SWAB)



The Netherlands is one of the countries with the lowest consumption of antibiotics in Europe.

2.5 ADHD

Use of ADHD medicines cannot be curbed

Dutch pharmacies dispensed a medicine to treat ADHD to 200,000 different people in 2011. That is a 14% rise compared to the preceding year. The rise in the 20 to 60 age group was 19% higher on average.

The number of people taking medicines to treat ADHD (Attention Deficit Hyperactivity Disorder) has risen over a period of six years from 70,000 in 2005 to 200,000 in 2011. This represents an average annual rise of 19%. Based on the number of prescriptions for these medicines over the past six months, the rise in the number of users in 2012 is expected to be around 10%. Within the group of ADHD medicines in the Netherlands, methylphenidate has the most users. Dutch pharmacies dispensed methylphenidate one or more times to 186,000 people in 2011.

Not just ADHD

Methylphenidate is registered for use in the treatment of ADHD in the Netherlands. This medicine is available under various brand names: Ritalin, Concerta, Medikinet, and Equasym. Variants with regulated release of methylphenidate are available from the three latter brands. Ordinary tablets are available unbranded and under the brand names Ritalin and Medikinet. In addition to methylphenidate, atomoxetine (Strattera) is also registered for the treatment of ADHD. This medicine is only available as a slow-release product. In addition to these medicines, the unregistered medicine dexamphetamine is also used to treat ADHD. There is a dispensing regulation for pharmacists for dexamphetamine. In addition to ADHD, narcolepsy is also registered as an indication

for methylphenidate, although this does not apply to all variants. Narcolepsy is a condition whereby people fall asleep during the day and cannot sleep through the night. Dexamphetamine also has narcolepsy as a specified use. Methylphenidate and dexamphetamine are both covered by the Opiumwet (Opium Act), which means that possession of these medicines is governed by rules. Certificates are available for travellers who wish to take these medicines abroad, including for journeys within the Schengen Area.

More than one million

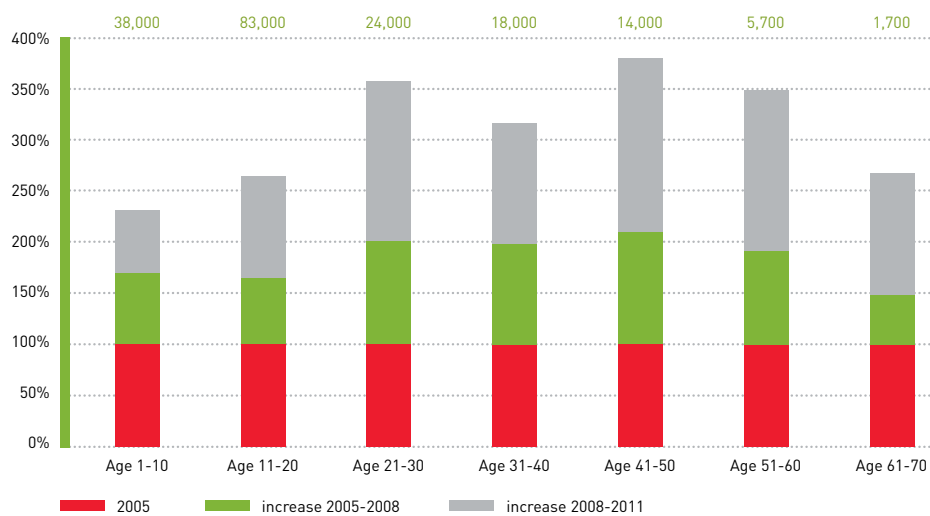
In 2011, the number of prescriptions of methylphenidate exceeded one million per year for the first time. At over 1.1 million, the number of prescriptions was 15% higher than in 2010. The expenditure on methylphenidate covered by statutory health insurance was € 18 million, of which € 11 million on the cost of medicines. Another € 21 million was not covered by the basic health insurance because a patient contribution is payable for slow-release products. This covered nearly half the prescriptions for methylphenidate. The slow-release products are often preferred because they are active for longer. For example, the ordinary tablets cannot always cover the whole period that the user spends at school. Some slow-release products only need to be taken once a day. There were 48,000 prescriptions for atomoxetine in

2011. The number of prescriptions peaked at 54,000 in 2008. Since then, this amount has been dropped by a few percent every year. Of the expenditure on atomoxetine, € 400,000 was covered by statutory health insurance, whilst 7,000 users jointly paid € 4.6 million in patient contributions. Some health insurers offer supplementary policies which cover the patient contributions. The SFK has no insight into the extent to which this happens. There were 30,000 prescriptions for dexamphetamine in 2011. Dexamphetamine had the same number of users in that year as atomoxetine this year.

Increasing age

Almost 45% of the users of methylphenidate in 2011 were in the 11 to 20 age group. That represents 83,000 people. About 1 in 22 people in the 11 to 20 category took methylphenidate in 2011. In this age group, the number of users has risen most strongly in absolute terms since 2005 by 52,000, but the increase in the number of users in the 20 to 60 age group was greater in terms of percentage.

2.6 The percentage increase in the number of users of methylphenidate since 2005 (2005 = 100%) with the absolute number of users in 2011 by age category.



The relative increase in the number of methylphenidate users is greatest amongst adults.

Source: Foundation for Pharmaceutical Statistics

2.6 Unreimbursed or conditionally reimbursed medicines

New increase in conditionally reimbursed medicines

Dutch pharmacies dispensed more than € 150 million worth of prescription medicines in 2011 which did not qualify for reimbursement under the basic health insurance. This figure has been rising in recent years. Over € 64 million in contraceptives was not reimbursed last year.

The vast majority of the prescription medicines available in the Netherlands are reimbursed under the statutorily insured drug package. The remainder is excluded from reimbursement or is only reimbursed under certain conditions. This latter has applied to more and more groups of medicines in recent years. Prescription medicines for erectile dysfunction and for incipient hair loss have been entirely excluded from reimbursement for many years. They are not included in the Drug Reimbursement System (GVS). This also applies to medicines used for smoking cessation. Only in 2011 were these medicines included in the category of medicines which were reimbursed under the statutorily insured drug package under certain conditions.

Smoking cessation

Smoking cessation programmes, in which the focus was on interventions aimed at changing behaviour, were fully reimbursed under the statutorily insured drug package with effect from January 2011. This also applied to the prescription and OTC medicines which support smoking cessation if they were used within these programmes. Because the reimburse-

ment of these medicines was not funded from the pharmaceutical therapy budget, the reimbursement status of the medicines did not change. Health insurers who had to pay for the smoking cessation programmes took special measures in order to be able to check that the medicines were being used within the smoking cessation programmes in accordance with the conditions. One of the requirements was a statement from the treatment provider. Some large insurers insisted that their insured persons had to go to national pharmacy chains to have their prescription dispensed. The measure has been modified with effect from January 2012. The smoking cessation programmes aimed at changing behaviour will be reimbursed, but the medicines used to support this will not.

In 2011, the SFK recorded a sum of € 18.6 million in expenditure on prescription medicines for smoking cessation, whereby the SFK is not aware - in view of the above - who ultimately paid for this: the potential ex-smoker or the insurer.

Contraceptives

Since 2011, contraceptives have also been covered by conditional reimbursement. Women aged 21 and older not longer qualify for reimbursement of contraceptives under the basic health insurance. In 2011, the expenditure on oral contraceptives was € 46.2 million and the expenditure on topical contraceptives was € 18 million for this group of women. Contraceptives do qualify for reimbursement under the basic health insurance if they are used by women aged 21 and older for a number of specific indications whereby contraception is not the goal. Because the SFK does not have access to the reasons for prescribing, it is not known how large that proportion is.

Sleep-inducing medication and sedatives

Sleep-inducing medication and sedatives have not qualified for reimbursement since 2010, unless they are used for a number of specific uses. Of the expenditure on sleep-inducing medication, a sum of € 26 million did not qualify for reimbursement in 2011. The figure for sedatives was € 24.7 million. For both, this constituted a small decline compared to 2010. In that year, the expenditure was € 27 million and € 26.6 million respectively.

Other

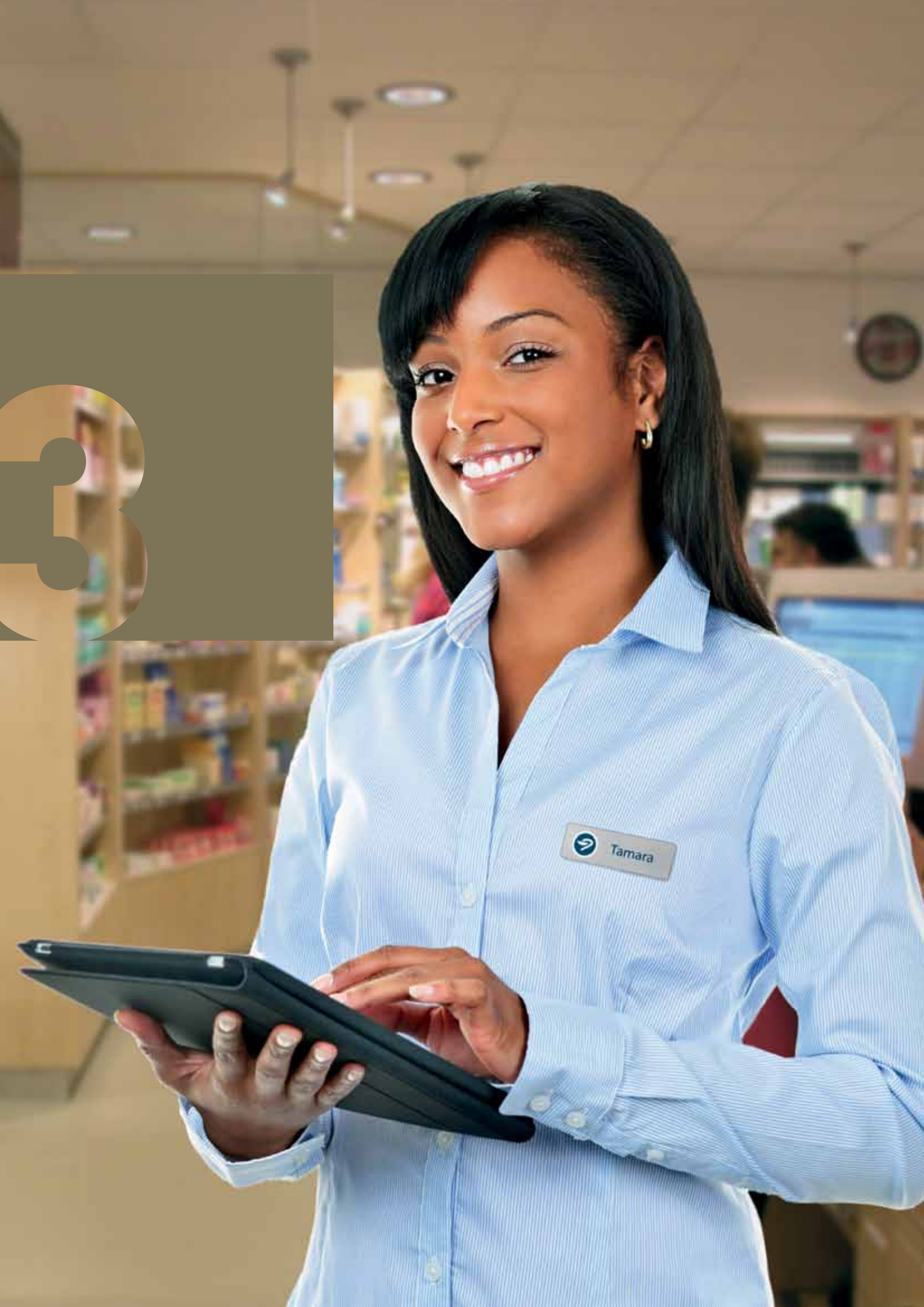
Medicines for erectile dysfunction never qualify for reimbursement. Nor do those for incipient hair loss. € 20 million and € 3 million respectively were spent on these medicines. Medicines which are used prophylactically for travel to foreign countries are also not reimbursed. In 2011, € 10.7 million was spent on malaria prophylactics and € 1 million on vaccinations against bacterial infections (typhoid) and viral infections (yellow fever). Finally, pharmacies dispensed € 350,000 worth of 'ordinary' flu vaccinations in 2011 to people who did not qualify for participation in the national vaccination campaign.

2.7 Expenditure (in million euros) on prescription medicines excluded from reimbursement under the basic health insurance in 2011

GROUP OF MEDICINES	AMOUNT
Oral contraceptives	€ 46.2
Sleep-inducing medication	€ 26.0
Sedatives	€ 24.7
Erectile dysfunction medicines	€ 20.0
Smoking cessation medicines (see text)	€ 18.6
Topical contraceptives	€ 18.0
Malaria medicines (travel prophylactics)	€ 10.7
Incipient hair loss medicines	€ 3.0
Typhoid vaccines (travel prophylactics)	€ 0.8
Viral vaccines (flu vaccination and yellow fever)	€ 0.6

Oral contraceptives top the list of 'self-funders'.

Source: Foundation for Pharmaceutical Statistics



Pharmacies

3.1 Independent pharmacy versus chain

Hardly any growth in the number of pharmacies

On 1 January 2012 there were 1,997 community pharmacies in the Netherlands, 17 more than the previous year. Last year, 41 new pharmacies were added and 24 were closed down. This small increase in the number of pharmacies does not keep pace with the increased use of medicines. The proportion of community pharmacies owned by chains declined by 1%.

Having stayed virtually the same in 2010, the number of pharmacies increased on balance by seventeen in 2011. This is a rise of 0.8%. Compared to the growth in the amount of medicines used, this increase is limited. The amount of medicines dispensed per pharmacy, expressed in defined daily doses (DDDs), rose by 3.5%. This is a bigger increase in the number of DDDs dispensed per pharmacy than in previous years.

Openings and closings

Since the easing of the laws and regulations in relation to the requirements set by the government for operating a pharmacy, there has been an increase in the number of pharmacies focusing on a specific form of service.

.....
Whereas there used to be a strong growth in these specialised pharmacies, this no longer appears to be the case since 2010.
.....

Relatively few specialised pharmacies were added in 2011. The 41 new establishments created last year included six outpatient pharmacies. This is considerably fewer than the fourteen outpatient pharmacies that opened in 2009. The demand for out-of-hours

pharmacies also seems to be filled; the number of out-of-hours pharmacies remains unchanged, just as it did in 2010. In 2011, the number of pharmacies that definitively closed down was 24, slightly fewer than in previous years when the numbers of pharmacies who locked their doors for good were 28, 29 and 31 respectively.

Chains and formulas

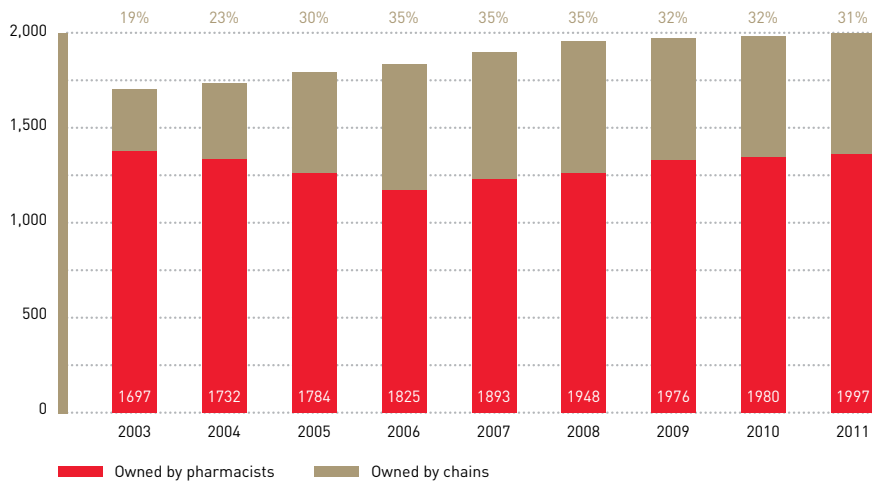
In 2011, the proportion of community pharmacies owned by a chain was 31%. This is 1% fewer than in 2009 and 2010. In terms of the number of pharmacies owned, Mediq continued to be the biggest chain. This company has about 220 pharmacies in its possession. There are also more than twenty independent pharmacies who use the Mediq formula as franchisees. Taken together, the chains Escura Apotheek and LLOYDS Apotheek which merged in 2010 constitute the second largest pharmacy chain in the Netherlands with 120 pharmacies in ownership and 40 franchisees. At the end of 2011, it was announced that both chains, part of wholesaler Brocacef Holding, will proceed under the name of BENU in 2012. In 2011, Alliance Healthcare had 74 pharmacies in its possession. These are immediately recognisable as

'Kring-apotheek' pharmacies, as are the independent pharmacies affiliated with Alliance Healthcare. About 260 pharmacies in total use the 'Kring-apotheek' formula. Alliance Healthcare furthermore doubled the international Boots pharmacy concept in the Netherlands from 9 to 18 establishments. Finally, more than 300 independent pharmacies take part in the Service pharmacy formula. In total, about 55% of all pharmacies are affiliated with a chain or formula. The large chains, Mediq, BENU, and Alliance Healthcare, together with the smaller pharmacy chains Medsen Apotheek (42 pharmacies), Thio Pharma (25), Zorggroep Almere (15), and SAL pharmacies (11), are affiliated with the Association of Chain Store Pharmacies (*Associatie van Ketenapotheken, ASKA*).

Cooperation between independent pharmacies

Apart from the joint ventures mentioned above, independent pharmacies are increasingly combining forces. Membership of the Dutch Pharmacy Cooperative (*Nederlandse Apotheek Coöperatie, Napco*) which promotes the interests of the independently established pharmacy grew from 619 to 634. A further development, not reflected in this count but also contributing to the trend towards cooperation, is the opening of central filling locations. At these locations, pharmacies organise repeat medication, often for several branches at once.

3.1 Development of the number of community pharmacies, 2003 – 2011



Following stagnation in 2010, the number of pharmacies rose slightly in 2011. The proportion of chain pharmacies dropped slightly in comparison to independent pharmacies.

Source: Foundation for Pharmaceutical Statistics

3.2 Community pharmacy sales

Pharmacies do not identify with the average

At € 2.5 million, the sales of medicines covered by statutory health insurance from the average pharmacy are virtually the same as for 2010. In spite of the reduction of maximum fees from € 7.91 to € 7.50, the revenue from dispensing fees stayed the same.

Last year, the average community pharmacy dispensed medicines covered by basic health insurance on 105,000 occasions. This was 8,100 more prescriptions than in 2010, in other words an increase of 8%. This growth was caused partly by an increase in the amount of medicines used and partly by the increase in the number of prescriptions dispensed in a weekly dosage system. In contrast to the growth in the number of prescriptions dispensed, the development of pharmacy sales tells a very different story. Sales of medicines covered by statutory health insurance by the average community pharmacy amounted to € 2,515,000 in 2011. This is a limited increase of € 26,000, or 1%, compared to 2010. The cost of materials for medicines available on medical prescription only forms the biggest component of sales and came out at € 1,871,000. Compared to last year, this is an increase of € 24,000 or 1.3%. Most pharmacies will not identify with this average picture. A significant part of the increase in medicine costs can be attributed to the expensive medicines. This growth in expenditure is scarcely noticed by the regular (community) pharmacy.

Fee revenue the same

The Dutch Healthcare Authority (NZa) lowered the maximum fees for pharmaceutical care from € 7.91 in 2010 to € 7.50 in 2011. This fee is based on the financing of the practice costs of a standard pharmacy defined by the NZa at € 620,602. These are not the total practice costs of a pharmacy, but the amount attributed by the NZa to the delivery of prescription medicines. The fee revenue together with the purchasing advantages (after subtraction of the clawback) and revenue from the sale of over-the-counter medicines, medical devices and other widely available products, should cover the costs of the practice.

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The lowering of the funding for practice costs is primarily a consequence of the spending cuts introduced in the pharmacy.
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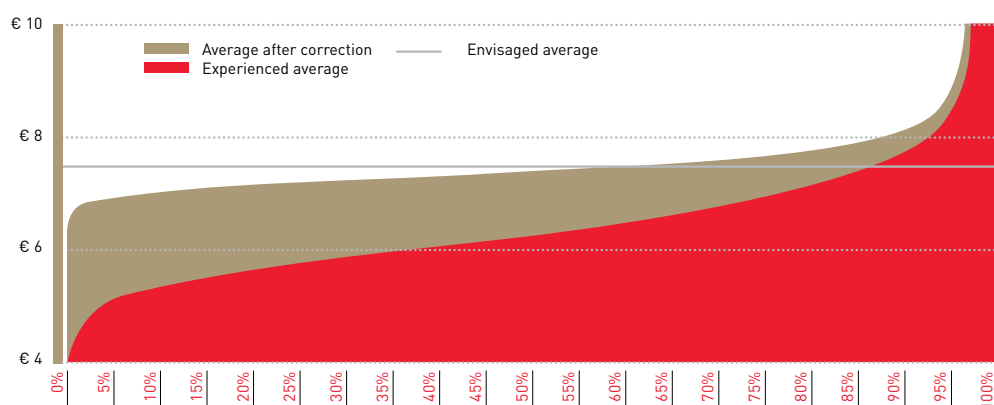
As a result, pharmacies were remunerated with a lower fee by the NZa. The NZa furthermore changed the system of allocation for the second year in succession, also to the disadvantage of pharmacies and dispensing general practitioners for the second year

in succession. In spite of the lower maximum fees per dispensation, the fee revenues for the dispensing of medicines available on medical prescription only were the same in 2011 as they were in 2010 due to a higher number of deliveries.

Most pharmacies below average

In practice, 86% of the pharmacies experienced a lower fee than the average of € 7.50 envisaged by the NZa. The experienced average is the yield from all the services identified by the NZa at maximum fees divided by the number of pharmacy-dispensed prescriptions covered by the WMG. Here, any revenue from plus-contract variants is not taken into account. For comparison with the average envisaged by the NZa however, the total number of pharmacy-dispensed prescriptions must be converted back to the number according to the old fees system, by dividing the number of medicines issued in weekly dose packs by two and adding the result to the number of basic dispensations. When this correction is made, 61% of the pharmacies come out at a lower than average fee.

3.2 Percentage community pharmacies with realised average fee for 2011



61% of pharmacies had a lower fee than the average envisaged by the NZa.

Source: Foundation for Pharmaceutical Statistics

3.2 Dispensing fee

Uncontrolled fees will lead to lower revenue in 2012

The abandonment of the maximum fees for the services of pharmacies determined by the NZa is expected to lead to a decline of € 27,000 in fee revenue for the average pharmacy. New services may partly compensate for this decline, but these are not always remunerated by insurers.

Pharmacists finance their practice costs and their income to a large extent from the revenue from the dispensing fees for medicines covered by the Healthcare (Market Regulation) Act (WVG medicines). Until January 2009, the dispensing fee was determined on the basis of the cost pattern of the average pharmacy. To that end, the Dutch Healthcare Authority (NZa) and its legal predecessors periodically had cost studies carried out. On several occasions, the KNMP and other pharmacy organisations indicated their disagreement with the way the NZa calculates the fee. The method of calculation used by the NZa and the changes in that method are to the financial disadvantage of pharmacies and dispensing general practitioners. Various pharmacies see their financial continuity threatened as a result, especially considering that their purchasing advantages have now vanished due to the introduction of the preference policies.

Fixed maximum fees

In July 2008, the NZa introduced a new fee system for pharmacies and dispensing general practitioners. For community pharmacies, this system means the fixed fee for each prescription medicine delivered has been abandoned. The new system makes a distinction between basic services and additional services with

associated maximum fees. The basic services include the dispensing of regular and weekly prescriptions, each for its own set maximum fee. Furthermore, one or more additional services may apply if a (special) pharmacy preparation, initial dispensation or dispensation during an evening, night or Sunday shift is involved. In previous years, the NZa has repeatedly lowered the fee for the services of pharmacies and dispensing general practitioners for both basic services and additional services.

Apart from the maximum fee, the NZa fee system also included a maximally increased fee. In theory, this allowed pharmacies to make financial agreements with insurers up to the level regarded by the NZa as sufficient to cover the costs. The NZa introduced this system under the name 'flexible fee' to encourage negotiation between pharmacists and insurers. This system was a forerunner of a system of uncontrolled prices for extramural pharmacies in 2012.

Uncontrolled prices

From 1 January 2012, a new treatment-related pricing system applies in the pharmacy sector. The prices for the services of pharmacies and dispensing general practitioners are no longer centrally fixed by the NZa. They are now freely negotiable. In the final weeks of

2011, health insurers presented contracts to pharmacists specifying the fees for the services provided. On the basis of these contracts, a general picture can be drawn of the consequences for the fee revenue of pharmacists. Since the SFK is unable to examine all contract variants in the market, the picture sketched is no more than an indication.

The current services in relation to the dispensation of medicines by pharmacists recur in the new treatment-related pricing system. For these services, the contracts offered by health insurers for an average pharmacy show a fee reduction of 4.4%. For the average pharmacy, this amounts to more than € 27,000. The SFK calculated the change in fee revenue per participating pharmacy on the basis of the difference between the maximum fees set by the NZa which applied in 2011 and the fees as offered in the new contracts. The calculation is further based on the dispensation of medicines available on medical prescription only from the statutorily insured drug package which the pharmacies declared to health insurers in 2011.

Decline in fees varies

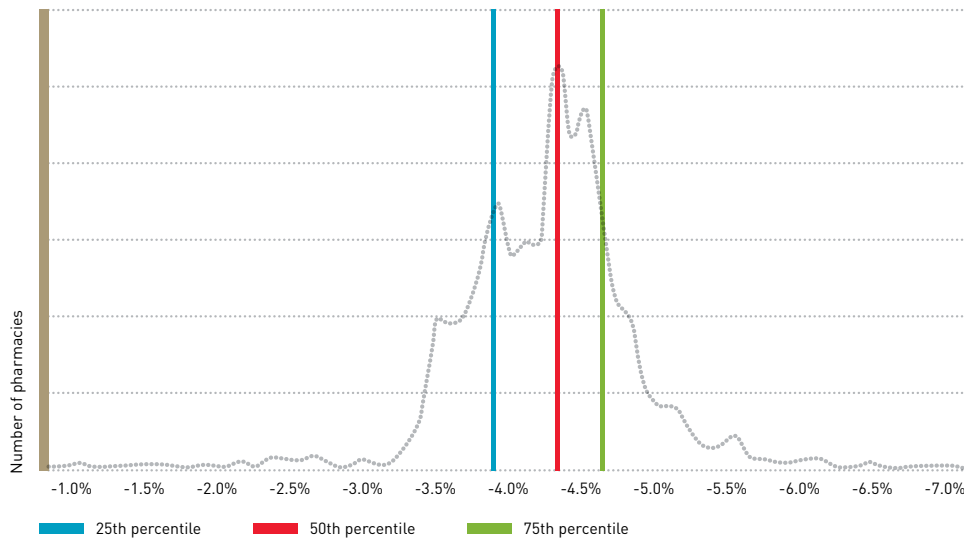
There is a relatively large variation between pharmacies in the extent to which they expect to see their fee revenues decline. A quarter of pharmacies will see a decline of 4.7 to 6.7% in fee revenue, half will see a decline of 4.0 to 4.7%, and a quarter will see a decline of 2.0 to 4.0%. These differences are largely attributable to the share of the various health insurers in the practice population. It also turns out that the former group is primarily made up of pharmacies with relatively many weekly dispensations. Health insurers generally make a relatively larger reduction in their payment for the weekly dispensations than for the standard dispensations. The group which is the least financially disadvantaged includes many out-of-hours pharmacies and ordinary pharmacies with relatively few weekly dispensations.

The plus-contract variants of insurers in 2011 and 2012 are not taken into account in the calculation. A number of pharmacies are eligible for higher fees in 2012, subject to conditions. This compensates for part of the decline in fee revenue. Pharmacies which already agreed to higher fees with health insurers in 2011 will however experience a larger decline in fee revenue if they are unable to conclude a plus-contract again.

New services not always compensated

With the new system of treatment-related pricing, new services not related to medicine dispensations were also introduced. Some of these services belong to the reimbursable care covered by basic health insurance and are contracted by health insurers. They include the performance of medication assessments, instruction on the use of a medicine-related device, and the non-dispensation of a medicine prescribed by the doctor if the pharmacist ascertains that it is not suitable for the patient. Some health insurers have determined a zero fee for these services and claim that the funding of these services is already included in the compensation for the services involving the dispensation of medicines. Other insurers have in fact determined fees for the services in question. Through the performance of these services, there will be a slightly smaller decline in the fee revenue calculated by the SFK.

3.3 Anticipated percentage change in fee revenue in 2012 compared to 2011 for current services



The decline in fee revenue is expected to vary strongly among community pharmacies.

Source: Foundation for Pharmaceutical Statistics

3.3 Personnel and workload

Labour productivity further increased

The processing rate rose in 2011 to 22,185 prescriptions per full-time pharmacy assistant. With respect to all pharmacy employees, the processing rate comes out at 16,400. The processing rate is a measure of labour productivity in the pharmacy.

The processing rate is the average number of prescriptions a full-time pharmacy assistant processes annually. For years, this was regarded as a measure of the workload in the pharmacy. Developments in the pharmacy sector in recent years have made the processing rate an increasingly unreliable indicator of the workload. These developments include the centralisation and outsourcing of activities such as the magistral preparation of medicines, the automatic packaging of medicines by patient name in measured doses for the moment of intake, smart filling and central filling. The calculation method used by the SFK to ascertain the processing rate is in fact a better indicator of labour productivity in the pharmacy, which is increasing each year.

Processing rate increases

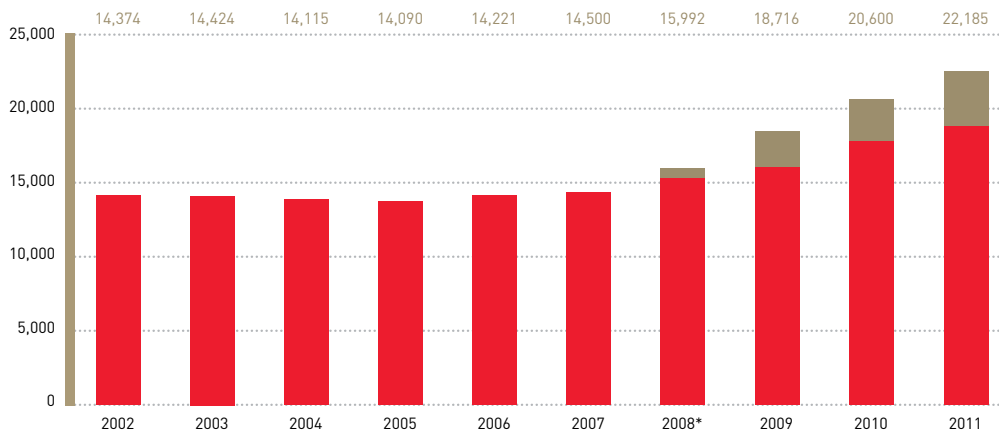
The SFK bases the processing rate on the number of dispensations of prescribed medicines that come under the WMG and medicines that do not come under the WMG, irrespective of whether they are compensated by the health insurer. The dispensation of medical devices such as diabetes testing materials, incontinence materials and bandages, and also the manual sales of (non-) medicines, are not taken into account here. Weekly dose packs registered as separate dispensations since the introduction of the differentiated fee structure in mid 2008 are counted

in full for the calculation of the processing rate. For several years now, the processing rate has shown a steady but clear growth. In 2011, the processing rate came out at an average of 22,185 prescriptions per full-time pharmacy assistant, an increase of 1,585 (7.5%) compared to 2010. This increase can be attributed on the one hand to an increase in the use of medicines and on the other to the increase in the number of weekly dose packs.

Personnel

On 1 January 2012, according to figures of the Pharmacy Assistants' Pension Fund (*Pensioenfonds Medewerkers Apotheken*, PMA), there were 16,458 persons working as pharmacy assistants in a community pharmacy. This is an increase of 255 persons (+1.6%) and follows a decline of 2.1% in the number of pharmacy assistants in 2010. In spite of the increase in the number of assistants, the total number of contract hours remained the same in 2011 as it was in 2010. The length of the average working week therefore declined last year from 24.3 hours to 24.1 hours. The number of employees in community pharmacies who are not officially pharmacy assistants increased from 6,928 to 7,270 persons (+4.9%). Support workers can also be deployed for activities in the pharmacy which determine the processing rate. If the processing rate is expressed

3.4 Development of processing rate in the community pharmacy



*From July 2008, weekly dose packs count on a one-to-one basis in the determination of the processing rate. The difference compared to previous years is illustrated by the bronze areas in the columns.

The steadily increasing processing rate since 2008 gives an indication of labour productivity in the pharmacy.

Source: Foundation for Pharmaceutical Statistics

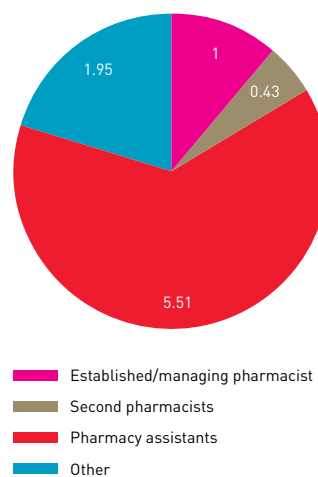
as the number of prescriptions per full-time pharmacy employee, the figure for 2011 comes out at 16,400, which is 1,000 more than in 2010.

The lowering of the fees pharmacists may charge for their services, the extension of the preference policies by health insurers and an increase in administrative charges all place a strong financial and administrative pressure on pharmacies (KNMP study report 'Changes in pharmaceutical care, charting the consequences', 14 March 2012). Whereas the demand for medicines and pharmaceutical care continues to grow, employment opportunities in the sector appear to be stagnating.

On average, the revenues of community pharmacies did not increase in the previous year, which makes staff increases impossible for many pharmacies.

This translates into the experiencing of a greater workload in the pharmacy, so that the pharmaceutical care of patients is increasingly constricted and the level of job satisfaction is in decline.

3.5 Number of employees in an average pharmacy in 2011 (in FTE)



Source: Foundation for Pharmaceutical Statistics

3.4 Pharmacists and the labour market

Labour market stagnating

In spite of a strong inflow of recently qualified pharmacists, the number of pharmacists in the community pharmacy remained the same in 2011. In community pharmacies, the demand for pharmaceutical care nevertheless continues to increase. There seems to be a greater willingness to study pharmaceutics.

Even though the growth in the labour market for community pharmacists has been in stagnation for two years now and the sector finds itself in stormy financial weather, this does not appear to be discouraging potential students from enrolling in the study of pharmacy and pharmaceutical sciences. At the end of 2011, there were 586 persons enrolled as first-year students for the pharmaceutical courses in Utrecht (339), Groningen (138) and Leiden (109). This far exceeded the previous record of 516 registered first-year students in 2008. This big increase was entirely due to the Utrecht faculty where the *numerus fixus* for pharmaceutical studies was abolished in 2011. As a result, the number of first-year students in Utrecht almost doubled last year. The situation could quickly be reversed however if the faculty gets its way, since it has submitted an application to reinstate a *numerus fixus* in 2013.

Fewer students

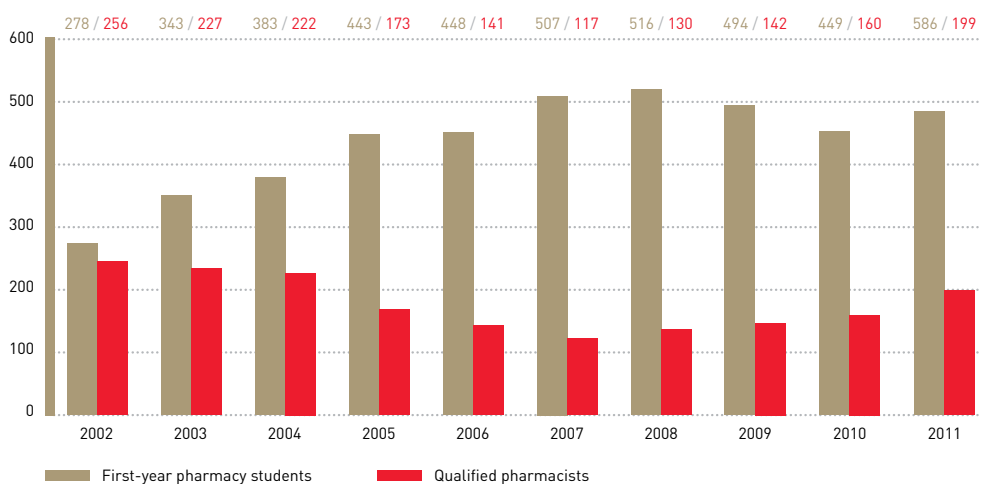
According to the universities, there were 2,582 students enrolled in the three pharmaceutics study programmes in the Netherlands at the start of this year. This is 155 less than the year before, in spite of the big increase in the number of first-year students. The faculty for pharmaceutical sciences

in Utrecht is the largest training centre in the Netherlands, with 1,374 students in 2011. This is 100 fewer than in 2010. In Groningen, the number of students in the pharmaceutics study programme declined by a similar number, from 907 to 805 enrolled students. The Bio-Pharmaceutical Sciences study programme in Leiden was the only one in which there was a relatively large increase in the number of students. In total, 403 people were enrolled in this study programme, 47 more than in the previous year. The Leiden programme does not train students as pharmacists, but as research scientists in the field of medicines. This degree programme is also available to pharmacy students in Groningen and Utrecht.

More female pharmacists

The number of people leaving the pharmaceutics faculties in Utrecht and Groningen with a pharmacist's diploma has been rising since 2008. Last year 199 students passed their pharmacy master's examination, 39 more than in 2010. This increase was due at least in part to a revival of interest in pharmaceutical studies since 2002, following a dip in the period 1999-2001. Many of the recently qualified pharmacists started their studies around the year 2005. Considering the increasing popular-

3.6 Numbers of first-year pharmacy students and qualified pharmacists (period 2002-2011)



The increased number of first-year students since 2002 has led to an increasing number of qualified pharmacists since 2008 and this trend is expected to continue in the years to come. The number of first-year students reached a new peak in 2011.

Source: Foundation for Pharmaceutical Statistics

ity of the subject in the years thereafter, the inflow of new pharmacists in the labour market is expected to increase in the coming years.

One trend which has been visible for some time now is the feminisation of pharmaceutics. For several years, women have made up 60% of the pharmacy and pharmaceutical sciences student population. As many as 69% of the students who graduated as pharmacists in 2011 were women.

Healthcare balance

The increase in the number of qualified pharmacists has not led to an increase in the number of pharmacists in community pharmacies however. Out of the recently qualified pharmacists, some 70%, or 140 persons, chose to work in a community pharmacy. Last year, the total number of working managing and second pharmacists was 2,859, one more than in 2010. Since the number of community pharmacists who left the active profession was only one less than the 140 who entered it, the number of working community pharmacists has virtually stayed the same. It is debatable to what extent the current and future batch of pharmacists will be able to balance the increasing demand for care. In terms of the

number of defined daily doses (DDDs) dispensed by community pharmacies, the demand for care last year was 6.4% higher than in 2010. It goes without saying that the quality of pharmaceutical care will come under pressure if the supply and demand for pharmaceutical care do not remain in balance.

.....
Due to the pressure created by the lower fees for 2012, it is impossible for pharmacies to invest further in their pharmaceutical services.

New services which are separate from the supply of medicines, such as holding interviews with patients who use a lot of medication, or medication reviews of patients entering or leaving a hospital, are for the most part not compensated by health insurers.

3.7 Number of persons working in the community pharmacies

	2007	2008	2009	2010	2011
Pharmacies	1,893	1,948	1,976	1,980	1,997
Pharmacists	2,871	2,912	2,877	2,858	2,859
Pharmacy assistants	16,027	16,312	16,548	16,203	16,458
Other	5,809	6,436	6,657	6,928	7,270

Since 2009, there has been no growth in the labour market for community pharmacists.

Source: Foundation for Pharmaceutical Statistics



Key figures pharmaceutical care in 2011

Key figures of pharmaceutical care covered by statutory health insurance in 2011

	NETHERLANDS	AVERAGE PER PHARMACY	AVERAGE PER PERSON
Sales pharmaceutical care	€ 5,001 million	€ 2,515,000	€ 325
of which were medicine reimbursement system (GVS) contributions	€ 41 million	€ 21,000	€ 3
Medicine costs	€ 3,720 million	€ 1,871,000	€ 242
WMG medicines	€ 3,617 million	€ 1,819,000	€ 235
Non WMG medicines	€ 103 million	€ 52,000	€ 7
Pharmacy compensation	€ 1,281 million	€ 644,000	€ 83
Dispensing fee	€ 1,240 million	€ 623,000	€ 80
Margin non WMG*	€ 41 million	€ 21,000	€ 3
Prescriptions	209 million	105,000	13,6
WMG medicines	200 million	100,600	13,0
Non WMG medicines	9 million	4,400	0,6
Patients	15,4 million	7,700	-

* Margin non WMG based on recommended sale price stated in the G-Standard. In practice, pharmacists and health insurers agree to lower prices, so that the margin actually realised is lower than indicated above.

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Colophon



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