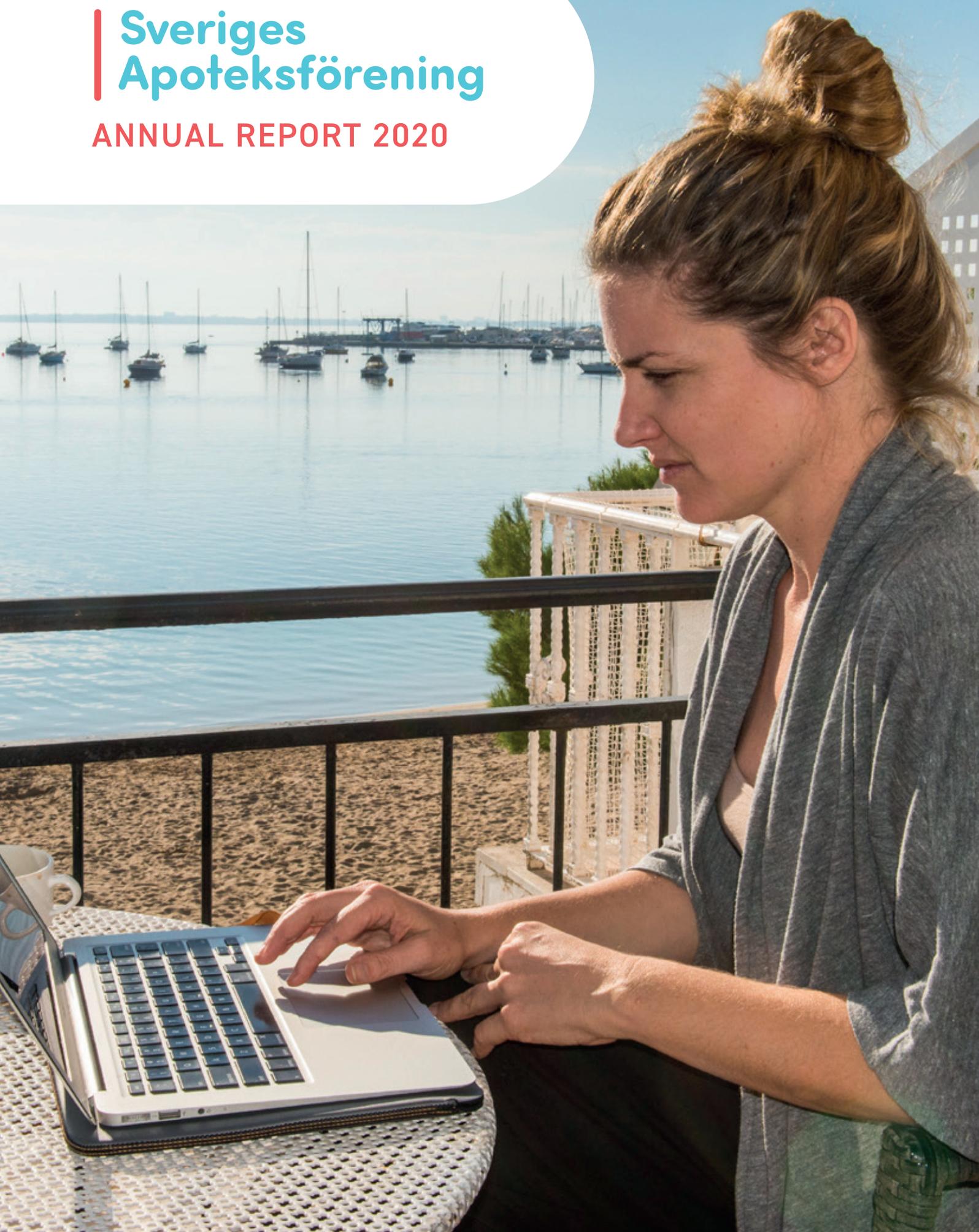
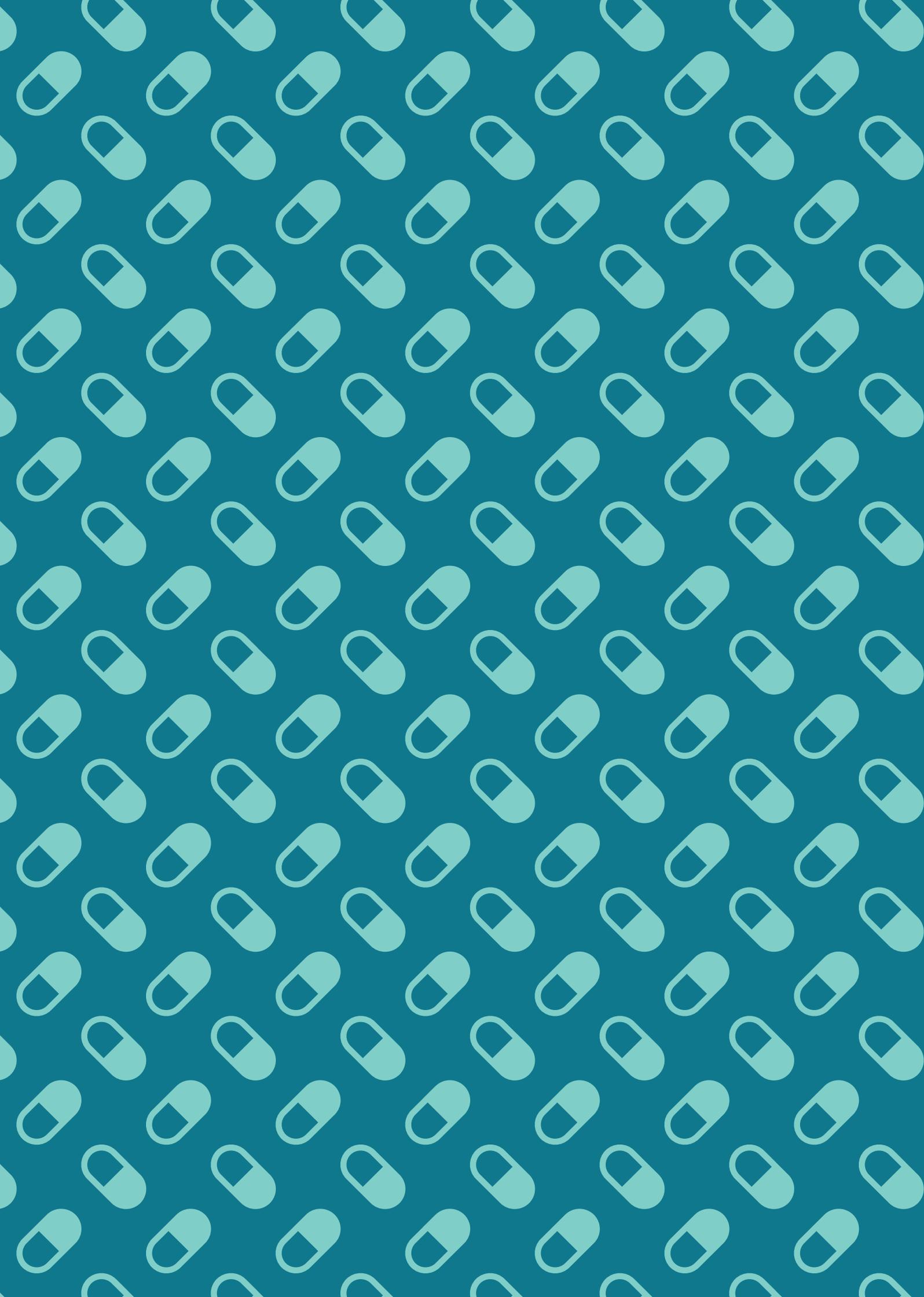


Sveriges Apoteksförening

ANNUAL REPORT 2020





PREFACE

In 2019 the Swedish pharmacy sector continued to show positive performance and customers say they are very satisfied with their pharmacies.

The year saw growing and closer cooperation between pharmacies and other parts of the healthcare sector. This development is being primarily driven by the desire to make things easier for patients and to assist customers where they are located. Online pharmacy sales are booming, and in 2019 the pharmacy industry was by far the fastest-growing sector of Swedish online retail. The number of community pharmacies is continuing to grow slightly, although the rate of growth has slowed significantly.

The single most important issue for the pharmacy sector in 2019 was the dramatic increase in the number of medicines no longer provided by suppliers. Pharmacies have an important role in solving problems for customers at the counter, online or by phone. Across the sector we are endeavouring to ensure pharmacists have more capabilities to dispense other available medicines to make things easier for patients.

This sector report is divided into two parts. The first describes the development of the Swedish pharmacy market over the course of the year. The second part describes the social assignment for pharmacies and how the sector endeavours to meet the expectations of both society and its customers.



Johan Wallér
CEO, Swedish Pharmacy Association

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THE SWEDISH PHARMACY SECTOR IN BRIEF

Customers remain very satisfied

- 98 percent of pharmacies' customers were satisfied with their most recent visit.
- 81 percent of them gave the two highest scores of "exceptionally good" or "very good".

98 % of customers were satisfied with their most recent pharmacy visit in 2019.

New pharmacies are still opening, but the rate of growth has slowed significantly.

- At the end of December 2019 there were 1,426 community pharmacies in Sweden, five more than in 2018. Since deregulation in 2009 this represents an increase of almost 500 pharmacies or 53 percent, but the rate of growth has slowed over the past two years.
- All counties have many more pharmacies now than they had in 2009, as have nine out of ten municipality groups. The number is unchanged since 2009 in the sparsely populated municipalities group.
- Distribution across groups of municipalities is good, with just under 40 percent of community pharmacies located in large towns and municipalities close to large towns, 33 percent in metropolitan areas and 28 percent in small towns/cities and rural areas.
- On average pharmacies are open 56 hours a week.

On average pharmacies are open 56 hours a week.



Sharp online sales growth

Online pharmacies accounted for 12 percent of sales and 18 percent of total volume on the community pharmacy market in 2020. Year-on-year growth in the value of online sales was some 36 percent.



Number of prescriptions dispensed

- 86 million prescriptions were dispensed during the year, corresponding to 235,000 prescriptions/day. In addition, 230,000 customers were provided with dose dispensed medicines.



86 million prescriptions were dispensed in 2019.

Continued high immediate dispensing

- 93 percent of all requested prescribed medicines are dispensed immediately when customers visit a pharmacy. The remaining medicines are usually ordered and dispensed to customers the following day.



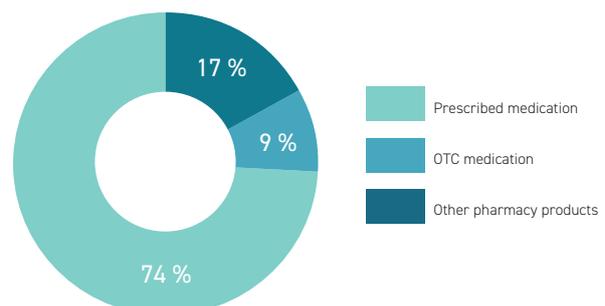
visits were made in total in 2019.

Customer visits

- Every day around 330,000 people visit a pharmacy, which equates to 120 million visits/year.
- Just under 40 percent of visits are made by customers collecting prescribed medicines.

Market sales are increasing

- Sales on the community pharmacy market were SEK 47 billion in 2019. This means that the market grew by 4 percent compared with 2018.
- The number of packs sold increased by 3.4 percent compared with the previous year.



THE SWEDISH PHARMACY MARKET IN 2020

The Swedish pharmacy market comprises large chains, purely online operators and privately run pharmacies. In total there are 1,426 community pharmacies, 10 online pharmacies and 36 hospital pharmacies providing inpatient care with medicines. The pharmacy sector continued to grow in 2019, with significant growth taking place in online sales. However, in the long term it is unsustainable that the reimbursement to pharmacies' for their main task to handling prescription only medicines do not cover the costs.



1. THE SWEDISH MARKET

1.1 High level of customer satisfaction

98 % satisfied with their most recent pharmacy visit

80 % very satisfied with their most recent pharmacy visit

330,000 customer visits

250,000 prescriptions



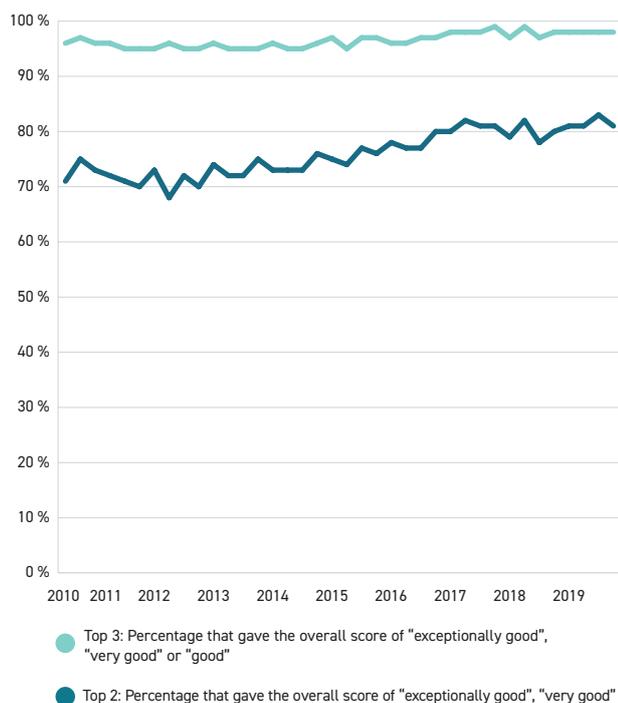
Pharmacies generally have very satisfied customers and have had for many years. In total, 98 percent of customers are satisfied with their most recent pharmacy visit and just over 81 percent said it was “very good” or “exceptionally good”.

The main reasons that customers are so satisfied with their pharmacies are the pharmacies’ geographical location and the fact that the pharmacy has what they want. The most satisfied customers are those that actively choose a particular pharmacy,

i.e. those that have clear alternatives to choose from. But short waiting times and pleasant customer service by staff are also key factors.

In recent years, pharmacies have endeavoured to develop their store concepts, which could be one reason for customers being increasingly satisfied. When analysing what drives customer satisfaction most among aspects such as location, queuing time and staff, we note that all areas are significant for customer satisfaction. In relative terms, however, it is possible to conclude that accessibility in the form of location being “sufficiently good” is regarded as a core factor. Today customers expect there to be a pharmacy within a reasonable distance of wherever they are.

Overall customer satisfaction with most recent pharmacy visit 2010–2019



Source: Kantar Sifo, Kundnöjdhet på apoteksmarknaden.

1.2 Why customers visit pharmacies

Each day approximately 330,000 people visit one of Sweden’s 1,426 pharmacies. Pharmacies had a total of 120 million customer visits in 2019. A large share, just under 40 percent, of those that visit a pharmacy do so to collect their prescription medication. Sweden’s pharmacies dispensed approximately 86 million prescriptions in 2019, as well as dose dispensed medicines to 230,000 customers.

The remaining approximately 60 percent of those visiting pharmacies are customers purchasing OTC medicines and other retail goods. When customers visit a pharmacy it is usually for several reasons at the same time; those collecting a prescribed medicine often take the opportunity to purchase OTC medicines or other pharmacy products.



1.3 The various pharmacy companies

The Swedish pharmacy market consists of five national retail chains; Apoteket AB, Apotek Hjärtat, Kronans Apotek, Apoteksgruppen and Lloyds Apotek. There are also three purely online pharmacies; Apotea, Meds and Apohem, and around 40 privately run pharmacies. Privately run pharmacies operate under the organisation SOAF, which in turn is a member of the Swedish Pharmacy Association. Apoteksgruppen is run as both a pharmacy chain with wholly owned pharmacies and using a franchise model with around 30 pharmacies with private ownership under the same brand.

1.4 Pharmacies on the community pharmacy market

Community pharmacies are shops that consumers can visit. At year-end 2019, there were 1,426 community pharmacies. In addition, there are also pharmacies that only sell medicines and provide advice about medicines online. There are three purely online operators and the pharmacy chains also offer online sales to varying extents.

In addition to community pharmacies, there are around 620 pharmacy agent outlets that operate as collection points for pharmacies and pharmaceutical products. Agent outlets are located in small communities that do not have an ordinary pharmacy. The number of agents has decreased as a result of the closure of petrol stations and small shops and due to the increase in online pharmacy sales.

Dose dispensing pharmacies are a special form of pharmacy with a community pharmacy permit, which pack medicines in bags according to the various medicines that a particular patient needs to take at a particular time. This is called automated dose

dispensing and is a service procured by regional authorities. The aim is to make it easier for older people who are taking numerous medicines simultaneously. Around 230,000 people have dose dispensed medicines. In 2019 there were three dose dispensing pharmacies run by three different operators. The number has gradually decreased in recent years, and these operations have been consolidated so that there is now one dose dispensing pharmacy per operator active on the market. Some dose dispensing of medicines is also carried out for inpatient care.

1.5 Pharmacies on the inpatient care market

There are 36 hospital pharmacies supplying inpatient care and certain other institutions with medicines. Production pharmacies (extemporaneous pharmacies) produce individually adapted medicines for both outpatients and inpatients. This is for items such as cytostatic and antibiotic drugs, and parenteral nutrition. Production also takes place for clinical trials. There are 10 production pharmacies in total. The following table lists all forms of pharmacy active at year-end 2019.

Different types of pharmacy on the Swedish market

Pharmacies by category	2018	2019
Community pharmacies (bricks-and-mortar shops that consumers can visit)	1421	1426
Hospital pharmacies (inpatient care)	40	36
Production pharmacies	17	10
Split-pack-dispensing pharmacies	3	3
Online pharmacies ¹	9	10
Other ²	3	3
Total	1493	1488

1) Units with a pharmacy permit and a full range of prescription items that only operate online, and that do not have stores that consumers can visit.

2) Other relates to haemophilia-related activities.

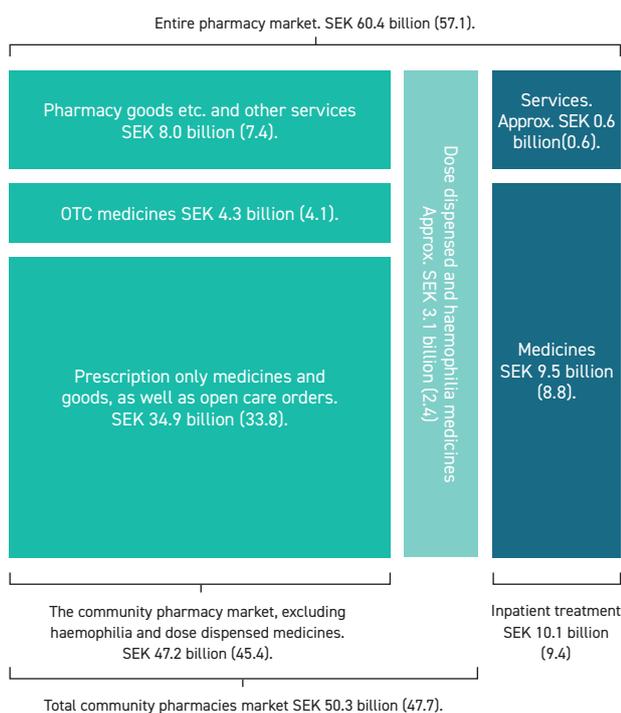
Source: SA Service AB and the EXPO dispensaries register.

2. ECONOMIC PERFORMANCE OF THE PHARMACY MARKET

2.1 The Swedish pharmacy market

The entire pharmacy market, including inpatient treatment, had annual sales of just over SEK 60 billion in 2019, which is an increase of SEK 3.3 billion or 5.8 percent on 2018. Sales on the overall community pharmacy market amounted to just over SEK 50 billion in 2019, which represents an increase of SEK 2.6 billion or 5.5 percent on the previous year. Sales also include haemophilia and dose dispensed medicines. The inpatient market, which mainly consists of supplying medicines for hospital patients, had sales of just over SEK 10 billion in 2019.

Chart showing the pharmacy market based on 2019 net sales



Notes: All sales refer to prices for consumers or end customers (pharmacy retail price), excluding VAT. A small part of dose dispensed medicines consist of full packs provided via dose dispensing pharmacies. The chart shows different parts of the actual 2019 pharmacy market (2018 in brackets), the amounts have been rounded off. OTC in other retail settings and vaccines are not included in the amounts shown. Source: SA Service AB and the Swedish eHealth Agency, as well as own calculations.

2.1.1 Community pharmacy market and performance by various segments.

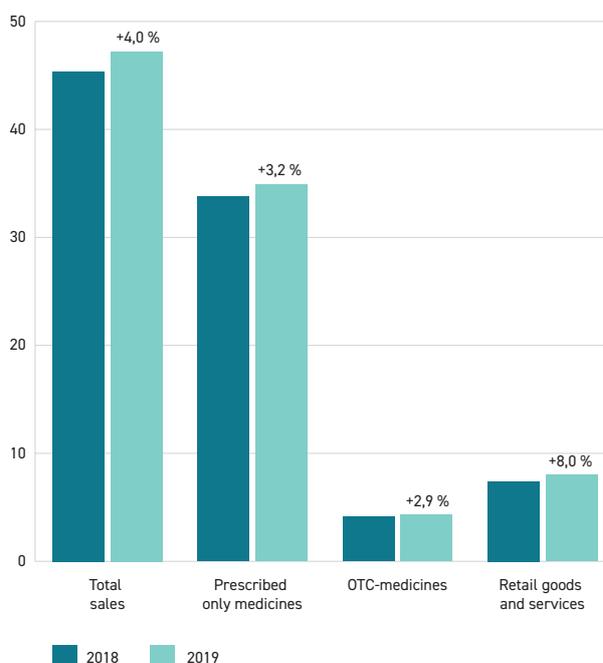
Net community pharmacy sales in 2019 amounted to just over SEK 47 billion, which is an increase of 4 percent compared with 2018. These figures include pharmacies' sales of medicines on the community

pharmacy market and sale of retail goods and services, while haemophilia and dose dispensed medicines are not included. The dominant segment is prescription only medicines, which accounts for approximately SEK 35 billion or 74 percent, while OTC medicines account for just over SEK 4.3 billion or 9 percent and other pharmacy goods account for SEK 8 billion or 17 percent.

Community pharmacies also face competition from other sales outlets such as supermarkets and petrol stations for sales of certain OTC medicines, but these sales are not included in the pharmacy market.

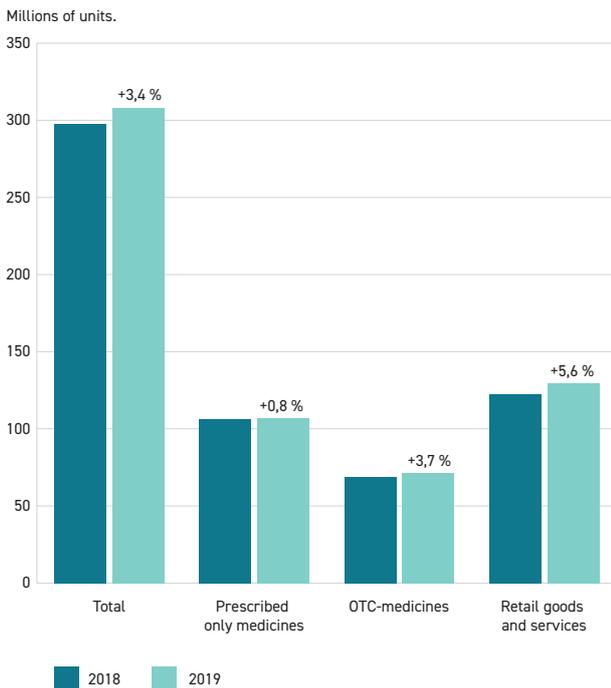
By volume, i.e. the number of units sold (usually packs), the community pharmacy market grew by a total of 3.4 percent in 2019. The increase in sales in 2019 was due to both higher volumes (more packs sold) and higher average prices of primarily prescription only medicines. Pharmacies' online sales are growing significantly, accounting for just over 12 percent of community pharmacy sales in January 2020, and measured in terms of volume (number of units) the percentage of online sales amounted to over 18 percent in the same month.

Net sales on the community pharmacy market 2018–2019.



SEK billion, current prices. Source: SA Service AB

Number of packs sold on the community pharmacy market 2018–2019.



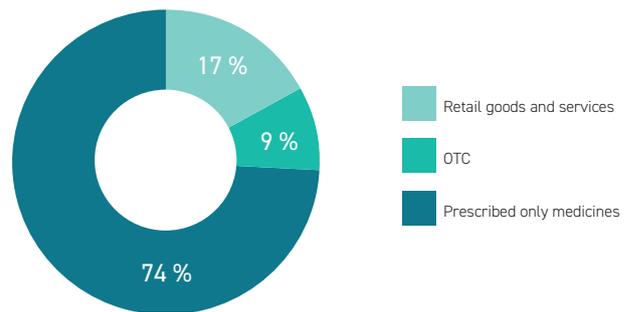
Källa: SA Service AB

2.1.2 Prescription only medicines

Prescribed medicines account for the lion's share of community pharmacies' total sales, at 74 percent. These medicines account for 35 percent of the total number of units sold. The medicines that are prescribed and the quantity is determined entirely by healthcare prescribers, and this is therefore not something pharmacies can or should influence. In addition, both pharmacies' purchase prices and selling prices are set by the Dental and Pharmaceutical Benefits Agency ('TLV') for those medicines subsidised by the public. Pharmacy operations concerning prescribed medicines therefore differ considerably from other sectors, in which unregulated pricing, own production ability and independent selection of goods and services are key elements.

Sales of prescribed medicines, including open care orders totalled just under SEK 35 billion in 2019, which is an increase of 3.2 percent on 2018. However, volumes only rose by 0.8 percent compared with the previous year.

Sales (SEK) by segment, 2019



Source: SA Service AB

2.1.3 OTC MEDICINES

OTC are an element of sales that pharmacies can partially influence. These medicines account for 9 percent of sales and 23 percent of the number of sold units. Pricing is unregulated for OTC medicines, but there is stiff competition both between pharmacy chains and from strong online sales growth. There is competition from supermarkets too, which are also able to sell most OTC medicines.

Sales of OTC medicines at pharmacies in 2019 amounted to SEK 4.3 billion, which is an increase of 2.9 percent on 2018. The volume of OTC grew by 3.7 percent in 2019, which represents a continued decline in average prices for this segment.

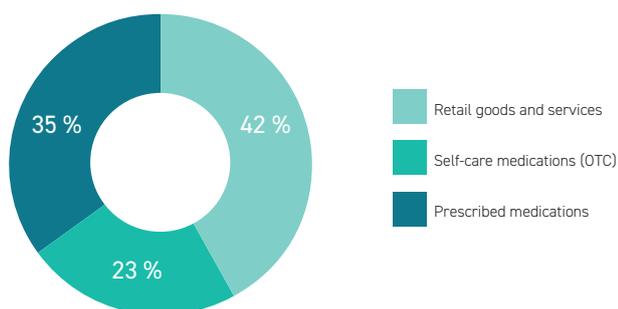
The share of OTC medicines sold outside pharmacies accounted for 18 percent of total sales of OTC in 2019. In order to respond to the competition from supermarkets and other retailers, pharmacies have expanded their range of OTC products, such as various brands of paracetamol and ibuprofen. This has boosted the offering of cheaper alternatives for consumers and contributed to further pricing pressure.

2.1.4 Other pharmacy goods and services

Those goods in pharmacies that are not medicines are referred to as other pharmacy goods. This segment also includes other services offered by pharmacies. Many of these services are currently provided free of charge for customers, so the impact on sales in this regard is negligible.

Sales of other pharmacy goods and other services totalled SEK 8 billion in 2019, which is an increase of 8 percent on 2018. In relation to total community pharmacy sales, other pharmacy goods and services accounted for 17 percent of sales in 2019. These other pharmacy goods account for 42 percent of the total number of units sold. The segment showed 5.6 percent growth in volume in 2019.

Volume (units) by segment, 2019



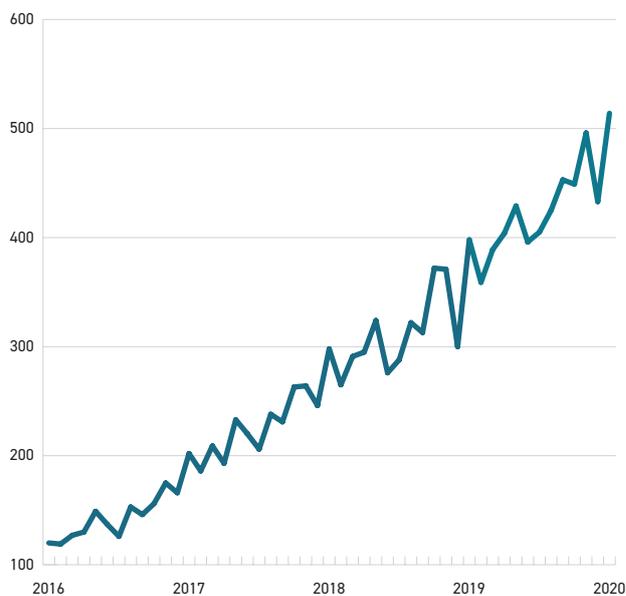
Source: SA Service AB.

There is a clear trend of pharmacies trying to offset the low pharmacy margin for prescription only medicines and the stiff competition on the OTC market with a good range of products and sales of other pharmacy goods. Pharmacy goods sold in pharmacies offer a particular mark of quality with an emphasis on health and wellbeing. In both 2017 and 2018 other pharmacy goods accounted for a higher percentage of sales growth than OTC and prescribed medicines. The difference with other segments strengthened further in 2019.

2.1.5 Online sales continue to grow significantly

Since 2016 pharmacies' online sales have grown from around SEK 120 million a month to approximately SEK 500 million a month in January 2020. This is an increase of 315 percent (see chart below). Annual growth of online sales in the pharmacy sector amounted to some 36 percent in 2019, meaning that the pharmacy sector has by far the strongest online sales growth in Sweden.

Total online pharmacy sales, excl. VAT, SEK million



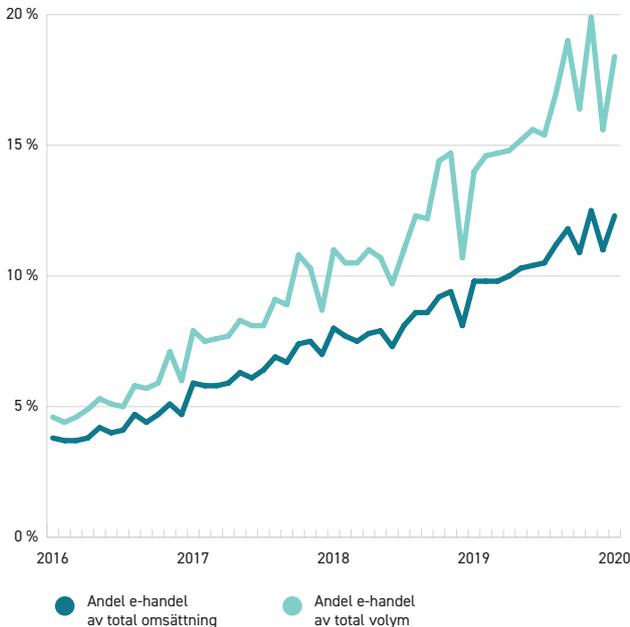
Source: SA Service AB.

The largest segment in terms of online sales is prescribed medicines, which account for almost half of the total value. Other pharmacy goods account for almost 45 percent, while OTC make up less than 10 percent. Measured instead by volume, i.e. the number of packs sold, sales of other pharmacy goods account for the predominant share, at just over 65 percent. The percentage of pharmacy goods is therefore significantly higher in the online channel than in community pharmacies. Online operations can offer a large and inexpensive range of pharmacy goods that are often related to health and hygiene. Pharmacies' combined online sales accounted for 12 percent of community pharmacy sales in January 2020, and measured by volume (number of units), online sales amounted to 18 percent in the same month. In January 2019 these figures were 10 percent and 14 percent. So it is not only sales and volumes in absolute terms that have increased over the past year, but online sales are also rising in relation to the growing overall market.

According to TLV's review of the pharmacy market's development in 2019, there is very good geographic spread of online sales. Some 98 percent of the country's postcode areas received delivery of prescription medicines during the period March to May 2019. Rural areas and small towns continue to show a higher percentage of online purchases than large towns. Commuter areas also have a larger

percentage of online purchases than other municipalities. Online sales therefore geographically supplement sales by community pharmacies.

Online share of total sales and volume



Source: SA Service AB

2.1.6 Pharmacies' financial earnings

The financial earnings of the community pharmacy market as a whole are reported as operating margin in the table below, i.e. pharmacies' combined operating income (EBIT) in relation to pharmacies' combined net sales. The operating margin of pharmacies is estimated at 2.2 percent for 2019, which represents a decline from the previous year's margin of 2.7 percent. Pharmacies' earnings capabilities are largely dependent on the size of the pharmacy margin on prescribed only medicines, which is determined by the government, and the development of parallel imports.

Pharmacies' right to negotiate on parallel-imported medicines results in a strengthening of the margin as they can purchase these products at a lower price than the purchase price set by the regulatory authority TLV, without needing to reduce the set selling price. The extent of parallel imports and, consequently, additional sales has decreased as a result of the weaker Swedish krona, which has adversely affected operating margin. The pricing of medicines that are not subsidised by the public, OTC medicines and other pharmacy goods is not subject to regulation, but margins in these segments are under

pressure from stiff competition on pricing, particularly from online pharmacies.

Pharmacies' combined operating profit for the past 5 years

Year	2015	2016	2017	2018	2019 P
Operating margin (EBIT), percent	2,4	3,3	2,9	2,7	2,2

N.B. 2019 is an estimate. Excluding the split-pack market.

Source: Pharmacies' official annual accounts, information direct from pharmacies and SA Service AB.



2.2 The inpatient care market

Sales of medicines on the inpatient market amounted to just over SEK 10 billion in 2019. Revenues mainly consist of sales of medicines to hospitals for use in inpatient care. Sales of medicines to some government institutions are also included in the inpatient market. In addition to this is the value of the procured services that some operators provide to regions. The value of these services is estimated at around SEK 0.6 billion in 2019. There are currently four operators supplying medications to hospitals on a tendered basis in the form of production or supply services: Apoteket AB, ApoEx, Oriola and APL.

In recent years we have seen mainly small regions opting to operate hospital pharmacies under their own management. In some cases this has been due to these regions having structured procurement, so that no companies made a bid. Some small regions are also taking strategic decisions to run hospital pharmacies under their own management. Large regions usually procure these services from pharmacies, which are able to provide cost-effective solutions for health care as a result of economies of scale and a high level of quality.

3. PHARMACIES' ECONOMIC CONDITIONS

3.1 Government oversees pharmacy market

Government does not reimburse pharmacies in full for handling prescription only medicines

Pharmacies have to compensate for this via other sales.



3.1.1 Need for appropriate and effective rules

The pharmacy market is partly heavily controlled by laws and regulations. The Swedish Medical Products Agency (Läkemedelsverket) determines whether or not a medicine will require a prescription, and whether over-the-counter (OTC) medicines should be sold exclusively at pharmacies or if they can be sold at other retail outlets as well. The Dental and Pharmaceutical Benefits Agency (Tandvårds- och läkemedelsförmånsverket, TLV) determines whether or not a prescription only medicine should be subsidised by the public.

The same authority decides what level of reimbursement pharmacies receive from the public to perform their social assignment for selling and providing advice on pharmaceuticals, and implementing generic substitutions.

Many of the laws and rules that regulate the pharmacy market are essential, because pharmaceuticals are specific items that need to be treated differently and pharmacies are not normal high-street shops. But all regulations affect pharmacies' ability to operate and control their costs. This is an insight that regulatory authorities should observe in the process of creating regulations, to ensure that existing and new rules are appropriate and effective.

3.1.2 Prescription only sales running at a loss

If public reimbursement is designed so that pharmacies have the funding to develop their pharmaceutical advisory services, then these services will improve. If reimbursement for handling prescriptions only medicines continues to be eroded, then pharmacies will try to sell more of OTC or other pharmacy goods in order to achieve a satisfactory level of profitability. However, this is a challenge as competi-

tion is tough and the growing level of online sales is putting pressure on prices for both OTC medicines and other items. Average prices for OTC have fallen over the past few years.

For approximately 70 percent of pharmacies' sales (subsidised pharmaceuticals), the government determines via TLV both pharmacies' purchase prices and selling prices for pharmaceuticals. The difference between these is the pharmacy margin for prescription only medicines, which is also established by the government. The pharmacy margin consists of a fixed amount and a percentage supplement based on the purchase price, and according to TLV it should reimburse pharmacies for dispensing prescription only medicines and associated customer advice, and managing generic substitutions of pharmaceuticals, but it should also compensate for other costs such as maintaining stock.

According to TLV's established principles, the pharmacy margin should also provide operators with a reasonable level of profitability for prescription only sales and create sufficient scope for a profitable overall business, with the aim of ensuring good availability.

But prescription only sales are neither profitable nor balanced; on the contrary, the total business is running at a loss. The Swedish Pharmacy Association has carried out calculations of the attributable costs and profit resulting from the handling of subsidised prescribed medicines. These calculations reveal that pharmacies made a loss on sales of prescription only medicines of just under SEK 600 million for 2016 and SEK 680 million for 2017. This means that the pharmacy margin covered 89 percent of costs in 2016 and 88 percent in 2017, including additional sales from parallel imports. Each prescription only medicine dispensed by pharmacies is therefore resulting in a loss for the business.

The pharmacy margin has remained unchanged since deregulation in 2009. This means that the fixed elements of the reimbursement have been eroded by inflation by 11 percent. It is true that the pharmacy margin overall has risen when calculated in Swedish krona. But this is because the number of prescription packages dispensed has increased and the price of prescription only medicines has risen, which in turn has

pushed up pharmacies' warehousing costs, for example.

If the pharmacy margin continues to be eroded, it will make it extremely difficult in the long term for pharmacy operators to maintain current service levels when it comes to community pharmacies. In the long run this could have a negative impact on availability to medicines.

If the government and TLV want to take responsibility for the provision of effective pharmaceutical advice and medicines, then long-term sustainable financing of this sector needs to be in place.

3.1.3 Parallel-imported pharmaceuticals – lower additional sales



Parallel-imported pharmaceuticals are approved medications that are imported from an EU/EEA country and marketed in Sweden following approval by the Swedish Medical Products Agency.

The system of pharmaceutical trading is based on the free movement of goods within the European Economic Area (EEA). Parallel-imported pharmaceuticals can be either original or generic. However, the medicine must be approved both in Sweden and in the export country at the date of application.

When the market was deregulated, the government emphasised the important role of parallel imports in keeping prices down, particularly the indirect savings effect via price-levelling mechanisms within the EEA. In terms of original pharmaceuticals without a generic competitor, the government highlighted that increased and more effective parallel imports could be quickly achieved “...by offering pharmacy operators good incentives for trading with parallel imports.”

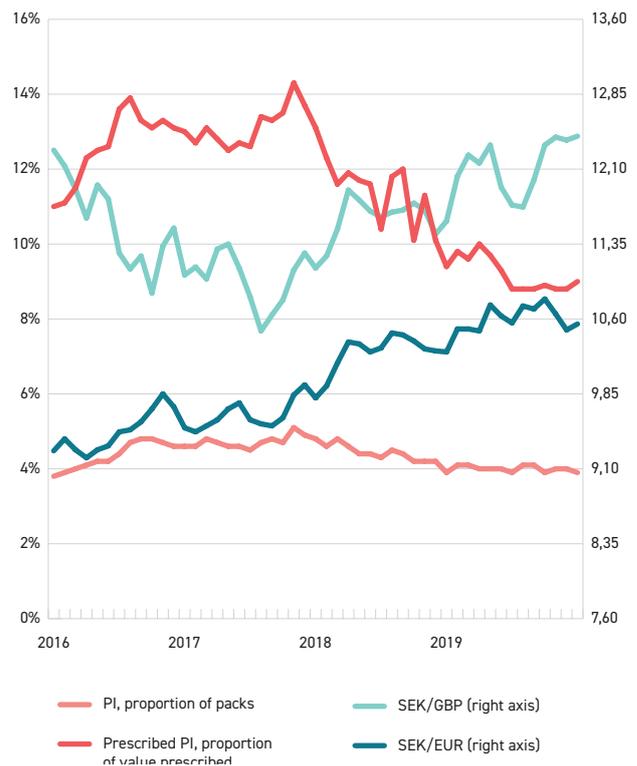
Parallel trading involves a degree of pricing pressure for medicines where the patent has not expired, which saves money for society.

However, it is important to stress the highly varied nature of parallel trading. An expired patent immediately removes conditions for Swedish pharmacies to parallel trade in that pharmaceutical product. A weakening of the Swedish krona can rapidly and significantly reduce the added value for pharmacies that can be gained from parallel imports. Similarly,

TLV's reviews and its decision to cut the price of older medicines may lead to conditions for parallel imports either being reduced or completely disappearing for these medicines.

Both GBP and EUR have rallied against the Swedish krona in recent years, and parallel imports declined to a nine-percent value share in the latter half of 2019. The value decreased to SEK 3.2 billion in 2019 from around SEK 4 billion per year over the most recent two years. Additional sales from parallel-imported pharmaceuticals via lower purchase prices than those established by TLV have been highly significant for pharmacies' income. Without these earnings, pharmacies would not have been able to increase availability as they have done. When parallel imports decline, it highlights the need to further strengthen the pharmacy retail margin.

Parallel imports, proportion of prescribed medicines (left axis and SEK exchange rate trend against EUR and GBP (right axis).



Source: SA Service AB and the Riksbank

3.1.4 The generic system – time for change

The generic substitution of pharmaceuticals saves substantial sums of money for the society every year. But the current system is not fit for purpose. It needs to be reviewed in order to reduce the negative effects that it entails. The constant monthly substitutions of

items to be sold for the period lead to risks in terms of patients taking the wrong medicine, or completely abandoning treatment. It also incurs significant costs for pharmacies in having to keep current medicines in stock, and leads to increased scrappage. Pharmacists are now obliged to spend a considerable amount of time explaining the system and why a customer is getting a new but equivalent product. The Swedish Pharmacy Association estimates that pharmacies' additional expenses related to substitution in the form of increased warehousing and handling costs amount to roughly SEK 300 million every year.



Two companies dominate the market for distributing pharmaceuticals to pharmacies



The Swedish Pharmacy Association believes that the substitution periods should be extended and that pharmacies should be allowed greater flexibility to dispense substitutable medicines that are already in stock. Research indicates that 'price collusion' is occurring on the Swedish market for generics. A study noted that price collusion generates additional costs for society in the region of between SEK 50 million and SEK 200 million a year, and that extended substitution periods would reduce or in principle eliminate these additional costs. The association has therefore initiated empirical research to gain further evidence relating to how the current system of generic substitution can be improved to make it more efficient for all parties involved, and to boost patient safety.¹

3.1.5 Distribution and right of return for pharmaceuticals

Pharmaceuticals are distributed by two companies: Oriola and Tamro. In practice, pharmacies have very little opportunity to choose or influence the terms on which these two distributors operate. Despite the fact that several pharmacy chains have their own distribution solutions for OTC medicines, parallel-imported pharmaceuticals and goods, it has proved impossible to get pharmaceutical companies to deliver their goods using pharmacies' own distribution solutions.

A new law came into force in 2018, which means that pharmacies now have the right to return pharmaceuticals that have not been collected by customers. The purpose of the law was to increase access to medicines by pharmacies keeping more products in stock. But as it stands, the law has failed to achieve its goal. For example, refrigerated items are excluded from the right of return, which means that the pharmacy has to bear the entire cost if the medication is not sold, or if a customer orders it and then fails to collect it. This results in pharmacies avoiding keeping these often expensive medicines in stock.

¹ <http://www.sverigesapoteksforening.se/wp-content/uploads/2019/05/Risker-och-kostnader-for-prissamordning-ar-pa-den-svenska-generikamarknaden.pdf>

4. PHARMACY PERSONNEL

4.1 Pharmacies' most important resource

11,800 people are employed by the sector.

Providing individually tailored advice on medicines and helping with pain relief and recovery are at the core of pharmacies' business. Offering advice on pharmaceutical products at a pharmacy requires the right training for the job, and the pharmacy sector employs highly skilled individuals and experts. This is why employees represent pharmacies' most important resource.

Swedish pharmacies lead the way in Europe when it comes to employees' level of education. A total of 53 percent of employees at pharmacies are graduate pharmacists, while 23 percent are pharmacy technicians who received their training at vocational colleges.

4.1.1 Pharmacists

'Pharmacist' is the collective name for licensed pharmacists who have completed a Master's degree (apotekare) or a Bachelor's degree (receptarie). The law states that there must always be at least one pharmacist at Swedish pharmacies.

Pharmacists are responsible for handling prescribed medicines at pharmacies and providing qualified advice on medicines. They perform an important checking function, ensuring that the prescribed medicine is correct. The pharmacist must contact the person who issued the prescription to point out any discrepancies. The pharmacist is also entitled to dispute a generic substitution if this is justified. At many pharmacies, pharmacists also provide certain pharmaceutical services. Pharmacies must also have a pharmacist who is responsible for quality and safety in relation to handling pharmaceuticals.

To become an MSc-qualified pharmacist you need to complete a five-year course at university, offered at Uppsala, Gothenburg and Umeå (which also offers remote training). To become a BSc-qualified pharmacist you need to complete a three-year higher education course, which is offered on site and remotely in Kalmar and Umeå, and on site in Uppsala and Gothenburg.



4.1.2 Pharmacy technicians

Pharmacy technicians are primarily responsible for pharmacies' self-care advice and OTC medicine. Some technicians who are qualified to work with prescribed medicines also partly support the pharmacists in handling prescriptions.

Technicians also work with other products and tasks at pharmacies. Both pharmacy technicians and pharmacists are able to determine when a customer should be referred to healthcare services, and when self-care is adequate.

To work as a pharmacy technician you need to have completed a one and a half year course at vocational college.

4.1.3 Other pharmacy personnel

Other personnel at pharmacies may include self-care advisors, or staff who have training in self-care and provide advice, and pharmacy assistants who work on the till and manage stock, etc. Pharmacies are also increasingly employing other specialists, such as skincare therapists and sometimes nurses.

4.2 Number of employees in the sector

In 2019, a total of approximately 11,800 individuals were working in pharmacy businesses in Sweden, around 10,300 of whom worked specifically at community pharmacies. Prior to deregulation, the number of employees at the then 930 community pharmacies corresponded to just over 6,200 full-time positions (full-time equivalents). In 2019, the equivalent figure was around 8,100 full-time positions at the 1,426 pharmacies.

4.2.1 Number of employees per pharmacy

The pharmacy sector has experienced considerable growth since deregulation in 2009, and the number of employees in the sector has increased. However, the number of employees per pharmacy has seen a slight decline, which is due to growth in the number of pharmacies and more efficient staffing levels and scheduling.

One natural effect of there being more pharmacies is that the number of dispensed prescriptions per pharmacy is lower. This affects staffing needs at pharmacies.

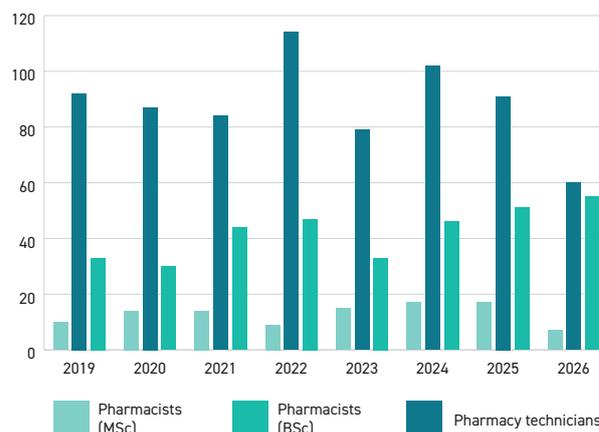
It is possible to quantify the dilution effect by examining the number of prescription items over the years. The number of prescription items (excluding dosage) has risen from 72.6 million in 2009 to approximately 86 million in 2019. This means that the total number of prescriptions dispensed per full-time equivalent (FTE) has declined by roughly nine percent since 2009 – from 11,710 prescription items per FTE and year in 2009, to 10,600 prescription items per FTE and year in 2019.

4.3 Skills supply challenges

There is essentially no unemployment in the sector, and the salary trend in recent years has been good. The number of pharmacists has grown by an average of one percent per year since 2005. The number of workplaces has risen significantly more, from 932 establishments in 2009 to 1,466 in 2017, according to the annual workforce barometer published by the Swedish Public Employment Service (Arbetsförmedlingen). In the survey, employers report that the shortage of pharmacists is higher than ever, both with regards to recently graduated and experienced pharmacists. Furthermore, a significant number of employees are expected to retire over the next ten years, including many pharmacists (BSc). In 2019,

around 640 pharmacists aged 65 or over were working in the sector full-time or part-time, just under 480 of whom were over the age of 67. In addition, the sector is continuing to grow as the use of medicines increases and the population ages.

Estimated number of people retiring for various levels of education



Source: SA Service AB

Number of pharmacists aged 65 or over who work full- or part-time

Age	Ar 2019
65–66 years	162
67 years or over	477
Total	639

Source: SA Service AB

The shortage of pharmacists is particularly significant outside the major cities. There are already many examples of pharmacies that have been unable to open or forced to close due to the difficulty in recruiting pharmacists in smaller towns across Sweden. Pharmacists are also in greater demand in other parts of the healthcare arena. In recent years, the situation has worsened as the BSc.- programmes in both Karlstad and Malmö have been discontinued.

The industry works together to increase the number of educational courses, increase the amount of people applying for pharmaceutical training and speed up the process for newly arrived pharmacists to obtain Swedish credentials. Another challenge for the industry is to attract more men to educate themselves to become pharmacists and to work in pharmacies. A great majority of employees are women.



THE PHARMACIES' ASSIGNMENT

Pharmacies support the safe and correct use of medicines and are therefore a key element within the healthcare system. The state describes this in three main tasks aimed at ensuring that pharmacies provide access to medicines, provide advice and information on medicines, and inform and implement generic substitutions. The skills available today at the pharmacies are not being fully utilised. There are several situations where pharmacists can further facilitate and improve the use of medicines. In addition, our customers have high expectations of the pharmacies, which helps the pharmacies see that they have a greater societal mandate so that they can offer a greater range of goods and services.

5. OUR SOCIETAL MANDATE

5.1 The pharmacies' main tasks

5.1.1 Main task 1 – access to the supply of medicines and goods

The pharmacy's societal mandate is to provide the safe and correct use of medicines, this is formulated through three main tasks:

- Ensure that the consumer has access to prescribed medicines and goods as soon as possible.
- Provide expert and individually tailored information and advice.
- Implement and provide information about generic substitutions.

All licensed pharmacies are required to provide all medicines and other products that are part of the benefits scheme when ordered on prescription or through the healthcare service. It may be of vital importance or crucial for a treatment that medicines are available when they are needed. This is particularly important in Sweden, as a majority of all medicines are supplied via the pharmacies. In many other countries, healthcare is responsible for a large proportion of the more unusual medicines. Around 93 per cent of all medicines dispensed by the pharmacies are available at the pharmacy itself for immediate pick-up by the customer. The remainder are ordered and can be dispensed the following day in accordance with the so-called 24-hour rule. An ever-increasing amount of medicines are dispensed via e-commerce and then delivered either within a few hours or a day. (Read more about direct dispensing in the next section.)

5.1.2 Main task 2 – individually tailored information and advice

The correct use of a medicine is crucial to ensure that it has the intended effect. The pharmacy therefore also has an important task to provide individually tailored advice when dispensing and to make sure that the customer knows how to administer their medication.

Low adherence to prescribed treatment is a major problem for the individual and involves considerable costs for society. The pharmacies check all prescriptions and approximately 850,000 of them must be corrected each year. Several of these corrections are of a minor nature, but a large number are of a more serious nature. Hospital admissions alone due to the incorrect use of medicines are estimated to cost SEK 200 million per year. In addition, the incorrect use of medicines causes unnecessary suffering for the patient.

Pharmacy staff play an important role in ensuring correct treatment, both for prescription only and non-prescription medicines. There is therefore a big difference between going to a pharmacy for advice and purchasing non-prescription medicines, and purchasing these medicines somewhere else where the staff are not permitted to provide advice.

5.1.3 Main task 3 – Implement and provide information about generic substitutions

Society places tough demands on the medicines financed via the benefit scheme. In order to keep the costs down for society, the pharmacies are obligated to make changes when there are equivalent medicines at lower prices available – so-called generic medicines.

Since 2009, there has been a special periodic product system that specifies which medicines pharmacies should change to each month. Even if the pharmacies save a lot of money for society through these

Having many ailments is difficult. I run out of my medications at different times and I'm not sure what I really have at home when I'm at the pharmacy. I would really like more help to get my medications in order.

changes, the design of the system has consequences for patient safety and increases handling costs for the pharmacies.

The system of providing periodic products involves the substituting of approximately 1,300 generic product groups each month. Even if the pharmacies have another cheap generic medication available, they may not sell this medicine if another product is the period's product for the current month. In addition, many patients themselves want a specific product within a generic substitution group. When this is not the product of the period, the probability of it being held in stock at the pharmacy

diminishes, and the product must then be ordered. The same applies in cases where the prescriber has marked on the prescription that the product must not be changed.

The frequent changes meaning that medicines are constantly changing their names and appearance confuses many patients. It particularly affects groups of patients who use many medications at the same time, who are elderly or who have a mental impairment. The fact that the substitution system involves patient risks through incorrect medication shows the limited research available in the field.

5.2 Regulatory requirements

The following basic legal and regulatory requirements apply to pharmacies:

- All pharmacies must have a permit from the Swedish Medical Products Agency
- A pharmacist must be present when the pharmacy is open
- The premises must be suitable for pharmacy activities
- There must be a pharmacist responsible to report any irregularities to the Swedish Medical Products Agency
- Provide all medicines and other products that are included in the benefit scheme when provided via prescription or ordered through the healthcare service
- Be able to manage electronic prescriptions, have access to a high-cost database and report sales information directly to the eHealth Agency
- Have their own system to check that regulatory requirements are complied with – own-control programme
- Provide individual and producer-independent information and advice on medicine, use of medicine and self-care
- Issue Schengen certificates, have the national pharmacy symbol at the pharmacy and offer partial payment when paying for medications covered by the benefits scheme
- Manage the medications benefit scheme, including generic substitutions
- Secure data processing of personal data
- A patient safety programme that works

General quality requirements on the pharmacies:

- The requirements are high in all Swedish pharmacies, regardless of owner. Requirements on pharmacies are stipulated in laws, ordinances and regulations from the Swedish Medical Products Agency, the Dental and Pharmaceutical Benefits Agency and the National Board of Health and Welfare. The requirements are the same, regardless of who owns the pharmacy.
- The quality systems at the individual pharmacies are regulated by the Swedish Medical Products Agency. At all pharmacies there is a pharmacist responsible for pharmaceuticals, whose task is to ensure compliance.
- By working preventively with clear routines and instructions, the allocation of responsibilities and skills development, the risk of making errors when prescribing medicines and making other mistakes is reduced. Follow-up through, for example, self-inspection, random sampling and sustainability controls are also part of the quality assurance work.

6. AVAILABILITY OF MEDICINAL PRODUCTS

6.1 The Swedish system

The fact that it is easy to get to a pharmacy when you need to is only one aspect of the availability of medicine. More importantly, contact with the pharmacy means that you get the medicines you need when you need them. In Sweden, a very high proportion of all medicines go through pharmacies.

In our neighbouring Nordic countries, it is more common for certain medicines to be dispensed to patients via the hospitals.

All pharmacies in Sweden must be able to dispense all medicines. This means that there is the same availability of medicines across the country, but this also poses a challenge for the pharmacies. Pharmaceutical preparations are not a homogeneous product group, but there are medicines that are used by tens of thousands of people and those used only by single patients. The Swedish pharmacy market is therefore organised in such a way that individual pharmacies try to maintain as large stock as possible at the same time as orders are processed and deliveries can be made every day of the week. The objective is that as many people as possible should get their medicines directly from the pharmacy and others should not have to wait longer than until 4 p.m. the next weekday. Deciding on the best balance between how much stock you should keep at the pharmacy and what products should be ordered is a difficult trade-off for the individual pharmacies. If you do not have a medicine in stock, there is a risk that the customer chooses to go to another pharmacy, but you also need to avoid keeping large stocks of medicines that are not sold and that must be destroyed. At the same time, it is difficult to decide which medicines should be in stock because there are many medicines that are unusual and all customers are unique.

6.2 Direct dispensing rate

In order to know how many customers receive their medicines directly from a pharmacy, questionnaires have been conducted at pharmacies on two

A new pharmacy has opened where I work. It means that I can pick up my medicines during my lunch break. I live quite far from a pharmacy otherwise but it is good that they are open until late at night in case of need.

occasions. It is referred to as the direct dispensing rate and was measured by the Swedish Pharmacy Association in 2015 ² and by TLV in 2019 ³. In the most recent survey, 92.6 per cent of the requested prescriptions were dispensed directly from the pharmacy. This was a decrease from 94.9 per cent in 2015. The largest part of the decrease was due to the fact that the number of medicines that could not be ordered from the supplier had increased significantly and is therefore beyond the pharmacies' control.

6.2.1 Medicines that are out of stock at the supplier

In order for the pharmacies to have medicines in stock, they must in turn order the medicines from



² <http://www.sverigesapoteksforening.se/wp-content/uploads/2018/08/Rapport-Undersökning-om-DX-på-apotek-Slutlig.compressed.pdf>

³ https://www.tlv.se/download/18.8664a0516f1aa30bdd880f/1576753997911/rapport_dec2019_matning_direktexpedieringsgrad_oppnevåadsapotek.pdf

the pharmaceutical companies. In TLV's surveys 1.9 per cent of all prescriptions could not be dispensed directly because the medicine was out of stock at the pharmaceutical company. This is a sharp increase since 2015, when 0.8 per cent of prescriptions could not be dispensed for this reason. In total 4.2 per cent of all customers were informed that one or more of their medicines could not be obtained for this reason. In one year, it corresponds to almost two million customer visits to the pharmacies. In many cases, the pharmacies can help resolve the situation by switching to an equivalent medicine, contacting a doctor for an alternative when a substitute is not available, or by applying to sell a foreign product. Sometimes there are no alternatives and then the consequences become more serious.

6.2.2 Unusual medicines

In TLV's direct dispensing study, it was found that the proportion of medicines that were not stocked by pharmacies because they were infrequently required at the pharmacy had increased from 1.5 per cent to 2.1 per cent between 2015 and 2019. This is not a surprising development. The medicines that are being researched and developed today are more specific to certain diseases and more adapted to specific patients than before. When new medicines arrive there are still patients who need the medicines they were previously prescribed. Over time, therefore, the number of different medicines used by the population increases. Unlike when a medicine cannot be ordered from the supplier, both the pharmacist and the patient can take steps to ensure that the medicine is available when needed. The patient can take the

The medication I pick up at a pharmacy is never in stock, but must be ordered. I have understood that there are about 20 patients throughout the whole country that need exactly the same strength. It's a bit of a hassle but works well.

Jag behöver mitt läkemedel och förut fanns det alltid inne på apoteket. Nu är det strul jämnt, tydligen något problem med tillverkningen. Ibland är det helt slut och man får vänta i veckor. En gång fick jag byta medicin men det fungerade inte.

initiative and order the medicine in advance and the pharmacies offer good order and delivery services. Most customers who need unusual medicines know that they must be ordered and are used to doing so.

6.3 Availability is not just about being in stock

The availability of a medicine is not just about how much of it is available at the pharmacy. How many pharmacies are available, the number of hours during the day the pharmacies remain open and whether they offer a home delivery service affects the possibilities of being supplied with a medicine in a convenient way. It is easier for larger pharmacies to remain well stocked, but having large pharmacies only will mean fewer pharmacies.

In TLV's survey we can see that all pharmacies irrespective of size succeed in how they are operating today even though there are differences between different pharmacies.

Another thing that affects the patient is the number of medicines taken. Regardless of whether all of a person's medicines are picked up at the same time or at different times, there is an increase in the risk that one of the medicines will, on occasion, be unavailable at the pharmaceutical company or rarely be asked for at the pharmacy. This means that there are many people who are sometimes affected by the fact that their medicines cannot be dispensed directly from the pharmacy. Therefore, those who require many medicines often need additional support in their treatment in order to obtain an overview as to which medicines must be ordered and when they should be ordered.

7. AVAILABILITY OF PHARMACIES

7.1.1 Number of pharmacies

1,426 Community pharmacies

10 Online pharmacies

The greatest pharmacy density is in Norrland counties and Värmland and Kronoberg, but most pharmacies are found in the metropolitan areas.

The pharmacy market was re-regulated in 2009 and the number of pharmacies subsequently increased by about 500 or 53 per cent. There are thus twice as many community pharmacies today. However, the rate of increase has slowed considerably in recent years and in 2018 ten new pharmacies were added and in 2019 only five new pharmacies opened up. At the end of December 2019, Sweden had 1,426 community pharmacies. Despite the significant increase in the number of community pharmacies, the Swedish pharmacy density is still among the lowest in Europe.

Antal fysiska öppenvårdsapotek per aktör

Pharmacy operator	Before re-regulation											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		
Apoteket AB	929	345	365	375	372	370	372	388	394	394	397	
Apotek Hjärtat ICA ¹	30	42	48	58	67	391	385	386	388	390		
Kronans Apotek ²	189	209	219	300	305	309	323	325	326	323		
Apoteksgruppen	150	155	158	163	165	169	177	185	188	193		
Lloyds-Apotek ³	50	81	77	79	83	80	79	78	78	78		
Apotek Hjärtat ¹	256	270	277	306	307	-	-	-	-	-		
Medstop ⁴	63	64	65	-	-	-	-	-	-	-		
Vårdapoteket ⁵	24	24	27	-	-	-	-	-	-	-		
Other operators	15	32	28	25	30	37	39	43	47	45		
Totals	929	1122	1242	1274	1303	1327	1358	1391	1411	1421	1426	

1) ICA Gruppen's acquisition of Apotek Hjärtat was carried out in early 2015, and the common pharmacy name is Apotek Hjärtat. 2) Used to be called Kronans Droghandel. 3) Used to be called DocMorris. 4) Medstop was purchased in 2013 by Kronans Apotek. 5) Vårdapoteket was purchased in 2013 by Apotek Hjärtat.

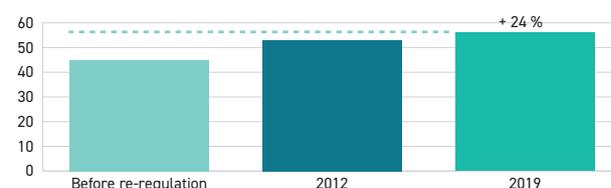
Note: The measurement period is the end of December for each year. There may be some deviation compared to the companies' annual reports if there is a delay in registration in EXPO. Source: SA Service AB and EXPO.

7.1.2 Opening hours

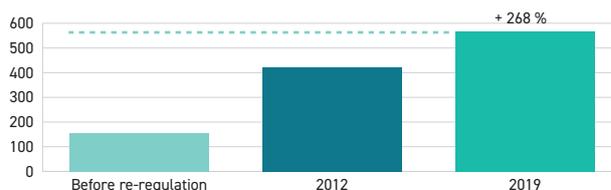
The opening hours are at least as important as the number of pharmacies with regard to availability. Since 2009, the pharmacies' opening hours have increased dramatically – from just over 45 hours a week to 56 hours on average in 2019. This means that the community pharmacies today have the equivalent of a further 350 pharmacies compared with the period when it was a monopoly, in addition to the newly established pharmacies. The total amount of time the pharmacies are open has increased by 90 per cent since the re-regulation.

The number of pharmacies open on a Sunday has risen from 154 to 566, which corresponds to an increase of just under 270 per cent. Many pharmacies in the country today are open almost 100 hours a week, practically every day of the year.

Opening hours



Number of pharmacies open on Sundays



7.1.3 Pharmacies per county and pharmacy density

All counties now have more pharmacies since the re-regulation that took place in 2009. Most establishments have occurred where the demand for pharmacies has been greatest, which has increased availability and reduced waiting times at pharmacies.

The largest percentage increase in the number of pharmacies has taken place in Uppsala and Stockholm counties as well as Blekinge and Skåne. However, in these counties, pharmacy density was initially the lowest in the country, measured as the number of pharmacies per inhabitant. The smallest increase has taken place in the counties of

Norrbotten, Dalarna, Västerbotten and Jämtland. In these counties, however, the number of pharmacies per inhabitant was initially among the highest in the country.

Number of community pharmacies and change per county

County	Before re-regulation	2019	Change, increase	Förändring, per cent
Blekinge	12	22	+10	+83%
Dalarna	35	39	+4	+11%
Gotland	7	9	+2	+29%
Gävleborg	34	47	+13	+38%
Halland	29	46	+17	+59%
Jämtland	23	27	+4	+17%
Jönköping	36	53	+17	+47%
Kalmar	29	37	+8	+28%
Kronoberg	21	33	+12	+57%
Norrbotten	37	39	+2	+5%
Skåne	103	181	+78	+76%
Stockholm	159	306	+147	+92%
Södermanland	24	37	+13	+54%
Uppsala	28	55	+27	+96%
Värmland	34	46	+12	+35%
Västerbotten	41	48	+7	+17%
Västernorrland	33	40	+7	+21%
Västmanland	25	37	+12	+48%
Västra Götaland	142	218	+76	+54%
Örebro	30	42	+12	+40%
Östergötland	47	64	+17	+36%
Riket	929	1426	+497	+53%

Note: The measurement period is the end of December for each year.
Source: SA Service AB and EXPO.

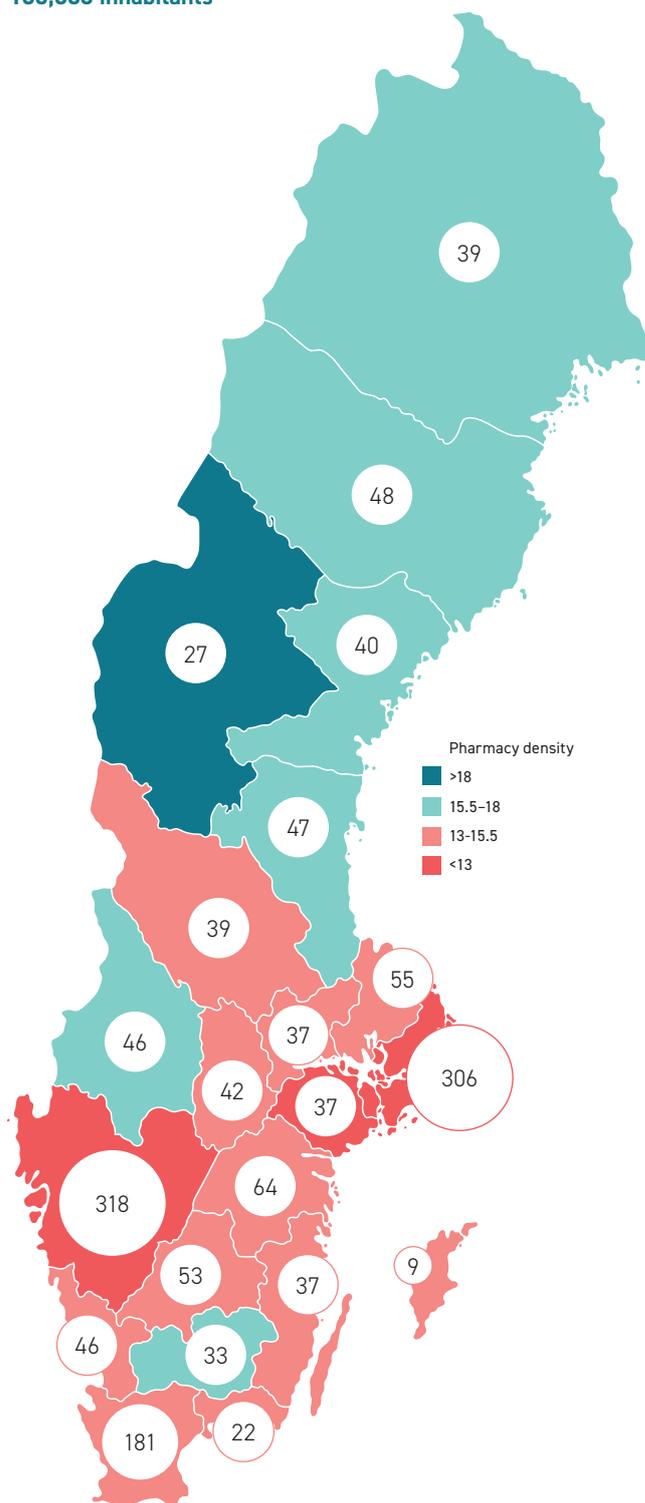
The establishment of new pharmacies thus has a natural and clear link to pharmacy density in relation to the number of inhabitants.

The map shows that Jämtland and the other Norrland counties as well as Kronoberg and Värmland are the counties that have the highest pharmacy density, while Stockholm, Västra Götaland and Södermanland have the lowest pharmacy density in relation to population.

The circles indicate the number of pharmacies per county and the larger circles correspond to more pharmacies. Most pharmacies are of course located in the three metropolitan counties that also have the most inhabitants, but at the same time pharmacy density is lower in these counties.

For Sweden as a whole, the density of pharmacies during the period 2009–2019 increased from just

Number of community pharmacies and pharmacy density per 100,000 inhabitants



The map shows pharmacy density per county measured as the number of pharmacies per 100,000 inhabitants. The figure illustrates pharmacy density in 2019, where counties with the highest pharmacy density are coloured in blue/green, and counties with the lowest pharmacy density are coloured in red/light red.

Source: SA Service AB and Statistics Sweden

under 10 to just under 14 pharmacies per 100,000 inhabitants. This can be compared with pharmacy density in Europe where the average is 31 pharmacies per 100,000 inhabitants, i.e. more than twice the density compared to Sweden.

7.1.4 Good spread throughout the country

In order to get a further picture of the spread of pharmacies across the country, we have used the new municipal grouping that the organization SKR (Sweden's Municipalities and Regions) have defined, and then analysed the conditions that prevailed in 2019.

The table shows that most community pharmacies or just under 40 per cent are located in larger cities and municipalities near larger cities, followed by metropolitan municipalities (33 per cent) and smaller cities/towns and rural municipalities (28 per cent). Pharmacies are therefore scattered throughout the country and various municipal groups. Pharmacy density for the main groups varies from 12.4 pharmacies per 100,000 inhabitants for metropolitan areas to 15.6 pharmacies for smaller cities, towns and rural municipalities. Up to and including 2018, the number of pharmacies in sparsely populated areas remained unchanged since the re-regulation, while all other types of municipalities had received more or considerably more pharmacies. Due to the new municipal grouping, we cannot report the corresponding data for 2019.

7.1.5 Pharmacies in sparsely populated areas

In some parts of the country, it is difficult to run profitable pharmacy operations. Therefore, special support may be given to pharmacies in sparsely populated areas under certain conditions to

compensate them because they operate in a sparsely populated area with less and shrinking number of customers.

Provided that the state's regulated margin on prescription medications does not continue to be eroded, there is no direct cause for concern that pharmacy operations in sparsely populated areas are by definition unprofitable or more threatened than before, see above. Often many of these pharmacies are in an area where they have a local monopoly and a sufficiently large customer base. The profitability problems that the pharmacies have experienced since 2010 are mainly related to establishments in the metropolitan areas, where competition between players is fierce.

A development that plays a major role with regard to availability in sparsely populated areas and for rural dwellers is the establishment of online pharmacies. According to an analysis by TLV, smaller towns have a higher proportion of e-commerce and a lower pharmacy density means a higher proportion of e-commerce. E-commerce can therefore be seen as a complement to community pharmacies in sparsely populated areas.

7.1.6 Swedish pharmacy density from a European perspective

Until 2009, Sweden was the country with the lowest pharmacy density in Europe after Denmark, with just under ten pharmacies per 100,000 inhabitants. Pharmacy density increased after the re-regulation, and by the end of 2019 there were 14 pharmacies per 100,000 inhabitants.

However, from a European perspective, pharmacy density in Sweden is still low. The latest available

Number and proportion of community pharmacies by municipal group and main group and pharmacy density 2019

Main group	Municipal group	Total	Total per main group	Per cent	Pharmacy density per 100,00 inhabitants
A. Metropolitan municipalities	A1. Major city	249	475	33%	12,4
	A2. Commuter municipality close to major city	226			
B. Larger cities and municipalities close to larger cities	B3. Larger city	357	552	39%	14,0
	B4. Commuter municipality close to larger city	106			
	B5. Commuter municipality near larger city (low commuting)	89			
C. Smaller cities/towns and rural municipalities	C6. Smaller city/town	194	399	28%	15,6
	C7. Commuter municipality near smaller city/town	88			
	C8. Rural municipality	85			
	C9. Rural municipality with tourism	32			
Total		1426	1426	100%	13,8

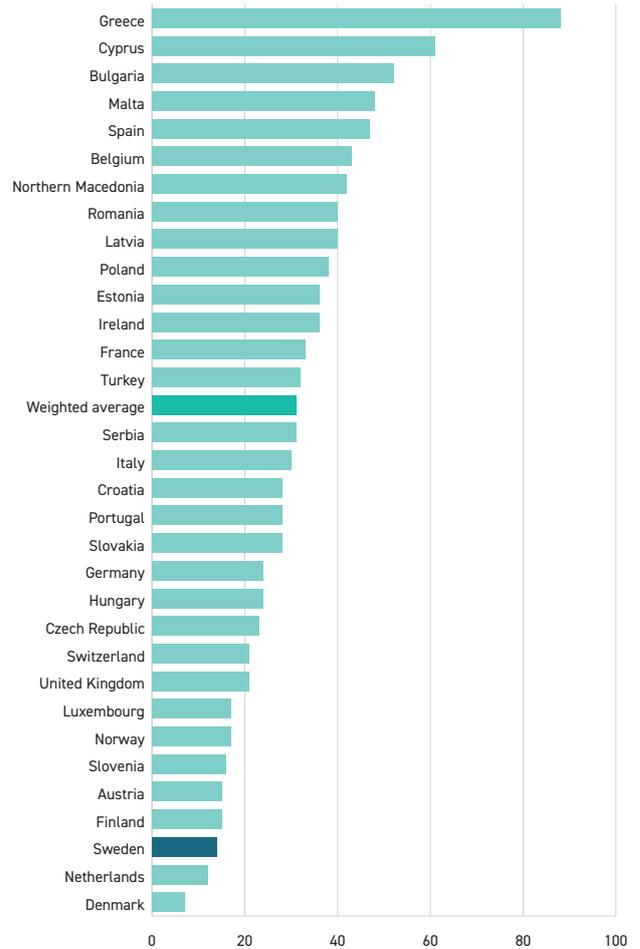
Note: The municipal group classification is based on SKR's definition from 2017. Source: SA Service AB, Statistics Sweden and EXPO.

statistics on the number of inhabitants per pharmacy in most European countries refer to 2017. Statistics show that Sweden is still one of the three countries with the lowest pharmacy density after Denmark and the Netherlands (see diagram below). On average, the density of pharmacies is 31 pharmacies per 100,000 inhabitants among the EU countries. The Swedes therefore have about 45 per cent as

many pharmacies in relation to the populations as in European countries on average. A contributing reason is that the Swedish population has increased relatively sharply in recent years. The new establishment of pharmacies in Sweden during the past two years is completely offset by the increasing number of Swedes.



Pharmacy density in Europe. Number of community pharmacies per 100,000 inhabitants



Source: PGEU. Data mainly refer to 2017

8. HOW WE DEVELOP PHARMACY CARE

Pharmacies are an excellent complement to the health centres

The pharmacies are rated highly as care providers. Benefits such as generous opening hours, high availability and competent staff are a good complement to and a relief for overburdened health centres. **70%**⁸ of the population are of the opinion that pharmacies should be situated in proximity to healthcare services.



The pharmacies already offer services over and above their core remit. Developments in this area is based on the core remit, but also on the basis that the pharmacies and pharmacists form a part of the healthcare system in Sweden. Future pharmacy operations are also driven by the opportunities offered through the introduction of the National List of Prescriptions (Nationella läkemedelslistan), the development of healthcare with increased digitalisation and increased personalisation. Customers' changing requirements and demand for pharmacies obviously have a major impact on how the pharmacies develop.

8.1 Quality assurance of pharmaceutical treatments

The pharmacies today already carry out checks on the prescriptions that are dispensed to ensure they comply with what the prescriber has intended and that treatment is reasonable for the patient. This also includes examining the risk of the impact on other medicines the patient is taking. With the introduction of the National medications list, the quality of the information the pharmacist uses to check this will be improved. This means that further developments can be achieved in this area. Above all, there are greater opportunities to make assessments as to how relevant the entire medicine treatment is, whether the treatment as a whole works for the patient or whether it needs to be adapted and to revise and update the information about the pharmaceuti-

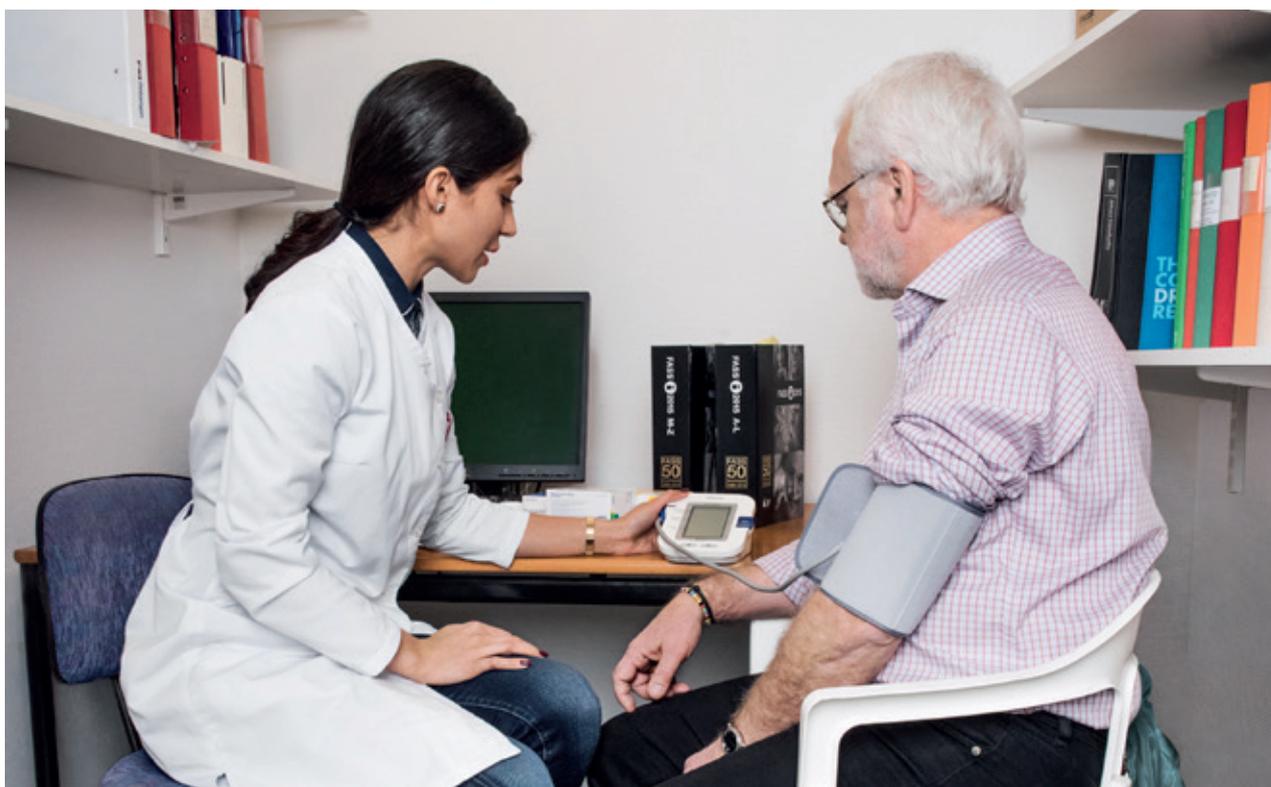
cal treatment. Through the provision of additional information, pharmacists could make minor corrections themselves, e.g. remove medicines from the list that are not being taken, and make suggestions for more extensive changes to the patient's doctor. Pharmacies today are helped by EES (electronic expert support) when taking decisions, which in 2019 was used in almost ten million customer visits.

8.2 Access to pharmaceutical treatment

The pharmacy's objective, to provide medicinal products, can be further developed towards providing pharmaceutical treatment. In addition to dispensing only the prescriptions that the patient has been prescribed, pharmacists can also customise how the patient receives their medicines and what form or package is used to facilitate their treatment. During 2019, several members of the Swedish Pharmacy Association launched an offer of split-pack dispensing outside of the scope of the regions' procurement agreements. Subscription services are already available on the market and e-commerce is an alternative that is expanding when it comes to supplying medicines, which means that patients do not always have to visit a pharmacy to get their medicines.

The pharmacies ensure that the prescriber's intention with the prescription results in an actual medicine which the customer can pick up. On many occasions it is a simple task – it is the dispensing of the same medicine or a generic medicine which has been approved by the authorities. But sometimes a greater effort is required, e.g. if the medicine is not available from the pharmaceutical company. Some patients also need a particular type of package or tablets with a score line, which requires customisation. Sometimes a smaller pack might be better for the patient who is unsure whether to continue treatment.

The pharmacies can assume greater responsibility than they do today with regard to the choice of a suitable pack size, which would also be the result of the introduction of a so-called generic prescription where the doctor only specifies the substance, pharmaceutical form and strength of the prescription and not a specific product.



Pharmacies could also assume greater responsibility for access to treatment beyond the prescription's validity period. Many patients today are at risk of their pharmaceutical treatment being interrupted because the prescription's validity period has expired. Pharmacists could in some cases extend – or re-prescribe – prescriptions for e.g. birth control pills, blood pressure medicines, diabetes medicines and others where the patient has already been receiving stable treatment. This was introduced in Denmark in 2019. In the long term, other groups of medicines could also be included where re-prescribing can be done after a simpler follow-up (a blood pressure check, an evaluation of a patient's medical history, etc.).

8.3 Improve pharmaceutical treatment

There are many things that pharmacists do to improve treatment for their patients and more can come into existence. Clearly, advice can be provided at a different time other than when a customer picks up a prescription and it may even be that such advice should be offered at a different time, as the patient may be more receptive to the information. This is the basis for the development of pharmaceutical services.

Several different services have been tried during 2019 on the Swedish market. Among the services

offered to customers are programmes for improved adherence to diabetes medicines, better technology for inhalation medicines, screening for heart failure in patients, counselling programmes with personal meetings and digital support for COPD patients. At the end of 2019, TLV submitted a report to the government proposing a three-year investment in the development and evaluation of pharmaceutical services that could be financed by society. In the long term, what is nowadays seen as something unique and special – a pharmaceutical service – should rather be regarded as the norm and what you should expect when you visit the pharmacy.

8.4 Integrated self-care

Pharmacy self-care includes the provision of advice and the sale of products to combat ailments that the patients themselves can diagnose and treat, e.g. colds, headaches and pollen allergy. An important task for pharmacies is to determine when self-care is not appropriate and when you should contact your doctor. At the same time, it is not always clear cut and there is reason to find out more as to whether self-care as a concept should be extended. Some are those products that are not self-care products, that can be offered as a supplement to prescription medicines to improve the health of those who have

a disease. In cooperation with health care providers, several pharmacies on the Swedish market are developing a smoother transition between self-care and health care on the pharmacy's premises or together with digital health care providers. What can be offered in close relation to self-care at pharmacies is also being developed, for example, by offering vaccination, the analysis of birthmarks and special health tests.

What the pharmacies do could to a greater extent be integrated into the entire healthcare system in Sweden. In the UK, it is possible to book visits to pharmacies for consultation about simpler ailments rather than visiting the doctor's surgery – some of which are already classed as self-care at Swedish pharmacies today. The visit is reimbursed through the healthcare system, guiding the patient to the right level of care from the very beginning.

Some health problems could today be managed through self-care if non-prescription medicines were available as treatment options within those areas. With regard to for example impotency problems, the doctor does not normally provide any input when the patient is diagnosed. The medicines that are available however should not be used by certain risk groups, which means that the medicines are

sold on prescription. By introducing a new class of medicines – a pharmacist only assortment – pharmacists could manage these risks at pharmacies. By using standardised forms that must be completed at the pharmacy, sales can be limited to those who do not belong to the risk groups, which would increase availability. This possibility exists for instance in Norway where Viagra is sold without prescription after the pharmacist has ensured that the patient does not belong to a risk group.

8.5 Medications and the environment

8.5.1 Environmental risks in connection with manufacturing

Customers increasingly ask questions about where their medicines are manufactured and their environmental impact. Often, pharmacies cannot respond to this because it is information that the pharmaceutical industry does not disclose voluntarily. This has contributed to the pharmacies working increasingly actively with environmental and sustainability issues both within the companies and jointly with the Pharmacy Association.

Medicines contain biologically active substances that may present risks to nature. Exactly how medicines affect the environment is unknown to scientists



today. The main risk associated with the dispersion of pharmaceutical substances in the environment is related to their manufacture. The developing countries account for a large share of the production of medicines.

Today, environmental considerations are lacking in the international standard for pharmaceutical production. In addition, there is limited knowledge and transparency about production conditions and emissions related to the manufacture of pharmaceuticals. This is unsatisfactory, according to the pharmacy sector. As with the Swedish Medical Products Agency and the OECD, pharmacies are of the opinion that environmental criteria should be included in regulations on good manufacturing practice (GMP).

For a long time the Pharmacy Association has urged that environmental impact should be one of the criteria for TLV when choosing which medicine should be the generic product of the month at the pharmacies. Today, the authority only takes into account the lowest price when the product of the month is chosen. This investigative proposal has existed since 2013.

8.5.2 Medicinal residues in Swedish nature

In Sweden, the absolute largest emissions of medicinal residues occur in connection with use. There are several different types of active substances that we know are extremely difficult for nature to break down, such as antibiotics and sex hormones. But even the non-prescription substance diclofenac is difficult to break down both by the body and in sewage

treatment facilities. The substance therefore gets into the environment to a great extent and affects living organisms such as fish. Many regions have removed diclofenac from their recommendation lists of prescription medicines, partly because of diclofenac's environmentally damaging properties. Since 2018, there has been industry agreement that all Swedish pharmacies should inform customers that diclofenac has a negative impact on the environment and should be used with consideration.

In order to reduce the large amount of medicines that are not consumed, the Swedish Pharmacy Association recommends that the pharmaceutical industry provide starter packs and that prescribers to a greater extent prescribe smaller starter packs. Today, large quantities of medicines are discarded because doctors have prescribed large packs that are then not used, for example because the treatment did not work or because the dose was changed. This can pose an environmental risk, but also increases the risk of incorrect medication use in general.

8.5.3 Returns of unused medicines

Unused medicines must be disposed of properly and incinerated at specially approved facilities. In order for this treatment to take place as safely as possible, the public is asked to submit their unused medicines to pharmacies. By law, all Swedish community pharmacies must accept medicinal residues from the general public. In total, all of the pharmacies in Sweden collected over 1,300 tonnes of medicinal residues in 2019.



9. ABOUT THE SWEDISH PHARMACY ASSOCIATION

The Swedish Pharmacy Association represents the companies that conduct pharmacy operations. Through our members, we represent in principle all community pharmacies in Sweden. The association shall ensure that, through its diversity, development and role, the pharmacy sector continues to generate social benefits and remains an important and contributing part of the care chain.

Our assignment is to strive for stable and predictable conditions for pharmacies, where the pharmacy sector's customer and community benefits are utilised.

The association is an industry organisation, not an employers' organisation.

The Swedish Pharmacy Association also has a wholly owned service company, SA Service AB, which works on behalf of its customers. The service company works, among other things, with legal and other advice in the pharmacy field, company-oriented projects and certain industry-common advertising and marketing issues. SA Service also provides sales statistics as well as up-to-date information and the surveillance of the pharmacy market and prepares information on the pharmacy sector.

By the end of 2019, the Swedish Pharmacy Association had ten members who together operated close to 100 per cent of the country's 1,426 community pharmacies and 10 distance and internet pharmacies as well as 36 hospital pharmacies. One of the

members of the association is the Swedish Independent Pharmacy Operators' Association (Sveriges Oberoende Apoteksaktörers Förening, SOAF), which organises approximately 40 independent pharmacy contractors. This means that we represent almost all pharmacies in Sweden – from the country's largest operator to the country's smallest.

As an industry association, it is important to participate in the debate and to present the benefits to society that the pharmacies provide as well as their potential. One of our most important tasks, therefore, is to be the sector's voice in the outside world and help to increase knowledge of the sector and its issues.

The Swedish Pharmacy Association is a natural referral body for investigations, government and authorities. We represent the industry vis-à-vis politicians, government agencies, state-owned companies, other industry associations and decision-makers. Particularly important issues in the sector's relations with the outside world are to promote high quality, good patient safety, good economic conditions, good pharmaceutical educational programmes and a high level of competence within the sector.



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