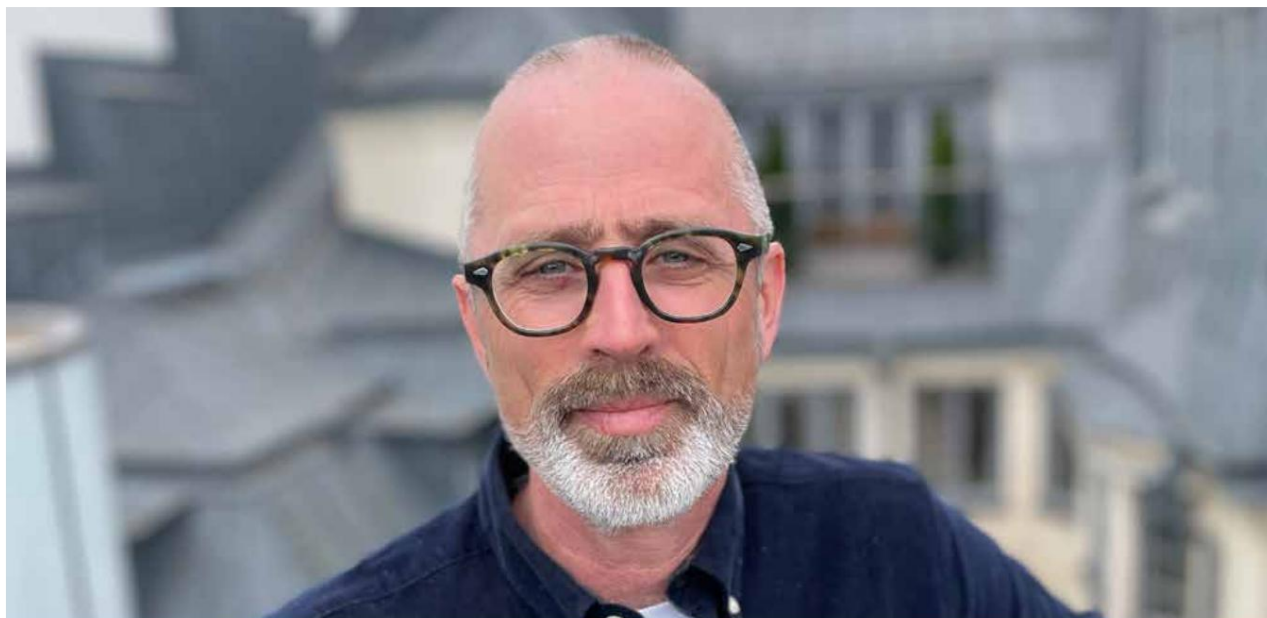




**Sveriges
Apoteksförening**
BRANSCHRAPPOR 2022



PREFACE

2021 was the second year when the corona pandemic took a firm grip on the world. But it was also the year when the covid-19 vaccine became available to the population and a large-scale vaccination gained momentum.

For pharmacies, the year has been marked by hard work. Periodically, the pressure on pharmacies has been high and the channel shift from physical stores to e-commerce has continued. Nearly every third pharmacy product was sold via the e-commerce channel in 2021. This has greatly affected pharmacy companies.

For the first time since the pharmacy market was regulated in 2009, we now see that the number of physical stores has decreased. This has primarily affected large urban regions and larger cities, while the number of pharmacies in smaller towns and rural areas, on the other hand, has increased somewhat.

Pharmacies have played an important role during the pandemic. Despite periods of high sickness absence, pharmacies have managed to continue to provide the population with medicines. Pharmacies have also equipped the population with protective equipment and rapid tests and, through collaborations with healthcare providers, been available for vaccination.

During the year, we in the industry worked close to TLV in their government assignment to start a trial operation with pharmaceutical services in pharmacies. This is an issue that I am passionate about and we in the industry have been asking for a long time. There are plenty of good examples from a number of other countries where values and research show how pharmaceuticals are

services can play an important role in improving drug use. The first pilot trials at pharmacies will start in the spring of 2022.

I'm also proud that we in February 2021, in the middle of the pandemic could launch Vålvald - the pharmacy's guide to increased transparency. Now, pharmacy customers who buy over-the-counter medicines can also make choices based on how transparent the pharmaceutical companies are regarding their sustainability work. Not only that, during the year we have further developed Vålvalds criteria so that in 2022 they also place certain requirements on responsible for the production of the individual products.

This year's industry report concludes with the chapter The pharmacy of the future, it is a look ahead, what the pharmacy market may look like in the not too distant future. Although we do not know exactly how pharmacies will develop, the market will most likely function differently than today.

I recommend reading this year's full feed industry report, if you want to know even more, the company has not even produced www.apotekswiki.se where we tried to compile facts about the industry in a simple and easy way.

Johan Wallér
CEO, Swedish Pharmacy Association

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1. THE YEAR IN BRIEF

98%

of customers were satisfied with their most recent pharmacy visit.

Very satisfied customers

- 98 percent of the pharmacy's customers were satisfied with their most recent pharmacy visit.
- 81.5 percent give one of the two highest grades, "extraordinarily good" and "very good".



140 million

visits were made in total in 2021.

Pharmacy for everyone

- Every day, about 390,000 people visit a pharmacy, which means 140 million visits / year to one of the country's pharmacies.
- 88 million prescriptions were dispatched in 2021
- There were 1411 outpatient pharmacies in Sweden at the end of 2021. (52 percent more than before the reregulation)
- There are nine e-commerce pharmacies. Pharmacy customers all over the country shop pharmacies goods via e-commerce. Proportion of older customers over 70 years has increased sharply as a result of the pandemic.



E-commerce accounts for growth in the market for outpatient pharmacies, even if the growth rate slows

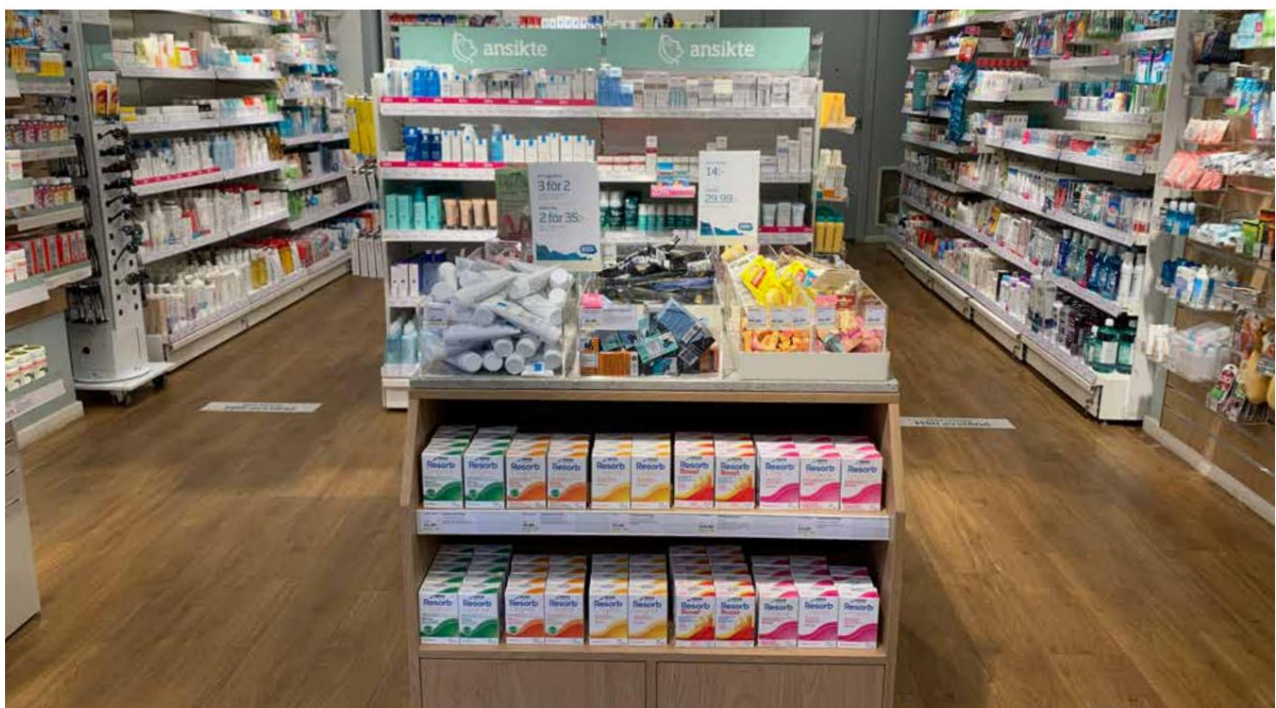
- Pharmacies' e-commerce increased by almost 20 percent in value during the year, while physical pharmacies had no growth in total sales.
- The volume share was close to 30 percent of all products sold via the e-commerce channel in 2021.



More than 88 million prescriptions were dispensed in 2021.

THE SWEDISH PHARMACY MARKET 2021

The Swedish pharmacy market consists of five nationwide chains, three pure e-commerce players and privately run pharmacies. There are a total of 1411 physical outpatient pharmacies, nine distance or internet pharmacies and 26 hospital pharmacies that provide inpatient care with medicines.

 apoteket APOTEK ICA APOTEK apoteks
gruppen Lloyds Apotek apotea.se **SOAF**
Sveriges Oberoende
Apoteksaktörers Förening apoex EMEDS apohem

Picture from Apoteksgruppen

2. THE SWEDISH MARKET

Very satisfied customers in pharmacies
all over the country

High customer

satisfaction Pharmacies have generally seen very satisfied customers and have had it for a long time. A total of 98 percent of customers are satisfied with their most recent pharmacy visit and 81.5 percent give the ratings "very good" and "exceptionally good" (grades four and five on a five-point scale). Regardless of gender, age and place of residence, pharmacy customers are satisfied with their pharmacies.¹

Annually recurring customer surveys show that the main reasons why customers are so satisfied with their pharmacies are the pharmacies' geographical location and that the pharmacy has what you are looking for. Most satisfied are the customers who make an active choice of pharmacy, ie those who have clear alternatives to choose from. Short waiting times and a pleasant response from the staff are also important factors. Customers believe that pharmacy staff are trustworthy and that they receive good guidance and advice at pharmacies.

Customers' cases at pharmacies

Every day, approximately 390,000 people visit one of the country's physical pharmacies or e-commerce. In total, the pharmacies had approximately 140 million customer visits in 2021.

A large proportion, almost 40 percent, of the people who visit a pharmacy do so to pick up their prescription drugs. In 2021, Sweden's pharmacies dispensed approximately 88 million prescriptions and dose-dispensed medicines to 225,000 customers. The remaining just over 60 percent of the pharmacy's visitors are customers who buy over-the-counter self-care medicines and trade goods. When customers visit a pharmacy, it is usually for several purposes at the same time. The person who is to pick up a prescription medicine often takes the opportunity to buy over-the-counter medicines or other pharmacy goods.

The various pharmacy

companies The Swedish pharmacy market consists of five nationwide chains; Apoteket AB, Apotek Hjärtat, Kronans Apotek, Apoteksgruppen and Lloyds Apotek. The pharmacy group is run both as



Picture from Lloyds Apotek

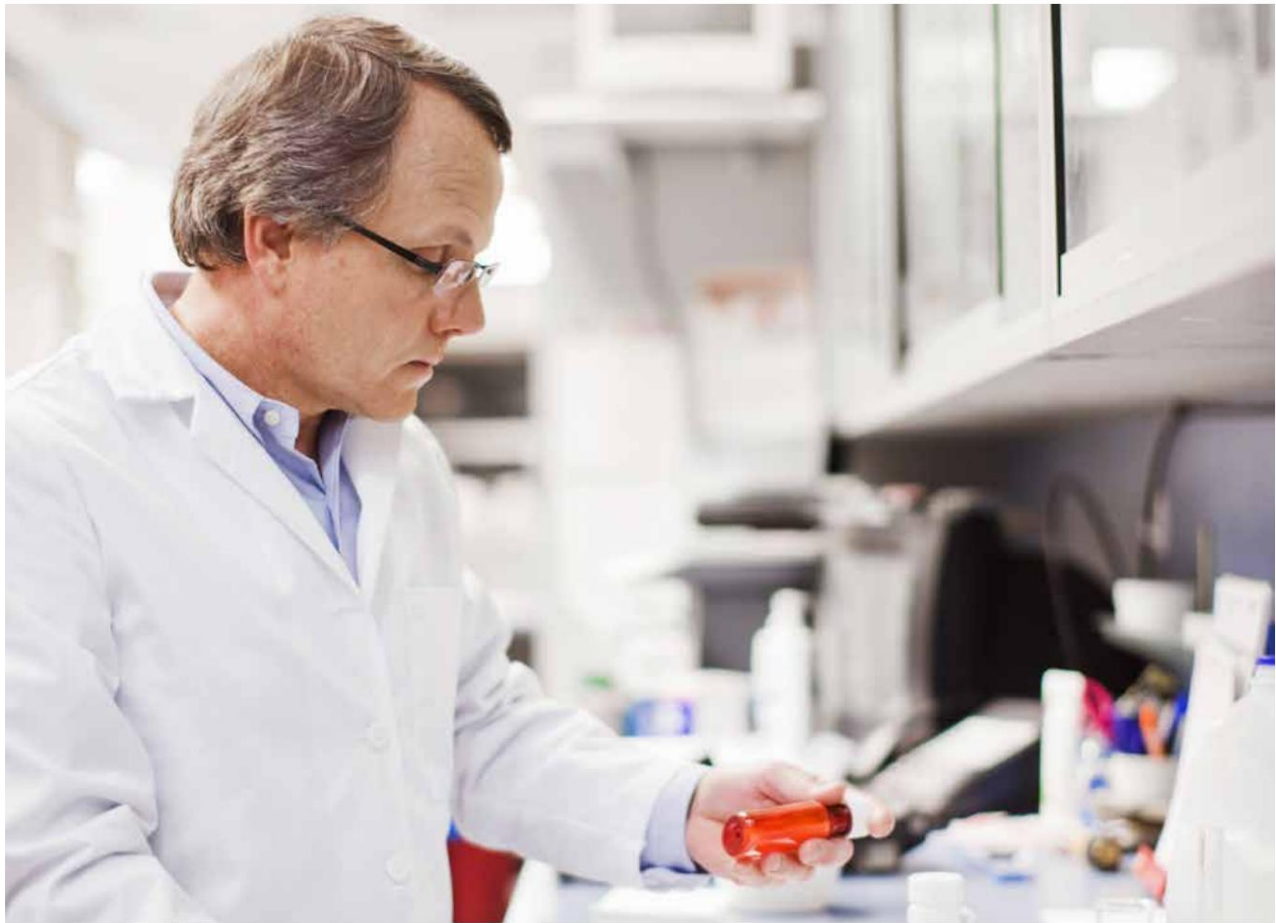
pharmacy chain with wholly owned pharmacies and in franchise form with about 30 pharmacies with individual ownership under the same brand. In addition, there are three pure e-commerce pharmacies; Apotea, Meds and Apohem as well as more than 40 privately run pharmacies. The privately run pharmacies are organized within the organization SOAF, which in turn is an association member of the Swedish Pharmacy Association. ApoEx is the association's only one with a limb that is completely focused on inpatient care.

Pharmacies in the outpatient market

Outpatient pharmacies are stores that a consumer can visit physically. At the turn of the year 2021/22, there were 1,411 outpatient pharmacies. In addition, there are pharmacies that only sell and give advice on medicines via the internet. There are three pure e-commerce players, but the pharmacy chains also have e-commerce in varying degrees. There are a total of nine distance or internet pharmacies.

Dosapoteken is a special form of pharmacy with an outpatient pharmacy license. At the pharmacy, medicines are repackaged in bags with the set of different medicines that a certain patient must take on an individual occasion. The packaging is called dose dispensing and is a service that regions procure. the purpose is to

¹) Source: Kantar Sifo, Customer Satisfaction in the pharmacy market. 2) <https://www.kantarsifo.se/insikter-kring-coronavirus> (20210226)



make it easier, especially for older people who take many medicines at the same time. Approximately 225,000 people have dose-dispensed drugs. In 2021, there were three dose pharmacies run by three different players; Apoteket AB, Svensk Dos and Apotekstjänst. Some dose dispensing is also done by medicines for inpatient care. In addition, some pharmacies have developed a dosing service that can be purchased by private individuals.

Pharmacies in the inpatient market

There are 26 hospital pharmacies that provide inpatient care and some institutions with medicines.

The number of hospital pharmacies has decreased as a result of concentrating on fewer units by procuring the supply services for one or more regions. The manufacturing pharmacies (extemporaneous pharmacies) manufacture individualized medicines for both outpatient and inpatient patients. These include cytostatics, antibiotics and parenteral nutrition. Manufacturing also takes place for clinical trials. In total, there are four manufacturing pharmacies. The following table shows all forms of pharmacies that were active at the end of 2021.

Different types of pharmacies on the Swedish market

Pharmacies divided into categories	2020	2021
Outpatient pharmacy (which consumers can physically visit)	1433	1411
Hospital pharmacy (in inpatient care)	34	26
Manufacturing pharmacy	4	4
Dosapotek	3	3
Distance and internet pharmacy ¹	9	9
Others ²	3	3
Amount	1486	1456

1) Units with a pharmacy license and a full range of prescription goods that only work with distance or e-commerce, and which cannot be visited physically as a consumer. 2) Others refer to hemophilia activities.

Source: SA Service AB and the expedition stand register EXPO.

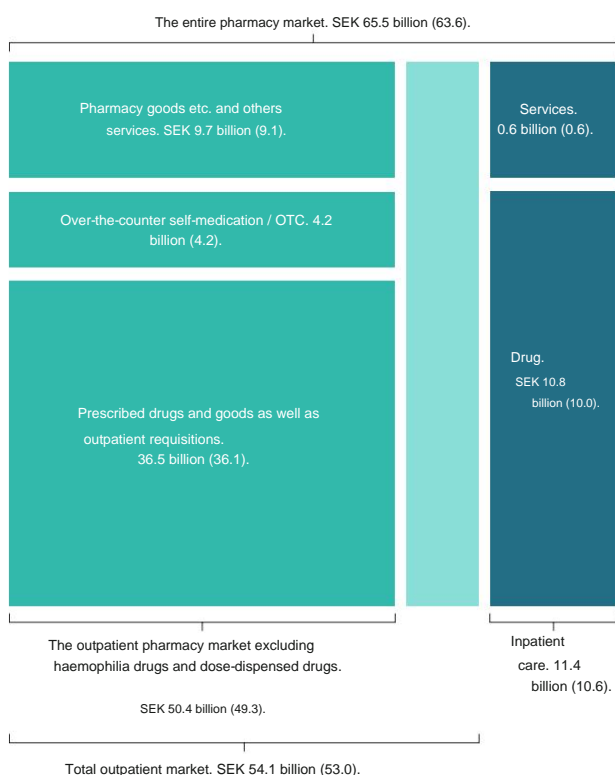
3. ECONOMIC DEVELOPMENT OF THE PHARMACY MARKET

The pharmacy market

The entire pharmacy market, including inpatient care, converted just over SEK 65 billion in 2021, which is an increase of SEK 1.9 billion or three percent compared with 2020. Turnover in the total outpatient pharmacy market amounted to just over SEK 54 billion in 2021, which means an increase of 1.1 billion or 2.1 percent from the previous year.

The turnover then also includes hemophilia drugs for haemophilia and dose-dispensed drugs. The closed healthcare market, which is mainly the supply of medicines to inpatients, had sales of more than SEK 11 billion in 2021.

Schematic overview of the pharmacy market based on net sales in 2021



The outpatient market and the development for different segments

In 2021, net sales in the open care pharmacy market amounted to SEK 50.4 billion, which corresponds to an increase of 2.3 percent compared with 2020. These figures include pharmacies' pharmaceutical sales in the outpatient market and sales of pharmacy goods and services, while hemophilia and dose-dispensed medicines are excluded derade. The dominant segment is prescribed drugs, which account for approximately SEK 36.5 billion or 72.4 per cent, while over-the-counter drugs have a turnover of just over SEK 4.2 billion or 8.4 per cent and other pharmacy products SEK 9.7 billion or 19.2 per cent. In the outpatient market, other outlets such as grocery stores and petrol stations also compete with pharmacies for the sale of certain over-the-counter medicines, but these sales are not included in the pharmacy market.

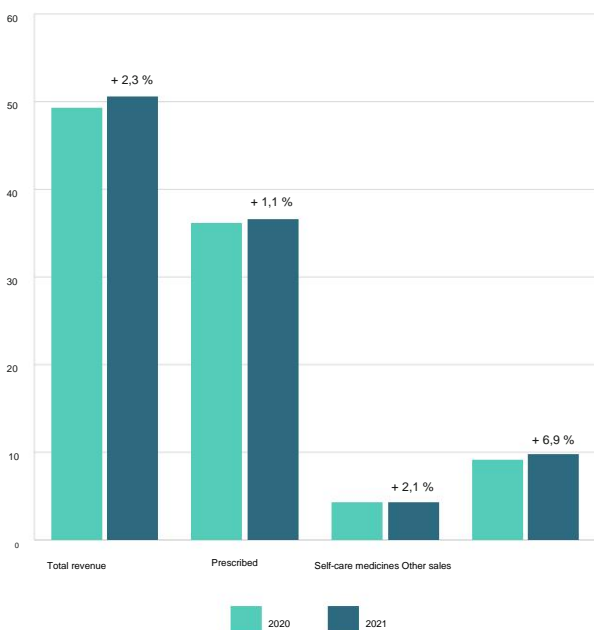
Measured in volume, ie the number of units sold (mostly packaging), the outpatient pharmacy market grew by a total of 2.6 percent in 2021.

The volume thus increased slightly more than sales in 2021 and it is above all other goods that have a good growth in both value and volume, while the growth for pharmaceuticals was weaker. Pharmacies' e-commerce continues to increase and in January 2022 accounted for 21.3 percent of sales in the pharmacies' outpatient care market, and measured in volume (number of units), the e-commerce share amounted to 32.5 percent in the same month.

Note: All sales refer to the price to the consumer or end customer (AUP) excluding VAT, except for medicines for inpatient care where the prices are net prices. Instead, pharmacies receive compensation for the supply service. Some of the dose-dispensed medicines are complete packages that go through Dos pharmacies. The figure aims to illustrate different parts of the actual pharmacy market in 2021 (in 2020 in parentheses), the amounts are rounded.

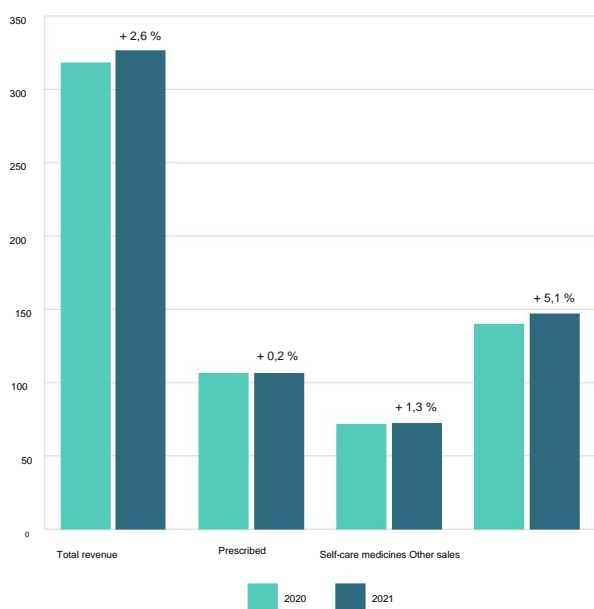
Source: SA Service AB and the E-health authority as well as own calculations.

Net sales in the outpatient pharmacy market 2020–2021. Billions of kronor, current prices



Note: The percentages refer to the development compared with the previous year.

Number of packages sold in the outpatient pharmacy market 2020–2021. Millions of units



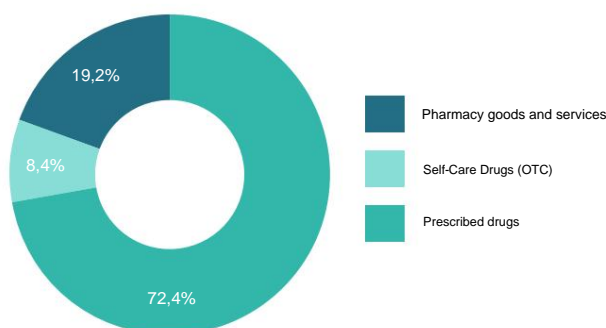
Note: The percentages refer to the development compared with the previous year.

Of the outpatient pharmacies' total turnover, prescribed medicines make up the lion's share or 72.4 per cent. These drugs account for just under a third of the total number of units sold. What drugs

which is prescribed, and to what extent, is completely controlled by the care's prescriber and is thus not something that pharmacies can or should influence. In addition, both the pharmacies' purchase price and sales price are determined by the Swedish Dental and Pharmaceutical Benefits Agency (TLV) for the medicines included in the pharmaceutical benefit. The pharmacies' operations concerning prescribed medicines therefore differ markedly from other industries, where free pricing, their own production capacity and independent choice of range for goods and services are central starting points.

Total prescription drugs, including so-called outpatient requisitions, had sales of approximately SEK 36.5 billion in 2021, which is an increase of 1.1 per cent compared with 2020. The volume was almost unchanged and increased by only 0.2 per cent compared with the previous year.

Sales (SEK) per segment, 2021



Source SA Service AB

Over-the-counter medicines are part of the sales that pharmacies can partly influence. These drugs correspond to 8.4 percent of sales and just over 22 percent of the number of units sold. There is a free pricing for over-the-counter medicines, but competition is fierce both between the pharmacy chains and from the rapidly growing e-commerce. In addition, there is competition from the grocery trade, which is also allowed to sell most over-the-counter medicines.

Sales of self-care medicines (OTC) in pharmacies amounted to just over SEK 4.2 billion in 2021, which is an increase of 2.1 per cent compared with 2020. The volume of self-care medicines increased by 1.3 per cent in 2021, which means a slight increase in average prices for this segment, which in recent years has shown falling prices.

Proportion of over-the-counter medicines sold outside

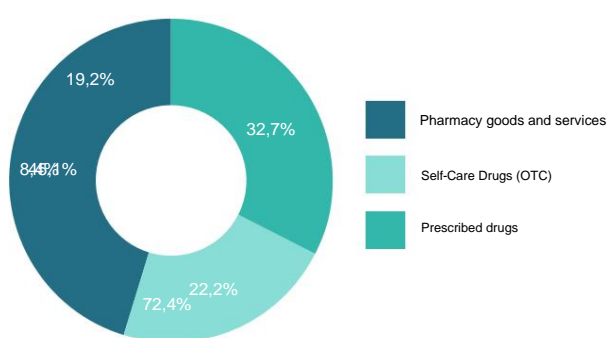
Pharmacies amounted to just under 17 per cent of the total turnover of over-the-counter medicines in 2021. Pharmacies thus increase their market share somewhat compared with previous years. To meet the competition from the grocery trade, which mainly sells well-known brands, pharmacies have introduced more alternative self-care medicines, such as various brands with the substances paracetamol and ibuprofen. This has increased the range of cheaper alternatives for consumers and further contributed to price pressure.

Other pharmacy goods and services

The goods in pharmacies that are not medicines are called other pharmacy goods. This segment also includes services offered by pharmacies. Many of these services are currently provided free of charge to customers, which means that the impact on sales in this context is negligible.

Sales of other pharmacy goods and other services amounted to SEK 9.7 billion in 2021, which corresponds to an increase of 6.9 percent compared with 2020. In relation to the pharmacies' total outpatient sales, other pharmacy goods and services accounted for just over 19 percent of sales in 2021. As On the other hand, the share of the total number of units sold was 45 per cent. The segment showed a volume growth of 5.1 percent in 2021 and thus has growth in both volume and average price.

Volume (units) per segment, 2021

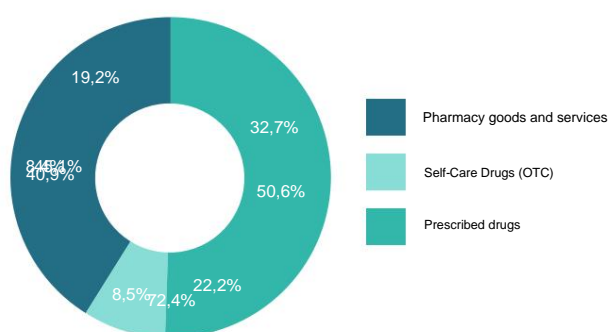


Source SA Service AB.

There is a clear tendency for pharmacies to try to compensate for the low trading margin for prescription drugs and the fierce competition in the self-care market with a good set-up and sales of other pharmacy products. Too many pharmacies have other pharmacy products that are sold in pharmacies

a special stamp of quality with a focus on health and well-being. During both 2020 and 2021, other pharmacy products accounted for the highest percentage growth in sales compared with self-care medicines and prescribed goods. The difference with other segments has been further strengthened during 2021. Other pharmacy products also account for a significantly larger share of sales in the e-commerce channel and amounted to just under 41 per cent in this channel in 2021.

Sales in e-commerce (SEK) per segment, 2021

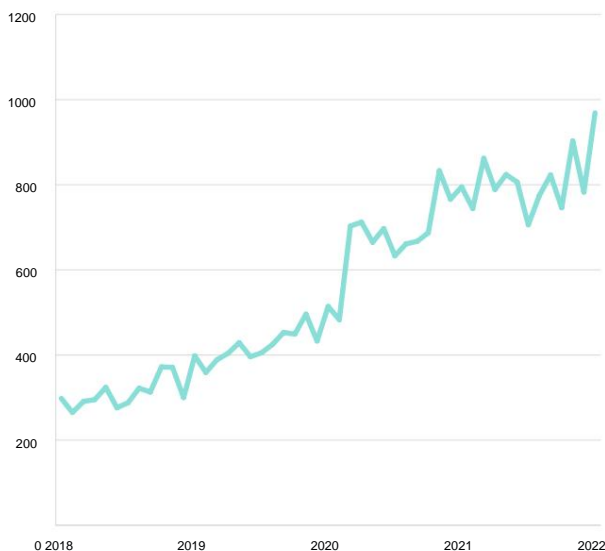


Source SA Service AB.

The pandemic has accelerated the growth of e-commerce and a channel shift

Since 2018, the pharmacies' e-commerce has increased in turnover from approximately SEK 300 million per month to approximately SEK 800 million per month in 2021 and sales increased further to SEK 970 million in January 2022. For the latter month, this corresponds to an increase of just over 220 percent compared with January 2018, see diagram below. The value growth for the pharmacy industry's e-commerce amounted to 19 percent in 2021 compared with 2020. The corresponding figure for 2020 was 59 percent. The pandemic has accelerated this development, but the growth rate has slowed down in 2021 compared with the previous year and sales have stabilized at around SEK 800 million per month.

Pharmacy's e-commerce, total turnover excluding VAT. Million kroner

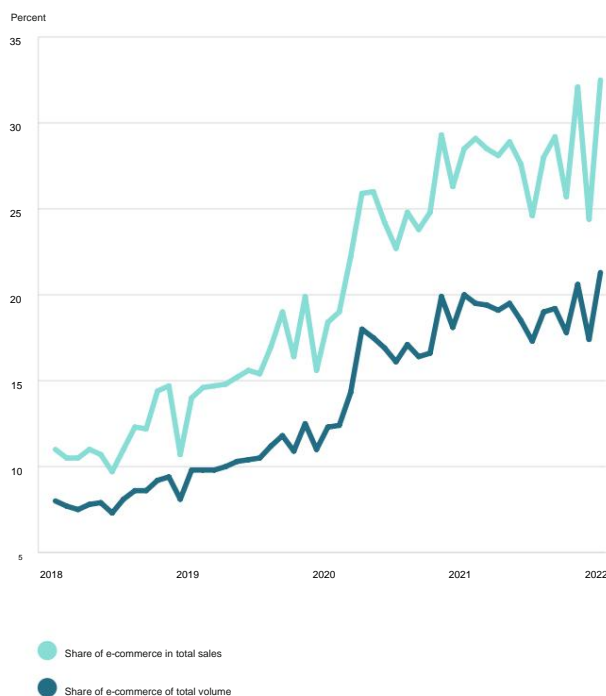


Source SA Service AB.

The largest segment in terms of sales in the e-han part is prescription drugs, which account for half of the value. Other pharmacy products account for just under 41 per cent, while over-the-counter medicines make up just over eight per cent. If volume is measured instead, ie the number of packages sold, sales of other pharmacy products account for the majority or 64 per cent and self-care medicines for 23 per cent.

The proportion of pharmacy goods is thus significantly higher in the e-commerce channel than in the physical pharmacies. E-commerce can offer a large and cheap range of pharmacy products that are often linked to health and hygiene. In January 2022, pharmacies' total e-commerce accounted for 21.3 percent of sales in the pharmacy's outpatient market, and measured in volume (number of units), e-commerce amounted to 32.5 percent in the same month. One year earlier, the corresponding shares were 20 and 28.5 percent, respectively. It is thus not only about sales and volume in absolute numbers that has increased sharply in the past year, but e-commerce is also increasing in scope in relation to the growing total market.

E-commerce's share of total sales and volume



Source: SA Service AB

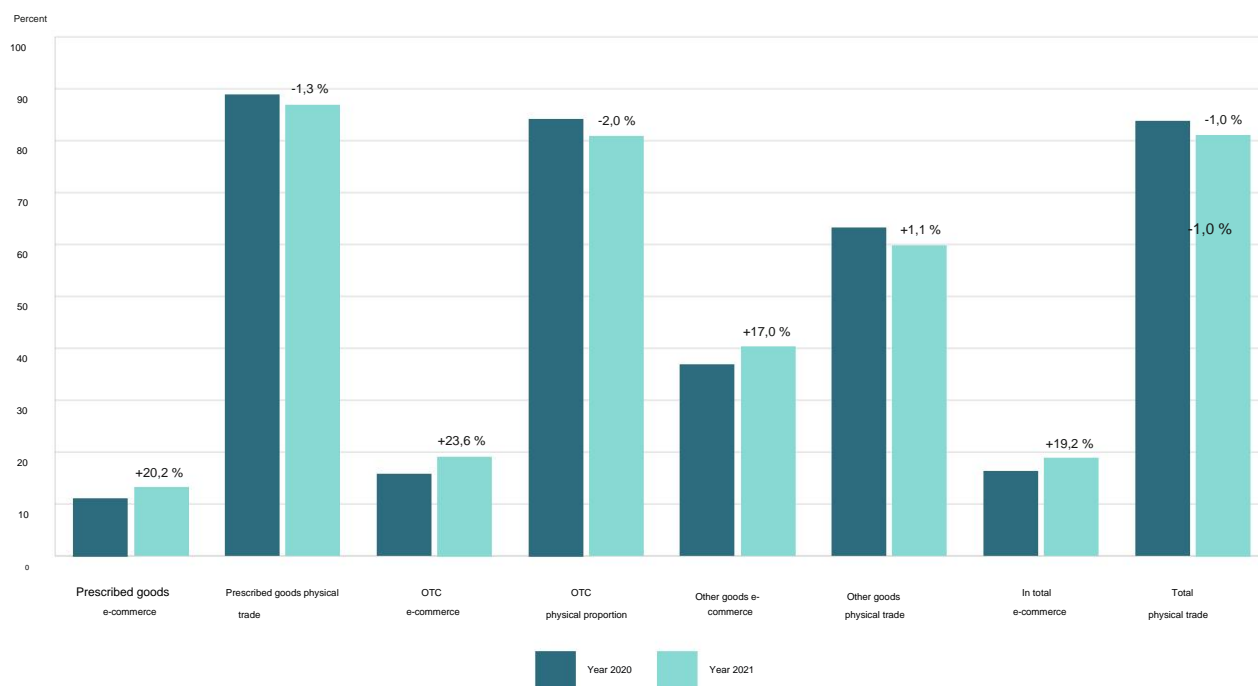
This relationship has meant a shift towards e-commerce, which means that all growth in value now takes place in this channel and this also applies to all three segments with the exception of other goods. Total growth was 19 percent in e-commerce while it was negative (-1 percent) in physical commerce. Growth in e-commerce for prescribed goods amounted to about 20 percent, while over-the-counter medicines increased by just under 24 percent and other pharmacy goods by 17 percent. Conversely, the two segments of pharmaceuticals had no growth in the physical channel, while other pharmacy products increased by only one percent in 2021.

The channel shift means that just over 40 percent of sales of other goods took place in the e-commerce channel in 2021, compared with 37 percent in 2020.

The e-commerce share for over-the-counter medicines amounted to 19 percent in 2021 (16 percent in 2020), while the corresponding figure for prescribed goods was 13 percent (11 percent). This development has been accelerated by the pandemic and new customers have started using the e-male part. The increase is particularly noticeable for customers over the age of 70, which is also the age group most affected by the restrictions.

It should be noted, however, that even though the growth was 20 percent for prescribed goods in e-commerce, the physical channel is still completely dominant and responds

Value shares for e-commerce and physical commerce per segment in 2020 and 2021 and growth compared with 2020



Note: The percentages above the bars indicate growth during the full year 2021 compared with the corresponding period in 2020.
Source: SA Service AB

for 87 percent of sales in this segment.

A similar picture applies to over-the-counter medicines, where just under 81 per cent of sales take place via the physical channel. This illustrates that the physical channel is still by far the largest sales channel for medicines, but that e-commerce is growing very fast and contributing to increased availability that complements the physical store network.

In TLV's follow-up of the development of the pharmacy market for 2019, it appears that the geographical spread of e-commerce is very good. 98 percent of the country's postcode areas received deliveries of prescription drugs during the period March to May 2019. It is still rural areas and smaller cities that show a higher proportion of e-commerce than larger cities. Commuting municipalities also seem to have a larger share of e-commerce compared with other municipalities.

E-commerce thus complements sales via physical pharmacies also geographically. The industry has probably reached a level where the scope of e-commerce means a turning point that will have an impact on the physical store structure. In 2021, the number of physical pharmacies also decreased by 22 compared with 2020, which is a trend break as the number of pharmacies has increased every year since the reregulation in the previous year.

The pharmacies' overall financial results remain weak

The financial result for the outpatient pharmacy market as a whole is reported as an operating margin in the table below, ie the pharmacies' total operating profit (EBIT) in relation to the pharmacies' total net sales. The pharmacies' operating margin is estimated at 1.9 per cent for 2021, which means a deterioration compared with 2020. The operating margin has been around a relatively low two per cent for the past three years.

Pharmacies' earning potential depends to a large extent on the size of the state-determined trading margin and on how parallel imports develop. The regulated trading margin for outpatient pharmacies, as a share of the total sales value, has according to the latest follow-up from TLV decreased from 16.2 percent in 2018 to 15.7 percent in 2020. Pharmacies' bargaining right for parallel imported drugs means a margin increase when they can buy these products at a lower price than the purchase price set by TLV, without having to reduce the set sales price accordingly. On the other hand, the volume of parallel imports has increased in 2021 compared with the year before.



Image from Apoex

Non-prescription medicines, over-the-counter medicines and other pharmacy products are subject to free pricing, but the margin in these segments is pressured by fierce price competition, not least from the growing e-commerce. The overall profitability of outpatient pharmacies is therefore weak.

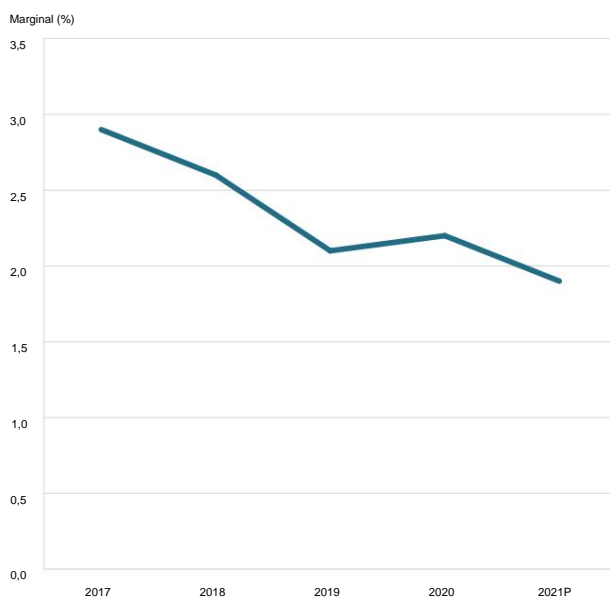
Apoteken's total operating profit for the past 5 years

Percent	2009	2017	2018	2019	2020	2021P
Operating margin (EBIT)	4.6	2.9	2.6	2.1	2.2	1.9

Note: 2021 is a forecast. Excluding Dosmarknaden.

Source: The pharmacies' official annual reports, direct information from the pharmacies and SA Service AB

The outpatient pharmacy's total operating margin 2017-2021 (EBIT)



Source: The pharmacies' official annual reports, direct information from the pharmacies and SA Service AB

The inpatient market

Sales of medicines on the inpatient market amounted to just over SEK 11 billion in 2021.

Sales mainly consist of sales of medicines to hospitals for use in inpatient care. The inpatient market also includes the sale of medicines to certain government institutions. To this should be added the value of the supply services that certain actors provide to regions after procurement. In 2021, this value is estimated at just over SEK 600 million. There are currently four pharmacy players who, after procurement, deliver medicines to the hospitals in the form of manufacturing or supply services: Apoteket AB, ApoEx, Oriola and APL.

In recent years, we have seen that mainly small regions choose to run hospital pharmacies under their own auspices. This has in some cases been due to the fact that the regions have designed the procurement so that no companies have submitted tenders. Some smaller regions also decide to run hospital pharmacies under their own auspices. Larger regions usually choose to procure from pharmacies that, through large-scale operation and high quality, deliver cost-effective solutions to healthcare.

4. THE ECONOMIC CONDITIONS OF THE PHARMACY

The state-regulated trade margin was increased at the beginning of 2022, but pharmacies' costs for dispensing prescriptions still exceed the compensation for this.



The state controls the pharmacy market

Need for appropriate and effective rules

The pharmacy market is partly strictly governed by laws and regulations. The Swedish Medicines Agency decides whether a medicine should be prescription or not and whether over-the-counter medicines may only be sold in pharmacies or also in other retail stores. TLV decides whether a prescription drug should be included in the drug benefit and thus mainly financed by the state. The same authority decides what compensation the pharmacies receive from the state for carrying out its social mission to provide and advise on medicines and by conducting the generic exchange.

Many of the laws and regulations governing the pharmacy market are necessary because medicines are not just any commodity and pharmacies are not just any store. But all the rules affect the conditions for running a pharmacy and cause costs.

That rules drive costs is an insight that regulatory authorities should take into account in the regulations so that existing and new rules are appropriate and effective.

Increased trading margin - a

welcome boost

TLV takes into account the overall sales development and profitability. That is, the sale of other goods and over-the-counter medicines is not only taken into account but is a prerequisite for the apo sign to achieve satisfactory profitability. This means that the current system steers towards developing the range and increasing sales of other products by a higher margin than prescription drugs.

However, it is a challenge as competition is fierce and the growing e-commerce is pushing up prices for both over-the-counter medicines and other goods.

For over-the-counter medicines, average prices have fallen in recent years. Conversely, pharmacies seek to reduce costs for the management of

prescription drugs where possible without violating the regulations.

For approximately 70 percent of the pharmacies' sales (medicines within the benefit), TLV determines both the pharmacies' purchase prices (AIP) and sales prices for medicines (AUP). The difference between them is the sub-margin for prescribed drugs, which is thus state-regulated. The trading margin consists of a fixed amount and a percentage surcharge based on the purchase price and must, according to TLV, reimburse pharmacies for the work of providing medicines, dispensing prescriptions and related advice to customers and handling generic exchange of medicines. It should also compensate for other costs, for example for warehousing, IT systems and to handle leftover medicines that customers can hand in at pharmacies.

According to TLV's established principles, the trading margin must also give the players reasonable profitability for the prescription transaction and create sufficient conditions for a profitable total transaction in order to enable the goal of increased availability. But the recipe business is neither profitable nor in balance, it goes the opposite with a deficit. The Swedish Pharmacy Association has made calculations of the attributable costs and the result for the handling of prescription drugs within the benefit. These show that the trading margin covered 89 percent in 2016 and 88 percent in 2017, including additional earnings from parallel imports. It is highly probable that the cost coverage has decreased further since these calculations were made, as the regulated margin in percent decreased during the period 2018–2020 according to TLV.

However, TLV has decided to increase the trading margin from the beginning of 2022 through an increased remuneration for dispensing generically interchangeable medicines within the product system of the period. The increased remuneration is expected to increase pharmacies' revenues by more than SEK 80 million. TLV justifies the increase with fee increases, primarily from the e-Health Authority, which entails increasing the costs for pharmacies that they are not able to influence because medicines within the benefit are price-regulated. This, together with increased competition and declining profitability, entails a risk that the availability of pharmacy services may deteriorate.

The Swedish Pharmacy Association welcomes this marginal strengthening and considers it obvious that



Picture from Apotek Hjärtat

pharmacies are compensated for increases in public law fees that pharmacies cannot escape, nor can they compensate for when the fees relate to the price-regulated area. The increased margin means compensation for realized and announced fee increases and in addition provides a smaller margin strengthening. The trading margin must provide long-term and stable conditions for the pharmacy players as, among other things, investment decisions are long-term. There is therefore reason for TLV to continue to follow the development and be prepared for further adjustments of the margin as the current profitability and channel shift towards e-commerce mean great challenges for the pharmacy players to maintain the current level of service in terms of physical pharmacies. In the long run, this may lead to a reduction in the good availability of medicines. If the government and TLV want to take responsibility for good drug advice and drug supply, there must be long-term sustainable financing of this activity.

Increased fees affect pharmacies

The Medical Products Agency has announced sharply increased fees for the supervisory activities of outpatient pharmacies of almost 60 percent compared with current fees, which corresponds to almost SEK 10 million. The Swedish Pharmacy Association questions the size of it

proposed fee increase, and whether this increase is offset by a consideration through increased supervision or whether there is a need to increase supervision to the extent and in the manner anticipated by the Medical Products Agency. To further increase patient safety and increase the efficiency of today's work, we see that there are other opportunities such as increased elements of system supervision. As 97 per cent of the physical outpatient pharmacy and several of the Internet pharmacies are part of one of the five nationwide pharmacy chains, this relationship should be utilized through another type of supervision in dialogue with the chains' quality departments. The Government has not yet decided on new supervisory fees, but the agency's request is currently being prepared within the Government Offices.

From 1 January 2022, the e-health authority (EHM) has increased the prescription fee for human prescriptions to SEK 2.70 and in 2021 has also increased the fee for animal prescriptions, which in total corresponds to approximately SEK 55 million per year. The fee shall cover EHM's costs for keeping the necessary registers that pharmacies use when dispensing prescription drugs. The increase is due to the development and introduction of the National Medicines List (NLL), which replaces the two previous registers of prescription drugs and the prescription register.

Parallel imported drugs - the value share increased in 2021

The pharmaceutical trade system is based on the free movement of goods within the European EEA. This means that pharmaceutical retailers take advantage of arbitrage opportunities by buying medicines in a country with lower sales prices and selling them in another country with higher prices. Drugs that are imported in parallel can be original drugs or generic drugs. However, the drug must be approved both in Sweden and in the country of export at the time of application.

In connection with the re-regulation, the government did not emphasize the important price-pressing role of parallel imports, not least the indirect saving effect through price equalization mechanisms within the EEA area. With regard to original medicines without generic competition, the Government emphasized that an increase and efficiency of parallel imports can be achieved "by giving pharmacy players good incentives to trade in and conduct parallel imports".

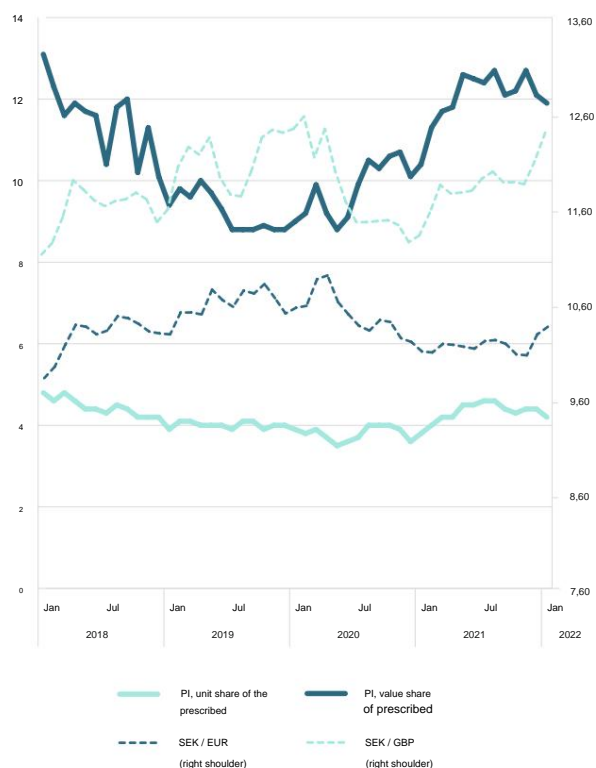
Parallel trade is the only way to push the price of medicines where the patent has not expired, which saves money for society but above all it gives a marginal boost to pharmacies as these can

buy medicines at prices that are lower than those set by TLV.

However, it is important to emphasize the highly variable nature of parallel trade. An expired patent immediately reduces the conditions for Swedish pharmacies to trade this drug in parallel. A weakening of the krona can quickly contribute to a significant reduction in the value added for pharmacies of parallel imports. Likewise, TLV's decisions on price reductions on older medicines and reconsiderations can lead to the conditions for parallel imports being reduced or completely disappearing for these medicines.

In recent years, both the pound and the euro have strengthened against the Swedish krona and parallel imports have fallen in 2019 and 2020. However, the krona has recovered and the value share of prescribed medicines increased to about 12 percent in 2021 while the value increased to SEK 4.4 billion. The additional earnings from parallel-imported medicines have been of great importance for the pharmacies' results. Without this earnings, pharmacies would apparently not have been able to increase availability in the way that has happened.

Parallel imports, share of prescribed medicines (left shoulder and the development of the krona against the euro and GBP (higher shoulder)).



Source: SA Service AB and the Riksbank



Picture from Apotek Hjärtat

The generic system - in need of change

The generic exchange of medicines saves large sums for the state every year. But today's system is not optimal but should be reviewed to reduce some negative effects that the system brings.

The constant monthly changes of the period's goods entail risks that patients take the wrong medication or completely refrain from treatment. It also entails large costs for pharmacies to have the current drug in stock and entails increased rejections. Today, pharmacists' pharmacists are forced to spend a large part of their time explaining the system and why a customer receives a new product. The Swedish Pharmacy Association estimates that the pharmacies' extra costs in connection with the exchange through increased warehousing and handling costs amount to approximately SEK 300 million.

The Swedish Pharmacy Association believes that the exchange periods should be extended and that pharmacies be given greater flexibility to dispense replaceable medicines that are already in stock. Research indicates that there will be so-called price coordinates in the Swedish generic market. The study states that price coordination causes society additional costs in the order of SEK 50 to 200 million per year and that longer exchange periods in the period's commodity system would in principle eliminate these additional costs.³

The association has therefore initiated empirical research to obtain more data on how today's systems with generic exchange can be developed to become more efficient for all parties involved and for the benefit of society and patient safety.

Distribution and right of return of medicines

There are two distributors for the distribution of medicines from the producer to the pharmacy, Oriola and Tamro. The companies are not full-range wholesalers, but the manufacturer chooses one of these distributors. The pharmacy therefore in practice has little opportunity to choose or influence the terms of the two distributors. Some pharmacy chains also have their own distribution solutions for over-the-counter medicines, parallel-imported medicines and other pharmacy products.

A new law came into force in 2018, which means that pharmacies now have the right to return medicines that customers have not picked up. The purpose of the law was to increase the availability of medicines by allowing pharmacies to keep goods in stock to a greater extent. But as the law is written, it missed its target. Refrigerated goods, which are increasing in scope and are often expensive medicines, are in fact excluded from the right of return, which means that pharmacies may bear the full cost if the medicine is not sold or if a customer orders a medicine that is not picked up. In a report, the Medical Products Agency has proposed that refrigerated and frozen goods should also be covered by the right of return, which in practice usually involves credit. So far nothing has happened and the issue is currently being prepared in the Government Offices.

³) Granlund D. and Rudholm N. (2018). Risks and costs for price coordination in the Swedish generic market.

5. PHARMACY STAFF

The pharmacy's most important resource

Providing individually tailored advice on medicines, contributing to relief and recovery is the basis for the pharmacy's operations. To give advice on medicines in a pharmacy, the right training is required for the task. The pharmacy industry is characterized by staff with high competence and great expertise. Therefore, the employees' pharmacies are the most important resource.

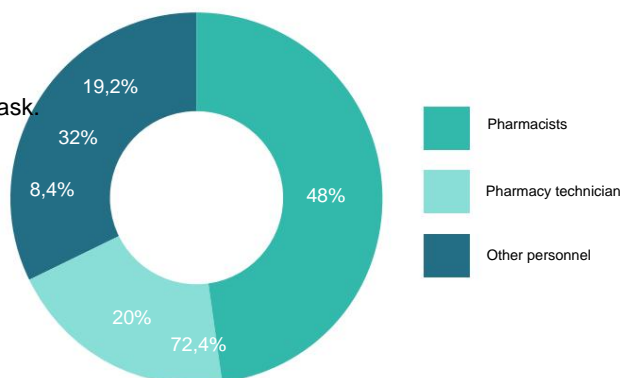
Swedish pharmacies are at the forefront in Europe when it comes to staff training levels. A total of 48 percent of the employees at outpatient pharmacies are university-educated pharmacists and 20 percent are polytechnic-trained pharmacy technicians.

During the pandemic years 2020 - 2021, the pharmacy's staff has acted professionally and taken their community's support very seriously. In many places, it has been challenging to succeed in keeping pharmacies open as a pharmacy is not allowed to stay open without a pharmacist on site. With record high sickness rates and long quarantine periods, it has not been obvious to succeed with this. Without loyal pharmacists who have fought hard, pharmacies would not have been able to fulfill their social mission as they did during the pandemic.



Picture from Apohem

Competence composition for employees in outpatient pharmacies, in 2021



Source: SA Service AB

Pharmacy pharmacists

Pharmacist is the collective name for the identification professions pharmacists and prescribers. By law, there must always be at least one pharmacist in a pharmacy in order for it to be kept open.

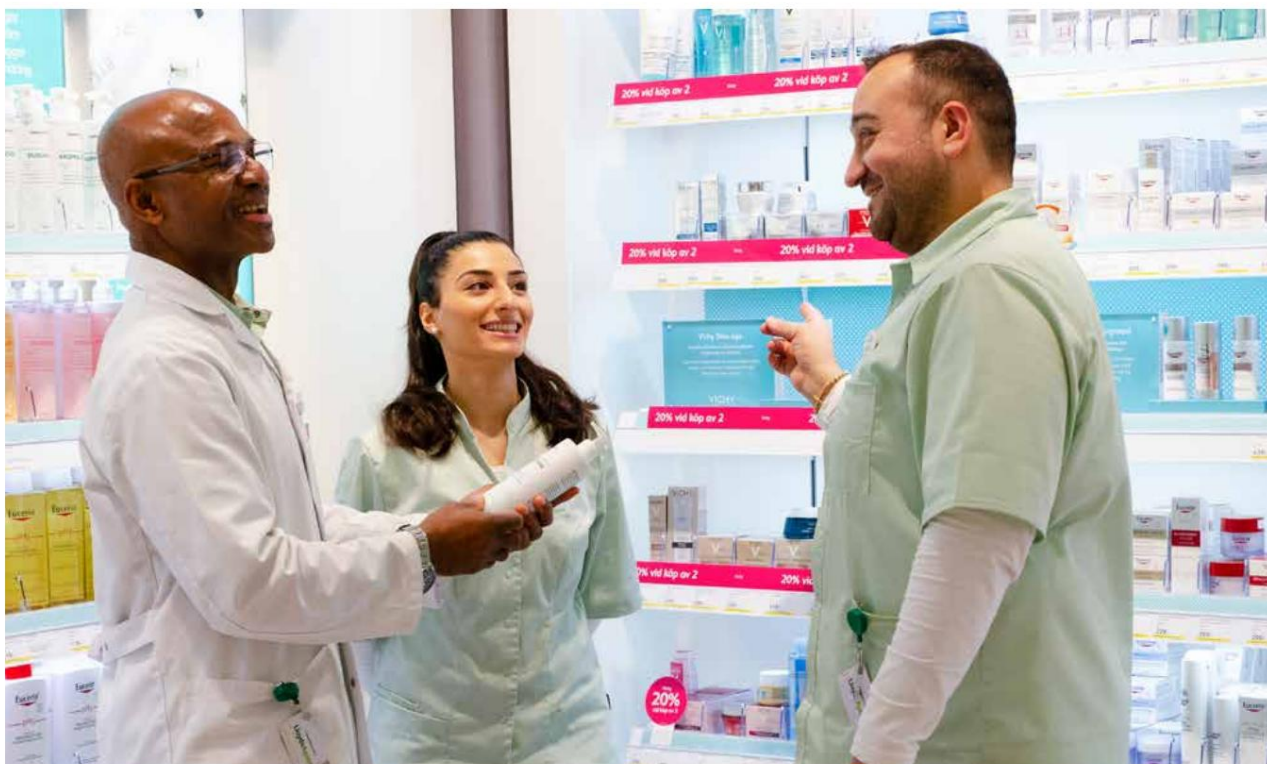
Pharmacists are responsible for prescription management at pharmacies and provide qualified advice on medicines. They constitute an important control function that ensures that the prescribed medicine is really what is being dispensed. The pharmacist should contact the prescriber and point out if something does not seem to be right with the prescription. The pharmacist also has the right to oppose a generic exchange if there is reason to do so. Pharmacies must also have a pharmacist responsible for medicines, who is responsible for the quality and safety of medicines

consumption.

To become a licensed pharmacist, a five-year university education is required, which is given in Uppsala, Gothenburg and Umeå (which also has distance education). To become a registered prescriber, a three-year university education is required that is physically and remotely available in Kalmar and Umeå, as well as physically in Uppsala and Gothenburg.

Pharmacy technicians

Pharmacy technicians are primarily responsible for the pharmacy's self-care advice and over-the-counter medicines. Some technicians who have prescription authorization also work in part with support for the pharmacists in prescription handling. The technicians also work with other goods and tasks in pharmacies. Both pharmacy technicians and pharmacists have the knowledge to decide when a customer should be referred to healthcare or when it is enough.



Picture from Lloyds Apotek

with self-care. To work as a pharmacy technician, you should have undergone a special polytechnic education in three semesters organized by an education provider that is funded through the Agency for Polytechnics and thus uses curricula that the pharmacy industry together with the union Unionen has developed. On the site www.jobbpåapo.tek.se there are links to these educational companies as well as the universities and colleges that offer pharmaceutical educations.

Other staff at pharmacies

Other staff who work at pharmacies can, for example, be self-care advisers, ie staff who have a self-care education and work with advice in self-care, as well as pharmacy assistants who work with cash, goods handling and more.

More and more pharmacies are hiring other specialists, such as dermatologists and sometimes nurses.

The number of employees in the industry In

2021, a total of approximately 12,300 people worked with pharmacy operations in Sweden, of which just over 10,300 people worked specifically in outpatient pharmacies. Prior to the reregulation, the employees at the then 930 outpatient pharmacies corresponded to just over 6,200 full-time positions (full-time equivalents). Year

2021

The corresponding figure was just over 8,200 full-time jobs at 1,420 physical pharmacies and e-commerce pharmacies.

The number of employees per

pharmacy The pharmacy industry has grown significantly since the re-regulation in 2009 and the number of employees in the industry has increased. On the other hand, the number of employees per pharmacy has seven kits, which is due to the fact that pharmacies have become more numerous, often slightly smaller in size but also more efficient in their overall staffing and scheduling.

A natural effect of more pharmacies is that the number of prescriptions dispensed per pharmacy is lower. This affects the need for staff per pharmacy. This so-called dilution effect can be quantified by studying the number of prescription lines over the years. The number of prescription lines (excluding dose) has increased from 72.6 million in 2009 to approximately 88 million in 2021. This means that the total number of prescriptions dispensed per full-time equivalent (FTE) has decreased by almost nine percent since 2009 - from 11,710 prescription lines per FTE and year 2009 to 10,680 prescription lines per FTE and year 2021.

Challenges with skills supply

Unemployment in the industry is virtually non-existent and wage growth has been good in recent years

This is a consequence of the fact that the industry has grown strongly and that the number of pharmacies has increased significantly.

Employers believe that the shortage of pharmacists remains large both in terms of newly graduated and more experienced pharmacists. In 2021, about 510 pharmacists worked who have reached or are approaching retirement age, of which about 370 were over 67 years old. In addition, large retirements are expected during the years 2025 and onwards, as many prescribers in particular will retire.

The shortage of pharmacists is particularly great outside the big cities. Already today, there are several examples of pharmacies that have not been able to open or have been forced to close due to the difficulty of recruiting pharmacists to smaller locations around the country. This has been particularly noticeable during the corona pandemic as the illnesses have periodically been very high and employees in risk groups have had difficulty working. In addition, pharmacists are in greater demand in other parts of healthcare.

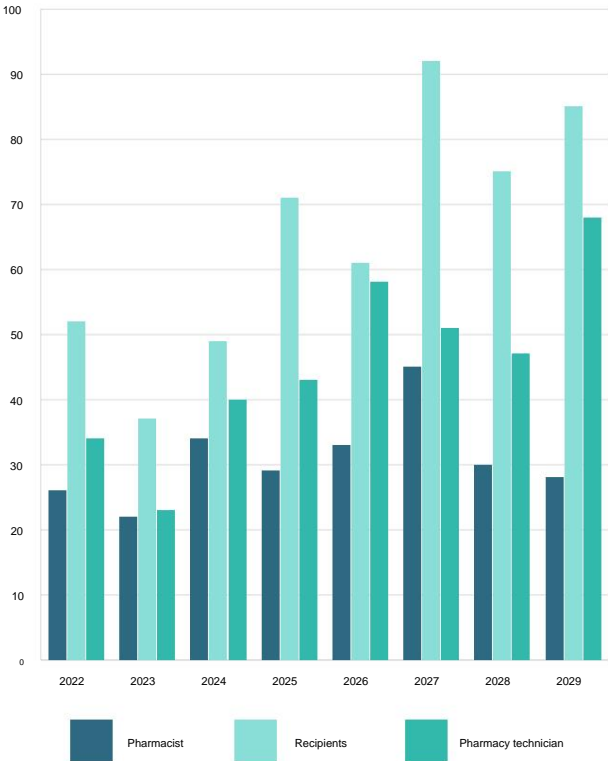
The industry is working together to increase the number of training places and increase the application pressure for the pharmaceutical educations. The industry also collaborates with Sweden's Pharmacists and the Academy of Pharmaceuticals in projects that are financed by the state to speed up the process for newly arrived pharmacists to obtain Swedish identification. There is still a large group of pharmacists with education outside the EU who want to work in pharmacies but who need a Swedish ID to be able to work as a pharmacist in pharmacies. A challenge for the industry is to attract more men to apply for pharmacy educations and work in pharmacies. A large majority of the employees are women.

Number of pharmacists 65 years or older who work full or part time

Age	Year 2020	Year 2021
65-66 years	131	139
67 years or older	252	371
In total	383	510

Source: SA Service AB

Estimated number of retirements for staff with different educational backgrounds



Source: SA Service AB



Picture from Apoteksgruppen

MISSION OF THE PHARMACY

Pharmacies stand for a safe and good use of medicines and are thus an important part of health care. This is formulated by the state in three basic assignments that aim to ensure that pharmacies have access to medicines, provide advice and information about medicines and that they inform and carry out the exchange of medicines. The expertise available in pharmacies is currently underused. There are several situations where pharmacists can further facilitate and improve drug use. In addition, the pharmacies' customers have high expectations of the pharmacies, which contributes to the pharmacies seeing that they have a larger social mission and today offer a greater range of goods and services.

6. OUR SOCIAL ASSIGNMENT

Apoteken's social mission is to stand for a good and safe use of medicines, this is formulated through three basic tasks:

- Ensure that the consumer as soon as possible can take place get access to prescribed drugs and goods.
- Provide expert and individually tailored information and advice.
- Carry out and inform about the exchange of medicine average.

The pharmacy's basic assignment

Basic assignment 1 - access to prescribing medicines and goods

All pharmacies with a pharmacy license have an obligation to provide all medicines and other goods that are included in the benefit when they are prescribed or ordered by the healthcare system. In Sweden, a majority of all medicines are supplied via the pharmacy channel. In many other countries, healthcare is responsible for a large proportion of the more unusual drugs. Pharmacies work actively with their warehouses so that around 93 percent

Of all the medicines that are requested, customers get them home immediately and most others are ordered home until the next day. However, some medicines can not be ordered because they are out of stock with the manufacturer. In order to fulfill its mission, pharmacies then need to find other solutions such as changing strength and pack size, finding a corresponding other medicine or a medicine in foreign packaging. An increasing proportion of medicines are dispensed via e-commerce and are then delivered either within a few hours or a day.

Basic assignment 2 - individually adapted information and advice

The fact that medicines are used correctly is crucial for the medicine treatment to have the intended effect. Therefore, pharmacies also have an important task when giving dispensing, individually tailored advice and for some to make sure that the customer knows how to use their medicine.

According to the WHO, compliance is estimated, ie. that medicines are used as intended, to about 50% in the world's developed countries⁴ and in Sweden the annual

⁴) https://www.who.int/chp/knowledge/publications/adherence_full_report.pdf

healthcare costs due to drug-related morbidity amount to between 12 and 19 million.⁵

The efforts of pharmacies are crucial to improve these figures and avoid unnecessary suffering for patients.

Pharmacy staff play an important role in the right drug treatment, both for prescription and over-the-counter drugs. There is therefore a big difference between going to a pharmacy for advice and purchasing over-the-counter medicines and shopping over-the-counter in other stores where staff are not allowed to give advice.

Basic assignment 3 - carry out and inform about the exchange of medicines

Society sets strict requirements for the medicines they finance through the benefit system. Pharmacies are obliged to keep costs down for society

to make changes when there are equivalent drugs at lower prices - so-called generic drugs.

Since 2009, there is a special period product system that specifies which drug the pharmacy should change to each month. Even though pharmacies save a lot of money for society through the change, the system's design has consequences for patient safety and drives up the handling costs for pharmacies.

For pharmacies, the constant changes of which goods are to be in stock in the approximately 1300 exchange groups means a great deal of administrative work and makes stock planning more difficult. For the patient, the constant changes can mean that the wrong medication is used or that the medication is not used at all as different names and appearances are confusing, especially for the elderly with many medications. This means that extra time needs to be spent on counseling.



Photo: Jeanette Hägglund, photo from Apoteket AB

⁵ Gyllensten, H. Economic impact of drug-related morbidity in Sweden. University of Gothenburg, 2014

Requirements for pharmacies

The following basic legal and regulatory requirements apply to pharmacies:

- All pharmacies must have a permit from
The Medical Products Agency
- A pharmacist must be present when the pharmacy is open
- The premises must be suitable for the pharmacy's operations
- Pharmacist responsible for pharmaceuticals who must report any deviations to
The Medical Products Agency
- Provide all medicines and others
goods that are included in the benefit when they are prescribed or ordered from healthcare
- Be able to handle electronic prescriptions, have access to a high-cost database and report sales information directly to the eHealth Authority
- Have your own system for checking that the requirements for pharmacies are complied with - self-monitoring program
- Provide individual and producer independent information and advice on medicines, drug use and self-care
- Issue a Schengen certificate, have the national pharmacy symbol at the pharmacy and offer partial payment for benefit costs
- Manage the drug benefit, including generic exchange
- Secure data processing of personal data
- Functional patient safety work

General quality requirements for pharmacies:

- The requirements are high at all Swedish pharmacies, regardless of owner. Requirements for pharmacies are found in laws, ordinances and regulations from the Medical Products Agency, the Swedish Dental and Pharmaceutical 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 Medical Products Agency's regulations. All pharmacies have a pharmacist responsible for medicines, whose task is to ensure that the requirements are complied with.
- By working preventively with clear routines and instructions, division of responsibilities and competence development, the risk of incorrect processing and other deviations is reduced.
Follow-up through, for example, self-inspection, random sampling and sustainability checks is also part of the work to ensure quality.
the business.
- Serious deviations are reported to Läke
the Swedish National Board of Health and Welfare and to the Swedish Health and Care Inspectorate (IVO), according to lex Maria.

7. AVAILABILITY FOR MEDICINAL PRODUCTS

The Swedish drug

the market is organized so that the pharmaceutical manufacturers have a few large warehouses in central locations in Sweden. Pharmacies have smaller warehouses in as many places as possible around the country. Each pharmacy adapts its drug stock to its unique customer base.

The Swedish system In

Sweden, a very high proportion of all medicines go via pharmacies and all pharmacies in Sweden must be able to dispense all medicines. This makes access to medicines across the country equal, but also poses a challenge for pharmacies. There are medicines used by tens of thousands of people and medicines used only by a few patients.

It is the pharmaceutical manufacturers who have the largest warehouses in a few central locations in Sweden, while the pharmacies have smaller warehouses in as many locations as possible. At each pharmacy, you adjust the stock according to which customers you have. The goal is for as many people as possible to get their medicines directly at the pharmacy counter and the others should not have to wait longer than 4 pm the next weekday. Which is the best balance between how much stock you have in the pharmacy and which goods should be ordered goods is a difficult trade-off for pharmacies. If you do not have a medicine in stock, there is a risk that the customer will choose to go to another pharmacy, but you also do not want to have a stock of medicines that are not sold and that must be destroyed.

Stock at the drug manufacturer

The largest part of all medicines available in Sweden is in the pharmaceutical manufacturer's warehouse. The manufacturer has its stock at a distributor as well

is responsible for delivering the medicines to the pharmacies.

The manufacturer's stock at the distributors is sufficient for an average of three to four months of consumption.

The warehouse is continuously replenished from the manufacturer's factories, which are usually located outside Sweden. There are no requirements for how large stocks a manufacturer must have in Sweden and it can vary between different drugs and over time how much is in stock in Sweden for that particular drug. The advantage of having large stocks at a few distributors is that it is easy to distribute the medicines to pharmacies as needed without there being stocks lying in the "wrong" place in the chain.

In its sub-report "A strengthened supply readiness for health care", the State Inquiry on Health Care Preparedness proposed that there should be a requirement for up to 6 months' stock of the most common medicines.

Stock at the pharmacy

At the country's 1411 pharmacies, there are around 7.5 million packs of prescription drugs in stock, spread over almost 12,000 different drugs. An average pharmacy has around 5,000 packages in stock divided into about 2,300 different drugs. The large e-commerce pharmacies have even larger stocks. The total stock in pharmacies corresponds to the volume sold in Sweden per month.



Image from Meds



Photo: Jeanette Hägglund, photo from Apoteket AB

Only a few medicines have such large sales that they are sold several times a week at a pharmacy and the stock can then last for several weeks. Many of the drugs that are sold less often are also in stock so that apo tek can provide good service to its customers. Of such a drug, which may not be sold more often than every two or three months, there are then only a few packages in stock. This means that, on average, a pharmacy's stock lasts for about a month, but if the manufacturer takes the time to deliver, individual goods can run out in some pharmacies fairly quickly but remain in other pharmacies for several months.

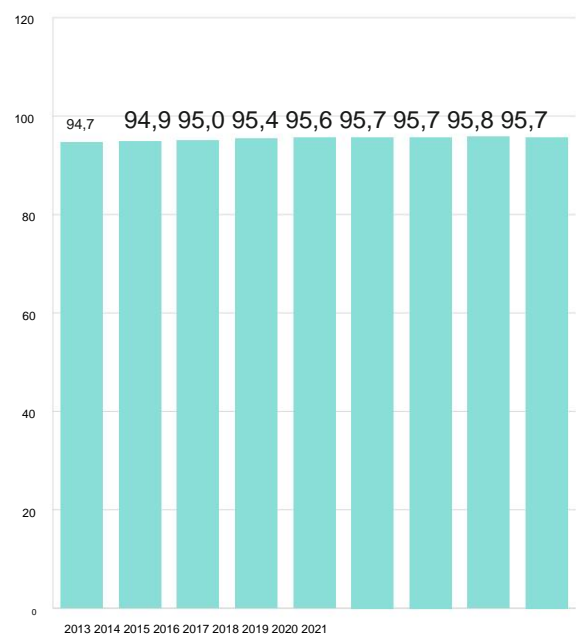
Direct dispatch rate

Pharmacies try to find a good balance between what should be in stock and what is order goods. In order to know how many customers receive their medicines directly at a pharmacy, questionnaire studies have been conducted at pharmacies on two occasions. This is called the direct dispensing rate and was measured by the Swedish Pharmacy Association in 2015 and by TLV 2019. In the most recent survey, 92.6 percent of the requested prescriptions were dispensed directly. 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 pharmaceutical manufacturer increased sharply - from 0.8 per cent of all prescriptions to 1.9 per cent of all prescriptions.

Pharmacies also measure what is called the level of service which is the proportion of drugs that can be dispensed

directly from all medicines dispensed by a pharmacy. The direct dispensing ratio also covers those occasions where the customer for some reason does not choose to order the medicine, e.g. by instead going to another pharmacy, and is therefore slightly lower than the level of service. The service level has increased continuously over the years and was 95.7% last year - which is the same level as in recent years. The pandemic does not seem to have affected the level of service at all.

Service level, annual average



Source: SA Service AB

Availability is not just stock

A valid prescription is also needed to get your medicine at the pharmacy. It is common for customers to lack valid prescriptions when they enter pharmacies. A student essay shows that over a third of the patients did not have a prescription in their list of medicines⁶ and an estimate from the pharmacy is that every tenth requested prescription cannot be dispensed when it is finally dispensed or expired.

Another thing that affects the patient is the number of drugs you have. Regardless of whether all medicines are taken at the same time or if you take different medicines at different times, the risk of

one of them at some point is out of stock of the pharmaceutical company or rarely in demand at the pharmacy. This means that many people are at some point affected by the fact that their medicines cannot be dispensed directly at the pharmacy.

Pharmacies can also help customers by having services that remind you when it's time to pick up medicines or offer home delivery when something is not in the pharmacy at that particular visit. In the end, it is the customer who has their medicine when they need to take what is important - not that it is in a pharmacy's warehouse.



Photo: Hanna Olsson, picture from Kronans Apotek

⁶) <https://www.diva-portal.org/smash/get/diva2:1543688/FULLTEXT01.pdf>

8. AVAILABILITY TO PHARMACIES

Today is available

1 411

apotek

which is

52% more

than when the market

re-regulated in 2009.

compared with 2009. There are thus significantly more pharmacies today and a significant e-commerce. In 2021, however, there was a trend break when the number of pharmacies decreased and was 22 fewer compared to 2020. One reason for this is the increased e-commerce, which now accounts for almost 20 percent of total sales in value. Despite the significant increase in the number of pharmacies, the Swedish pharmacy density is still among the lowest in Europe.

Pharmacy opening hours

An at least as important factor for accessibility as the number of pharmacies is the opening hours they have. Since 2009, pharmacies' opening hours have increased dramatically - from 45.3 hours a week to an average of 55.6 hours in 2021, which means an increase of 23 percent. The number of pharmacies open on Sundays has increased from 154 to 559 since the reregulation, which corresponds to an increase of just over 260 per cent. Many pharmacies in the country today are open close to 100 hours a week, almost every day of the year.

Number of pharmacies

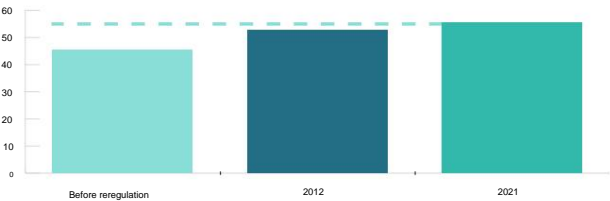
The pharmacy market was re-regulated in 2009 and the number of physical outpatient pharmacies has since increased every year until 2020. At the end of December 2021, Sweden had 1,411 outpatient pharmacies, which means an increase of approximately 480 pharmacies or 52 percent

Number of physical outpatient pharmacies per player

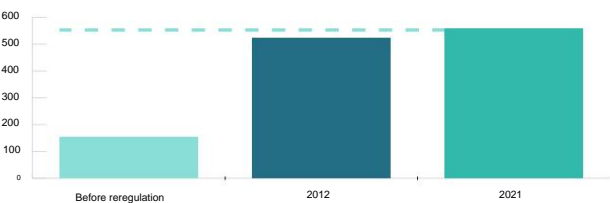
Pharmacy actor	Before reregulation	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Apoteket AB	929	345	365	375	372	370	372	388	394	394	397	402	391
Pharmacy Hjártat ICA1		30	42	48	58	67	391	385	386	388	390	391	390
Kronans Apotek2		189	209	219	300	305	309	323	325	326	323	324	318
The pharmacy group		150	155	158	163	165	169	177	185	188	193	197	193
LloydsApotek3		50	81	77	79	83	80	79	78	78	78	77	75
Pharmacy Hjártat1		256	270	277	306	307							
Medstop4		63	64	65									
Vårdapoteket5		24	24	27									
Other actors		15	32	28	25	30	37	39	43	47	45	42	44
Amount	929	1122	1242	1274	1303	1327	1358	1391	1411	1421	1426	1433	1411

1) ICA Gruppen's purchase of Apotek Hjártat was completed in early 2015, and the common pharmacy name is Apotek Hjártat. 2) Formerly called Kronans Droghandel. 3) Formerly called DocMorris. 4) Medstop was bought in 2013 by Kronans Apotek. 5) Vårdapoteket was bought in 2013 by Apotek Hjártat. Note Measurement time is the end of December each year.
Source: SA Service AB and the forwarding register, EXPO

Opening hours per pharmacy and week, hours



Number of pharmacies open on Sundays



Source: SA Service AB and the dispatcher register EXPO



Picture from Apotea

Pharmacy by county and pharmacy density

All counties have had more pharmacies since the reregulation in 2009. Most establishments have taken place 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. In these counties, however, the pharmacy density was initially the lowest in the country, measured as the number of pharmacies

per inhabitant. The smallest increase has taken place in Norrbotten, Jämtland, Dalarna and Västerbotten counties. In these counties, however, the number of pharmacies per inhabitant was initially among the highest in the country. The new establishment of pharmacies thus has a natural and clear connection to the density of pharmacies in relation to the population.

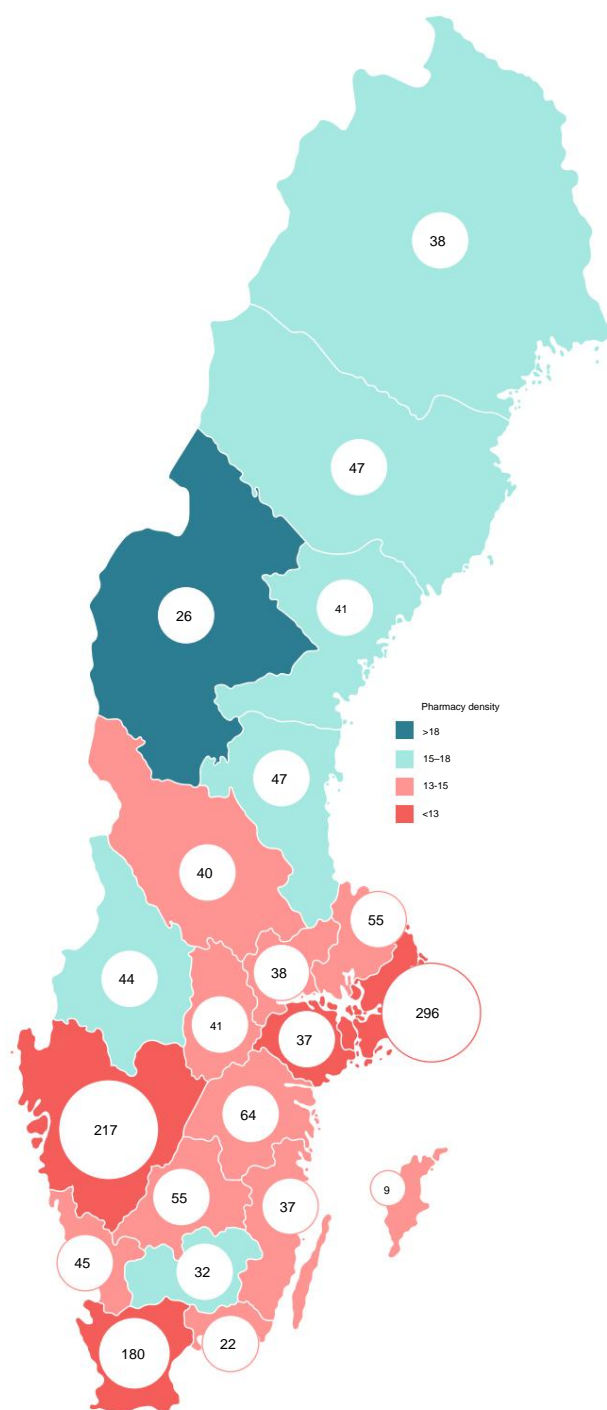
Number of outpatient pharmacies and change per county

County	Before reregulation	2021	Change, number	Change, percent
Uppsala	28	55	+27	+96%
Stockholm	159	296	+137	+86%
Blekinge	12	22	+10	+83%
Skåne	103	180	+77	+75%
Halland	29	45	+16	+55%
Södermanland	24	37	+13	+54%
Västra Götaland	142	217	+75	+53%
Jönköping	36	55	+19	+53%
Kronoberg	21	32	+11	+52%
Västmanland	25	38	+13	+52%
The kingdom	929	1411	+482	+52%
Gävleborg	34	47	+13	+38%
Örebro	30	41	+11	+37%
Östergötland	47	64	+17	+36%
Värmland	34	44	+10	+29%
Gotland	7	9	+2	+29%
Kalmar	29	37	+8	+28%
Västernorrland	33	41	+8	+24%
Västerbotten	41	47	+6	+15%
Dalarna	35	40	+5	+14%
Jämtland	23	26	+3	+13%
Norrbotten	37	38	+1	+3%

Note: Measurement time is the end of December each year.
Source: SA Service AB and the expedition stand register EXPO

The next figure shows the pharmacy density per county measured as the number of pharmacies per 100,000 inhabitants. The figure illustrates the pharmacy density in 2021, where counties with the highest pharmacy density are colored in blue / green, while counties with the lowest pharmacy density are colored in red / light red. It appears that Jämtland and the other Norrland counties as well as Kronoberg and Värmland are the counties with the highest pharmacy density, while Stockholm, Södermanland, Västra Götaland and Skåne 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 naturally located in the three metropolitan counties that also have the most inhabitants, but at the same time the pharmacy density is lower in these counties. For Sweden as a whole, the pharmacy density in 2009–2021 has increased from just under 10 to 13.5 pharmacies per 100,000 inhabitants.

Number of pharmacies and pharmacy density per 100,000 inhabitants



Source: SA Service AB and Statistics Sweden

Good spread across the country

To get a further picture of the spread of pharmacies across the country, we have used the new municipality grouping from 2017, which Sweden's Municipalities and Regions have defined, and analyzed the conditions and development in 2021. The table shows that most pharmacies or almost 40 percent available

in larger cities and municipalities near larger cities, followed by large cities and municipalities close to cities (33 per cent) as well as smaller cities / towns and rural municipalities (just under 29 per cent). Physical pharmacies are thus well spread across the country and different municipal groups. The table also shows that the reduction in the number of pharmacies in 2021 took place in metropolitan areas and larger cities, while the number increased slightly for smaller cities / towns and rural municipalities compared with 2020. The closure of pharmacies in 2021 has thus not affected the more sparsely populated municipalities. .

Pharmacy in sparsely populated areas

In some parts of the country, it is difficult to conduct profitable pharmacy operations. Therefore, there is a particularly sparse rural support that under certain conditions can be given to pharmacies to reduce the risk of declining population data. Provided that the pharmacies' state-regulated margin on prescription medicines does not continue to erode, there is no direct reason to worry that pharmacy operations in sparsely populated areas are by definition unprofitable or more threatened than before, see above. Many of these pharmacies often have a position of local monopoly and a sufficient customer base. The profitability problems we have seen at the pharmacy level mainly concern establishments in the big cities where competition between the players is fierce. One development that plays a major role in the accessibility of sparsely populated and rural residents is the establishment of internet pharmacies. According to an analysis by TLV, smaller towns have a higher proportion of e-commerce and lower pharmacy density means higher e-commerce. E-commerce can therefore be seen as a complement to physical pharmacies in sparsely populated areas.

The Swedish pharmacy density in a European perspective

Until 2009, Sweden was the country after Denmark with the lowest pharmacy density in Europe, with almost ten physical pharmacies per 100,000 inhabitants.

The pharmacy density has increased after the reregulation, and at the end of 2021, as mentioned, there were 13.5 pharmacies per 100,000 inhabitants.

In a European perspective, however, the pharmacy density in Sweden is still low and the 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 pharmacy density for the European countries is just under 31 pharmacies

Number and proportion of outpatient pharmacies per municipal group in 2021 and change compared with 2020

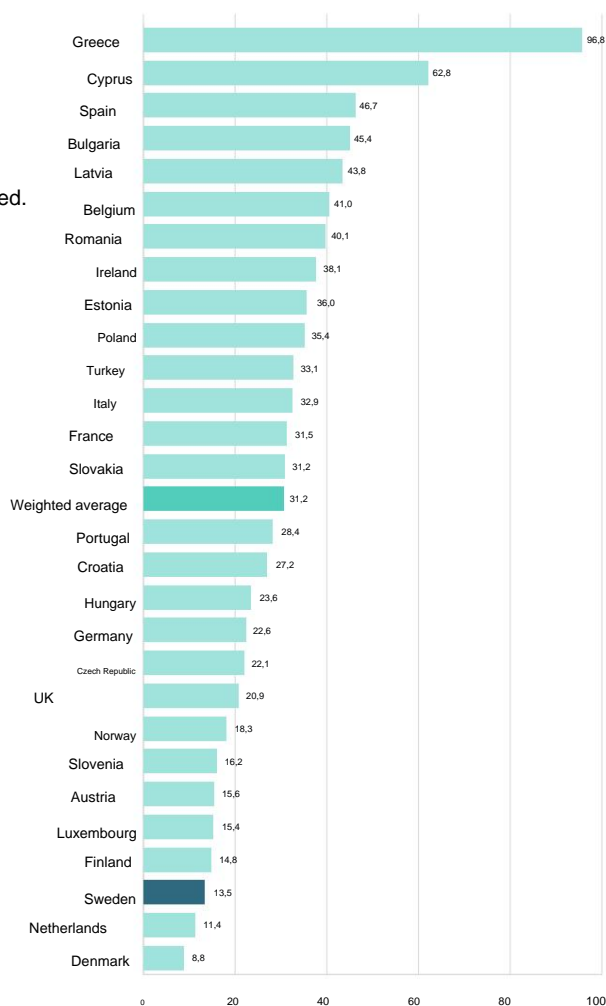
Main group	Municipal group	Quantity 2021	Number per main group	Percent	Quantity 2020	Change Quantity
A. Large cities and municipalities close to the city	A1. Big cities	243	468	33,2%	251	-14
	A2. Commuting municipality near big city	225			231	
B. Larger cities and municipalities near larger cities	B3. Larger city	345	540	38,3%	355	-11
	B4. Commuting municipality near a larger city	107			107	
	B5. Low commuting municipality near major city	88			89	
C. Smaller cities / towns and rural municipalities	C6. Smaller town / urban area	196	403	28,6%	194	3
	C7. Commuting municipality near a small town / urban area	86			86	
	C8. Rural municipality	87			87	
	C9. Rural municipality with hospitality industry	34			33	
In total		1411	1411	100% 1433		-22

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

per 100,000 inhabitants. In Sweden, therefore, the inhabitants have almost 45 percent as many pharmacies in relation to the population as the 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 in recent years is completely offset by the fact that the number of Swedes has increased.

However, Swedish consumers' access to pharmacies is better than what these figures indicate, as Sweden has the most developed e-commerce in pharmacy operations of all European countries. In most countries in Europe, pharmacies are not even allowed to sell prescription drugs via e-commerce. In Sweden, sales in value in the e-commerce channel account for 13 percent of the total sales of prescription drugs and almost 20 percent of sales of OTC drugs. In addition, an assortment of OTC products is sold in other retail areas, which is not permitted in several European countries.

Number of pharmacies and pharmacy density per 100,000 inhabitants



Source: PGEU and Eurostat. Data refer to the year 2020/21

9. MEDICINE AND ENVIRONMENT

Välvald - the pharmacy's guide to increased transparency

In 2021, Välvald, the pharmacy's industry's joint guide to the pharmaceutical companies that are more transparent with their sustainability work, was launched. A total of eleven companies with around 300 over-the-counter pharmaceutical products received the Välvald logo on the shelf edge of all the country's pharmacies in stores and e-commerce.

Välvald was jointly developed by the pharmacy industry because pharmacies felt that the need to be able to answer customers' questions about sustainability and the impact of medicines on the environment grew. The guide does not guarantee that one company is more transparent or that a specific drug is manufactured more sustainably than another as the drug companies today do not disclose such information. But some pharmaceutical companies work more than others with sustainability and for increased transparency, and pharmacies want to reward this. In 2021, two requirements were set for a pharmaceutical company to be included in the guide. The company must be covered by an externally audited sustainability report and be a member of the organization The Pharmaceutical Supply Chain Initiative (PSCI), which works for transparency and sustainability issues in the pharmaceutical industry. Products containing diclofenac exclude race from Välvald.

During the year, intensive work was carried out to tighten the criteria. Välvalds' overall goal is to contribute to sustainable drug production. The ambition is to be able to make sharp demands in the long term on how individual products are produced and to develop Välvald into a sustainability label. Customers with informed choices give pharmacies the opportunity to show that transparency and sustainability issues are competitive advantages also for medicines. Already after Välvalds first year, we see a great interest from several pharmaceutical companies to want to be covered by the guide and meet set criteria.

Prior to 2022, the criteria have been developed and now include requirements for the pharmaceutical company to answer questions regarding individual products. Companies need to guarantee that the over-the-counter medicines included in Välvald have been manufactured with respect for human rights, workers' rights, the environment and free from corruption. The criteria will continue to be developed and where possible, in line with others

sustainability initiatives. For example, the Procurement Authority's proposed requirements for the procurement of medicines and their application by the regions. The Medical Products Agency, the Swedish Dental and Pharmaceutical Benefits Agency and the eHealth Agency have a joint government assignment to develop criteria for discharges of drugs to the environment within the framework of a trial operation with an environmental premium within the pharmaceutical benefits system (period of goods) during the years 2024 to 2027.



Responsible use of medicines with

environmental damage

Medicines contain active substances that can sometimes be difficult to degrade and harmful when they are released into nature. Today's treatment plants are not designed to purify all these different substances and the result is that they reach the environment. Medicines are often of such great medical benefit that they should still be used. How and when these drugs should be used to do the greatest benefit to the least possible harm to nature, pharmacists' pharmacists are best suited to communicate. This applies, for example, to the correct use of prescription antibiotics, but also to over-the-counter painkillers sold in self-care.



Photo: Jeanette Hägglund, photo from Apoteket AB

An example of a substance that the treatment plants do not currently remove is diclofenac, which also has a negative impact on the environment. The Swedish Medicines Agency classifies diclofenac in gel form as non-prescription, which means that it can be sold both in pharmacies and in other stores without advice. In light of this, pharmacies have had an industry agreement since 2018 that all Swedish pharmacies should inform their customers that diclofenac has a negative effect on the environment and should be used with consideration. At the beginning of 2022, the Medical Products Agency reported on its government assignment regarding the possibility of using environmental harmfulness in the evaluation of where a drug may be sold.

In the assignment's final report Environmental harm for over-the-counter medicines⁷, the Medical Products Agency recommends that environmental harm should be taken into account when deciding where medicines may be sold. Our hope is that diclofenac will in future only be sold in pharmacies in connection with counseling.

Leftover medicines

Unused medicines must be disposed of correctly and incinerated in specially approved facilities. In order for this handling to take place as safely as possible, the public is encouraged to hand in their leftover medicines to pharmacies. By law, all Swedish outpatient pharmacies must receive drug residues from the general public. In total, all Swedish pharmacies collected approximately 1,400 tonnes of drug residues in 2021.

with other countries this is a very high level.

This is stated in a forthcoming report from the OECD "Management of pharmaceutical household waste, OECD publishing 2022 Paris".

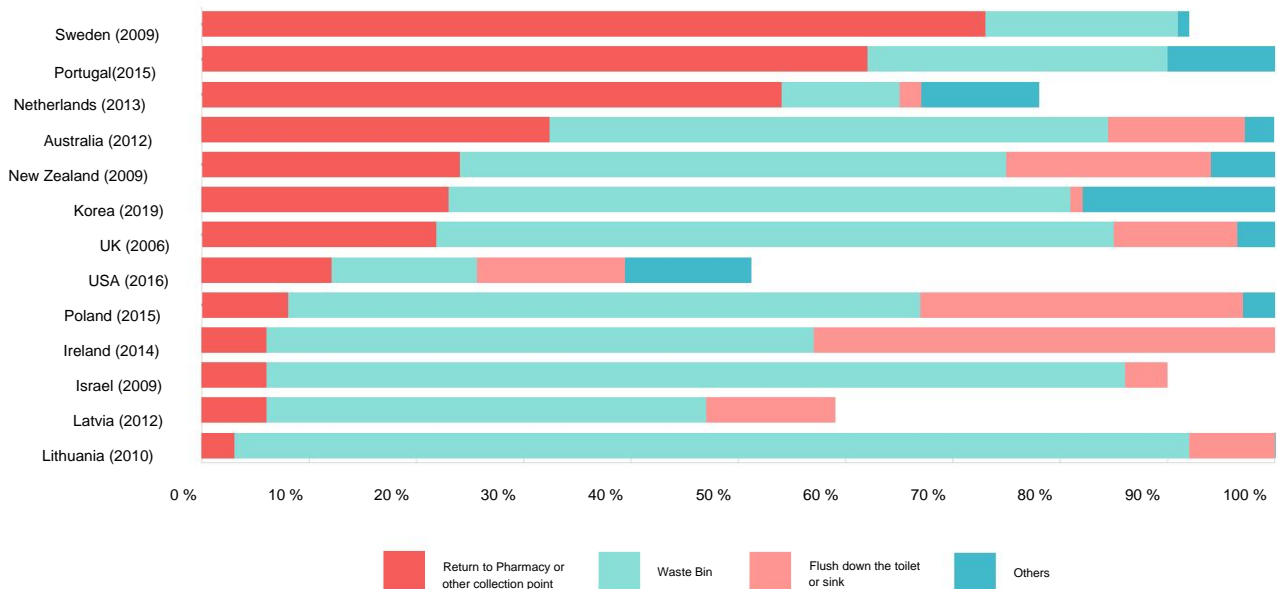
Pharmacies spend both time and money on receiving unused medicines. Pharmacies are not fully compensated for this work, on the contrary. The costs of receiving leftover medicines increase for the pharmacy every year and amount to more than SEK 20 million.

There are also some incidents linked to the return of medicines. These are often needles and hazardous waste that are left at pharmacies despite the fact that they must be returned to the municipalities' recycling centers. The municipalities do not always apply their responsibility in practice, but instead most municipalities refer to the pharmacy's collection responsibility. Due to this, the pharmacy wants the municipalities' responsibilities to be clarified.

The proportion of leftover medicines should also be reduced and there are several ways to do this. The pharmaceutical industry, for example, should provide more starter packs of medicines to patients who are about to start a new medicine or new strength. The system with the goods of the period should be revised with longer exchange periods. Today, many people testify that they have large amounts of old medicines lying around at home that are not used or used incorrectly.

⁷ <https://www.lakemedelsverket.se/4b116c/globalassets/dokument/regeringsuppdrag/2021-01-19-Environmental-harm-over-the-counter-drugs-s2021-01905-partially.pdf>

OECD Management of pharmaceutical household waste



OECD (2022, forthcoming) Management of pharmaceutical household waste, OECD Publishing, Paris

The pharmacy companies' work with sustainability issues

The pharmacy companies work in several ways with sustainability issues and for most of the companies, the environment and sustainability are important issues to profile themselves within. Many of the companies are at the forefront and there are several interesting examples to highlight. In general, we in Sweden are ahead when it comes to taking responsibility for sustainability and the environment in pharmacies. In the report "Best Practice Paper on Green and Sustainable Pharmacy in Europe" 8 compiled by the pharmacies' European industry organization PGEU, it is clear that we in Sweden are far ahead of other countries.

Transport, packaging and packaging materials gives a direct negative environmental impact and are therefore clear focus areas for pharmacies. As e-commerce grows, these investments become increasingly important. The companies both collaborate with and make demands on their suppliers in order for the entire chain to become more climate-smart. Almost all pharmacy companies work actively and purposefully to reduce their climate footprint. Below are some examples from Swedish pharmacy companies.

During the year, a company set scientifically based climate goals in line with the Paris Agreement, which are approved as Science Based Targets. Through agreements with subcontractors, several companies set requirements for fossil-free transport. And increased electric power. Some choose to compensate for climate for transports that still contribute to emissions. Through active and goal-conscious work, one of the companies has reduced its

carbon dioxide emissions from freight transport by 23 percent in one year. And completely fossil-free in the metropolitan regions. A company only allows carriers with vehicles that meet environmental class Euro 6 within the company's warehouse area. During the year, several companies have chosen to map their climate footprint in order to be able to work more goal-oriented, increase competence and reduce their footprint.

Pharmacy companies also work actively with other sustainability issues. Several companies collaborate with external researchers in various fields to reduce the climate footprint. This involves, for example, participation in the POPFREE project, which is led by the research institute RISE and brings together actors from different industries and parts of the value chain to phase out PFAS. Another pharmacy company is collaborating with the recycling app Bower with the basic purpose of getting more people to recycle their plastic packaging. All products from the company's own brand can be ordered. Investments in launching several packages of bio-based material that are manufactured in Sweden to shorten transport routes are other projects that pharmacy companies are working on. For example, a company has decided that they no longer accept products that are delivered in plastic trays to the company's warehouse. An e-commerce pharmacy also has one of Sweden's largest photovoltaic facilities on its roof. Several companies also hold special return campaigns and give extra customer club points to customers who return leftover medicines.

8) <https://www.pgeu.eu/wp-content/uploads/2019/11/PGEU-Best-Practice-Paper-on-Green-and-Sustainable-Pharmacy-in-Europe.pdf>

10. THE PHARMACY OF THE FUTURE

In recent years, there has been a great development in the pharmacy market - both in Sweden and in several other countries in the world. Much of what we see happening has been smaller-scale in the past, or in some countries alone, the pandemic has accelerated development. In Sweden, we have above all seen a strong growth in e-commerce, while in general in Europe we have a development where pharmacies are linked more closely to other health and medical care by moving certain care initiatives to pharmacies. The clearest example is vaccination, which is currently carried out by pharmacists in pharmacies in many countries - but not in Sweden. In Sweden, a trial operation with pharmaceutical services will start this year, something that already exists in our Nordic neighboring countries. The development that is taking place will continue and the pharmacies of the future will look different.

Here we look ahead at what the pharmacy market will look like in the not too distant future.

Medicines directly home

Patients on continuous drug treatment do not always have to go to a pharmacy to pick up medicine. Many drugs will be delivered directly to the patient's home. There are a number of different solutions where medicines are delivered as needed without the patient having to order and where the medicines are individualized, e.g. by dose packaging.

Customers continue to go to pharmacies, to get help with new drugs and more urgent drugs, but the activities at pharmacies are mainly focused on services, advice and care than sales of drugs.

Digitization - not just e-commerce

To make it easier for patients to keep track of their prescriptions, medicines and how to use them, there are several digital services. The simplest ones remind the patient when it's time to order new medicines and the more advanced ones help to adapt the treatment through collaboration with the responsible doctor. Advice is more digital with personalized information in text and images with fast contact routes to specialized pharmacists and others with relevant knowledge. Behind the scenes, there are many tools that help pharmacists to ensure that drug expeditions are safe there automated

Analyzes of the entire drug treatment support decisions and advice provided. Several of these tools stop incorrect prescriptions and suspected over-prescriptions even before they reach pharmacies. Digitization also means that there is more information about the environmental impact of medicines and the opportunity for patients to make well-balanced decisions about which medicines to use.

New ways to improve drug use

As fewer people visit pharmacies to collect their medicines, the focus is on services that improve the use of medicines. The most common service is support and planning on how and when drug deliveries are to take place, when it is time for follow-up and support in the event of new insertion or changes in treatment. Thanks to the National List of Medicines, pharmacists at pharmacies can more easily make changes to prescriptions such as extending treatment pending the next doctor's visit, clearing out duplicates and pauses or deleting prescriptions for medicines that are not to be used.

In this way, patients, doctors and pharmacists have a more accurate picture of which medicines a patient actually uses. But above all, the pharmacy offers adapted advice that not only ensures proper handling but also ensures that patients' compliance, motivation and knowledge increase.

Care at the pharmacy

The pharmacy's self-care has been expanded to include more things that today require a visit within the traditional care. Simpler ailments are assessed at pharmacies and it is possible to buy medicines with a subsidy without having to visit a doctor. Some prescription drugs today are sold in pharmacies after a pharmacist has ensured that it is safe for the patient to use.

The collaboration with care providers means that all pharmacies have several different partners - digital care providers, specialist clinics and care centers - which make it easy for patients to quickly receive care at the right level of care. Getting vaccinated at a pharmacy is a matter of course and something that is much appreciated as it provides good accessibility for all groups in society. Pharmacies are seen as the natural first instance for many healthcare issues but also for preventive health and wellness.

11. ABOUT SWEDEN'S PHARMACY ASSOCIATION

The Swedish Pharmacy Association represents the companies that conduct pharmacy operations. Through our members, we represent in principle all pharmacies in Sweden. The association is an industry organization, not an employers' organization. Our mission is to work for stable and predictable conditions for pharmacies, where the pharmacy industry's customer and societal benefits are utilized.

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 with, among other things, legal and other advice in the pharmacy area, company-oriented projects and certain industry-wide advertising and marketing issues. SA Service also offers sales statistics as well as current information and external monitoring of the pharmacy market and prepares data for the pharmacy industry.

At the end of 2021, the Swedish Pharmacy Association had ten members who together ran almost 100 percent of the country's 1,411 outpatient pharmacies.

and 9 distance or internet pharmacies as well as 34 hospital pharmacies. One of the association's members is the Swedish Independent Pharmacy Actors' Association (SOAF), which organizes 44 independent pharmacy contractors. This means that we represent almost all pharmacies in Sweden - from the country's largest chains to small privately run pharmacies.

As an industry association, it is important to participate in the debate and show the pharmacies' societal benefits and potential. One of our most important tasks is therefore to be the industry's voice in the outside world and contribute to increasing knowledge about the industry and its issues.

The Swedish Pharmacy Association is a natural referral body. We represent the industry vis-à-vis politicians and decision-makers, authorities and the Government Offices as well as other industry associations. Particularly important issues in the industry's relations with the outside world are to work for high quality, good patient safety, good financial conditions, qualitative pharmaceutical education and high competence in the industry.



Björn Falkenhall (chief economist), Fredrik Boström (chief pharmacist), Lisa Stern Ödmark (chief strategist) and CEO Johan Wallér.

SA SERVICE AB / SVERIGES APOTEKSFÖRENING
REGERINGSGATAN 60, 111 56 STOCKHOLM
INFO@SVERIGESAPOTEKSFÖRENING.SE | 070-239 16 06

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Apoteksförening**

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