Sveriges Apoteksförening

SECTOR REPORT 2023

Cover: Image from Kronan pharmacy

PREFACE

After several years marked by the pandemic, we all hoped for a bright future in 2022. But early in the new year, Ukraine was invaded and we were rapidly thrown into the next crisis, which meant new refugees and human suffering in Europe. The consequences were an energy crisis, rampant inflation and runaway food and fuel prices. This affects all of us, and the pharmacy industry is no exception.

The need for pharmaceuticals has increased as a result of all the crises, both in Ukraine and here in Sweden. Several pharmacy companies have taken excellent initiatives to help Ukraine and support their population with access to medicines. The shortage of medicines has continued to affect us in Sweden as well. Swedish pharmacies make valiant efforts daily to ensure patients receive the right medicines. The continued crises also mean that preparedness remains high on the agenda.

During the course of the year, a new government was installed in Sweden. In the political agreement called the 'Tidö Agreement', the government wants to develop the role of pharmacies in the continuum of care, naming both services and behind-the-counter medicines. These are issues that the pharmacy industry is already working intensely with. During the course of the year, pilot projects on pharmaceutical services finally got underway. Initial results show that the pharmacies, with the right conditions, can really make a difference for better use of pharmaceuticals. In 2022 the industry came to an agreement on more responsible sales of diclofenac by moving it behind the counter and only selling it after providing advice on its use. This can be seen as a first step towards testing behind-the-counter medicines – medicines that do not require a prescription, but can only be sold after the advice of a pharmacist.

During the course of the year, the pharmacy industry worked together to actively take a stand against the hatred and threats that all pharmacies feel have increased. A branch-wide agreement and a common decal in pharmacies is a first step in a long-term project to reduce discrimination and increase security for everyone.

The industry-wide project Välvald (Well Chosen) is in its second year. The logo, which appears on over-the-counter products, places ever greater demands for social responsibility from the manufacturers to earn the right to place it on the shelf next to the product. Välvald is the first label of its kind in the world, and perhaps soon it will be the world's first sustainability label for pharmaceuticals.

Johan Wallér

CEO, Swedish Pharmacy Association

INNEHÅLL

The year in brief 5

1. The pharmacies and the customers 6
High customer satisfaction 6
Customers' business at pharmacies 6
The pharmacy companies 6
Pharmacies on the community pharmacy market 7
Pharmacies on the hospital market 7

2. The pharmacy market's economic development 8
The total pharmacy market 8
The inpatient care market 12
Pharmacies' profits are still weak 12

3. Access to pharmacies 14
Number of community pharmacies 14
Pharmacies in relation to population 15
Pharmacies' opening hours 15
Pharmacies per county and pharmacy density 15
Pharmacies and types of municipalities 17
Pharmacies in sparsely populated areas 17
Pharmacy density in Europe 17

4. Pharmacies' financial conditions 19
The government controls the pharmacy market 19

5. Pharmacy staff 23
The pharmacies' most important resource 23
Number of employees in the sector 24
Skills supply challenges 24

6. Our social mandate 26
Pharmacies' core tasks 26
Requirements on pharmacies 28

7. Availability of medicinal products 29
The Swedish system 29

8. Medicines and the environment 31
Environmentally harmful medicines 31
Responsible sale of diclofenac 31
Unused medicines 31
Välvald – the pharmacies' requirement for responsible manufacturing of medicines 32
Pharmacy companies' work with sustainability issues 33

9. About the Swedish Pharmacy Association 34

THE YEAR IN BRIEF

98%

satisfied customers – regardless of gender, age and place of residence, pharmacy customers are very satisfied.

Total sales of the entire pharmacy industry in 2022, of which **58 billion** was in the community pharmacy market.

130 million
customer visits

360,000 people visit pharmacies daily. Of these, 36% are filling prescriptions; 89 million prescriptions were filled at pharmacies in 2022.

online pharmacies

Sweden has the most extensive e-commerce with medicines in Europe.

Increased sales in both shops and e-commerce

This is counter to the trends in other retail sales where e-commerce decreased significantly in 2022. In the pandemic years 2020 and 2021, however, all growth in the pharmacy industry was in e-commerce.

1,047 pharmacies

The number of pharmacies decreased in 2022 to four fewer than the year before. The closed pharmacies were in metropolitan municipalities. The number of pharmacies has decreased in the past two years. This has not affected pharmacies in sparsely populated areas.

20%

About 20% of sales occurred in e-commerce; measured in the number of sold products, e-commerce stood for 30% of sales.

1.8%

The industry's collective profit margin in 2022. Sales of medicinal products recovered compared with the weak figures in 2021, but profitability is still low.

7,500 people
per pharmacy

Pharmacy density has decreased somewhat in the past three years, mainly because population has increased.

1. THE PHARMACIES AND THE CUSTOMERS

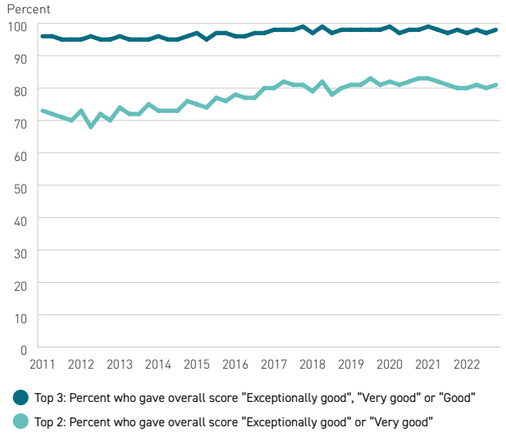
The Swedish pharmacy market consists of national chains, purely online pharmacies and independently run pharmacies. In total there are 1,407 bricks-and-mortar community pharmacies, seven online pharmacies, 28 hospital pharmacies and three dose-dispensing pharmacies.

High customer satisfaction

In general, the pharmacies have highly satisfied customers, which has been true for a very long time. A total of 98% of customers are satisfied with their latest pharmacy visit and 80% give the ranking "very good" or "exceptionally good" (grade four and five on a five-grade scale). Regardless of gender, age and place of residence, pharmacy customers are satisfied with their pharmacies.[1]

Annual customer surveys show that the two fore-most reasons that customers are very satisfied with their pharmacies are the geographical location and that the pharmacy has what they need. Short waiting times and pleasant staff are other important factors. The customers feel that the pharmacy staff inspire trust and give good guidance and advice.

Overall customer satisfaction



Source: Kantar Sifo, Customer satisfaction on the pharmacy market.

1) Kantar Sifo, Customer satisfaction on the pharmacy market.

Customers' business at pharmacies

Every day about 360,000 people visit one of the country's physical or online pharmacies. In total, the pharmacies had over 130 million customer visits in 2022. A large proportion, about 36%, of the people who visit a pharmacy do so to pick up prescription medicines. Pharmacies in Sweden dispensed about 89 million prescriptions and dose-dispensed medicines for 280,000 customers in 2022. The remaining 64% of pharmacy visitors are customers buying over-the-counter self-care medicines and other products. When customers visit a pharmacy, it is often for several errands at once, and those who are filling a prescription often take the opportunity to buy over-the-counter medicines or other pharmacy products as well.

The pharmacy companies

The Swedish pharmacy market consists of four national chains: Apoteket AB, Apotek Hjärtat, Kronans Apotek and Doz Apotek. In 2022 it was announced that Kronan and Apoteksgruppen were going to merge under the name Kronans Apotek. In addition there are three purely online pharmacies: Apotea, Meds and Apohem, and 48 independently run pharmacies. The independently run pharmacies are organised in the organisation SOAF, which in turn is a member of the Swedish Pharmacy Association. ApoEx is the only member of the Swedish Pharmacy Association completely focused on supplying medicines for inpatient care.

Pharmacies on the community pharmacy market

Community pharmacies are bricks-and-mortar shops that a consumer can visit in person. At the beginning of 2023, there were 1,407 community pharmacies in Sweden. In addition, there are also pharmacies that only sell and provide advice about medicines online. There are a total of seven mail-order or online pharmacies, and in addition to the purely online shops, the pharmacy chains also have e-commerce to varying degrees. Apart from the community pharmacies, there are nearly 600 pharmacy outlets that serve as collection points for medicines and pharmacy products.[2] Outlets are located in smaller towns that do not have pharmacies. The number of outlets has decreased as petrol stations and smaller shops have closed and pharmacies' online sales have increased.

Dose-dispensing pharmacies are a special kind of pharmacy with a community pharmacy permit. Dose-dispensing pharmacies re-package medicines in packets at the specific dosage a specific patient is to take at a given time. This is called dose-dispensing and is a service procured by the region. The purpose is to facilitate medication primarily for elderly people who take many medicines at the same time. About 280,000 people take dose-dispensed medicines.[3] There are three dose-dispensing pharmacies run by three different companies: Apoteket AB, Svensk Dos and Apotekstjänst. Some dose-dispensing is also done for medicines for inpatient care, and some pharmacies have also developed a service that can be purchased by private individuals.

Pharmacies on the hospital market

There are 28 *hospital pharmacies* that provide medicines to inpatients and some institutions. Hospital pharmacies have decreased in number as a result of concentration into fewer units, in that supply services are procured for one or more regions. There are currently two pharmacy companies that have been procured to supply medicines to hospitals in the form of manufacturing or supply services: Apoteket AB and ApoEx. Manufacturing pharmacies (extemporaneous pharmacies) produce individually adapted medicine for both outpatients and inpatients. These include chemotherapy, antibiotics and parenteral nutrition. They also produce medicines for clinical trials. There are four manufacturing pharmacies in total. The following table lists all forms of pharmacies that were active at the end of 2022.

Different types of pharmacies in the Swedish market

Pharmacies by category	2021	2022
Community pharmacies	1,411	1,407
Online pharmacies[1]	7	7
Hospital pharmacies (in inpatient care)	26	28
Production pharmacies	4	4
Dose-dispensing pharmacies	3	3
Total	**1,456**	**1,449**

1) Businesses with a pharmacy permit and a full range of prescription items that only operate by mail order or online, and that do not have bricks-and-mortar stores that consumers can visit.

Source: SA Service AB and the EXPO registry

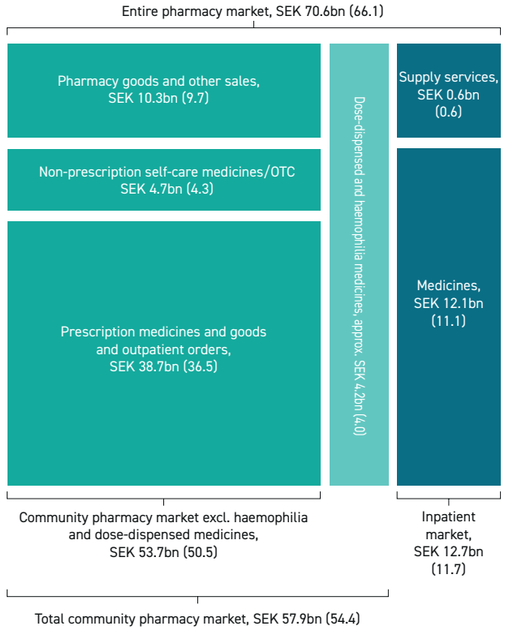
2) TLV, 2022 review of the development of the pharmacy market.
3) Ibid.

2. THE PHARMACY MARKET'S ECONOMIC DEVELOPMENT

The total pharmacy market

The entire pharmacy market, including inpatient treatment, realised sales of just over SEK 70 billion in 2022, which is an increase of 6.8 percent. Sales on the overall community pharmacy market amounted to just over SEK 58 billion in 2022, which represents an increase of 6.4 percent over the prior year. These sales include haemophilia medicine and dose-dispensed medicines. The inpatient market, which mainly consists of supplying medicine for hospital inpatients, had sales of over SEK 12.7 billion in 2022.

Chart showing the pharmacy market based on 2022 net sales



Notes: All sales reflect price to consumer or end customer (pharmacy retail price) excluding VAT, except for medicines for inpatient care, where the prices are net and the pharmacy instead receives compensation for the supply service. Some of the dose-dispensed medicines consist of full packs provided by dose-dispensing pharmacies and other, smaller pharmacies that do not report to SA Service. This figure illustrates different parts of the pharmacy market in 2022 (2021 in brackets).

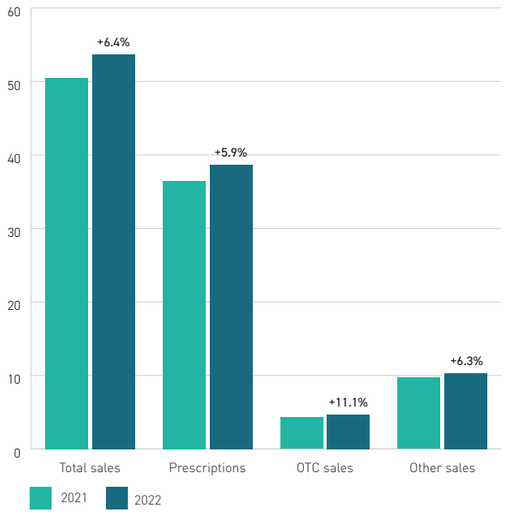
Source: SA Service and the Swedish eHealth Agency

Community pharmacy market and performance by various segments

In 2022, net community pharmacy sales amounted to just under SEK 54 billion. These numbers include the pharmacies' sales of medicines, pharmacy goods and other goods, but not haemophilia and dose-dispensed medicines. The dominant segment is prescription medicines, which account for 72 percent, while OTC medicines account for about 9 percent and other pharmacy goods account for19 percent. Community pharmacies also face competition from other sales outlets such as supermarkets and petrol stations for sales of certain non-prescription medicines, but these sales are not factored into the pharmacy market.

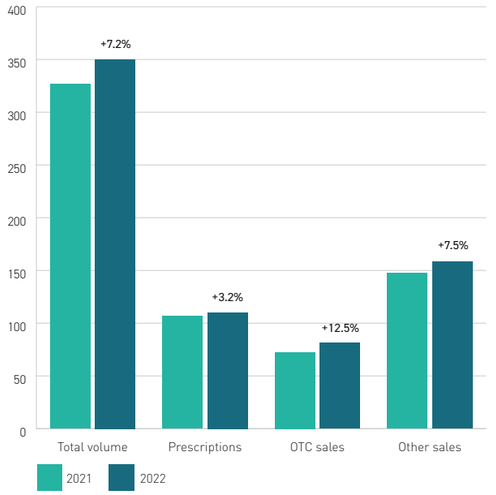
By volume, i.e. the number of units sold (usually packages), the community pharmacy market grew by a total of just over 7 percent in 2022, which reflects strong volume growth in all segments. Medicine sales, both prescription and non-prescription, performed significantly better in 2022 compared with the weak 2021. In terms of volume, pharmacy goods and other sales were the dominant segment, accounting for about 45 percent.

Net sales in the community pharmacy market 2021–2022. SEK billion



Note: The percentages refer to the development compared to the previous year..
Source: SA Service AB

Number of packages sold in the community pharmacy market 2021–2022. Millions of units

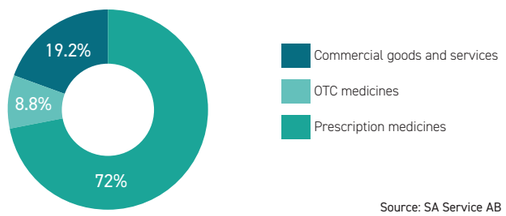


Note: The percentages refer to the development compared to the previous year..
Source: SA Service AB

Prescribed medicines

Of total sales in community pharmacies, prescription medicines make up the lion's share, or 72 percent. These medicines account for nearly one-third of the total number of sold units. Which medicines are prescribed and to what extent is determined entirely by healthcare prescribers and not something pharmacies can or should influence. In addition, both pharmacies' purchasing and sales prices are set by the Dental and Pharmaceutical Benefits Agency (TLV) for those medicines subsidised by the government. Pharmacy operations concerning prescribed medicines therefore differ considerably from other sectors, in which unregulated pricing, own production capability and independent selection of product ranges and services are key elements. Total sales of prescription medicines, including so-called 'outpatient orders', totalled nearly SEK 39 billion in 2022, and volume increased by a relatively high 3 percent compared with 2021.

Sales (SEK) by segment, 2022



Source: SA Service AB

4) The Swedish eHealth Agency, Concise

Non-prescription self-care medicine (OTC)

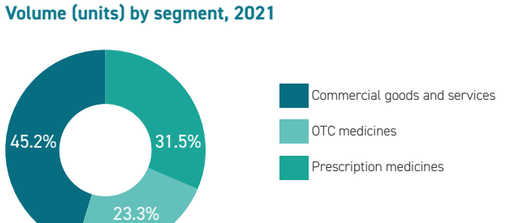
Non-prescription medicine is part of the sales that pharmacies can to some extent influence. These medicines correspond to almost 9 percent of sales and about 23 percent of units sold. Pricing is unregulated for non-prescription medicines, but there is stiff competition both between pharmacy chains and from the fast-growing online market. In addition there is competition from supermarkets, which are also permitted to sell most non-prescription medicines.

Sales of self-care (OTC) medicines at pharmacies in 2022 amounted to SEK 4.7 billion, which is an increase of about 11 percent compared with 2021, while the volume increased by more than 12 percent. This means a continued decrease in average prices for this segment, which has shown dropping prices in the past few years. The percentage of non-prescription medicines sold outside pharmacies amounted to about 16 percent of total sales of non-prescription medicines in 2022. Pharmacies thus increased their market share somewhat compared to the previous year, when the figure was 17 percent.[4] In order to take on the competition from supermarkets, which primarily sell well-known brands, pharmacies have introduced more alternative self-care medicines, such as different brands with the substances paracetamol and ibuprofen. This has added to the range of cheaper alternatives for consumers and contributed to further pricing pressure.

Pharmacy goods and other goods

Products sold in pharmacies that are not medicines are referred to as pharmacy goods and other sales. Sales of pharmacy goods and other goods totalled over SEK 10 billion in 2022 and pharmacy goods and other sales accounted for just over 19 percent of the community pharmacies' sales. Of the share of total units sold, however, other pharmacy goods accounted for 45 percent. This segment also showed lower average prices in 2022, as the growth in volume was higher than the growth in sales.

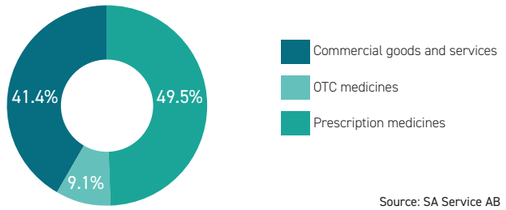
Volume (units) by segment, 2021



Source: SA Service AB

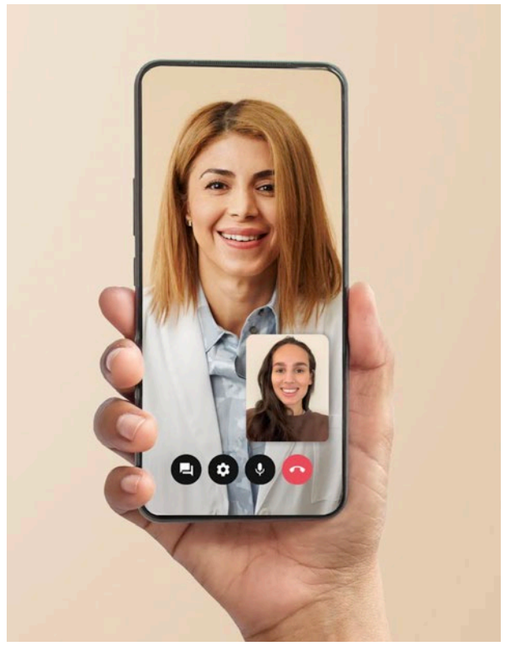
There is a clear tendency for pharmacies to try to offset the low sales markup on prescribed medicines and the stiff competition on the self-care market with a good range of products and sales of other pharmacy goods, which often have a special quality stamp with a focus on health and wellbeing. During both 2020 and 2021, other pharmacy goods accounted for the highest percentage of sales growth compared to self-care medicines and prescribed items. However, in 2022 medicines saw equally strong growth in sales. Other pharmacy goods continue to account for a significantly larger share of sales in the e-commerce channel and made up more than 40 percent in this channel in 2022.

Sales in e-commerce (SEK) by segment, 2022



Source: SA Service AB

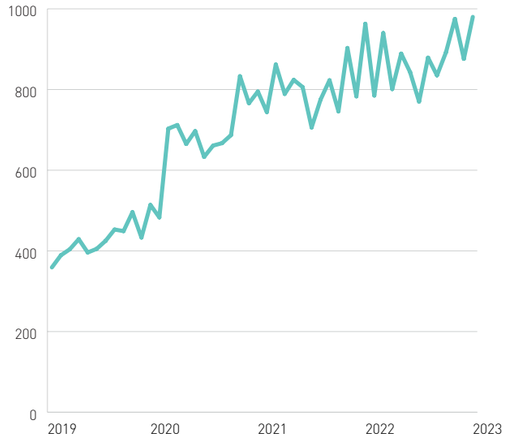
Image: Apohem



E-commerce and the shift in channels

Since 2019, pharmacy e-commerce sales have increased from an average of SEK 420 million per month to approximately SEK 870 million per month in 2022. Sales were even higher in January 2023, which is a seasonally strong month for e-commerce (SEK 980 million). This corresponds to an increase of about 145 percent compared with January 2019; see the graph below. The growth in value for the pharmacy sector's e-commerce amounted to nearly 10 percent in 2022 compared to 2021. The corresponding figure for 2021 was about 19 percent. Thus, the rate of growth slowed in 2022 compared with the previous year, but is still increasing, in contrast to many other retail sectors.

Total online pharmacy sales, excl. VAT, SEK millions



Source: SA Service AB

The largest segment in terms of online sales is prescription medicines, which account for half of the value. Pharmacy goods and other goods account for over 40 percent. Measured instead by volume, i.e. the number of packages sold, sales of other pharmacy goods account for the predominant share, at 64 percent, and self-care medicine is 24 percent. Online operations can offer a wider range of pharmacy and other goods than bricks-and-mortar shops at competitive prices. Pharmacies' combined online sales accounted for about 21 percent of community pharmacy sales in January 2023, and measured by volume (number of units) online sales amounted to just shy of 32 percent in the same month. One year earlier, the figures were about the same, so the scope of e-commerce is largely unchanged in relation to the growing overall market.

Online share of total sales and volume

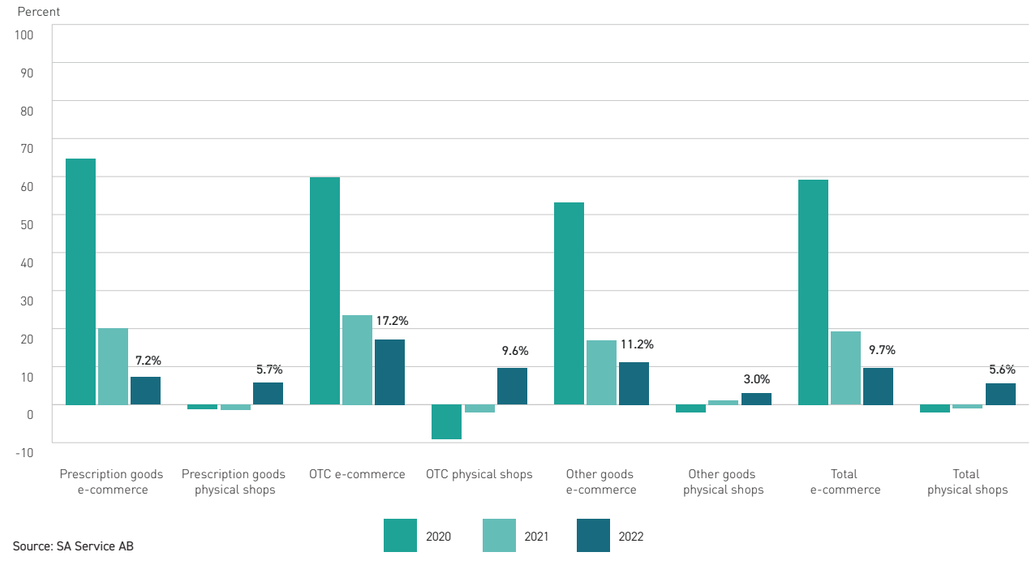
Source: SA Service AB

In 2020 and 2021, all the growth was in e-commerce, which resulted in a shift towards this channel, but in 2022, value growth occurred in both channels, which is the case for all three segments. The total growth was just shy of 10 percent in e-commerce and a bit lower, nearly 6 percent, in bricks-and-mortar shops in 2022. The graph also clearly shows that the rate of growth of e-commerce slowed in 2022 compared with the two previous years.

This shift in channels means that approximately 42 percent of sales of pharmacy goods and other goods were made in the e-commerce channel in 2022. The e-commerce share for non-prescription medicine amounted to about 20 percent in 2022, while the corresponding figure for prescription goods was just over 13 percent. This development has been accelerated by the pandemic and new customers have continued using e-commerce. The increase is particularly evident for customers over 70 years of age, which is also the age group that has been most affected by the restrictions.

It should, however, be noted that even if the growth was higher in e-commerce in recent years, the bricks-and-mortar channel is still fully dominant and accounts for 87 percent of sales of prescription medicines and about 80 percent of non-prescription medicines. This illustrates that the bricks-and-mortar channel is still by far the biggest sales channel for medicines, but that e-commerce is growing very quickly and contributes with increased accessibility, which supplements the bricks-and-mortar shop network. Rural communities and smaller towns show a higher percentage of online purchases than larger towns. Commuter municipalities also seem to have a larger share of e-commerce compared to other communities.[5]

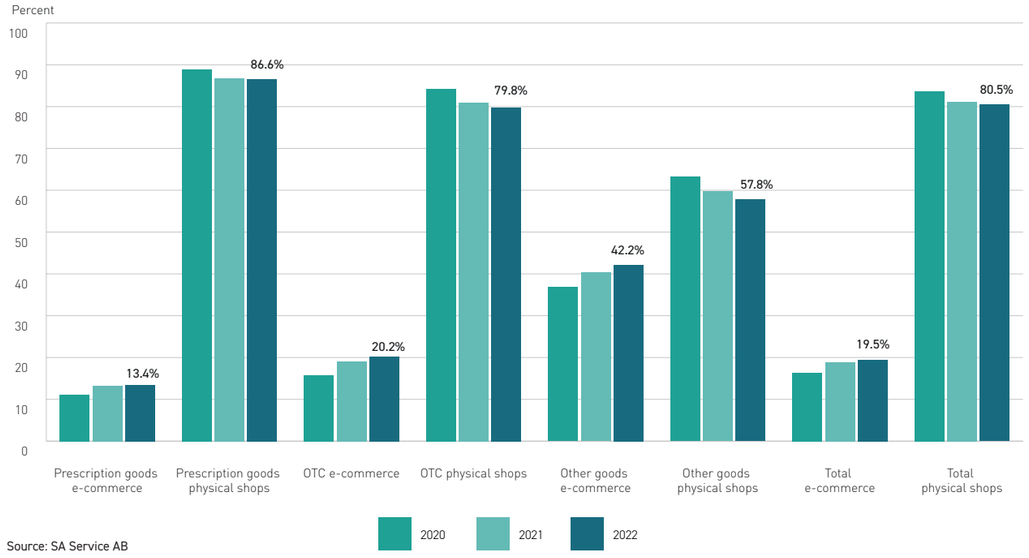
Annual growth in value for online and physical commerce per segment in 2020–2022 (percentage)



Source: SA Service AB

5) TLV, 2019 review of the development of the pharmacy market

Value percentages for online and physical commerce per segment in 2020–2022 (percentage)



Source: SA Service AB

The sector has probably reached a level where the extent of e-commerce has led to a tipping point that will have an impact on the bricks-and-mortar store structure in the coming years. However, in 2022 there were only four fewer bricks-and-mortar pharmacies than in 2001, but it was the second year in a row that their number decreased.

The inpatient care market

Sales of medicines on the inpatient care market totalled about SEK 12 billion in 2022, an increase of 9 percent compared with 2021. Revenues mainly consist of sales of requisitioned medicines to hospitals for use in inpatient care. Sales of medicines to some state-run institutions are also included in the inpatient market. In addition, some operators provide supply services to regions via procurement, which is also included. The value of these services is estimated at just over SEK 600 million in 2022. In recent years, we have seen some mainly small regions opting to operate 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 large-scale production and a high level of quality.

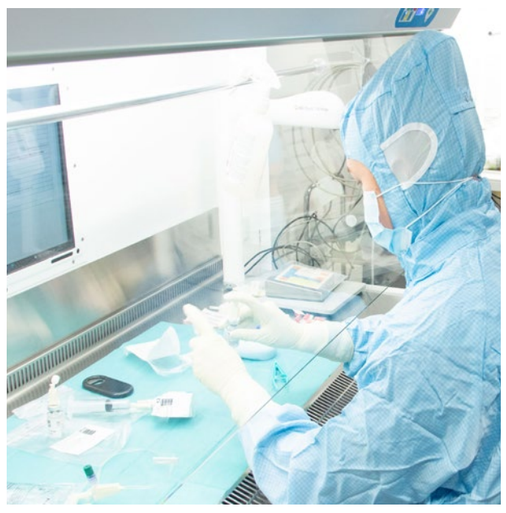


Image: Apoex

Pharmacies' profits are still weak

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. Pharmacies' operating margin is estimated at 1.8 percent for 2022, which means that it has remained at or near a relatively low two percent in recent years.

Pharmacies' earning opportunities are largely dependent on the size of the markup, which is determined by the government, and the development of parallel imports. Their right to negotiate for parallel-imported medicines results in a

Image: Apotea

strengthening of the margin, as they can purchase these products at a lower price than the purchase price set by TLV without needing to reduce the set selling price to an equivalent degree. The scope of parallel imports has decreased, particularly in the latter half of 2022, as the result of the continued weakening of the Swedish krona. The value percentage of prescription medicines amounted to 8.6 percent in January 2023.

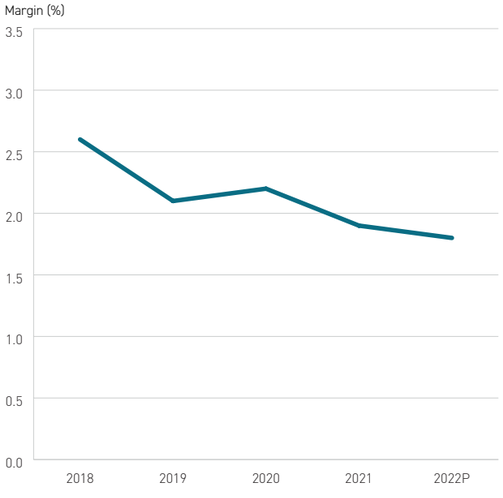
For medicines that are not subsidised by the government, non-prescription medicines and other pharmacy goods, pricing is not subject to regulation, but margins in these segments are under pressure from stiff competition on pricing, particularly from the growth in e-commerce. Overall profitability for the community pharmacy segment therefore remains low and is not sustainable in the long run at the current levels.

Pharmacies' combined operating margin the past 5 years

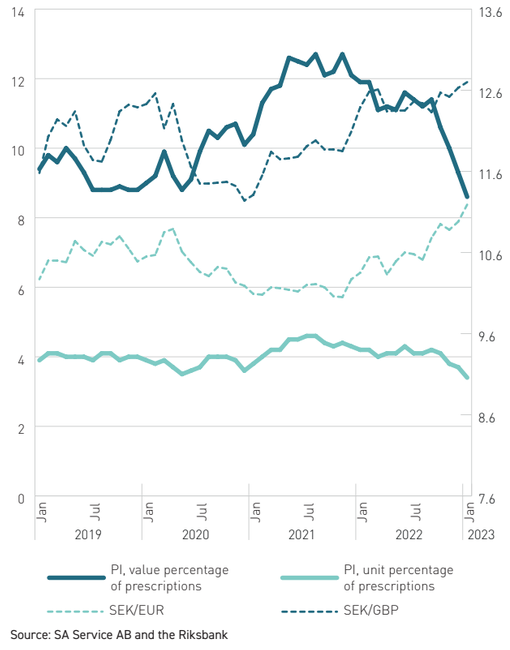
Percentage	2018	2019	2020	2021	2022[P]
EBIT margin	2.6	2.1	2.2	1.9	1.8

Note: 2022 is projected. Not including the dose-dispensed market.

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



Parallel imports, percentage of prescribed medicines (left) and the Swedish krona's development against the EUR and GBP (right)



Source: SA Service AB and the Riksbank

3. ACCESS TO PHARMACIES

Currently there are **1,407** bricks-and-mortar community pharmacies and seven online pharmacies.

Image: DOZ Apotek

Number of community pharmacies

The pharmacy market was re-regulated in 2009, after which the number of bricks-and-mortar community pharmacies increased every year to the end of 2020. At the end of 2022, Sweden had 1,407 community pharmacies, an increase of nearly 480 shops, or more than 50 percent compared with 2009. There are thus substantially more pharmacies today and a significant level of e-commerce. This trend broke in 2021, however, as the number of pharmacies dropped, and the downturn continued in 2022 with fewer bricks-and-mortar pharmacies. One reason for this is the growth in e-commerce, which now accounts for some 20 percent of total sales, which impacts the shop structure and establishment of pharmacies.

Number of bricks-and-mortar community pharmacies per company

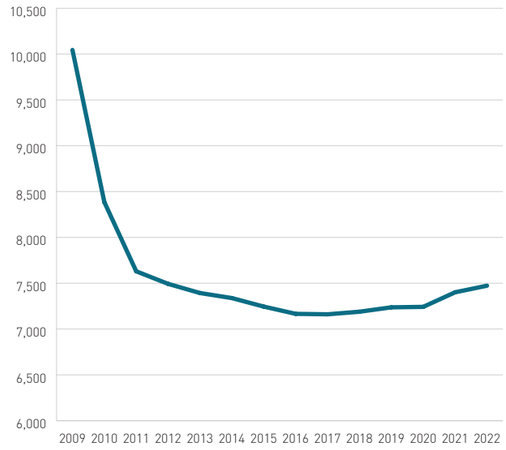
Pharmacy company	Before re-regulation	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Apoteket AB	929	345	365	375	372	370	372	388	394	394	397	402	391	390
Apotek Hjärtat ICA[1]		30	42	48	58	67	391	385	386	388	390	391	390	390
Kronans Apotek[2]		189	209	219	300	305	309	323	325	326	323	324	318	508
Apoteksgruppen		150	155	158	163	165	169	177	185	188	193	197	193	–
Doz Apotek[3]		50	81	77	79	83	80	79	78	78	78	77	75	71
Apotek Hjärtat[1]		256	270	277	306	307	–	–	–	–	–	–	–	–
Medstop[4]		*63*	*64*	*65*	-	-	-	-	-	-	-	-	-	-
Vårdapoteket[5]		*24*	*24*	*27*	-	-	-	-	-	-	-	-	-	-
Other players		15	32	28	25	30	37	39	43	47	45	42	44	48
Total	**929**	**1,122**	**1,242**	**1,274**	**1,303**	**1,327**	**1,358**	**1,391**	**1,411**	**1,421**	**1,426**	**1,433**	**1,411**	**1,407**

1) ICA Gruppen purchased Apotek Hjärtat at the start of 2015 and the shared pharmacy name is Apotek Hjärtat. 2) Previously called Kronans Droghandel, which in 2022 merged with Apoteksgruppen and is owned 50% each by Euroapotheca and Oriola. 3) Previously called Lloyds apotek. 4) Medstop was bought out by Kronans Apotek in 2013. 5) Vårdapoteket was bought out by Apotek Hjärtat in 2013. Note: Counted at the end of December of the stated year.
Source: SA Service AB and the EXPO registry

Pharmacies in relation to population

Despite the continuous increase in the number of pharmacies (apart from the past two years), pharmacy density, measured as the number of inhabitants per bricks-and-mortar community pharmacy, remains the same in 2022 as it was in 2012. In both of these years, there were just under 7,500 inhabitants per community pharmacy. Pharmacy density increased particularly during the years 2010 and 2011 and has remained relatively constant since then. The increase in the number of pharmacies since 2012 has been matched by the rapid population growth in Sweden during the same period.

Pharmacy density, number of inhabitants per bricks-and-mortar community pharmacy

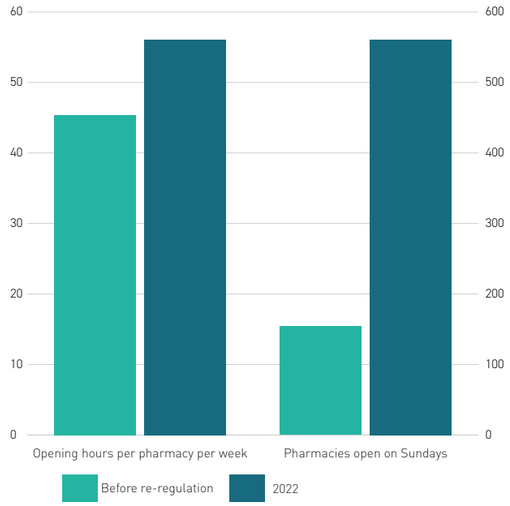


Source: SA Service AB and Statistics Sweden

Pharmacies' opening hours

An accessibility factor at least equally important as the number of pharmacies is their hours of business. Since 2009, pharmacies' opening hours have increased dramatically – from 45 hours a week to 56 hours a week on average in 2022, thus an increase of 24 percent. The number of pharmacies open on Sundays has risen from 154 to 560 since re-regulation, an increase of more than 260 percent. Many pharmacies in the country today are open almost 100 hours a week, practically every day of the year.

Opening hours per pharmacy and week, hours (left) and number of pharmacies open on Sundays (right)



Source: SA Service AB and the EXPO registry

Pharmacies per county and pharmacy density

All counties now have more pharmacies since re-regulation in 2009. Most new openings have occurred where the demand for pharmacies has been the greatest, which has increased availability and reduced waiting times at pharmacies. The largest percentage increase in the number of pharmacies was in Uppsala and Blekinge as well as Stockholm county and Skåne. However, these were the counties where pharmacy density was initially the lowest in the country, measured as the number of pharmacies per inhabitant. The smallest increase was in the counties of Norrbotten, Jämtland, Västerbotten and Dalarna, but these were the counties that started out with the highest pharmacy density in the country.

Thus, the establishment of new pharmacies has a clear and natural link to pharmacy density in relation to population.

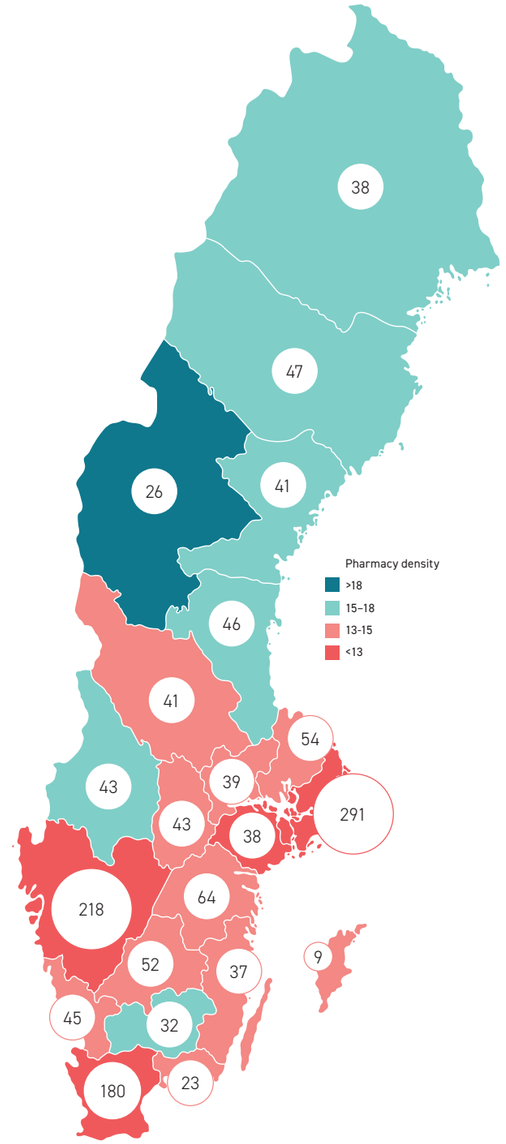
Number of community pharmacies and change per county

County	Before re-regulation	2022	Change, number	Change, percentage
Uppsala	28	54	+26	+93%
Blekinge	12	23	+11	+92%
Stockholm	159	291	+132	+83%
Skåne	103	180	+77	+75%
Södermanland	24	38	+14	+58%
Västmanland	25	39	+14	+56%
Halland	29	45	+16	+55%
Västra Götaland	142	218	+76	+54%
Kronoberg	21	32	+11	+52%
Nationwide	**929**	**1,407**	**+478**	**+51%**
Jönköping	36	52	+16	+44%
Örebro	30	43	+13	+43%
Östergötland	47	64	+17	+36%
Gävleborg	34	46	+12	+35%
Gotland	7	9	+2	+29%
Kalmar	29	37	+8	+28%
Värmland	34	43	+9	+26%
Västernorrland	33	41	+8	+24%
Dalarna	35	41	+6	+17%
Västerbotten	41	47	+6	+15%
Jämtland	23	26	+3	+13%
Norrbotten	37	38	+1	+3%

Note: The time of the count is the end of December of the stated year.
Source: SA Service AB and the EXPO registry

This map shows pharmacy density per county, measured as the number of pharmacies per 100,000 inhabitants in 2022. Counties with the highest pharmacy density are blue/green, while those with the lowest density are shown in red/pink. We can see that Jämtland and the other counties in Norrland, as well as Kronoberg and Värmland are the counties with the highest pharmacy density, while Stockholm County, Västra Götaland, Södermanland and Skåne have the lowest pharmacy density in relation to population. The numbers in the circles are the number of pharmacies per county. Naturally, the three metropolitan counties have the highest population and therefore the most pharmacies, but still have lower pharmacy density. For Sweden as a whole, pharmacy density in the period 2009–2022 has increased from 10 to 13.4 pharmacies per 100,000 inhabitants.

Number of pharmacies and pharmacies per 100,000 inhabitants



Source: SA Service AB, Statistics Sweden and the EXPO registry

Number and proportion of community pharmacies per type of municipality in 2022 and 2021 and change compared with 2021

Main group	Type of municipality	Number in 2022	Number per main group	Percentage	Number in 2021	Change, number
A. Big cities and metropolitan-area municipalities	A1. Big cities	241	465	33.0%	243	-3
	A2. Commuter municipalities near big cities	224			225	
B. Medium-sized towns and municipalities near medium-sized towns	B3. Medium-sized town	341	538	38.2%	345	-2
	B4. Commuter municipalities near medium-sized town	109			107	
	B5. Low-commute municipalities near medium-sized town	88			88	
C. Smaller towns/urban areas and rural communities	C6. Smaller town/urban area	198	404	28.7%	196	1
	C7. Commuter municipality near a smaller town/urban area	87			86	
	C8. Rural municipality	85			87	
	C9. Rural municipality with hospitality industry	34			34	
Total		**1,407**	**1,407**	**100%**	**1,411**	**-4**

Note: The types of municipalities are based on SALAR's definitions from 2017.
Source: SA Service AB, Statistics Sweden and the EXPO registry

Pharmacies and types of municipalities

To gain another picture of the distribution of pharmacies across the country, we used the 2017 Classification of Swedish Municipalities as defined by the Swedish Association of Local Authorities and Regions, and analysed conditions and development in 2022. The table shows that the largest number of pharmacies, nearly 40 percent, are located in medium-sized towns and municipalities near medium-sized towns, followed by large cities and municipalities near large cities (33 percent) and smaller towns/urban areas and rural municipalities (just under 29 percent). Bricks-and-mortar pharmacies are thus well distributed across the country and throughout various municipality types. The table also shows that the reduction in the number of pharmacies in 2022 occurred in metropolitan areas and medium-sized towns, while the number remained essentially unchanged in smaller towns/urban areas and rural municipalities compared with the previous year. The same pattern was observed in 2021, and thus the drop in the number of pharmacies in the past two years has not impacted the more sparsely populated areas at all.

Pharmacies in sparsely populated areas

In some parts of the country, it is difficult to run a profitable pharmacy business. For this reason, special support is available for pharmacies in sparsely populated areas under certain conditions to reduce their risk in case of a decline in the population base. Provided that the state's regulated margin on prescription medicines 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 at threat than before; see above. Often many of these pharmacies are in an area where they have a position of local monopoly and a sufficient customer base. The profitability problems that the pharmacies have experienced relate mainly to establishment in metropolitan areas, where competition between players is fierce.

One development that plays a major role with regard to availability in sparsely populated areas and for rural inhabitants is the establishment of online 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 bricks-and-mortar pharmacies in sparsely populated areas. For this reason, the Swedish Pharmacy Association is concerned about the proposed new regulations for mail-order sales being prepared by the Medical Products Agency. If this proposal were to become law, it could have severe consequences for e-commerce, and particularly for access to medicines in more sparsely populated areas.

Pharmacy density in Europe

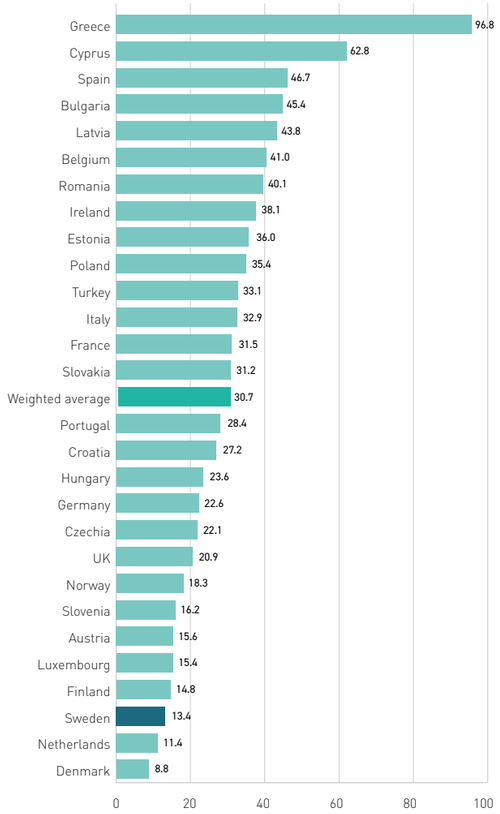
Until 2009, Sweden was second only to Denmark in having the lowest pharmacy density in Europe,

with fewer than ten bricks-and-mortar pharmacies per 100,000 inhabitants. Pharmacy density increased after re-regulation, and by the end of 2022 there were 13.4 pharmacies per 100,000 inhabitants.

From a European perspective, however, pharmacy density in Sweden remains low, and statistics show that Sweden is still one of the three countries with the lowest pharmacy density after Denmark and the Netherlands (see graph). Average pharmacy density for European countries is just under 31 pharmacies per 100,000 inhabitants. This means that Swedish residents have about 45 percent as many pharmacies in relation to the population of European countries on average. One contributing factor is the fact that the Swedish population has increased quite sharply in recent years. The establishment of new pharmacies in Sweden in recent years is completely offset by the increasing number of Swedes.

Swedish consumer access to pharmacies is, however, better than these figures indicate, since Sweden has the most developed e-commerce in the pharmacy sector of any European country. In most countries in Europe, pharmacies are not even permitted to sell prescription medicines online. In many, such as Norway, an online pharmacy must always have a physical shop as well. In Sweden, the e-commerce channel accounts for 13 percent of the total sales value of prescription medicines and nearly 20 percent of the sales value of OTC medicines.

Number of pharmacies and pharmacy density per 100,000 inhabitants



Source: PGEU and Eurostat. Data from 2020/21, Sweden 2022.

4. PHARMACIES' FINANCIAL CONDITIONS

Sales of over-the-counter medicines and other products are a necessity for pharmacies to be profitable.

The government controls the pharmacy market

Need for appropriate and effective rules

The pharmacy market is in part heavily controlled by laws and regulations. The Swedish Medical Products Agency (Läkemedelsverket) determines whether or not a medicine will require a prescription, and whether non-prescription 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 (TLV) determines whether or not a prescription medicine should be included in the pharmaceutical benefits scheme and thus primarily subsidised by the government. The same agency determines what compensation the pharmacy receives for carrying out its social mandate of providing medicines and advice on medicines and making generic substitutions.

Many of the laws and regulations that govern the pharmacy market are necessary, because medicines are not just any goods and pharmacies are not just any shops. But all regulations do entail costs while also moderating the pharmacies' freedom to operate. That rules drive costs is an insight that regulatory authorities should bear in mind when drafting regulations to ensure that existing and new rules are appropriate and effective.

Increased profit margin – a welcome compensation

For approximately 70 percent of pharmacy sales (subsidised pharmaceuticals), TLV determines both the pharmacy purchase price (PPP) and the pharmacy sales price (PSP) for medicines. The difference between these is the pharmacy markup for prescription medicines, which is thus regulated by the government. The markup consists of a fixed amount and a percentage supplement based on the purchase price, which according to TLV should compensate pharmacies for providing medicines, dispensing prescriptions and associated customer

Image: Kronans Apotek

Image: Apotek Hjärtat

advice, and managing generic substitutions of brand-name medicines. It should also compensate for other costs, such as inventory and scrapping, and for handling unused medicines that customers can return to a pharmacy.

TLV considers the overall sales performance and profitability; i.e. sales of OTC medicines, pharmacy goods and other products are not only considered, but are a necessary condition for pharmacies to achieve satisfactory profitability. This means that the current system encourages developing the product range and increasing sales of other products with greater margins than prescription medicines. However, this is a challenge as competition is keen and the growth of e-commerce is pressing prices of OTC medicines and other goods. Prices of non-prescription medicines have on average dropped in recent years.

According to TLV's established principles, the markup should also provide operators with a reasonable level of profitability for prescription sales and create sufficient scope for a profitable overall business, with the aim of ensuring higher availability. But prescription sales are neither profitable nor balanced; on the contrary, they are running at a loss. The Swedish Pharmacy Association has previously calculated the related costs and return resulting from the handling of subsidised prescription medicines and found that the markup covered 89 percent in 2016 and 88 percent in 2017, including additional earnings from parallel imports. It is most likely that the cost coverage has decreased further since these calculations were made, as the regulated markup as a percentage decreased from 17.6 percent in 2017 to 15.4 percent in the first half of 2022.[6]

TLV adjusted the markup in early 2022 by increasing the compensation for dispensing generic substitutes in the 'product of the period' system. This increased compensation is estimated to increase pharmacy revenues by over SEK 80 million. TLV justified the increase by referring to increased fees from the Swedish eHealth Agency and the Medical Products Agency, which led to increased costs for the pharmacies that they had no means of adjusting since the subsidised medicines are subject to price regulation. This, combined with falling profitability, would otherwise have led to a risk of diminishing accessibility of pharmacy services.

The Swedish Pharmacy Association welcomes this reinforcement of the markup and considers it to be self-evident that the pharmacies should be compensated for increased statutory fees that the pharmacies cannot avoid or pass along to the consumers, since these fees are tied to regulated prices. The high rate of inflation leads to increased costs for the pharmacies, as they largely rent their premises and the rents are are primarily regulated according to the CPI change, which means rent increases of around 10 percent in 2023.

6) TLV, 2022 review of the development of the pharmacy market.

The markup should deliver long-term and stable conditions for pharmacy operators, as investment decisions, among other considerations, are long-term. There is therefore cause for TLV to continue to track this development and be prepared for additional margin adjustments, as the current profitability, cost development and channel shift towards e-commerce present major challenges for pharmacy actors when it comes to maintaining current service levels in bricks-and-mortar pharmacies. Over the long term this could lead to a reduction in the dependable availability of pharmacies. If the government and TLV want to take responsibility for the provision of good medicine advice and medicine supply, then long-term sustainable financing of this sector needs to be in place.

Increased statutory fees impact pharmacies

The Government has announced new fees for supervisory activity in accordance with a request from the Swedish Medical Products Agency amounting to an increase of approximately SEK 12 million per year. In the review process, the Swedish Pharmacy Association questioned the size of the fee increase, as well as whether the increase will be reflected in a corresponding increase in oversight, or if there is any need to increase oversight to the extent and in the way the Medical Products Agency foresees. To further increase patient safety and boost efficiency in today's work, we see other possibilities, such as greater involvement of system oversight and utilising all the possibilities of digitalisation.

As of 1 January 2022, the Swedish eHealth Agency (EHM) has increased the prescription order fee for human prescriptions to SEK 2.70, and in 2021 it also increased the fee for veterinary prescriptions, altogether totalling approximately SEK 55 million annually. These fees are intended to cover EHM's costs for maintaining the databases pharmacies use when dispensing prescription medicine. The increase is due in part to the development and introduction of the National Medicine List (NLL), which replaces the two previous registries, the medicine registry and prescription registry. Note that the increased fees from the above agencies amount to a total of approximately SEK 67 million, which means that the increased markup will largely be eaten up by these fee increases.

Parallel imports of medicines

The system for trade of medical products is founded on free movement of goods within the European Economic Area (EEA). Parallel-imported medicines can be either original or generic, but they must be approved both in Sweden and in the exporting country at the time of application. Parallel trade is important to keep the prices down on medicines for which the patent has not yet expired, which saves money for society; but above all it boosts the margins for the pharmacies, as they can acquire medicines below TLV's fixed prices.

However, it is important to emphasise the extremely volatile nature of parallel trading. An expired patent immediately eliminates the conditions for Swedish pharmacies to pursue parallel trade with that medicine. A weakening of the Swedish krona can quickly undermine the added value that pharmacies derive from parallel imports. Similarly, TLV's decision to cut the price of older medicines or reassessments of them may lead to conditions for parallel imports either being reduced or completely disappearing for these medicines. In 2022, the Swedish krona has continued to weaken, which has caused parallel imports to decrease, primarily in the latter half of the year. Added profits from parallel importing of medicines have been of major significance for the pharmacies' bottom line. Without these earnings, pharmacies would by all accounts not have been able to increase availability in the way that has been done.

The generics system – in need of change

The generic substitution of medicines saves substantial sums of money for society every year. But the current system is not optimal. It should be reviewed in order to reduce certain negative effects that it entails. The constant monthly switching of

Image: Meds apotek

the 'product of the period' leads to risks in terms of patients taking the wrong medicine or not properly adhering to the treatment. It also incurs significant costs for pharmacies by having to keep current medicines in stock and leads to increased disposal of drugs. Pharmacists are now forced to spend a considerable amount of time explaining the system and why a customer is getting another medicine than what the doctor prescribed. The Swedish Pharmacy Association estimates that extra costs to pharmacies for substitution incurred through inventory and handling costs amount to approximately SEK 300 million annually.

The association believes that the substitution periods should be extended to between three and six months 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 generics market.[7] In the study it was observed that price collusion results in significant added costs to society, and that longer substitution periods in the 'product of the period' system would, in principle, eliminate these added costs. The association has therefore initiated empirical research to produce more supporting documentation about how the current system of generic substitutions can be developed to become more effective for all parties involved and to the benefit of both society and patient safety.

Distribution and right of return for pharmaceuticals

There are two companies that distribute medicines from producers to pharmacies: Oriola and Tamro. They are not full-assortment wholesalers; rather, the manufacturer chooses one of these distributors. This means that pharmacies have very little opportunity to choose or influence the terms these two distributors impose on them. Some pharmacy chains also have dedicated distribution solutions for non-prescription medicines, parallel-import medicines and other pharmacy goods.

A new law came into force in 2018, which means that pharmacies now have the right to return medicines that have not been collected by customers. The purpose of the law was to increase access to medicine by pharmacies keeping more products in stock. Refrigerated items – which are increasingly common and often include expensive medicines – are excluded from the right of return, which means that the pharmacy has to bear the entire cost if the medicine is not sold or if a customer orders it and then fails to collect it. The Swedish Medical Products Agency proposed in a report that refrigerated and frozen products should also be covered by the right of return, which in practice usually entails a credit. The question is currently under review in the Swedish Government Offices.

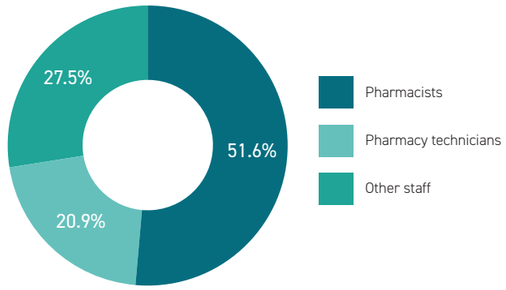
7) Granlund D. and Rudholm N. (2018). Risker och kostnader för prissamordningar på den svenska generikamarknaden (Risks and costs of price collusion on the Swedish generics market).

5. PHARMACY STAFF

The pharmacies' most important resource

Providing personalised advice on medicines and helping with relief and recovery are at the core of pharmacies' business. To be able to provide advice on medicines in a pharmacy requires the right qualification for the task. The pharmacy sector is staffed with highly competent staff with great expertise. This is why the employees are the pharmacies' most important resource. Swedish pharmacies lead the way in Europe in terms of staff educational level. Nearly 52 percent of employees at community pharmacies are graduate pharmacists, while just over 20 percent are pharmacy technicians who received their training at a polytechnic school.

Competency distribution of employees in community pharmacies in 2022



Source: SA Service AB

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 prescriptions at pharmacies and providing qualified advice on medicines. They perform an important monitoring role, ensuring that the prescribed medicine is actually the one to be dispensed. The pharmacist can make certain changes, but must contact the prescriber and point out more serious problems with the prescription. The pharmacist is also entitled to object to a generic substitution if this is justified. Pharmacies must also have a pharmacist who is responsible for quality and safety in relation to handling pharmaceuticals.

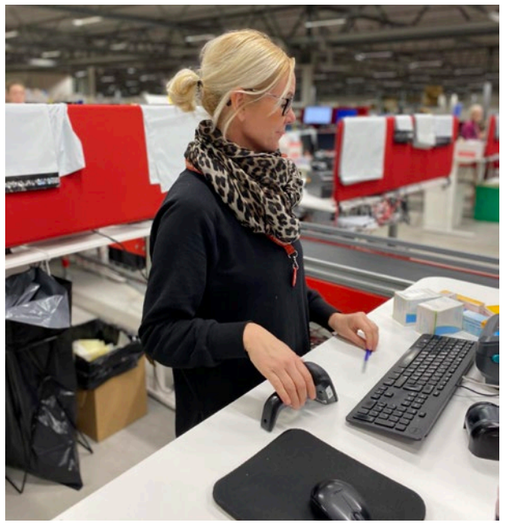


Image: Apotea

To become a registered pharmacist you need to complete a five-year course at university, offered at Uppsala, Gothenburg and Umeå (which also offers distance studies). 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. In 2023, Malmö University will once again open a BSc pharmacy course.

Pharmacy technicians

Pharmacy technicians are primarily responsible for pharmacies' self-care advice and the sale of non-prescription medicines and other products. Some technicians who are qualified to work with prescriptions also provide support to the pharmacists in handling prescriptions. Both pharmacy technicians and pharmacists are able to determine when a customer should be referred to healthcare services, or when self-care is adequate. To work as a pharmacy technician, one must have gone through a special three-term polytechnic university arranged by a training coordinator financed by the Swedish National Agency for Higher Vocational Education and thereby using the teaching plan developed by the pharmacy sector in collaboration with the Unionen trade union. The site www.jobbapåapotek.se provides links to these training companies and the universities and colleges that offer pharmacy training.

Other pharmacy staff

Other staff working in pharmacies may include self-care advisors, i.e. people who have internal training in self-care and provide relevant advice, and pharmacy assistants who work the till and manage stock, etc.

Number of employees in the sector

In 2022, a total of approximately 12,300 people were working in pharmacy businesses in Sweden, of whom just over 10,100 worked specifically at community pharmacies. Prior to re-regulation, the number of employees at the then 930 community pharmacies corresponded to just over 6,200 full-time positions (full-time equivalents). In 2022 the corresponding figure was about 8,800 full-time equivalents at 1,414 bricks-and-mortar and e-commerce pharmacies. Thus, the pharmacy sector has grown significantly since re-regulation and the number of employees in the sector has increased. However, the number of employees per pharmacy has decreased somewhat, due to the fact that there are more pharmacies, often somewhat smaller in size but more efficient in their staffing and scheduling.

Skills supply challenges

There is essentially no unemployment in the sector and the salary trend in recent years has been good. Employers report that the shortage of pharmacists remains high both with regard to recently graduated and more experienced pharmacists. In 2022, just shy of 370 active pharmacists were either approaching or had already reached retirement age; of these, approximately 270 were 67 or older. Furthermore, a number are expected to retire in the coming year, particularly many BSc-qualified pharmacists.

The shortage of pharmacists is particularly great outside the big 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 to smaller towns across Sweden. Pharmacists are also in greater demand in other parts of the healthcare sector and in the pharmaceutical industry.

The sector is making a collective effort to ensure a greater number of available places in study programmes and an increased application volume to these pharmacy programmes. The sector also works with the Swedish Pharmacists Association and the

Image: Apoteket AB. Photo: Jeanette Hägglund

Image: Kronans Apotek

Swedish Academy of Pharmaceutical Sciences on projects financed by the government to accelerate the process for immigrant pharmacists to become licensed in Sweden. There is still a large group of pharmacists with training and education outside the EU who wish to work in pharmacies but who require Swedish credentials to be able to work in a Swedish pharmacy as a pharmacist. One challenge for the sector is attracting more men to apply to pharmacy education programmes and pharmacy jobs. A great majority of employees are women.

Number of pharmacists aged 65 or over working full or part-time

Age	2021	2022
65–66 years of age	139	103
67 or older	371	269
Total	**510**	**372**

Source: SA Service AB

Age	2023	2024	2025	2026	2027	2028	2029	2030
Registered pharmacists	27	22	30	25	39	40	35	31
BSc pharmacists	55	60	84	57	76	85	92	58
Pharmacy technicians	22	28	32	36	27	30	42	31
Total	**104**	**110**	**146**	**118**	**142**	**155**	**169**	**120**

Source: SA Service AB

Working together against hatred and threats

In the past few years, hatred and threats directed at Swedish pharmacy staff have increased. To make it clear that this is not acceptable, no matter what pharmacy company is involved, the sector has joined forces to actively take a stand against all forms of racism, discrimination, hatred and threats. Pharmacies should be perceived as a safe, inclusive environment for customers and staff alike. The joint work includes a sector-wide agreement and a common decal that is displayed in all pharmacies. In addition, the companies will be able to share good examples with each other.

Each employer has complete responsibility for the pharmacy's staff and the companies have their own policies and strategies for how to deal with hate and threats in the workplace. The sector-wide efforts do not replace this, but are to be seen as a complement and an extra security so that no one can pit companies against each other.

THE PHARMACIES' ASSIGNMENT

The skills available today at the pharmacies are not being utilised to their fullest. There are several situations where pharmacists could further facilitate and improve the use of medicines. Customers' high expectations contribute to pharmacies offering a greater range of goods and services than their social mandate requires.

6. OUR SOCIAL MANDATE

Pharmacies' social mandate is to ensure the safe and correct use of medicines. This is formulated through three main tasks:

- Ensuring that consumers have access to prescribed medicines and goods as soon as possible.
- Providing expert and individually tailored information and advice.
- Implementing and providing information about generic substitutions.

Pharmacies' core tasks

Core task 1 – Access to required medicines and goods

All licensed pharmacies are required to provide all medicines and other products that are included in the pharmaceutical benefits scheme when provided via prescription or ordered through the healthcare service. In Sweden a majority of all medicines are provided through the pharmacy channel, as opposed to many other countries, where the healthcare system is responsible for a large proportion of the more unusual medicines. Pharmacies work actively with their stocks to ensure that approximately 93 percent of all requested medicines will be immediately available for customer purchase, and most others can be ordered for next-day delivery. An ever-increasing amount of medicines are dispensed via e-commerce and delivered within a few hours or a day.

But some medicines cannot be ordered because they are out of stock at the manufacturer, which is an increasing problem in Sweden and the rest of Europe. Pharmacies can often resolve the problem with a substitutable medicine, but they could do more with improved regulations.

Core Task 2 – Individually tailored information and advice

Correct use of medicines is critical for a medical treatment to provide the intended effect. Therefore, pharmacies have an important task to provide individually tailored advice when dispensing and to make sure that each customer knows how to take their medicine.

The WHO estimates that compliance (using medicines as intended) is about 50% in the world's developed countries[8] and in Sweden alone, the annual costs for care resulting from drug-related morbidity is believed to amount to between SEK 12 and 19 billion.[9] In addition to providing advice

8) https://www.who.int/chp/knowledge/publications/adherence_full_report.pdf
9) Gyllensten, H. Economic impact of drug-related morbidity in Sweden. University of Gothenburg, 2014

Image: Kronans Apotek

in the core task, pharmacies can be a part of the solution to this problem through specially developed pharmaceutical services. A trial project is underway testing a variety of services.

Pharmacy staff play an important role in ensuring correct treatment, both with prescription and non-prescription medicines. This means there is a significant difference between going to a pharmacy for advice and non-prescription medicine, and purchasing non-prescription medicine somewhere else where staff are not permitted to give advice.

Core Task 3 – Implementing and providing information about generic substitutions

Society sets stringent requirements for the medicines that they finance through the benefits system. In order to keep costs to society down, pharmacies are obligated to make changes when there are equivalent medicines at lower prices – so-called generic medicines.

Since 2009, there has been a special regulation that specifies which generic products pharmacies should use each month. Even if pharmacies save society a lot of money this way, the system increases handling costs for pharmacies because they need to keep different products in stock from month to month. For patients, the constant rotations can lead to them taking the wrong medicine or not taking their medicine at all, as the different names and appearances can be confusing, particularly for elderly patients with numerous medicines. This means that extra time must be spent on advising.

Requirements on pharmacies

The following basic legal and regulatory requirements apply to pharmacies:

- All pharmacies must have a licence from the Swedish Medical Products Agency
- A pharmacist must be present when the pharmacy is open
- The premises must be suitable for pharmacy operations
- There must be a pharmacist responsible for reporting any irregularities to the Medical Products Agency
- Provide all medicines and other products that are included in the pharmaceutical benefits scheme when prescribed or ordered through the healthcare service
- Be able to manage electronic prescriptions, have access to the high-cost threshold database and report sales information directly to the eHealth Agency
- Have an internal system to check compliance with regulatory requirements on pharmacies – a self-monitoring programme
- Provide individual and producer-independent information and guidance on pharmaceuticals, the use of medicines and self-care
- Issue Schengen certificates, have the national pharmacy symbol at the pharmacy and offer instalment payment for medicines covered by the benefits scheme
- Manage the pharmaceutical benefits scheme, including generic substitutions
- Secure processing of personal data
- A functioning patient safety programme

General quality requirements on pharmacies:

- Requirements on pharmacies are stipulated in laws, ordinances and regulations by 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 individual pharmacies are regulated by the Swedish Medical Products Agency. At all pharmacies there is a quality-responsible pharmacist, whose task is to ensure compliance with the regulations.
- By working preventively with clear routines and instructions, dividing responsibilities and skills development, the risk of incorrect dispensing and other irregularities is reduced. Follow-up through such activities as self-inspection, spot checks and sustainability controls are also part of the quality assurance work.
- Serious irregularities must be reported to the Swedish Medical Products Agency and to the Health and Social Care Inspectorate (Inspektionen för vård och omsorg (IVO)), in accordance with Lex Maria.

7. AVAILABILITY OF MEDICINAL PRODUCTS

The Swedish pharmaceutical market is organised such that the pharmaceutical manufacturers have a few large warehouses in central locations in Sweden. The pharmacies have smaller stocks in as many locations as possible. Each pharmacy adapts its local stocks to its unique customer base.

The Swedish system

In Sweden, a very high proportion of all medicines go through pharmacies and 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 it also poses a challenge for pharmacies. There are medicines that are used by tens of thousands of people and others that are only used by a handful of patients. The manufacturers of medicines have the biggest stocks in a few central locations in Sweden, while pharmacies have smaller stocks in as many locations as possible. The pharmacies receive deliveries every weekday of goods to fill their own stocks as well as orders for individual customers.

Stocks at the manufacturer

The majority of all medicines available in Sweden are maintained in the manufacturers' stocks. They keep these stocks at a distributor, which is also responsible for delivering the medicines to the pharmacies. On average, the manufacturers' stock at the distributors is enough for three to four months. The stock is continuously replenished from the manufacturers' factories, which are usually located outside of Sweden. There are no requirements for how much stock a manufacturer must have in Sweden, and the amount kept in stock may vary between products and over time. The advantage of having large stocks at a small number of distributors is that it is easy to distribute the medicines to pharmacies according to demand without any stock being left over in the 'wrong' place in the chain.

Stocks at pharmacies

The country's 1,407 pharmacies have about 7.5 million packages of prescription drugs in stock, distributed across almost 12,000 different medical products. The average pharmacy has around 5,000 packages in stock, distributed across some 2,300 different medicines. The major online pharmacies have even bigger stocks. The total stock out at pharmacies is equivalent to the volume sold in Sweden per month.

Only a few medicines are used by many customers and are thus in stock at all pharmacies – most commonly a medicine is only sold by a small number of pharmacies in Sweden. Each pharmacy adapts its stocks to the customers it has. The goal is for as many customers as possible to get their medicines right at the pharmacy counter and for others not to have to wait longer than to 4 pm the next weekday. It is difficult to achieve a perfect balance between the size of a pharmacy's stocks and what goods should be available on order. If a medicine is not kept in stock, there is a risk that the customer will choose to go to a different pharmacy, but at the same time the pharmacies do not want to be stuck with stocks of leftover medicines that must be destroyed.

Immediate dispensing rate

Two surveys have been conducted to find out how many customers receive their medicines immediately

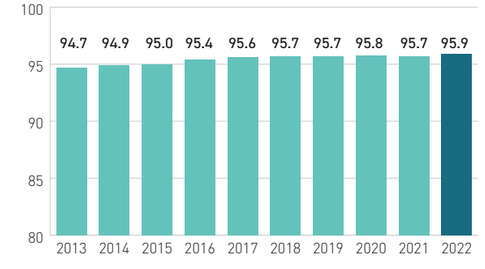
Image: Apoteket AB. Photo: Jeanette Hägglund

from a pharmacy. This is called the immediate dispensing rate and was surveyed by the Swedish Pharmacy Association in 2015 and by TLV in 2019. In the most recent survey, 92.6 percent of the requested prescriptions were dispensed immediately. This was a decrease from 94.9 percent in 2015. The majority of this reduction was due to the strong increase in the number of medicines that could not be ordered from the manufacturer – from 0.8 percent of all prescriptions to 1.9 percent of all prescriptions. Since then, the number of medicines that pharmacies cannot order has increased even more, which may have affected the immediate dispensing rate even more.

The problem of medicine shortages has increased sharply in the past few years. This is not only a Swedish problem; it has global causes and affects the entire Western world. The pharmacy sector has long pointed out that the regulations need to be changed in order to better manage the consequences for patients when pharmaceutical manufacturers cannot deliver according to demand. Manufacturers must be required to inform pharmacies of future shortages at an earlier stage. Information on shortages must reach all relevant parties as soon as they occur, and pharmacies must have greater opportunities to replace medicines with others that are available.

Pharmacies also measure what is known as service level, which is the percentage of medicines that can be dispensed immediately, of all medicines that a pharmacy dispenses. The service level has continuously increased over the years, and was 96 percent last year – a continued high rate. The immediate dispensing rate also includes those instances when a customer for some reason chooses not to order the medicine, for example by going to another pharmacy instead, and is therefore somewhat lower than the service level.

Service level



Source: SA Service AB

Image: Apotek Hjärtat

Availability not just about stock levels

To pick up medicine at a pharmacy, a customer needs a valid prescription. Often, customers lack valid prescriptions when they come to the pharmacies. An academic paper showed that one-third of patients were lacking prescriptions in their list of medicines[10] and the pharmacies estimate that one out of every ten prescriptions requested cannot be dispensed because there are no repeats remaining on the prescription or the prescription has expired. A Swedish prescription is valid for one year and can usually be dispensed four times. Patients can pick up three months' worth of medicine at a time under the pharmaceutical benefits scheme.

Pharmacies can help customers by providing services that remind them when it is time to fill their prescriptions or offering home deliveries when something is not in stock when the customer is in the shop. The important thing is that the customer has their medicine when they need it – not that it is on the pharmacy's shelves. It is always good to visit the pharmacy well before you run out of the medicine at home, if possible. New guidelines from the National Board of Health and Welfare say to have about a month's supply for emergencies.

10) Hammar, T., Mzil, L. & Eiermann, B. Discrepancies in patients' medication lists from pharmacies in Sweden: an interview study before the implementation of the Swedish National Medication List. *Int J Clin Pharm* (2022). https://doi.org/10.1007/s11096-022-01480-x

8. MEDICINES AND THE ENVIRONMENT

Sustainability and environmental issues have become increasingly important in the Swedish pharmacy sector. Several companies profile themselves on it. Compared with pharmacy industries in other countries, we in Sweden have taken major steps. Today we feel that it is not possible to work with health without also taking a broader responsibility for sustainability.

Environmentally harmful medicines

Medicines include active substances that can sometimes be difficult to break down and harmful when they are released into the natural environment. Today's sewage treatment plants are not designed to remove all these substances and as a result, pharmaceutical residues harm other living organisms and animals. Most medicines provide such significant medical benefit that they must be used despite the risks to the environment. This makes it extra important for pharmacists to provide advice and guidance in connection with dispensing medicines, thus contributing to reducing the harm to the environment. Examples of this are the correct use and returning of antibiotics, sex hormones and diclofenac.

Responsible sale of diclofenac

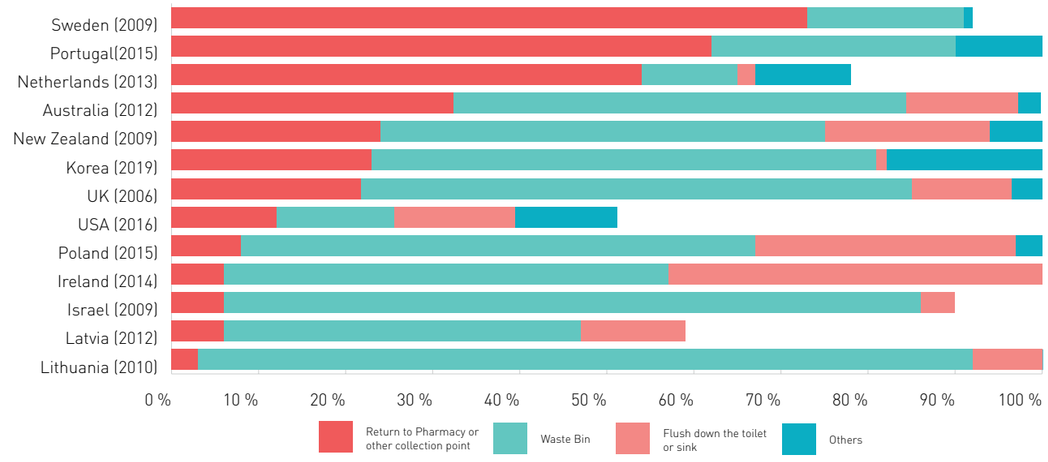
Swedish sewage treatment plants have difficulty breaking down the substance diclofenac, which has a scientifically proven negative effect on the environment and significantly exceeds the limits set by the Swedish Agency for Marine and Water Management. Despite this, the Medical Products Agency classifies diclofenac gel as non-prescription. On this basis, there has been an industry agreement since 2018 that all Swedish pharmacies are to inform their customers that diclofenac has a negative effect on the environment and should be used with caution. Since then the sector has chosen to move diclofenac behind the counter and to only sell it after counselling, both in shops and online.

Unused medicines

Unused medicines must be correctly disposed of and incinerated in specially approved facilities. To ensure that this takes place as safely as possible, the public is asked to hand in their unused medicines to pharmacies. By law, all Swedish community pharmacies must accept leftover medicines returned by the public. All Swedish pharmacies collected a total of approximately 1,430 tonnes of surplus medicine in 2022. Compared with other countries, this is a very high level. This appears in a report from the OECD: "Management of pharmaceutical household waste, OECD 2022 Paris".

Pharmacies spend both time and money on accepting unused medicines. They are not fully reimbursed for this work; on the contrary, the costs

Management of pharmaceutical household waste



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

Image: Apoteket AB. Photo: Jenaette Hägglund

for pharmacies for accepting unused medicine increase every year and now amount to more than SEK 20 million. Furthermore, quite a number of incidents linked to the return of medicine also occur. Often, needles and other hazardous waste are returned to pharmacies even though they are supposed to be returned to local authorities' recycling centres. The local authorities do not always live up to their responsibilities in practice; in fact, most refer to pharmacies being responsible for collection. Therefore, the pharmacies would like to see a clarification of the local authorities' responsibilities.

The large amount of unused medicine is a problem. One reason that patients have leftover medicines at home is that the pharmaceutical industry does not offer enough starter packs of medicines for patients who are starting out on a new medicine or a new dosage. Many medicines only come in larger packages, when the treatment only calls for a small one. Another reason that patients end up with leftovers is that they do not recognise the medicine. The 'product of the period' system means that patients often receive medicine with an unfamiliar name, shape and colour, which is confusing for many patients. Longer substitution periods in the system would make things easier and create a sense of security for many patients, especially those who have many different medicines.

Välvald – the pharmacies' requirement for responsible manufacturing of medicines

In 2021, Välvald (Well Chosen) was launched in the nation's 1,400 physical and online pharmacies. It is a symbol that shows which non-prescription medicines meet the pharmacies' requirements for responsible manufacturing.

Välvald was developed because the pharmacies were frustrated at the secrecy in the pharmaceutical industry around the production of medicines. It is widely known that a large proportion of the active substances are made in China and India and that the industry is characterised by long supply chains and confidential agreements. Medicines that make people in Sweden healthy may be harming people, animals and nature on the other side of the world. Because there is no established sustainability labelling in the pharmaceutical field today, we chose to start that journey ourselves.

Välvald's overarching goal is to contribute to more sustainable pharmaceutical production and to be able to help our pharmacy customers to choose over-the-counter medicines based on responsible manufacturing.

The criteria for being a part of Välvald have continuously evolved. At the start, only the overall sustainability work of the pharmaceutical companies was reviewed. Now stringent demands require that the individual products are manufactured with respect for human rights, workers' rights and the environment, and free from corruption. Verifying documentation is required, showing that these requirements are met throughout the supply chain of the active ingredients.

In our contacts with pharmaceutical companies, we find that several companies work actively with sustainability and climate concerns. Several of the companies that sell over-the-counter medicines in Sweden put a significant amount of time and effort into obtaining the necessary information to meet Välvald's requirements.

Our ambition is to continue to develop the criteria so that Välvald can eventually be classified as a sustainability label for pharmaceuticals. Therefore, in the development of future criteria, the product's climate impact will probably be relevant to look into further.

Pharmacy companies' work with sustainability issues

Several pharmacy companies work consciously with sustainability issues. The environment and sustainability are often key profile focuses and there are several interesting cutting-edge examples that are worth noting.

Of the bigger pharmacy companies, several have mapped out their climate impact. Unsurprisingly, their conclusions are similar and also apply to the industry as a whole. Climate impact is mapped throughout the company's value chain, both direct emissions from its own operations and indirect emissions caused by other links in the chain. The products sold and goods transports and packages are among the most important elements. To be able to reduce these emissions requires cooperation with the suppliers.

Travel, waste management and energy use are also aspects that affect the climate. For example, one company has decided that it will no longer accept products that are delivered to its warehouse in plastic trays. More and more companies are investing in solar power systems and offer various e-commerce deliveries with a climate focus.

Two of the big pharmacies have set up science-based climate goals aligned with the Paris Agreement that are approved as the *Science-Based Targets Initiative*. One company has developed a 'Green List' of 71 suppliers committed to Science-Based Targets.

Several pharmacies have made huge investments in sustainable deliveries, fossil-free transports and electric trucks. More and more contracts with suppliers demand fossil-free transports and more electric vehicles. Another clear trend is that the regions are demanding fossil-free transports in their pharmaceutical procurements. Back in 2021, one company achieved the goal of making all of its transports in the metropolitan regions fossil-free. They accepted the transport challenge of Fossil Free Sweden and are working to make all transports to their pharmacies nationwide to be fossil free by 2030. Some companies choose to climate-compensate for transports that do contribute to emissions, for example via ZeroMission.

Most pharmacy companies participate in fundraisers and charities for the environment and water. In addition, pharmaceuticals, other pharmacy products and money have been sent directly from Swedish pharmacies or through charity organisations for war victims in Ukraine.

9. ABOUT THE SWEDISH PHARMACY ASSOCIATION

The Swedish Pharmacy Association represents the companies that conduct pharmacy operations in Sweden. The association is an industry organisation, not an employers' organisation. Our mission is to strive for stable and predictable conditions for pharmacies. Through our members, we represent essentially all community and hospital pharmacies in Sweden.

The operations are carried out through the Swedish Pharmacy Association and its wholly owned service company SA Service AB. The service company works, among other things, with legal and other advice in the pharmacy field, company-oriented projects and certain advertising and marketing issues the industry has in common. SA Service also provides monthly sales statistics as well as up-to-date information and external monitoring of the pharmacy market and prepares material regarding the pharmacy sector.

At the end of 2022, the Swedish Pharmacy Association had nine members who jointly operated close to 100 percent of the country's 1,407 community pharmacies and seven online pharmacies as well as 28 hospital pharmacies. One of the members of the association is the Swedish Independent Pharmacy Operators' Association (Sveriges Oberoende Apoteksaktörers Förening, SOAF), which organises 44 independent pharmacy entrepreneurs. This means that we represent almost all pharmacies in Sweden – from the country's largest chains to small individually run pharmacies.

As an industry association, it is important for us to participate in the debate and show pharmacies' benefits and potential for society. 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 consultation body for the pharmacy market. We represent the industry vis-à-vis politicians and decision makers, authorities and the Swedish Government Offices as well as other trade associations. Particularly important issues in the sector's relations with the surrounding world are promoting high quality, good patient safety, good economic conditions, high-quality pharmaceutical training programmes and a high level of competency within the sector.

Björn Falkenhall (Senior Economist), Fredrik Boström (Senior Pharmacist), Lisa Stern Ödmark (Senior Strategist) and CEO Johan Wallér.

SA SERVICE AB/SWEDISH PHARMACY ASSOCIATION
REGERINGSGATAN 60, 111 56 STOCKHOLM
INFO@SVERIGESAPOTEKSFORENING.SE | +46 70 239 16 06

Sveriges Apoteksförening

WWW.SVERIGESAPOTEKSFORENING.SE
WWW.JOBBAPAAPOTEK.SE
WWW.APOTEKSWIKI.SE