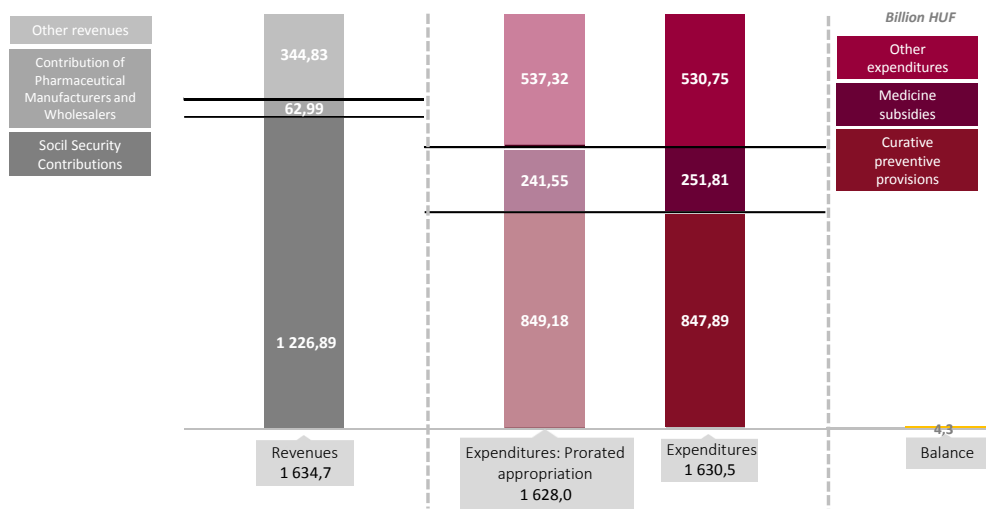


## News, current issues

- News** Applicable data is needed in healthcare >>
- News** Prevention of our diseases can be helped by the internationally unique healthcare data asset of Hungary >>
- News** Cancer: leaders of innovative pharmaceutical companies expect to have a breakthrough in treatment within 10 years >>

## Macro approach to financing healthcare and medicinal products

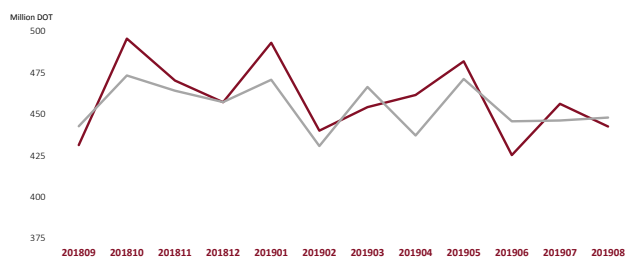
### Balance of the Health Insurance Fund, August 2019



Source: Healthware analysis based on NHIFA data

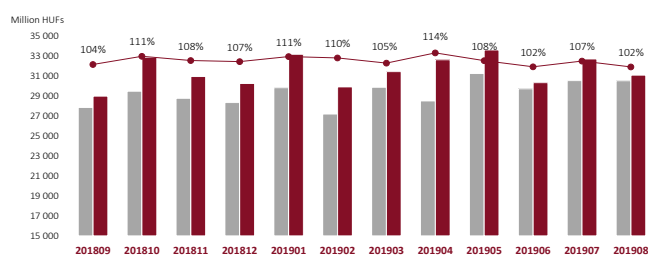
## Dynamics of the sales/circulation of prescription-only-medicine

### Pharmacy DOT turnover



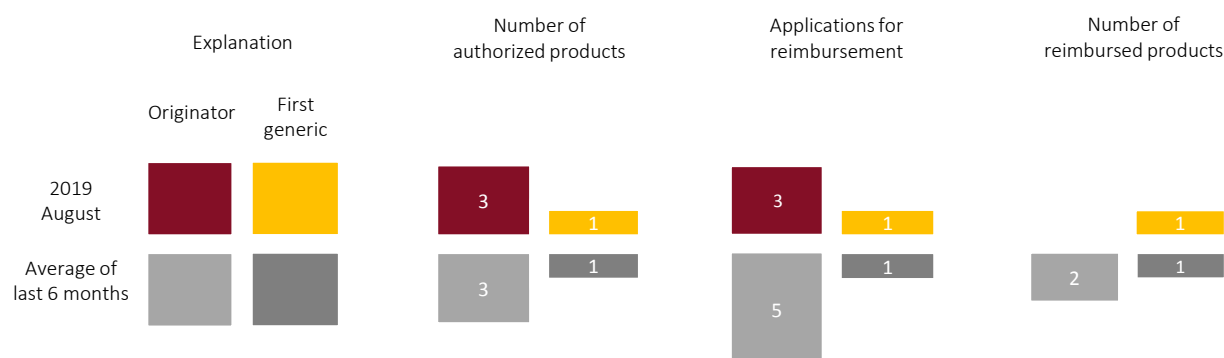
Source: Healthware analysis based on NHIFA data

### Pharmacy reimbursement turnover



Source: Healthware analysis based on NHIFA data

## Changes to subsidized medicinal product categories, August 2019



Source: Healthware analysis based on NHIFA data

Product offering

### Indicator system development

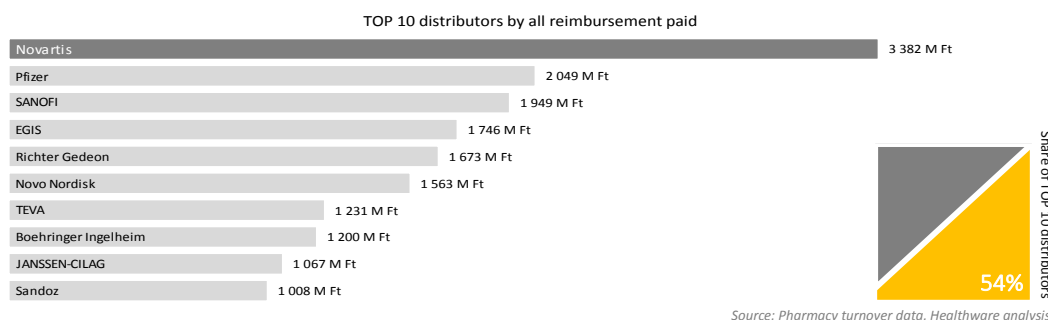
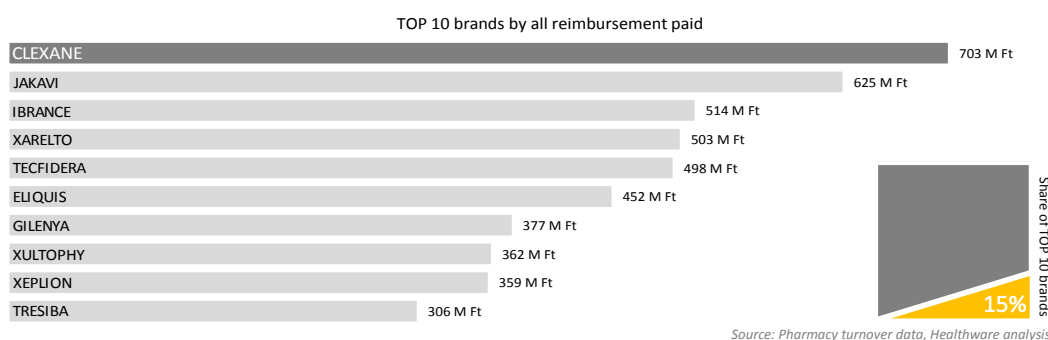
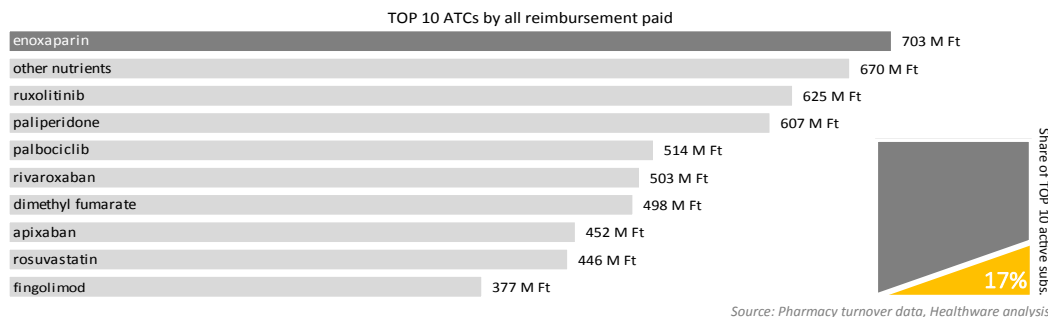
Quality indicators are needed to evaluate a therapy at macro level. The individual micro-level knowledge enables to seek/elaborate parameters which allow to build up an indicator system.

With the comprehensive knowledge acquired along our micro-level analysis products we can ensure elaboration of systems, which show the success of certain medical technologies in transparent way, with objective parameters.

More about the service: [link](#)

## Market data

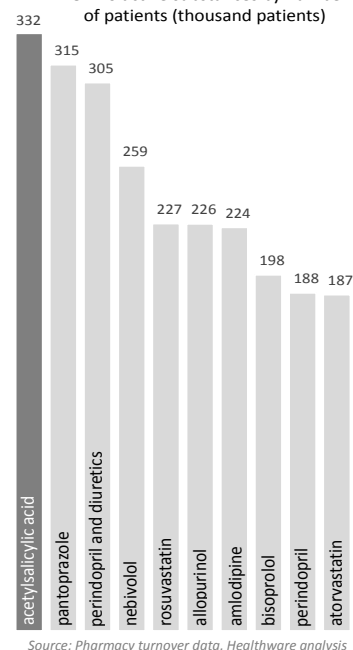
### Toplists of reimbursement and number of patients, August 2019



### Average number of medical sales reps



### TOP 10 active substances by number of patients (thousand patients)



## Reimbursed pharmaceutical market analysis, 2006-2019 — case study

In our current case study, we examine the DOT and reimbursement turnover time series, published by NHIF, in the light of the relevant market events and regulatory cycles. In our case study next month, we will analyze the NPP turnovers, finally, in December, we present methods for analyzing time series, which can be a useful tool to forecast the trends of DOT turnovers. So we can get a picture of the future of the pharmaceutical market, fully based on econometric models.

In the current analysis, every product - appearing in the public drug list or the turnover database - was ordered to its latest published ATC code. Analyzing the (WHO DDD based calculated) DOT turnovers, we did not consider the NPP turnovers, since the NPP DOT turnover values published by NEAK are not mirroring the reality.

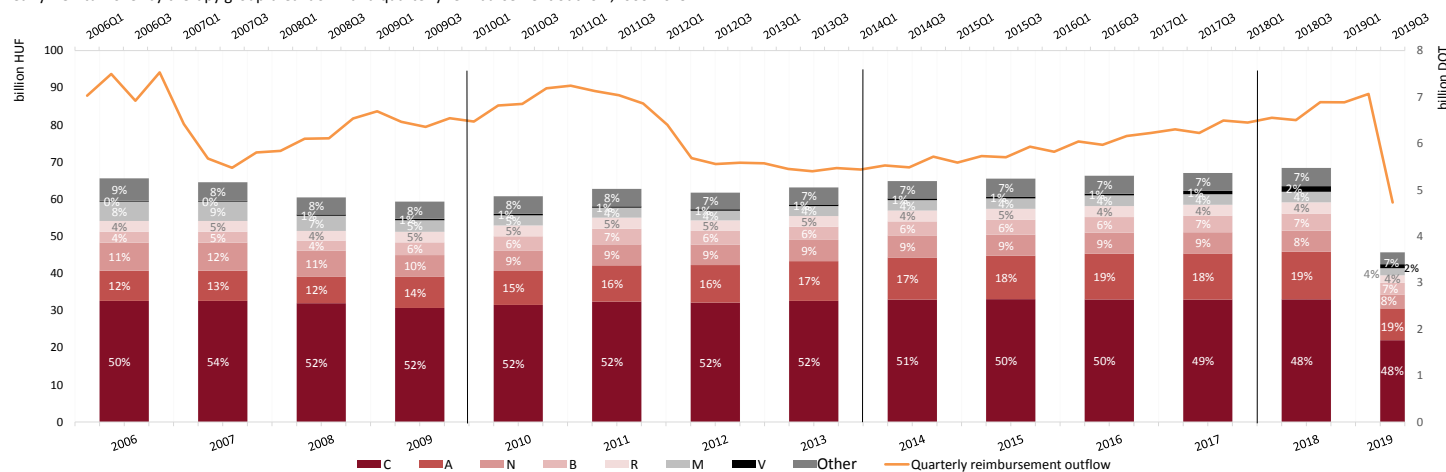
Figure 1 shows the yearly DOT turnover, in the proportion of the ATC1 categories (secondary axis)

from 2006. The orange line shows the quarterly reimbursement outflow, for the same period. Examining the reimbursement outflow, two major drops can be observed during this period. The first one between 2006Q4 and 2007Q3, the second one between 2011Q3 and 2012Q2.

The first drop in reimbursement turnover was a result of targeted reimbursement policy measures, where new reimbursement rates were determined for all reimbursement category. This measure typically decreased the reimbursement percentages, so it increased the extent of copayment. The latter and the introduction of visit fees (which lead to 15% reduction of doctor-patient meetings) resulted in the fact, that turnover on ex-factory prices also dropped by 12%, so the reimbursement outflow was reduced by 20%. After this measure, DOT turnover has decreased in the three following years.

(Continue on the next page)

Yearly DOT turnover by therapy group breakdown and quarterly reimbursement outflow, 2006-2019



## Reimbursed pharmaceutical market analysis, 2006-2019 — case study

The second drop in reimbursement outflow was also not due to market developments. The reason for the decrease is partly the modification of blind bidding and FX process regulation introduced in October 2011, partly the reclassification of substances from pharmacy drugs to itemized accounting drugs. The extent of the latter is not significant in DOT turnover, but due to their high unit price, these circle of products generated almost 30 billion HUF reimbursement turnover in 2011. In 2012, the growing trend of the DOT turnover stopped. Moreover, a moderated decrease was observable compared to 2011. The reason for that is probably not a significant downturn in the demand but rather that a part of the turnover was channeled to the non-reimbursed segment due to delistings after the first blind bidding processes. After 2012, the DOT turnover had a stable increasing trend.

Therapy groups	Yearly average growth			Growth during the examined period (bázis 2006)	Change in DOT turnover share 2006-2018
	2007-2018	2017-2011	2012-2018		
C - Cardiovascular system	100,1%	100,0%	100,5%	101,4%	-1,4%
A - Alimentary tract and metabolisma	104,0%	104,1%	104,0%	156,9%	6,3%
N - Nervous system	97,8%	94,5%	100,6%	75,4%	-3,2%
B - Blood and blood forming organs	104,2%	108,0%	103,9%	157,2%	2,3%
R - Respiratory system	100,4%	100,6%	101,1%	103,7%	0,0%
M - Musculoskeletal system	95,5%	87,8%	101,4%	54,8%	-3,8%
V - Various ATC structures	119,7%	110,2%	130,6%	628,4%	1,9%
Other	100,4%	96,2%	104,8%	80,9%	-2,1%
Total	100,4%	98,9%	101,9%	104,3%	

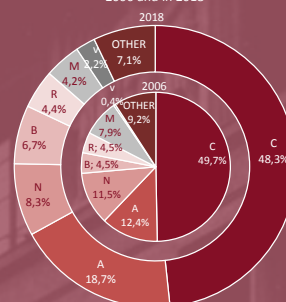
During the examined period, the total DOT turnover has increased by 4.3% which means a 1.1% yearly average decrease during the 2007-2011 period, and a 1.9% yearly average increase for the 2012-18 period.

Behind the reimbursement and consumption decline during the first (2006-2009) government cycle stands an active political behavior. Since then, to the increase of reimbursement outflow (driven among others by monotonically increasing demand), the government reacted with the implementation of all reimbursement policy tools. The question arises whether the current reimbursement system is sustainable -given the steadily expanding range of products- if the potential of the classic price reduction mechanisms runs out but the demand continues to increase.

In the case of the primary care products with lower prices, the current system may lead to the result where the distributors withdraw their products -containing a given active substance- from the reimbursement system. This could lead to the DOT turnover growth in the case of the higher-priced products, and in parallel, the regulatory/financing control over the withdrawn products ceases. These processes result an unmanageable pharmacy budget which leads the financing of innovative therapies to the less transparent (itemized accounting, NPP) financial techniques. The question is, how long this condition can be maintained.

Examined the market share of the ATC1 groups, the "A - Alimentary tract and metabolism" group increased to the greatest extent, by 6.3% during the entire period. The yearly DOT turnover growth of both "A" and "B" therapy groups showed a steady increase. Between 2006 and 2018 their total growth in DOT turnover was respectively 56.9 and 57.2%.

Share of ATC1 groups in the total DOT turnover in 2006 and in 2018



Therapies of the cardiovascular system (C) had the biggest share of the total DOT turnover between 2006 and 2018, steadily around 50%. However, their share decreased minimally, by 2% in the examined period. Nervous (N) and Musculoskeletal (M) system therapies decreased to the greatest extent between 2006 and 2018. Former had an almost 25% decline, the latter decreased by more than 45%. The decline of their market shares measured in DOT turnover was smaller. In both cases, it was between 3 and 4% in the 2006-2018 period.