UEF 4 course 7 sem

Lecture 4

Topic. Analysis and forecasting of circulation costs, Cost estimates.

Lecture plan

1. The concept of circulation costs.
2. Classification of circulation costs.
3. Costs are constant and variable. Gross costs
4. Measurement of circulation costs: in total and by level (%)
5. Items of circulation costs
6. Analysis of circulation costs
7. Forecasting the costs of circulation
8. Directions of cost reduction.

1. The concept of circulation costs.

The production and sale of any product, including medicines, requires certain costs of economic resources for the rental and maintenance of buildings, utilities, purchase of goods, storage of goods, salaries of pharmacy employees, transportation costs, telephone and Internet, and other expenses.

The cost of circulation (Cc) is a monetary estimate of the costs incurred by the seller in the process of promoting goods to the buyer for a certain period of time.

The costs not related to the promotion of goods from the supplier to the buyer are not included in the costs of the pharmacy and relate to the total costs, which are usually paid from the profit of the enterprise and are not planned in advance.

Such costs include: payment of fines and penalties, payment of pharmacy profit tax, payment of high interest on loans from private banks, and other unplanned expenses.

2. Classification of circulation costs

1. *According to the economic content*, **CL** is divided into:

☐Net (for the purchase, sale, accounting of goods)

Additional (for transportation, storage, analysis, etc.)

2.*In relation to the turnover*:
☐Conditionally-permanent (for rent, maintenance, wages according to official salaries, etc.)
☐Conditionally variable (for the transportation of goods, payment of bonuses, Internet services, etc.)

3. *By regulation*:
☐Normalized (for business trips, training of personnel, consumption of auxiliary materials, norms of natural loss of goods, advertising, etc.)
☐Non-normalized (for the maintenance of premises, services of non-departmental security, fire protection, travel around the city, etc.)

4.*For tax purposes*:
☐Expenses related to production and sales.
☐Non-operating expenses.

Expenses related to production and sales are divided into:
☐Material expenses (for transportation services of third-party organizations, for the purchase of raw materials and materials, for the maintenance and operation of fixed assets, etc.)
☐For labor (the amounts of the PO accrued in accordance with the forms and systems of remuneration accepted in the organization, incentive and compensation payments, transfer to extra-budgetary funds, etc.).
☐The amount of accrued depreciation (expenses for the full restoration of the OF).
☐Other (expenses for fire and non-departmental security, telephone conversations, mail, Internet services, city trips, representative expenses, etc.)
Non-operating expenses include:
☐Amounts of under-accrued depreciation in accordance with the useful life.
☐Expenses for the liquidation of unfinished construction and other property, the installation of which has not been completed.

☐The amount of shortages of inventory, if there is no fault of the materially responsible persons, or the court refused to recover from the PIER.

3. Costs are constant and variable. Gross costs

Fixed costs **are such costs,** the amount of which does not depend on the volume and structure of turnover, but their level changes in the opposite direction with respect to turnover: with an increase in the volume of turnover, the level of fixed costs of circulation, calculated as a percentage of turnover, decreases, and vice versa.

Variable costs *depend on the volume and structure of trade turnover.*
In a pharmacy, variable costs include storage costs, part-time work, sorting, packaging of goods, packaging costs, etc.

The sum of fixed and variable costs is called *V.costs*

Fixed costs + ***Variable costs*** = ***V. costs***

4. Measurement of the costs of circulation: in total and by level (%).

Cost accounting in the pharmacy is carried out in sum (*monetary) terms*. Costs are taken into account for each item of expenditure, then in the total amount for all items. This is an absolute indicator. In addition, the relative indicator of circulation costs is calculated, in % relative to the total amount of goods sold (turnover) for a month, quarter or year. This indicator is called the *level of circulation costs*.

Cost level (CL) = Pharmacy support (Ps)/sales volume (SW)*100%
CL = PS : SW(retail prices) *100%
Pharmacy support = *V. costs*

The **Cost level** is a *qualitative economic indicator*, it shows the pharmacy's expenses for each ruble of goods sold at retail prices.

The level of costs is the *main indicator for economic analysis*. Each pharmacy strives to reduce the amount and especially the level of costs.

5. Items of circulation costs.

Each pharmacy keeps records of its expenses by cost items. The list of articles corresponds to the types of work performed by the pharmacy.

Very often pharmacies use the following items to account for costs:

1. Transportation costs
2. Labor costs
3. Social contributions
4. Expenses for rent and maintenance of buildings, structures, premises
5. Depreciation of fixed assets
6. Expenses for the repair of fixed assets
7. Wear of workwear, low-value and fast-wearing items
8. Fuel, gas, electricity costs
9. Expenses for storage, part-time work, sorting and packaging of goods
10. Advertising expenses
11. The cost of paying interest on the loan
12. Loss of inventory values within the norms of loss
13. Container losses
14. Other expenses: depreciation of intangible assets; expenses on TB and ensuring normal working conditions; expenses on cash tapes, receipts; collection; payment for audit services; postal, telephone, telegraph communications, etc.

The largest share is occupied by the costs of wages, rent and maintenance of buildings, premises and inventory, depreciation costs.

Analysis and forecasting of circulation costs.

The main objectives of the analysis of circulation costs are:

–analysis of the implementation of plans, standards in general and for individual cost items;

–study of the dynamics and structure of costs;

–analysis of factors affecting costs;

–identification of cost savings reserves.
The analysis is carried out both in general by amount and level, and by individual items of expenses that form the basis of accounting statements and cost calculation. Depending on the tasks of the analysis, the articles are grouped into costs of import and sale, unproductive, administrative and managerial; in relation to the production process, or in relation to the volume of sales into conditionally constant and conditionally variable. Their dynamics, structure, absolute and relative indicators of change are studied. (Most of all, the change in costs is influenced by the change in prices and the acceleration of turnover). The economic cost analysis is the basis for the preparation of the pharmacy's cost estimates for the next year.

6. Analysis of circulation costs

1. Study of the implementation of the projected indicators of **Cost** in general and in the context of articles.
2. Identification and study of individual factors that affect the overall level of **Cost** and the level of expenses for individual items.
3. Identification of reserves for saving material, labor, and monetary resources.

*They study **Cost** by level and in total.*

Cost level = Pharmacy support (Ps)/sales volume (SW)*100%
CL = PS : SW(retail prices) *100%

The *minimum* amount of **Cost** is the lower limit, beyond which further cost savings are unreasonable, because it will lead to the complexity of delivery and sale of goods, reduction of service culture, etc.
The *maximum* amount of **Cost** is the costs that provide the organization with not profitable, but also break-even work (on the verge of break-even)
Therefore, the planned amount of **Cost** should be:

Cost min. < **Cost** plan.
Cost max. > **Cost** plan.

The work of a pharmacy organization will break even, with equal income and expenses.

Fixed costs + *Variable costs* = *V. costs*

To analyze the* Cost *means to establish their deviation in the current year in comparison with the forecast and in comparison with previous periods.

1. Determine the amount of savings or cost overruns included in the* Cost *in the current year.
***Savings = Planned* Cost *- actual* Cost**

When analyzing the impact of turnover on Cost , usually with an increase in Turnover :

☐the average level of conditionally constant Cost decreases;
☐the absolute sum of conditional variables of Cost increases.

7. Forecasting the costs of circulation

Forecasting is carried out as a whole and in the context of individual expenditure items.

Cost planning for individual items of pharmacy circulation costs

Cost accounting items are divided into **3 groups *depending on the method of their planning***

A - by % (level) – for variable costs
B - by amount – for fixed (constant) costs
C - by calculation – for normalized costs

<u>Planning stages</u> (planning algorithm, planning steps)

1. analysis of data on actual expenses for each item
(including control of the appropriateness of attributing expenses to specific items);

#2. planning the amount of expenses incurred by the pharmacy itself for each article is one of the methodological approaches:

3. calculation of centralized taxes and deductions;
4. determining the total amount of expenses;
5. determination of the average level of circulation costs ;
6. distribution of the total amount by quarter.

The sum of all expenses for the year / plan of sales volume*100% = Cost level year

Amount of expenses by quarter /plan of sales volume by quarter*100% = Cost level quarter

Methodically, the calculation of the costs of circulation for the planned period begins with determining the amount of expenses. The planning of the total amount of expenses is preceded by the determination of expenses for each item. The amount of expenses in the amount of each article for the planned period can be determined by one of the following methodological techniques:

A) By Cost level (variables)

They plan expenses that change with the change in the volume of sales. Having identified a trend in the level change over several years, the level of costs for the planned period is calculated. Then the amount is determined by the product of the sales volume plan (turnover) by the planned level of circulation costs under the article. If the level of expenses is the same as in the base year, and the amount of the planned sales volume (turnover) is higher than in the base year, then the absolute amount of expenses for this item in the planned period increases. For example, the cost of shipping goods, wages, packaging costs, etc.

B) The amount (Fixed costs, permanent, constant)

is used in determining expenses that do not depend on the volume of sales (rent, maintenance of premises and inventory, maintenance costs). If changes in these indicators are not planned, then the absolute amount of expenses that have developed in the base year for this item may remain unchanged in the planned year.

C) By calculation (calculated on the basis of standards, averages, etc.)

These are expenses such as losses within the limits of natural loss, the cost of drug analysis, labor costs. By calculation, the planned salary costs are determined:

Wage fund (per year) = cf. salary of 1 employee (per month) x planned number of employees x 12months

The number of employees is set according to standard staff and staffing standards (they are advisory in nature) or according to actual needs.

After the approval of the calculations for individual items, the total amount of expenses is determined. A qualitative indicator is the average level of circulation costs – the ratio of the amount of expenses to the implementation plan multiplied by 100%.

costA + costB + costC = *V. costs*

8. Directions of reducing the costs of circulation.

Cost reduction is the main means of increasing the profitability of the enterprise.

The main directions are related to improvement:

- ☐trade and technological process;
- ☐turnover structures
- ☐inventory rationing process;
- ☐use of the material and technical base of the enterprise;
- ☐organization of remuneration.

Example 1,

- ☐flexible pricing policy at the pharmacy,
- ☐wide range of products,
- an increase in the turnover of goods with a short circulation period

will accelerate the overall turnover of goods and, as a result, save circulation costs for individual items and for the pharmacy as a whole.

Example 2,

- ☐Rational placement of equipment,
- ☐creation of additional jobs,
- the choice of the optimal mode of operation of a pharmacy organization

can lead to a significant increase in turnover and reduction of circulation costs.

Example 3,

A significant reserve for saving circulation costs is the reduction of unproductive expenses.

The main measures to reduce these costs are:

- ✧ reducing the ways of goods movement,
- ✧ ☐accelerating the turnover of goods,
- ✧ ☐improving the organization of storage and
- ✧ ☐increase in the sale of pharmacy assortment goods.

Example 4

- ✓ ☐labor rationing,
- ✓ ☐development of optimal staffing,
- ✓ ☐the choice of a wage system

will reduce the relative level of labor costs.

Proposals for cost savings in a pharmacy organization are established for each item of expenditure. They affect the planning of the total costs of circulation. It is necessary to ensure the following proportion:

$$\mathbf{Tp > Tt > Tc}$$

Where

Tp - are the *growth rates of profit*

Tt - are the *growth rates of turnover*

Tc - are the *growth rates of circulation costs*, respectively.