

THE ALGORITHM FOR DESIGNING THE FINANCIAL PLAN OF ORTHOPEDIC DENTISTS

Rizaev J. A. Akhmedov A. A. Marupova M.X. Jalalova D. Z. Samarkand State Medical University

Annotation

The assessment of the activity of the dental orthopedic department provides for the justification of a financial plan summarizing the technical and economic level of development of the MSO. The design of measures to ensure a balance between the imperatives of the quality of dental orthopedic care and its cost includes an analysis of the implementation of the financial plan of the MSO. The design of a scientifically based financial plan is closely intertwined with strategic planning, since it includes the purposeful activity of the orthopedic departments of the MSO.

Keywords: When developing a draft financial plan for orthopedic dentists, it is necessary to take into account the actual indicators reflecting the activities for the previous year (month).

In addition, information is needed on the cost of restorations and dentures in a particular region, new services (modern technologies) introduced into the next year's activities, while it is necessary to take into account one of the time-consuming planning sections - the time spent at the clinical stages of manufacturing restorations and dentures.

A universal measure of the amount of labor spent on performing a particular job is the working time of an orthopedic dentist. "Dentists of medical organizations, institutions (departments, offices), with the exception of dental surgeons and maxillofacial surgeons, have a reduced 33-hour working week (Appendix 2 to the Decree of the Government of the Russian Federation No. 101 dated 02/14/2003)," i.e. their working day is 6.6 hours (396 min.) when a five-day working week (33: 5) and 5.5 hours with a six-day (33: 6). DentalWay LLC operates on a 6-day working week.

When rationing the work of outpatient doctors, the estimated time norms usually include the main and auxiliary activities, and the time spent on office conversations, conferences, meetings are not included in the calculated norms.

In the working day of an orthopedic dentist, there are: basic and auxiliary activities,



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as well as personal necessary time. The main activity includes the direct process of providing therapeutic, diagnostic and rehabilitation assistance (provision of services). Auxiliary activities include official conversations, registration of medical documentation, interpretation of functional diagnostic and radiological studies, discharge of directions, certificates and other work related to the reception of the patient

When calculating the load (maintenance) standards, it is necessary to know the working time utilization factor of the position. The value of this coefficient depends on which components and in what percentage are included in the calculated time norms.

The experience of labor rationing, conducting photochronometric observations show that these costs amount to about 0.417 hours out of 5.5 hours of the working day, therefore, the coefficient of use of working time is $0.924 < 5.5 - 0.417^{-1}$.

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The annual budget of the working time of the position (B) was determined by the following formula [89]:

B = m * q - n - z, where

m is the number of hours per day, set by dividing the weekly working time by 6; q is the number of working days per year for a 6-day working week;

n - the number of hours of reduction of working time on pre-holiday weekends during the year;

z is the number of working hours that fall within the vacation time period.

In 2017-2019, with a 6-day working week, the annual working time budget is 271 working days (minus the 365 days of pre-holiday working days, weekends and non-working holidays reduced by one hour - 299 and minus 28 days of vacation).

Labor standards are established by determining the amount of working time required to perform a certain job, or the amount of work that must be performed per unit of time. By the method of timing, we calculated the average time spent by an orthopedic dentist for each service provided at the clinical stage of the manufacture of a dental prosthesis or restoration (Table 1).

The timing results indicate that the most time-consuming and lengthy at the clinical stages is the manufacture of overlapping removable prostheses on a beam (Cad/Cam) -546 min. and clasp prostheses, the production time of which ranges from 116 to 278 minutes. The clinical stage of crown manufacturing (using various technologies) averages 2.3 hours. According to the timekeeping of Grishkova N.O., the labor costs of an orthopedic dentist are identical for any crowns and are equal to 2.3 hours.



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Table 1 - Time of clinical stages of manufacturing restorations and dentures

Name of the service, restoration, prosthesis	Time	in
	min.	
Consultation	15	
Comprehensive examination of the oral cavity, filling out a voluntary consent for examination and treatment	30	
Individualization of the impression transfer	16	
Wax modeling of 1 tooth (Wax Up)	24	
Research on diagnostic models of jaws	28	
Tooth restoration with ceramic veneer (layering or coloring method)	149	
Tab Stump Co-Cr	53	
Tooth restoration with a ceramic tab using E-max technology	90	
Platsmass crown (pharmacological)	52	
Crown made of PMMA material (Cad/Cam)	53	
Zirconia-based crown with ceramic coating (Cad/Cam)	168	
Zirconium Dioxide-based Crown (Cad/Cam)	140	
Solid crown	139	
Metal-ceramic crown	142	
Crown according to E-max technology	137	
Removing and cementing the crown	13	
Restoration of the tooth stump for prosthetics using a fiberglass pin	41	
Removable plate prosthesis made of acrylic (Ivoclar headset)	184	
Clasp prosthesis (Ivoclar headset)	238	
Clasp prosthesis with locks (Bredent) Ivoclar headset	278	
Dental-D acetal clasp prosthesis (Ivoclar headset)	226	
Removable denture made of nylon/akrifri (Ivoclar headset)	183	
Repair of a removable prosthesis	30	
Relocation of a removable prosthesis	57	
Individual abutment	60	
Pharmacological (plastic) crown for the implant	140	
A crown for an implant based on zirconium dioxide (Cad/Cam)	156	
Metal-ceramic implant crown (Cad/Cam)	149	
Manufacturing of an individual spoon for the implant	50	
Overlapping removable prosthesis on a beam (Cad/Cam)	646	





After the timekeeping and the establishment of the time for the provision of services, we began to develop a draft financial plan for the dental orthopedic department, taking into account the following indicators:

- 1. The number of occupied positions of orthopedic dentists.
- 2. Number of working days per year: planned, actual (for the previous year).
- 3. The number of restorations, dentures, their structure by type: planned, actual (for the previous year).
- 4. The cost of manufacturing restorations, dentures at clinical and dental stages, their structure by type: planned, actual (for the previous year).
- 5. The production time of restorations, dentures at clinical stages, their structure by type: planned, actual (for the previous year).

In this study, an algorithm for designing the financial plan of dentists-orthopedists of the department has been developed:

- 1. Calculation of the manufacturing time of restorations, dentures at clinical stages, their structure by type.
- 2. The establishment of the production time per year of all orthopedic dentists and each in particular. This indicator is determined taking into account the number of occupied positions of orthopedic dentists, working days per year, the number of restorations made, dentures and the time spent on their manufacture.
- 3. Comparative analysis of planned and actually worked time (for the previous year) of all orthopedic dentists and each in particular.
- 4. Calculation of the planned financial receipts for the services rendered (taking into account the prices prevailing in the market). This indicator is determined taking into account the number of occupied positions of orthopedic dentists, working days per year, the number of services rendered, restorations made, dentures and their cost.
- 5. Establishment of the most demanded services (restorations and dentures).
- 6. Analysis and identification of the causes of deviations from the established indicators.
- 7. Development of measures to eliminate negative trends.

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