

Financing and Pricing of Outpatient and Polyclinic Medical Care in Armenia

Aghajanyan Susanna S.

PhD in Economics, Senior Lecturer at the Chair of International Economic Relations, Armenian State University of Economics (Yerevan, RA)

<https://orcid.org/0000-0002-5469-3995>

susy_agadjanyan@yahoo.com

Vardanyan Tatevik G.

PhD in Economics, Lecturer at the Chair of International Economic Relations Armenian State University of Economics (Yerevan, RA)

<https://orcid.org/0000-0001-6488-2717>

tatev.vardanyan@outlook.com

Badalyan Meri V.

PhD in Economics, Associate Professor, Dean of The Faculty of Accounting and Auditing, Armenian State University of Economics (Yerevan, RA)

<https://orcid.org/0000-0002-7128-1968>

badalyanmeri.asue@gmail.com

Ayvazyan Anna A.

PhD Student at the Chair of Management Armenian State University of Economics (Yerevan, RA)

<https://orcid.org/0000-0002-1785-9634>

annaayvazyan96@yahoo.com

Arshakyan Ani H.

PhD Student at the Chair of Business Administration Armenian State University of Economics (Yerevan, RA)

<https://orcid.org/0009-0006-4017-2810>

arshakyanani96@gmail.com

UDC: 336.1; **EDN:** MAUTOW; **JEL:** H51, H75, I1, I18, P36;

DOI: 10.58587/18292437-2024.1-158

Keywords: healthcare, financing, medical care services, ambulatory polyclinic organizations, salary, costs, pricing

Ամբուլատոր եվ պոլիկլինիկական բժշկական օգնության ֆինանսավորումն ու գնագոյացումը Հայաստանում

Աղաջանյան Սուսաննա Ս.

տ.գ.թ., Միջազգային տնտեսական հարաբերությունների ամբիոնի ավագ դասախոս, Հայաստանի պետական տնտեսագիտական համալսարան (Երևան, ՀՀ)

Վարդանյան Տաթևվիկ Գ.

տ.գ.թ., Միջազգային տնտեսական հարաբերությունների ամբիոնի դասախոս, Հայաստանի պետական տնտեսագիտական համալսարան (Երևան, ՀՀ)

Բադալյան Մերի Վ.

տ.գ.թ., դոցենտ, հաշվապահական հաշվառման և աուդիտի ֆակուլտետի դեկան, Հայաստանի պետական տնտեսագիտական համալսարան (Երևան, ՀՀ)

Այվազյան Աննա Ա.

Կառավարման ամբիոնի ասպիրանտ, Հայաստանի պետական տնտեսագիտական համալսարան (Երևան, ՀՀ)

Արշակյան Անի Հ.

Բիզնեսի կազմակերպման ամբիոնի ասպիրանտ, Հայաստանի պետական տնտեսագիտական համալսարան (Երևան, ՀՀ)

Ամփոփագիր. Սույն հոդվածում քննարկվում են ՀՀ առողջապահության համակարգում ամբուլատոր-պոլիկլինիկական ոլորտի ֆինանսավորման հիմնական առանձնահատկությունները, մեկ շնչին ընկնող ֆինանսավորման չափորոշիչները, բժշկական ծառայությունների համար սահմանված գները: Մեկ շնչին ընկնող ֆինանսավորման նորմերի չափորոշիչները որոշելու համար վերլուծվել են գործող նորմատիվ փաստաթղթերը,

ամբուլատոր պոլիկլինիկական ոլորտի ֆինանսական հաշվետվությունները: Հետազոտությունները ցույց են տվել, որ առաջնային խնամքի ծառայություններ մատուցողներին վճարվում է ֆիքսված գումար՝ առանց պացիենտի ռիսկին համապատասխանեցնելու կամ առաջնային օդակի բժշկների համար խթաններ ստեղծելու պացիենտներին ուղարկել հիվանդանոցներ կամ այլ մասնագիտացված խնամքի կենտրոններ: Կատարված հետազոտության արդյունքները ցույց են տալիս, որ մեկ շնչի հաշվով հաշվարկված ֆինանսավորման նորմը հիմնականում ապահովում է ամբուլատոր պոլիկլինիկական հիմնարկի աշխատավարձի ֆոնդի 90-95%-ը, մնացած 5-10%-ն ուղղվում է կոմունալ, վարչական, ներպոլիկլինիկական դեղորայքային ծախսեր և այլն: Ավելին, ամբուլատոր բժշկական զննումների և սպասարկման համար սահմանված ֆիքսված գները հիմնականում չեն կիրառվում:

Հանգուցաբառեր՝ առողջապահություն, ֆինանսավորում, բժշկական ծառայություններ, ամբուլատոր պոլիկլինիկական հաստատություններ, աշխատավարձ, ծախսեր գնագոյացում

Финансирование и ценообразование амбулаторно-поликлинической медицинской помощи в Армении

Агаджанян Сусанна С.

к.э.н., старший преподаватель кафедры международных экономических отношений,
Армянский государственный экономический университет (Ереван, РА)

Варданян Татевик Г.

к.э.н., преподаватель кафедры международных экономических отношений,
Армянский государственный экономический университет (Ереван, РА)

Бадалян Мари В.

к.э.н., доцент, декан факультета бухгалтерского учета и аудита,
Армянский государственный экономический университет (Ереван, РА)

Айвазян Анна А.

аспирант кафедры управления,
Армянский государственный экономический университет (Ереван, РА)

Аршакаян Ани А.

аспирант кафедры делового администрирования,
Армянский государственный экономический университет (Ереван, РА)

Аннотация: В данной статье рассматриваются основные особенности финансирования амбулаторно-поликлинических учреждений в системе здравоохранения РА, нормативы подушевого финансирования и цены, установленные на медицинские услуги. С целью определения параметров нормативов подушевого финансирования были проанализированы действующие нормативные документы, финансовая отчетность амбулаторно-поликлинического сектора. Исследования показали, что поставщикам первичной медико-санитарной помощи платят фиксированную сумму без учета риска для пациентов и создания стимулов для врачей первичной медико-санитарной помощи. Результаты проведенного исследования показывают, что подушевой норматив финансирования в основном обеспечивает 90-95% фонда оплаты труда амбулаторно-поликлинического учреждения, остальные 5-10% направляются на коммунальные, административные, внутри-поликлинические расходы, на лекарства и т.д.

Ключевые слова: здравоохранение, финансирование, медицинские услуги, амбулаторно поликлинические организации, зарплата, расходы, ценообразование

Introduction

One crucial element within the healthcare system is healthcare financing, which should be coupled with a consistent increase in the allocation of public funds towards healthcare. This should involve a diverse range of funding sources, fair pricing for medical services, enhancements in payment mechanisms, and various other measures. Healthcare must take precedence in public spending, always prepared to address not only immediate challenges but also global ones.

In this regard, the financial tools utilized in primary healthcare (PHC) hold a significant role. These tools encompass reimbursement rates, medical service pricing, and the method of compensating healthcare providers, among others.

They serve as essential prerequisites for enhancing healthcare system quality, enhancing medical care accessibility, and advancing healthcare infrastructure. Within the healthcare financing framework, pricing and standards serve informative, incentivizing, regulatory, and distributive functions, and form the foundation for budget calculations, contractual pricing, and mandatory health insurance rates.

In the Republic of Armenia (RA), a system is in place to provide free or discounted medical care and services, both in hospitals and outpatient facilities. The calculation and funding of contractual amounts for outpatient and polyclinic medical care programs and services are determined based on the actual population registered or the real services rendered

by the healthcare institution, following the principle of performance.

For comprehensive outpatient and polyclinic care, which includes individual examinations, consultations, treatment appointments, and more, a per capita financing rate is established. This payment method incentivizes primary care physicians to prioritize the well-being of their patients and avoid unnecessary increases in the number of visits, tests, and consultations. Simultaneously, in primary care, when an intermediary payment approach is used, physicians have an incentive to refer patients to inpatient care only when it is truly necessary since hospital services are free of charge for the patients in this context.

In the Republic of Armenia (RA), the standard for outpatient and polyclinic medical care for adults aged 18 and above is fixed at 3,048 AMD (equivalent to 7.43 euros) (1EUR=410.04 AMD \ The recalculation was performed by the CB of the RA using the exchange rate set on September 26, 2023, which was 1 EUR = 410.04 AMD), while for each registered child below the age of 18, the yearly standard is 6,096 AMD (equivalent to 14.86 euros in 2023). To advance the implementation of comprehensive health insurance, boost the efficiency of the primary healthcare (PHC) system, and ensure both the accessibility and quality of healthcare services, it is imperative to evaluate to what extent these established standards contribute to the attainment of the mentioned objectives.

The objective of this research is to assess the appropriateness of the standard applied to outpatient and polyclinic facilities and to gauge the cost level of tests and services provided in outpatient and polyclinic healthcare by comparing them to the average prevailing market rates.

The findings of the study reveal that the per capita financing standard predominantly covers 90-95% of the labor compensation expenses for outpatient and polyclinic institutions. The remaining 5-10% is allocated for utility bills, administrative overhead, in-patient medications, and other miscellaneous costs. In terms of comparing prices for laboratory tests and instrumental services with similar services available for a fee, it becomes evident that these prices are considerably lower than the average market rates. Moreover, they tend to remain static and do not account for factors like the utilization of new medical equipment and consumables. Furthermore, these prices primarily serve as informational figures, as these institutions are funded based on their overall effectiveness rather than the volume of tests and services conducted.

Literature Review

Primary healthcare represents the foundation of a strong healthcare system. The fundamental tenets of primary healthcare (PHC) were outlined in the Alma-Ata Declaration, crafted during the International PHC Conference in 1978. As per this declaration, all nations are urged to create a PHC strategy and establish an all-encompassing national healthcare system. Public health plays a crucial role in tackling most of society's health challenges, and this can be accomplished by making better use of the world's resources (O'Connor, Bankauskaite , 2008).

Healthcare systems have garnered significant attention in the policies of many nations. This focus stems from concerns about the accessibility of essential healthcare services, as well as the effectiveness and costs associated with existing healthcare systems. The research team at the World Health Organization (WHO), in their report titled "Assessing Recent Developments in Health Financing," underscores that alterations in how healthcare is funded on a systemic level can have profound and widespread ramifications.

The report's authors conclude that deliberately changing the financing mechanisms for healthcare and the payment structures for healthcare services can lead to a purposeful transformation in the nature and quality of relationships between healthcare providers and patients. Such changes can have a substantial impact on healthcare access and, as a result, the health outcomes of various population groups. The volume and composition of healthcare expenditures, as well as the number and categories of healthcare personnel involved, depend on the adopted financing methods [4].

The literature also addresses how per capita financing can encourage resource efficiency by exerting control over both service prices and their quantity. Many countries in Central Europe and the Baltic States utilize per capita payments for primary care, with differentiation based on age and gender [8]. However, it's worth noting that this payment method could potentially result in an increased morbidity rate in the population, as healthcare providers might reduce the scope of services they offer [9].

The core principle of the per capita payment system is that the payment to healthcare providers is not directly linked to the resources used or the volume of services delivered. Consequently, some of the risk is shifted from the payer to the provider. If the provider incurs costs that exceed the per capita budget, they are held responsible for covering those additional expenses. Conversely, if the provider achieves cost-efficiency and keeps expenses below

the per capita budget, they can retain and reinvest any surplus funds [10].

In the Republic of Armenia, the Ministry of Health is responsible for defining standards for both hospital and outpatient healthcare, along with health-related services. Furthermore, it establishes average and region-specific prices for specific types of medical care and services that are offered to the population of Armenia either for free or under preferential conditions. Healthcare spending in Armenia has been consistently on the rise. Although some of this increase can be attributed to enhancements in the overall health of the population, statistical data reveals a limited connection between the growth in expenditures and improvements in health outcomes.

In the Republic of Armenia (RA), the primary healthcare sector employs a per capita financing norm. In this system, primary healthcare in RA is funded by multiplying the number of registered participants at a medical facility by the per-person tariff. Under this per capita payment system, healthcare providers receive a predetermined amount for delivering specific services to each patient at primary healthcare facilities. This funding method is structured to encompass various expenses, including salaries for medical staff, compensation for medical consultations, tests, selected services, infrastructure expenses, and other necessary operational costs for primary healthcare facilities.

It's worth noting that more costly procedures such as computed tomography or magnetic resonance imaging are not covered by the consultation fee. In most instances, residents of RA can access specialized care by paying additional out-of-pocket expenses. On average, the direct household payments per person amount to 228,764 AMD per year (equivalent to 557.9 euros in 2021).

It's important to emphasize that the RA Audit Chamber's report for the year 2022 pointed out a challenge in evaluating costs and economic efficiency. This challenge stems from the absence of appropriate methodologies for determining service

quantities and their pricing, as well as the absence of substantiations for service pricing.

As a result, this paper aimed to compute the financial burden associated with the PHC standard and offer explanations for the pricing of services.

Analysis

The Republic of Armenia's government ensures the provision of funded healthcare services through state-targeted health programs, irrespective of the legal structure or ownership of healthcare providers. The funding from the Armenian state budget follows a limited (global) budget approach, which is determined based on the financial allocation to the healthcare sector in the state budget. This allocation is distributed among different types of medical care and service programs, each of which has its specific calculation method. This calculation method is uniformly applied to all organizations offering similar medical care and services.

The Primary Health Care Program encompasses three key initiatives, with a particular emphasis on the Ambulatory-Polyclinic Medical Care Services initiative, which serves as the cornerstone of medical care and support in 2023. In 2022, this initiative accounted for the majority, approximately 97.8%, equivalent to around 30.3 billion drams, and is expected to grow by approximately 7% in 2023. Under this program, the measure 11001, titled "Ambulatory Polyclinic Medical Care Services," is put into action. This measure encompasses a range of primary health care services delivered by family physicians, general practitioners, pediatricians, and specialized medical practitioners. Within this framework, activities such as disease prevention, early diagnosis, treatment, ongoing monitoring of chronic patients (including proactive outreach), conducting home visits as per guidelines, facilitating patient hospitalization, and other related processes are carried out.

The determination and funding of contracted amounts for out-of-hospital medical care and service programs are based either on the actual registered population or the performance of the healthcare organization.

Table 1. *Non-financial performance indicators of the ambulatory-polyclinic medical care services performance indicators [7]*

	<i>2022 Actual</i>	<i>2023. Planned</i>
Number of people, including people, registered in organizations for primary health care of the population	<i>3116867</i>	<i>3077381</i>
Number of populations registered in organizations by local therapist, family doctor: persons aged 18 and over, person	<i>2398978</i>	<i>2364782</i>
Number of populations registered in the organizations by local pediatrician, family doctor: up to 18 years. children, man	<i>717889</i>	<i>712599</i>
Number of students receiving medical care and services at the school, people	<i>387070</i>	<i>389666</i>

Number of people who have the right to receive drugs on free and preferential terms, people	1036871	864000
Number of laboratory-instrumental diagnostic studies carried out during prenatal and postnatal monitoring of pregnant women, volume	713763	701232
The amount spent on the event (thousand AMD)	27857528.79	29,637,005.3

In the year 2022, there were a total of 3,116,867 individuals registered with primary healthcare organizations. Among them, 2,398,978 individuals (constituting 76.9%) were 18 years old and above, while 717,889 individuals (comprising 23.1%) were children under the age of 18. This registration process aligns with the established procedure outlined in the decision of the Republic of

Armenia's government, wherein the population of Armenia is registered with a primary healthcare provider within the appropriate ambulatory-polyclinic organization. Consequently, the number of beneficiaries registered across various outpatient-polyclinic organizations may exhibit significant variations.

Table 2. *The number of beneficiaries registered in ambulatory polyclinic organizations [7]*

Serving ambulatory polyclinic organization	Population registered by the ambulatory polyclinic organization
"Armenia" Republican Medical Center CJSC	47789
Natalie Farm Ltd. Astghik Medical Center	27500
Polyclinic No. 19 CJSC	68547
Polyclinic No. 8 CJSC	37065
Polyclinic No. 20 CJSC	32263
Polyclinic No. 17 CJSC	43339
Polyclinic No. 16 CJSC	18346
Polyclinic No. 12 CJSC	35532
Canard Ltd., Davidian's polyclinics	1299

The count of beneficiaries registered within specific outpatient-polyclinic organizations holds significance as it serves as a crucial metric. This is because the calculation and funding of contracted

amounts for out-of-hospital medical care and service programs hinge on the actual number of individuals registered in these organizations.

Table 3. *The main forms of financing outpatient medical care and service [5]*

Outpatient medical care and service contract volumes	
For projects funded on a per capita basis	<ul style="list-style-type: none"> • limited budget principle • the number of registered residents and the product of the approved annual norm per resident
Other (not funded on a per capita basis)	from the volumes of actual works of previous years

This implies that the funding allocated to ambulatory medical organizations is determined based on an established annual norm per resident, irrespective of whether that resident seeks medical

care during the year, their location within the country, or other factors. However, this funding approach does not consider the actual utilization rate of healthcare services by the population.

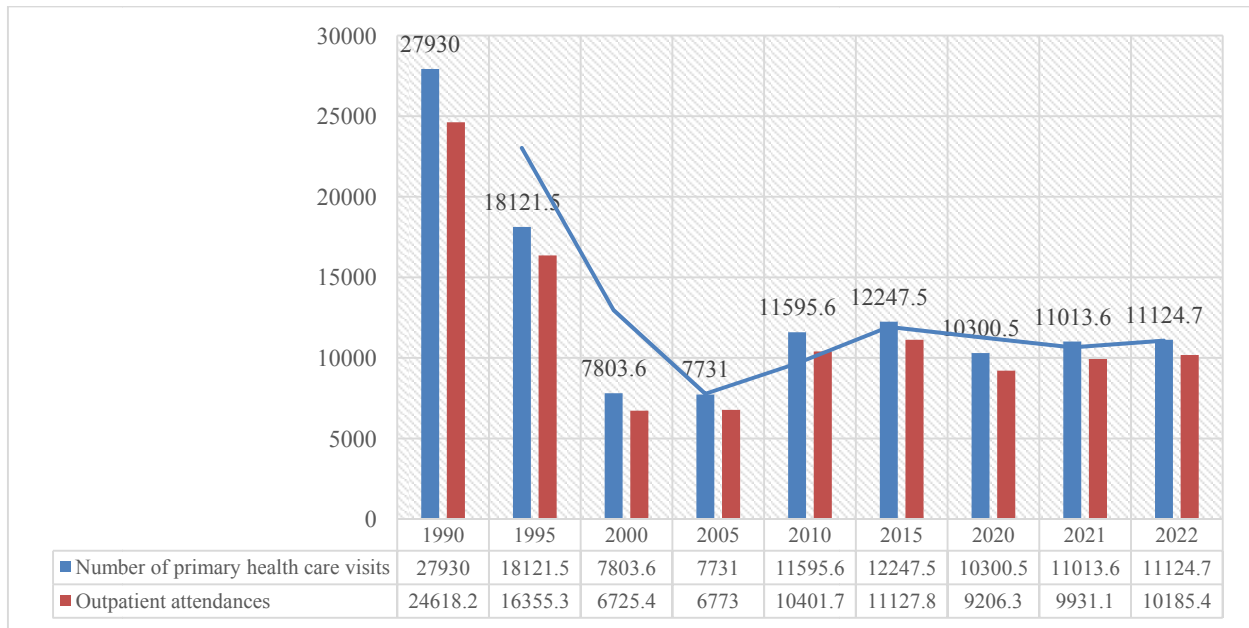


Figure 1. The activities of RA out-hospital and narrow professional medical care organizations

As illustrated in Figure 1, while there has been a relative increase in the number of visits to primary healthcare compared to 2005, it's noteworthy that

the attendance in 2022 was 15% lower than in 2015. In 2022, outpatient visits accounted for 91.55% of the total visits, with 3.2% attributed to home visits.

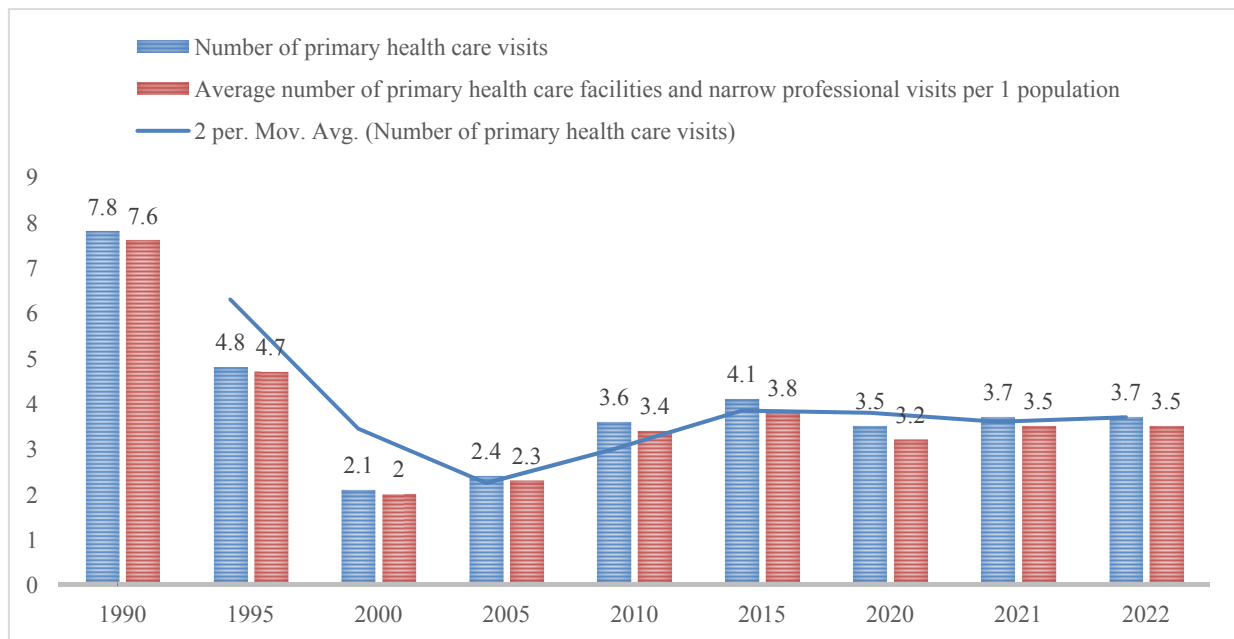


Figure 2. Average number of visits to primary health care per one resident, 1990-2022 [7].

In 2022, the average number of visits per resident to primary healthcare facilities was 3.7, indicating that, on average, each resident sought primary healthcare services approximately 3.7 times. The annual average normative cost per resident is determined by taking into account the normative population of the serviced area and considering the demographic breakdown by age and gender. Projected costs are calculated separately for registered children under the age of 18 and population groups aged 18 and older. Furthermore, the annual expense norms are derived through

categorizing expenditures, including salaries, pharmaceuticals, medical supplies, utility costs, and other economic expenses.

In polyclinics that offer primary healthcare services, the institution receives AMD 3,048 for every registered resident who is 18 years of age and older, while AMD 6,096 is provided for each registered child under the age of 18. Additionally, the state allocates 282 drams for each specialized medical care and service cabinet (typically five main cabinets) within these primary healthcare polyclinics [13].

In the course of our research, we examined the financial statements of 46 primary healthcare service providers to assess their performance in 2021 [6]. Our calculations have revealed that the primary source of income for these institutions largely stems from the revenue generated through services provided as part of the state mandate.

It's important to emphasize that within the financial makeup of primary healthcare service providers lacking other sources of income or assets, state funding constitutes a substantial proportion, averaging around 85%. Notably, only “Diagnostics” OJSC and “Arinterlev” LLC (“Vardanants” Medical

Clinic) recorded 83% and 89%, respectively, of their revenue coming from paid services. Additionally, it's worth noting that particularly in regional areas, the reliance on state funding can reach up to 100% in institutions delivering primary healthcare services (e.g., “Tsaghkahovit” Medical Clinic-96.6%, “Vanadzor” No. 3 Polyclinic PP-96.67%, “Byurakan” Medical Clinic CJSC-100%, Andranik Petrosyan Byureghavan City Polyclinic CJSC-98.18%, and others).

Furthermore, we conducted an analysis of the expenditure structure within these primary healthcare service institutions.

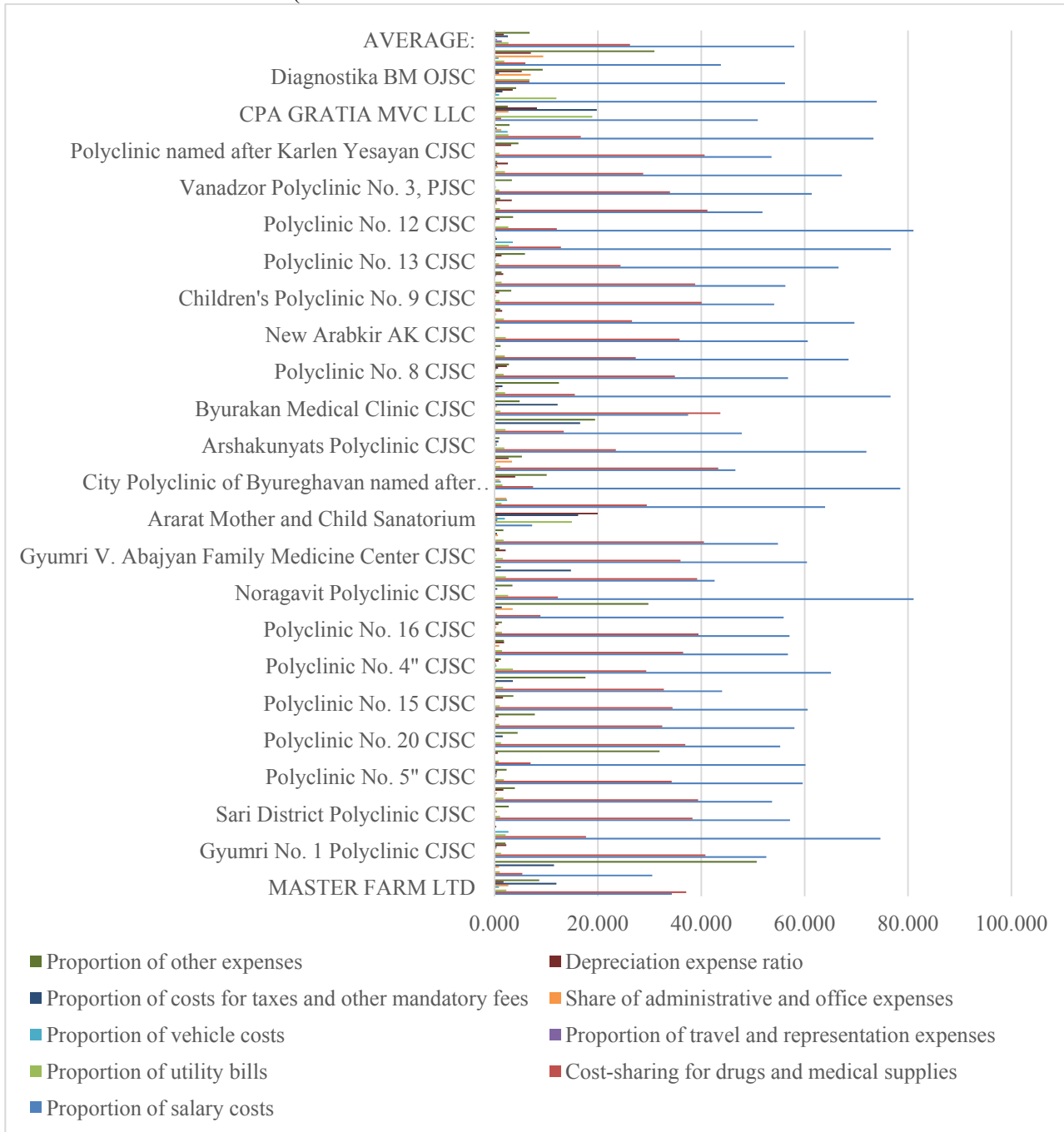


Figure 3. The share of basic expenditure items in total expenditures in institutions providing primary care services, 2021 (Calculated and compiled by the authors based on the 2021 financial reports of primary health care service providers)

Figure 3 reveals that the bulk of expenses in primary healthcare service institutions are attributed to salaries, comprising an average of 58%, which includes salaries earned from delivering paid services. Additionally, medicines and medical supplies account for an average of 26.2% of expenses.

In these examined primary healthcare service institutions, when we factor in the portion of salary costs related to the state mandate, we observe that this figure averaged 93.4%.

Table 4. Comparison of norms of ambulatory-polyclinic medical care and minimum norms of remuneration per resident

Outpatient polyclinic medical care services	Annual rate (AMD)	Medical staff	Per each registered resident	Specific weight
Medical care and service provided by a community therapist working under normal conditions (for persons aged 18 and over, per registered resident)	3048	Regional therapist	117.5	69.88%
		Regional nurse	60.0	
Field therapist working in mountain and high mountain conditions	3168	Regional therapist	117.5	67.2%
		Regional nurse	60.0	
Narrowly specialized medical care and service (5 main cabinets), including each cabinet	169	surgical	Doctor 7.83	84 %
		cardiology	Nurse 4.0	
		ophthalmic		
		otorhinolaryngology		
Primary health care services in polyclinics for children up to 18 years of age, per registered child	6096	Regional pediatrician	235	69.88%
		Regional pediatrician nurse	120	
Narrowly specialized medical care and service (5 main cabinets), including each cabinet	282	surgical	Doctor 13.05 Nurse 6.67	84 %
		cardiology		
		ophthalmic		
		otorhinolaryngology		
		neurological		

Salary expenses for doctors, middle-tier, and junior medical staff are determined by multiplying the normative population figures within the service areas by per capita rates sanctioned by the Minister. For other personnel, essential drugs, and medical supplies necessary for the functioning of the clinics, as well as utility and operational expenses, calculations are made using either the actual figures or normative data from previous years. Additionally, the costs to maintain a single clinic for all programs or services funded based on the population size they serve are set at the same rate for the optimal population being served.

salary for a family doctor is 117.5 AMD per registered adult resident, and for a nurse, it is 60 AMD. For children under the age of 18, these figures are 235 AMD for a family doctor and 120 AMD for a nurse.

Consequently, in the context of primary healthcare, for individuals aged 18 and above, the

Analyzing the breakdown of the salary fund as presented in the financial reports reveals that, on average, approximately 46.2% of the fund is allocated to doctors' salaries, 35.8% is designated for middle and junior medical staff, and the remaining 18% is directed towards compensating administrative and economic personnel.

Table 5. Average cost structure of institutions providing primary care services and their share in state funding, 2021, %

	Average cost structure	Their specific weight in state funding
Salary costs	58	93.4
Medicines and medical supplies costs	26.2	6.6
Utility bills	2.7	
Travel and representation costs	1.4	
Vehicle costs	0.5	
Administrative and office expenses	1	

Taxes and other mandatory fees	2.6	
Depreciation expenses	1.8	
Other expenses	5.8	

Upon scrutinizing the financial records of healthcare facilities and juxtaposing them with the labor compensation norms, it becomes apparent that a substantial portion, specifically 50-60%, of the institution's expenditures are indeed allocated to the salary fund. It is important to note that in this context, it is challenging to distinguish between the portion of the salary fund derived from state funds and that generated from paid services. However, if we narrow our focus to primary healthcare institutions that solely rely on state funding, the salary fund index averages at an impressive 93.4%.

Table 5 summarizes the cost components of the norm calculated per capita. The determination of prices for medical care and healthcare services, insurance amounts, and premiums under free and preferential conditions guaranteed by the state in the Republic of Armenia is governed by Government Order No. 2004.318-N dated March 4, 2004. This process is carried out within the budgetary limits allocated by the Republic of Armenia's state budget for relevant health sector programs. The pricing is

based on medical and economic guidelines endorsed by the Minister of Health. In cases where these guidelines are unavailable, the pricing is determined through actuarial calculations and may consider proposals from medical centers, professional associations, and public organizations.

In the course of this research, we examined the prices listed in Annex 1 of Minister of Health Order No. 240-L. To evaluate the appropriateness and comparability of these established prices, we collected cost calculations for medical services offered on a fee-for-service basis, particularly in primary health care institutions. To assess their fairness, we also compared these prices with market rates for similar services.

For gathering average market prices, we reviewed the current price lists of various healthcare providers, including Vardanants Medical Center, Dialab, Ecosens, Davidyants Laboratories, Center for Medical Genetics and Primary Health Care, Normed, and Slavmed, for the month of September 2023.

Table 6. Calculation of the cost of medical services provided on a paid basis in primary health care institutions and the proportion of costs

	General blood test without leucoformula	General blood test with leucoformula	Determination of blood group and resource factor	General examination of urine	X-ray (30x40 strip)	Sonographic examination	General examination of the phlegm
Salary	350	700	700	525	1750	1750	700
Materials, utilities, depreciation and other expenses	370	745	695	560	1565	1400	795
Taxes:	80	155	155	115	385	350	155
Profit	200	400	450	300	1300	1500	350
PRICE	1000	2000	2000	1500	5000	5000	2000
Salary (%)	35.00	35.00	35.00	35.00	35.00	35.00	35.00
Materials and other costs (%)	37.00	37.25	34.75	37.33	31.30	28.00	39.75
Taxes (%)	8.00	7.75	7.75	7.67	7.70	7.00	7.75
Profit (%)	20.00	20.00	22.50	20.00	26.00	30.00	17.50

As indicated in Table 6, a significant portion, approximately 35%, of the expenses associated with services provided on a fee-for-service basis within primary healthcare institutions is allocated to the salary fund. Procurement of materials and supplies required for service provision typically occurs through public procurement procedures, and these

costs, along with utility bills and other expenditures, collectively constitute about 37-40% of the total expenses.

It's noteworthy that paid services make up a relatively small portion of the constants in primary healthcare in the Republic of Armenia. This is primarily due to the population's preference for

more specialized institutions when seeking paid services. Reasons for this preference include time-saving, receiving results in digital formats, and other factors.

To facilitate a comparison between the prices of medical services and examinations with market rates, we conducted a juxtaposition of the prices for research and services within primary healthcare against the average market prices.

Table 7. Comparison of outpatient medical prices with market prices

Types of research and services	Self-value (wages, material costs and other costs)	Outpatient medical care (AMD)	Prices of fee-based services in primary health care	Average market price
General blood test without leucoformula (with determination of at least three components per person)	720	490	1000	1750
General blood test with leucoformula	1445	1050	2000	3000
Bacteriological investigation of phlegm	1495	1600	2000	7100
X-ray, tape 30X40	3310	2900	5000	7500
Sonographic examination (cost per case, regardless of the number of locations)	3150	3300	5000	12000

As Table 7 illustrates, the prices established for outpatient medical care, categorized by types of research and services, are notably low and fall considerably below the rates charged for comparable services in specialized laboratories and medical centers. Additionally, it's important to acknowledge that the relatively affordable availability of used equipment and materials contributes to the lower pricing of paid services within the primary healthcare sector.

Conclusion

The research findings reveal that some of the norms for ambulatory medical care established for outpatient healthcare in the Republic of Armenia (RA) are utilized in the financing process of outpatient medical care. The per capita rate is only differentiated based on age (children and adults) and geographic location, with higher rates in mountainous regions. However, the norm lacks diversification by age, risk groups, patient characteristics, or other criteria.

The results of the conducted research show that comparing the prices of laboratory-instrumental research and services with similar services provided on a paid basis showed that these prices are significantly lower than the average market prices, are generally not updated, do not take into account new medical equipment, consumables usage etc. In addition, these are purely informative, as these institutions are funded not according to the number of researches and services performed, but according to the overall performance.

In order to improve the quality and efficiency of primary care, incentives for primary care providers should be strengthened so that primary care providers take more responsibility for patient care. This includes adjusting the standard rate for risk or patient needs and introducing certain performance-based components to primary care reimbursement.

References

1. Appendix Approved by the RA Chamber of Accounts 2022 by decision No. 239-A of December 16. Conclusion on the results of the accounting carried out with regard to outpatient-polyclinic medical aid services in the Ministry of Health, 2022
2. Appendix N 3. Format of presentation of budget programs and expected results. RA Ministry of Health. Part 4. Results (performance) indicators of the state body.
3. Concept of state-guaranteed free and preferential medical care and service financing. Appendix No. 1 of the Government of the Republic of Armenia in 2013, under Protocol Decision No. 21 from the May 29 session.
4. **Contandriopoulos, A. P., Rivero, C. C., Kaddar, M., Sikipa, G. G., Solon, O., Thomason, J., & Tibouti, A.** (1993). WHO study group on the evaluation of recent changes in the financing of health services.
5. Decision No. 318-N of March 4, 2004. The Government of the Republic of Armenia.
6. Financial statements of institutions providing primary health care services for 2021 <http://moh.am>

7. Health and healthcare. Statistical yearbook, Armenia 2023 / A 720 D. Andreasyan, A. Bazarchyan and others: Yer. "Academician S. Avdalbekyan National Institute of Health" CJSC, 2023. 303 pages.
8. **Jegers M, Kesteloot K, De Graeve D, Gilles W.** A typology for provider payment systems in health care. *Health Policy (New York)* 2002;60(3):255–273.
9. **Kerr EA, Mittman BS, Hays RD, Leake B, Brook RH.** Quality assurance in capitated physician groups. Where is the emphasis? *JAMA.* 1996;276:1236–9.
10. **Langenbrunner, J., Cashin, C., & O'Dougherty, S. (Eds.).** (2009). *Designing and implementing health care provider payment systems: how-to manuals.* World Bank Publications.
11. **O'Connor J.S., Bankauskaite V.** Public health development in the Baltic countries (1992–2005): From problems to policy. *Eur. J. Public Health.* 2008;18:586–592. doi:10.1093/eurpub/ckn097.
12. Order of the Minister of Health of the Republic of Armenia on January 20, 2023 No. 241 – L:
13. The standards, average rates, and reimbursement specifics for out-of-hospital and in-hospital medical care and services, as well as challenging diagnostic tests provided to the population at no cost or with preferential conditions, are outlined in Appendix 1 of the January 20, 2022, order N240-L issued by the Minister of Health in the Republic of Armenia.

Տճանաչանք/հանձնվել է՝ 22.02.2024

Рецензирована/Գրախոսվել է՝ 26.02.2024

Принята/Ընդունվել է՝ 29.02.2024