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Survey of direct medical costs in inpatient treatment of type 2 diabetes mellitus at Nhan Dan Gia Dinh Hospital, 2024 - 2025

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ABSTRACT

Introduction: Type 2 diabetes mellitus (T2DM) is a common chronic disease that leads to serious complications and increases the burden of healthcare costs. Identifying the direct medical costs (DMC) of inpatient care is essential to assessing the economic burden and proposing effective management strategies. Methods: A cross-sectional descriptive study from medical records and hospital billing invoices of inpatients with T2DM at Nhan Dan Gia Dinh Hospital (GDPH) in 2025. Results: A total of 464 patients were included, with a mean age of 70.0 ± 13.4 years; the majority were female (62.9%) and elderly (76.7%). The average DMC per inpatient episode was 7,287,627 VND (95% CI: 6,353,801 - 8,221,453 VND), of which the majority was covered by health insurance (88.48%). The three largest cost components were hospital bed-day charges (24.86%), laboratory tests (22.38%), and medications (22.11%). Length of stay and number of comorbidities were significantly correlated with DMC (r = 0.868; p < 0.001). Conclusions: The average DMC per inpatient episode for T2DM at GDPH in 2025 was approximately 7.3 million VND, with nearly 90% of expenses covered by health insurance. Length of stay and disease severity were the main factors influencing treatment costs.

Keywords: *direct medical cost, type 2 diabetes mellitus, inpatient treatment, Gia Dinh People's Hospital*

1. INTRODUCTION

Type 2 diabetes mellitus (T2DM) is a non-communicable disease with an increasingly rising global prevalence, associated with chronic complications, reduced quality of life, and substantial socioeconomic burden. According to the International Diabetes Federation (IDF), more than 537 million adults worldwide were living with diabetes in 2021, and this number is projected to increase to 643 million by 2030 [1]. Notably, Southeast Asia, including Vietnam, is witnessing a rapid rise in diabetes prevalence due to changes in lifestyle, diet, and urbanization. In Vietnam, estimates from the Ministry of Health indicate that the prevalence of diabetes has doubled over the past two decades, from 2.7% in 2002 to approximately 5.4% in 2021 [2]. T2DM accounts for more than 90% of all diabetes cases and is associated with risk factors such as obesity, sedentary lifestyle, unhealthy diet, and genetic predisposition. The disease not only reduces patients' quality of life but also leads to serious complications, including cardiovascular disease, renal failure, neuropathy, and increased mortality risk. These complications contribute to higher disability rates and impose a significant financial burden on both healthcare systems and affected families.

According to R. Williams et al. (2020), global direct healthcare expenditure for diabetes in 2019 was estimated at 760 billion USD, and this figure is projected to rise to 825 billion USD by 2030 [3]. In Vietnam, the economic burden of direct medical costs (DMC) for T2DM has been documented in several studies, showing that both inpatient and outpatient treatment episodes are associated with considerable expenses. A study using social insurance data in Ho Chi Minh City reported an average inpatient DMC of 6,718,576 VND (6,501,042 - 6,936,110 VND) - approximately equivalent to the average

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per-capita income in 2022 - and an average outpatient DMC of 365,293 VND (362,297 - 368,289 VND) per visit [4]. Another study conducted in Dong Nai Province found that the mean inpatient DMC was 1,962,700 ± 1,557,480 VND, while the mean outpatient DMC was 495,663 ± 282,184 VND [5]. Patients with T2DM who develop complications (cardiovascular, renal, ophthalmic, etc.) incur significantly higher healthcare costs compared with those without complications, indicating that the DMC of T2DM depends not only on treatment regimens but also on disease progression and the presence of comorbidities.

To date, no study has analyzed the inpatient DMC of T2DM treatment at Nhan Dan Gia Dinh Hospital. Therefore, this study was conducted to provide a comprehensive assessment of the treatment cost burden, supporting resource allocation, and improving management and clinical care. The study aims to:

- Determine the value and cost structure of direct medical costs in inpatient treatment of type 2 diabetes mellitus at Nhan Dan Gia Dinh Hospital.

- Identify factors associated with direct medical costs in inpatient treatment of type 2 diabetes mellitus at Nhan Dan Gia Dinh Hospital.

2. METHODS

2.1. Study subjects

Inpatients diagnosed with type 2 diabetes mellitus (T2DM) from January 2025 to October 2025 at Nhan Dan Gia Dinh Hospital (including medical records and payment invoices).

2.2. Study setting and duration

Setting: The study was conducted at the Endocrinology Department and other related departments of Nhan Dan Gia Dinh Hospital. Study period: From January 2025 to October 2025.

2.3. Study methods

Study design a cross-sectional descriptive study using inpatient billing records and medical records at Nhan Dan Gia Dinh Hospital.

2.3.1. Study sample sample size

$$n=Z^2_{(1-\frac{a}{2})}\frac{\sigma^2}{\varepsilon^2\mu^2}$$

Where:

n: Minimum required sample size.

Z: Confidence coefficient, commonly 1.96 for 95% confidence.

σ: Standard deviation.

μ: Mean value.

ε: Relative precision (acceptable percentage of error).

Based on the findings of Tran Thi Ngoc Suong (2022) [6], where σ = 3,749,464 VND, μ = 3,733,079 VND, and ε = 10%, the minimum required sample size was 388. To ensure an adequate sample size, an additional 10% was added for potential loss to follow-up. The final estimated sample size was approximately 427.

2.3.2. Sampling criteria

Inclusion criteria: Patients diagnosed with T2DM as either the primary diagnosis or a comorbid condition and receiving inpatient treatment at Nhan Dan Gia Dinh Hospital.

Exclusion criteria: Patients lacking essential data for the study: Missing payment invoices or incomplete survey forms. Patients with severe chronic comorbidities affecting treatment costs (e.g., cancer, renal failure). Patients who refused participation or withdrew during the study. Excluding patients with severe chronic diseases results in average cost estimates that are lower than those for the overall diabetic population, providing a more objective perspective.

2.3.3. Sampling method

A simple random sampling method was applied. With an estimated data collection period of 10 months (approximately 300 working days), an average of 1 - 2 samples per day was required (427/300 ≈ 1 - 2). The hospital typically admits more than two T2DM inpatient cases daily. During the study period, all eligible cases admitted each day were assigned sequential numbers, after which a random number algorithm in Excel was used to randomly select 1 - 2 patients for data collection.

2.4. Study variables

Study variables are presented in Table 1.

Table 1. Study variables

Characteristic	Variable		Variable type	Statistical method
Patient characteristics	Gender		Qualitative	Frequency, percentage (%)
	Age		Quantitative	Mean ± SD
	Age group		Qualitative	Frequency, percentage (%)
	Insurance coverage rate		Qualitative	Frequency, percentage (%)
	Area of residence		Qualitative	Frequency, percentage (%)
Clinical characteristics	Average number of inpatient days per episode		Qualitative	Frequency, percentage (%)
	Reason for admission		Qualitative	Frequency, percentage (%)
	Treatment outcome		Qualitative	Frequency, percentage (%)
	HbA1c control level		Categorical	Frequency, percentage (%)
	Number of comorbidities		Quantitative	Mean ± SD
	Presence of comorbidities		Qualitative	Frequency, percentage (%)
	Comorbidities		Qualitative	Frequency, percentage (%)
	Acute complications		Qualitative	Frequency, percentage (%)
	Chronic complications		Qualitative	Frequency, percentage (%)
DMC	Average DMC per inpatient episode		Quantitative	Mean ± SD
	DMC by cost component	Consultation	Quantitative	Mean ± SD
		Laboratory test		
		Imaging diagnostics		
		Blood and blood products		
		Procedure and surgery		
		Medications		
		Medical supplies		
		Bed-days		
		Transportation		
	DMC by source of payment	Health insurance payment	Quantitative	Mean ± SD
		Patient out-of-pocket payment		Mean ± SD

Note: SD - Standard Deviation; DMC - Direct Medical Cost; HbA1c control categories: Good (< 7%), Moderate (7 - 8%), Poor (> 8%). Source: VADE (2024).

2.5. Data processing and analysis

Data were processed and analyzed using Microsoft Excel 2019 and IBM SPSS Statistics 20.0. Statistical analyses were conducted with a 95% confidence level. Associations between characteristics and direct medical costs were assessed by testing hypotheses H0 and H1 using appropriate statistical methods.

3. RESULTS

3.1. Direct medical costs and cost structure of inpatient care for type 2 diabetes mellitus at Nhan Dan Gia Dinh Hospital

3.1.1. Characteristics of inpatients with type 2 diabetes mellitus at Nhan Dan Gia Dinh Hospital

The characteristics of the patients are presented in Table 2.

According to Table 2, the mean age of the study sample was 70.0 ± 13.4 years, with a male-to-female ratio of approximately 1:1.7. Most patients resided in Ho Chi Minh City (84.7%) and had a health insurance reimbursement rate of 80% (59.1%). The mean length of hospital stay was 5.4 ± 3.9 days, most patients were admitted through the appropriate referral pathway (97.2%), and nearly all had comorbidities (97%). The two most common comorbidities were hypertension (20.9%) and dyslipidemia (6.3%), with 67.7% of patients presenting with both conditions.

Table 2. Patient and clinical characteristics

Characteristic	Variable		Frequency	Percentage (%)
Patient characteristics	Age	Mean ± SD	70.0 ± 13.4	
	Age group	< 45	20	4.3
		45 - 60	88	19.0
		> 60	356	76.7
	Gender	Male	172	37.1
		Female	292	62.9
	Area of residence	HCMC	393	84.7
		Outside of HCMC	71	15.3
	Insurance coverage rate	100%	152	32.8
		95%	38	8.2
		80%	274	59.1
Clinical characteristics	Length of stay (days)	Mean ± SD	5.4 ± 3.9	
	Reason for admission	Referred correctly	451	97.2
		Referred incorrectly	13	2.8
	Treatment outcome	Recovered/improved	413	89.0
		Unchanged	13	2.8
		Worsened	33	7.1
		Death	5	1.1
	HbA1c control level	Good	72	15.5
		Moderate	33	7.1
		Poor	123	26.5
		Unknown	236	50.9
	Number of comorbidities	Mean ± SD	3.8 ± 1.1	
	Comorbidities	Hypertension+Dyslipidemia	314	67.7
		Hypertension	97	20.9
		Dyslipidemia	29	6.3
		Other*	451	97.2
	Acute complications	None	381	82.1
		Diabetic ketoacidosis	19	4.1
		Hyperglycemia	43	9.3
		Hypoglycemia	24	5.2
	Chronic complications	None	345	74.4
		Cardiovascular complications	21	4.5
		Renal complications	70	15.1
		Peripheral neuropathy	15	3.2
		Foot infections	32	6.9

Note: SD - Standard Deviation; HCMC - Ho Chi Minh City; Other - gastritis-duodenitis, pneumonia, anemia, etc.*

3.1.2. Direct medical costs for type 2 diabetes mellitus treatment at Nhan Dan Gia Dinh Hospital

Direct medical cost per inpatient episode

The mean total direct medical cost per inpatient episode is presented in Table 3.

The study recorded a mean cost of 7,287,627 VND (95% CI: 6,353,801 - 8,221,453 VND). The lowest cost observed per episode was 123,900 VND, while the highest reached 98,323,745 VND.

Direct medical cost per inpatient episode by cost component

Direct medical cost per inpatient episode by cost component is presented in Table 4.

Table 3. Total direct medical costs per patient (unit: VND)

		Value
Mean		7,287,627
95% CI	Upper limit	8,221,453
	Lower limit	6,353,801
Minimum		123,900
Maximum		98,323,745
Quartiles	25%	2,318,725
	50%	4,371,758
	75%	8,514,666

Table 4. Direct medical cost per patient by cost component (unit: VND)

Cost component	Mean (95% CI)	Minimum	Maximum	Percentage (%)
Consultation	2,482 (564 - 4,401)	0	200,000	0.03
Laboratory tests	1,627,529 (1,469,728 - 1,785,303)	0	14,381,400	22.3
Imaging diagnostics	923,930 (833,355 - 1,014,504)	0	6,947,000	12.7
Blood and blood products	101,250 (60,530 - 141,970)	0	4,176,000	1.39
Procedures / Surgery	129,428 (36,496 - 222,360)	0	11,460,900	1.8
Medications	1,613,365 (1,367,016 - 1,859,714)	0	29,480,951	22.1
Medical supplies	615,960 (181,269 - 1,050,650)	0	56,161,415	8.5
Bed-days	1,811,158 (1,644,705 - 1,977,611)	0	20,089,500	24.9
Transportation	462,525 (331,255 - 593,794)	0	12,545,400	6.3
Total	7,287,627 (6,353,801 - 8,221,453)	123,900	98,323,745	100

Note: CI - Confidence Interval; VND - Vietnamese Dong

The study found that bed-day costs accounted for the largest share, with an average of 1,811,158 VND (95% CI: 1,644,705 - 1,977,611 VND), representing 24.9% of total costs. This was followed by laboratory tests with 1,627,529 VND (95% CI: 1,469,728 - 1,785,303 VND) (22.3%), and medications with 1,613,365 VND (95% CI: 1,367,016 - 1,859,714 VND) (22.1%). The costs of imaging diagnostics accounted for 12.7%, while the remaining cost components represented relatively small proportions.

Direct medical cost per inpatient episode by source of payment

Direct medical cost per inpatient episode by source of payment is presented in Table 5.

Table 5. Direct medical cost per inpatient episode by source of payment (Unit: VND)

Source of payment	Mean (95% CI)	Minimum	Maximum	Percentage (%)
Health insurance	6,446,136 (5,595,046 - 7,297,225)	123,900	93,407,558	88.48

Source of payment	Mean (95% CI)	Minimum	Maximum	Percentage (%)
Patient out-of-pocket	841,491 (707,663 - 975,319)	0	14,609,166	11.52
Total	7,287,627 (6,353,801 - 8,221,453)	123,900	98,323,745	

Note: CI - Confidence Interval; VND - Vietnamese Dong

The study found that the majority of total costs were covered by health insurance, accounting for 88.48%, with an average of 6.45 million VND (95% CI: 5.60 - 7.30 million VND) per inpatient episode. Out-of-pocket payments made by patients accounted for 11.52%, with an average of 0.84 million VND (95% CI: 0.71 - 0.98 million VND) per inpatient episode.

3.2. Factors associated with direct medical costs in inpatient treatment of type 2 diabetes at Nhan Dan Gia Dinh Hospital

Kruskal-Wallis, Mann-Whitney, and Spearman correlation tests were applied to evaluate associations between the related factors and the average total inpatient direct medical costs. The analysis of factors associated with inpatient treatment costs is presented in Tables 6 and 7.

Table 6. Correlation between quantitative variables and direct medical costs

Characteristic	Correlation coefficient	p-value
Number of comorbidities	0.185	**0.000**
Length of hospital stay	0.868	**0.000**

The study found a significant association between the number of comorbidities and direct medical costs ($r = 0.185$, $p = 0.000 < 0.050$), as well as between length of hospital stay and direct medical costs ($r = 0.868$, $p = 0.000 < 0.050$).

Table 7. Correlation between clinical characteristics and direct medical costs

Characteristic		Direct medical cost		
		Mean cost (95% CI) Unit: VND	Mean rank	p-value
Treatment outcome	Recovered/improved (n = 413)	7,337,567 (6,323,378 - 8,351,755)	234.28	**0.000**
	Unchanged (n = 13)	1,917,054 (957,655 - 3,236,453)	76.77	
	Worsened (n = 33)	7,262,009 (4,540,125 - 9,983,894)	245.76	
	Death (n = 5)	17,295,152 (4,870,502 - 29,719,802)	403.20	
Number of comorbidities	1 - 2 conditions (n = 57)	6,892,169 (3,228,549 - 10,555,789)	181.23	**0.001**
	3 - 4 conditions (n = 281)	6,728,672 (5,712,999 - 7,744,345)	230.57	
	≥ 5 conditions (n = 126)	8,713,081 (6,685,066 - 10,741,097)	260.00	
Other*	No (n = 13)	2,672,255 (1,134,494 - 4,210,016)	114.77	**0.001**
	Yes (n = 451)	7,420,663 (6,463,416 - 8,377,912)	235.89	
Acute complications	No (n = 381)	7,923,937 (6,815,793 - 9,032,080)	244.68	**0.000**

Characteristic		Direct medical cost		
		Mean cost (95% CI) Unit: VND	Mean rank	p-value
Acute complications	Yes (n = 83)	4,366,734 (3,383,063 - 5,350,405)	176.58	**0.000**
Hyperglycemia	No (n = 440)	7,457,172 (6,478,886 - 8,435,458)	235.79	**0.024**
	Yes (n = 24)	4,179,297 (2,394,835 - 5,963,758)	172.21	
Hypoglycemia	No (n = 421)	7,703,016 (6,684,394 - 8,721,639)	241.32	**0.000**
	Yes (n = 43)	3,220,671 (2,477,949 - 3,963,392)	146.12	
Chronic complications	No (n = 345)	6,712,327 (5,762,377 - 7,662,277)	223.20	**0.011**
	Yes (n = 119)	8,955,512 (6,269,564 - 11,341,461)	259.47	
Diabetic foot infections	No (n = 432)	6,815,680 (5,966,584 - 7,664,776)	226.15	**0.000**
	Yes (n = 32)	13,658,910 (6,456,971 - 20,860,848)	318.22	

Note: CI - Confidence Interval; VND - Vietnamese Dong; Other - gastritis-duodenitis, pneumonia, anemia, etc.*

Factors significantly associated with DMC included: number of comorbidities (p = 0.001), presence of other comorbidities (gastritis-duodenitis, pneumonia, anemia), acute complications, chronic complications, and diabetic foot infections (p = 0.000 - 0.011). Higher treatment costs were observed in patients with five or more comorbidities (8,713,081 VND), with other comorbidities (7,420,663 VND), with chronic complications (8,955,512 VND), and especially with diabetic foot infections (13,658,910 VND). Costs also notably varied by treatment outcomes, highest in patients who died (17,295,152 VND) and lowest in those with unchanged conditions (1,917,054 VND).

4. DISCUSSION

The analysis of DMC across 464 inpatient episodes of T2DM at Nhan Dan Gia Dinh Hospital showed that the mean age of the study population was 70.0 ± 13.4 years, with patients aged over 60 accounting for the highest proportion (76.7%) and women making up the majority (62.9%). These findings are consistent with those reported by Nguyen Thi Thanh Huong et al. (2023), who recorded a mean age of 69.2 ± 9.4 years among patients with diabetes, with the 70 - 79 age group representing the largest proportion (42.7%) [7], and with the study by Nguyen Thi Thuy Trang et al. (2022), which also noted a predominance of female patients among hospitalized individuals with T2DM in Ho Chi Minh City [8]. The study population demonstrated that T2DM patients had a high level of clinical complexity, with an average of 3.8 ± 1.1 comorbidities per patient. Most patients had 3 - 4 comorbidities (60.6%), among which hypertension and dyslipidemia were the most common (67.7%). This reflects the multifaceted nature of metabolic syndrome and the tendency toward multimorbidity in older adults with diabetes. The study recorded acute complications in 17.9% of patients (hyperglycemia 9.3%, hypoglycemia 5.2%, ketoacidosis 4.1%), indicating persistent risks of glycemic instability during hospitalization. Chronic complications were recorded in 25.6% of cases, with kidney complications being the most common (15.1%), followed by diabetic foot infection, cardiovascular complications, and peripheral neuropathy. This pattern highlights multisystem involvement among long-term T2DM patients and emphasizes the need for prioritizing renal complication management in clinical practice.

The study found that the mean DMC per inpatient

episode was 7,287,627 VND (95% CI: 6,353,801 - 8,221,453 VND). Costs varied significantly, ranging from 123,900 VND to 98,323,745 VND, reflecting substantial differences in disease severity and clinical needs. Patients with severe complications, multiple chronic comorbidities, or requiring specialized interventions incurred markedly higher treatment costs than stable cases. The average cost at Nhan Dan Gia Dinh Hospital was higher than the cost reported by Nguyen Thi Thuy Trang et al. (2022) at District 8 Hospital in Ho Chi Minh City (5.7 million VND per admission) [8] and reported by Tran Thao Suong 2023 4,476,407 VND per admission [6] . Our study was conducted at Nhan Dan Gia Dinh Hospital (GDPH), a Grade I, city-level tertiary hospital in Ho Chi Minh City (high-complexity clinical services, higher technical service prices; differences in disease severity and clinical complexity; differences in study periods and updated health service price policies implemented nationally during 2022 - 2025.

Regarding cost components, the three groups with the highest proportions were laboratory tests (22.38%), medications (22.11%), and hospital bed-days (21.86%). These findings align with those of Tran Thi Ngoc Suong et al. (2023) in their cost analysis of diabetes care at Tien Giang General Hospital [6]. The substantial proportions of these categories may be explained by the need for frequent laboratory monitoring, use of multiple medications (insulin, oral hypoglycemics, antibiotics, drugs for complications and comorbidities), and prolonged hospital stays among patients with complications or multimorbid conditions. In the study by Tran Thao Suong (2023), the proportion of bed-day costs was reported to be approximately 1.7 times higher than in our study because Tran Thao Suong study was conducted during the COVID-19 pandemic. During this period, patients with type 2 diabetes were less likely to attend routine follow-up visits, resulting in delayed care, worsened glycemic control, and an increased likelihood of presenting with more severe disease at admission. Consequently, patients in the TTS study required longer stays in emergency and intensive care units, which substantially elevated bed-day expenditures compared with post-pandemic studies, including ours. In addition, the proportions of laboratory test costs and medication costs are comparable to those reported in Tran Thi Suong's study [6]. The proportion of medical supply costs in our study (8.5%) is higher than that reported by Tran Thao Suong (1.9%). This difference is mainly attributable to variations in hospital level and service pricing: Nhan Dan Gia Dinh Hospital is a Grade I urban hospital with broader clinical indications and higher technical service tariffs, leading to greater use and cost of medical supplies. The study also showed that health insurance (HI) covered the majority of total costs, with a mean reimbursement of 6.45 million VND, accounting for 88.48% of total costs, highlighting the important financial protection role of HI in chronic disease management amidst rising healthcare expenditures.

The study found that the length of hospital stay and number of comorbidities were statistically significant predictors of DMC. Length of stay showed the strongest association ($r = 0.868$), while the number of comorbidities demonstrated a weaker but significant correlation ($r = 0.185$). This pattern suggests that costs increased proportionally with hospitalization duration and clinical complexity, while age did not show a significant association with cost. Other demographic factors - including gender, age group, area of residence, and HI reimbursement rate - were not significantly associated with costs ($p > 0.05$). Similarly, treatment outcomes were significantly associated with the average DMC per inpatient episode. Patients who died incurred the highest costs, while the lowest in those whose conditions remained unchanged. Several clinical factors also demonstrated strong associations with higher costs, including the number of comorbidities, presence of additional comorbid conditions (e.g., pneumonia, gastritis-duodenitis, anemia), acute complications, chronic complications, and, particularly, diabetic foot infections, which resulted in the highest cost increase.

This study used real-world hospital data, providing an objective assessment of the economic burden of inpatient T2DM care and offering evidence to support improving resource allocation and cost-management strategies. This study provided the first analysis of direct medical costs for inpatient T2DM care at Nhan Dan Gia Dinh Hospital. However, due to time constraints, the study has certain limitations, including a limited scope and sample size that may not fully represent the broader patient population. The study covered a 12-month data collection period; fluctuations in treatment guidelines,

reimbursement policies, and hospital pricing during this timeframe may have influenced cost estimates. In addition, the analysis was conducted at a single tertiary hospital, which may restrict generalizability to lower-level or rural healthcare settings.

To reduce the direct medical costs of diabetes, early diagnosis and regular screening are essential to prevent complications that require expensive treatments. Patient education and self-management support can lower hospitalizations, while optimized treatment protocols using cost-effective medications ensure efficient care. Regular monitoring allows timely interventions, and preventive programs promoting healthy lifestyles can slow disease progression. Coordinated, integrated care across providers further minimizes redundant tests and pro-cedures, helping to control overall healthcare expenses.

5. CONCLUSION

This study found that the mean DMC per inpatient episode for T2DM at Nhan Dan Gia Dinh Hospital was considerably high, with hospital bed-days (24.86%), laboratory tests (22.38%), and medications (22.11%) contributing the largest cost proportions. Most expenses were covered by HI. Factors significantly associated with higher DMC included length of hospital stay, number of comorbidities, presence of other comorbid conditions, acute complications, hyperglycemia, hypoglycemia, chronic complications, and diabetic foot infections.

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TÓM TẮT

Đặt vấn đề: Đái tháo đường tuýp 2 (ĐTĐT2) là bệnh mạn tính phổ biến, gây ra nhiều biến chứng nghiêm trọng và làm tăng gánh nặng chi phí điều trị. Việc xác định chi phí trực tiếp y tế (CPTTYT) trong điều trị nội

trú là cần thiết để đánh giá gánh nặng kinh tế và đề xuất giải pháp quản lý hiệu quả. Phương pháp: Mô tả cắt ngang từ hồ sơ bệnh án và phiếu thanh toán viện phí của bệnh nhân điều trị nội trú ĐTĐT2 tại Bệnh viện Nhân dân Gia định năm 2025. Kết quả: Khảo sát 464 bệnh nhân với độ tuổi trung bình 70.0 ± 13.4; đa số là nữ (62.9%), người cao tuổi (76.7%) ghi nhận CPTTYT trung bình mỗi đợt điều trị có giá trị 7,287,627 VND (KTC 95%: 6,353,801 - 8,221,453 VND), phần lớn do BHYT chi trả (88.48%) và các thành phần chi phí chiếm tỷ lệ cao nhất bao gồm ngày giường (24.86%), xét nghiệm (22.38%), thuốc (22.11%). Nghiên cứu ghi nhận thời gian điều trị và số bệnh mắc kèm có liên quan ý nghĩa thống kê với CPTTYT ($p < 0.001$). Kết luận: Chi phí điều trị nội trú ĐTĐT2 tại Bệnh viện Nhân dân Gia định trung bình 7.3 triệu đồng với BHYT chi trả gần 90%. Thời gian điều trị và mức độ bệnh lý là yếu tố ảnh hưởng chính đến CPTTYT.

Từ khóa: *chi phí trực tiếp y tế, đái tháo đường tuýp 2, điều trị nội trú, Bệnh viện Nhân dân Gia Định*

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