

Standard Costing of Frequencies of Use of Services Related to Chronic Venous Disease Care in a Cohort of Patients from a Colombian Health Insurer

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OBJECTIVES

To estimate the average annual cost of health services use related to Chronic Venous Disease (CVD) according to their classification.

METHODS

The records between 2015 to 2020 from an institution that provide services were analyzed, which allowed us to know the CEAP (clinical-etiological-Anatomical-physiopathological) qualification, procedures and pharmacological treatments applied to patients. A sample were used with ICD-10 codes from I80 to I89. According to the CEAP clinical classification, the frequencys of an average patient was validated by two leading vascular pycsicians at national level. These were converted into costs using the Social Security Institute fare manual 2001 + 30% (of each rate) and the prices of Integrated System for the Supply of Medicines and Medical-Surgical of Colombia. Costs were expressed in American dollars using an average exchange rate of USD\$ = 3,743 COP of 2021 .

CONCLUSIONS

Analyzing standard costing allows decisions to be made for the proper use of resources in health services related to CVD care.

RESULTS

A total of 388 patients (85.57% female) with a median age of 64 years (IQR 57 - 69.25) and males with an age of 66.5 years (IQR 58.75 - 71 .25) were analyzed. The clinical characterization was C0 (34.79%), C1 (5.67%), C2 (31 .44%), C3 (9.79%), C4 (6.1 9%), C5 (2.32%) and C6 (9.79%). on average, the annual cost per patient is C0 (\$53,1 6), C1 (\$130.1 1), C2 (\$490.26), C3 (\$952.46), C4 (\$955.17), C5 (\$1 ,128.29) and C6 (\$1 , 292.83). The procedure service group concentrates from 42.17% of the total annual cost per C2 patient to 77.78% of the annual cost per patient in C6. Pharmacological treatments begin from C2, with Diosmin/hesperidin 450+50 mg being the most formulated.

Table 1. Average annual cost per patient, service group, and clinical classification

Service group	C0	C1	C2	C3	C4	C5	C6
Medical consultations	\$ 25	\$ 25	\$ 27	\$ 27	\$ 29	\$ 29	\$ 29
Laboratory and images	\$ 28	\$ 57	\$ 133	\$ 134	\$ 134	\$ 134	\$ 135
Procedures	\$ 0	\$ 49	\$ 207	\$ 668	\$ 668	\$ 842	\$ 1,006
Hospitalization	\$ 0	\$ 0	\$ 95	\$ 95	\$ 95	\$ 95	\$ 95
Medicines	\$ 0	\$ 0	\$ 28	\$ 28	\$ 28	\$ 28	\$ 28
Total per patient year	\$ 53	\$ 130	\$ 490	\$ 952	\$ 955	\$ 1,128	\$ 1,293

Table 2. Average annual cot by clinical classification and sex

CVD clinical classification	Female		Male		Total	
	n	USD	n	USD	n	USD
C0	116	\$ 6,166	19	\$ 1,010	135	\$ 7,176
C1	18	\$ 2,342	4	\$ 520	22	\$ 2,862
C2	114	\$ 55,889	8	\$ 3,922	122	\$ 59,811
C3	30	\$ 28,574	8	\$ 7,620	38	\$ 36,193
C4	19	\$ 18,148	5	\$ 4,776	24	\$ 22,924
C5	8	\$ 9,026	1	\$ 1,128	9	\$ 10,155
C6	27	\$ 34,906	11	\$ 14,221	38	\$ 49,128
Total	332	\$ 155,052	56	\$ 33,197	388	\$ 188,250

Figure 1. Age distribution by sex

