

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo
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Service (sector) Glaucoma N° CEP

Unit Cost Determination and Break-Even Analysis in Computerized Campimetric Tests (CCT)

Purpose: The average price used by insurers to pay for CCT tests is insufficient to cover costs. Given this situation, the present work seeks to determine actual costs in a medical clinic in São Paulo City as well as to identify the minimum level of production (volume of tests) necessary to match revenue with costs, that is, calculate the break-even level in volume produced. Beyond this, the study shall attempt to look at both different pricing alternatives and production levels to recover investment in a reasonable time frame. **Methodology:** The cost methodology centres on identifying fixed and variable costs in the conducting of tests and applying the concepts of cost objectives and absorption costing. Cost data was collected on the most recent quarterly period (July to September, 2003) and divided into fixed or variable components and complemented by the cost allocation of indirect operating costs (public utilities, outsourced services, and support services). Unit price was determined by using the weighted average value paid by insurers for tests over the period studied. Mathematical models were then used to calculate the break-even point (in quantity produced) and conducting alternative simulation studies it was possible to conclude a projected return on investment. **Results:** Given the data, average cost for the period was determined to be R\$23,15 with average production at 278 tests per month: (Fixed Cost at R\$10,43 + Variable Cost at R\$12,72 for a total unit cost of R\$23,15). Given the average charge of insurers at R\$21,37, we calculate a loss per test in the order of R\$1,78 (21,37 – 23,15). These results indicate the need to produce a minimum of 335 tests per month to reach break-even point implying 251 direct labour hours (DLH) given that the duration of each test is na average of 45 minutes. As for return on investment in a 10 year span 2 alternatives are presented: (1) monthly production rise to 800 tests a month; or (2) adjust price mark-ups of 75%. **Conclusions:** Given the average monthly production levels of the last 3 months at 278 tests, production capacity is at its maximum(100%). Average 9,5 hour working days in a 22-day working month must rise to 11-hour working day to break even – a distant possibility if no additional fixed costs are to be incurred. On the issue of a profitable return on investment we may safely discard the increase of production levels to 800 tests per month as not feasible. The only possible alternative is to adjust prices upwards of 75% to realize capital recovery in 10 years. This unit price adjustment will mean a new break-even production level at 118 tests per month.