## **Original Article**

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## Calculating the Cost Price of Dialysis in Shahid Sadoughi Hospital Using Activity Based Costing: Yazd, 2011

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## **Abstract**

**Introduction:** In the present study, there was an attempt to calculate the cost price of dialysis in Shahid Sadoughi Hospital of Yazd using Activity Based Costing, and compare it with the tariff fixed on service.

**Methods:** Using a descriptive and cross-sectional method, this retrospective research was carried out. The data required for examining the research problem were collected through forms designed to elicit information, interviews with authorities of the hospital and the ward, and also direct observation of the activities done in the dialysis center. At the end, the cost price of dialysis service was calculated using activity based costing method via Excel software.

**Results:** The results of the study show that while the total cost in this ward is 1,723,906,772 Rials, the total revenue is 2,304,900,000 Rials. Moreover, the cost of every session of dialysis service is 442,028 Rials.

**Conclusion:** It is evident from the findings of this study that although the cost of dialysis has been lower than its tariff, it is possible to keep the costs of services down by improving the efficiency of work, especially through establishing standard patterns of consumption to reduce the costs of consumption, and also by improving the management initiatives and performance of human resources.

Keywords: Cost Price, Activity Based Costing, Dialysis Service, Hospital

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## References

- Abbasi Moghaddam, M. A. (1999). "Computing Cost Price of Neuro- Surgeries and Comparin Them with the Tariffs of Medical Services". *Journal of Medical Faculty*, No. 6, pp. 82-87. [In Persian]
- Abdul Majid, J. and M. Sulaiman (2008). "Implementation of Activity Based Costing in Malaysia: A Case Study of Two Companies". *Asian Review of Accounting*, Vol. 16, Issue. 1, pp. 39-55.
- Aird, B. (1996). "Activity-Based Cost Management in Health Care Another Fad?". *International Journal of Health Care Quality Assuranc*, Vol. 9, Issue. 4, pp. 16-19.
- Capettini, R.; Chow, Ch. W.; and A. H. McNamee (1998). "One the Need and Opportunities for Improving Costing and Cost Management in Health Care Organizations". *Managerial Finance*, Vol. 24, Issue. 1, pp. 46-59.
- Chen, Z. and L. Wang (2007). "A Generic Activity-Dictionary Based Method for Product Costing in Mass Customization". *Journal of Manufacturing Technology Management*, Vol. 18, Issue. 6, pp. 678-700.
- Cinquini, L. and F. Mitchell (2005). "Success in Management Accounting: Lessons from the Activity-Based Costing/Management Experience". *Journal of Accounting & Organisational Change*, Vol. 1, pp. 63-78.
- Cohen, S. and E. Kaimenaki (2011). "Cost Accounting Systems Structure and Information Quality Properties: An Empirical Analysis". *Journal of Applied Accounting Research*, Vol. 12, Issue. 1, pp. 5-25.
- Cokins, G. (1997). "If Activity Based Costing Is the Answer, What Is the Question?". *IEE Solutions*, Vol. 29, Issue. 8, pp. 39-42.
- Dalci, I.; Tanis, V.; and L. Kosan (2010). "Customer Profitability Analysis With Time Driven Activity-Based Costing: A Case Study in a Hotel". *International Journal of Contemporary Hospitality Management*, Vol. 22, Issue. 5, pp. 609-637.
- Driver, M. (2001). "Activity-Based Costing: a Tool for Adaptive and Generative Organizational Learning?". *The Learning Organization*, Vol. 8, Issue. 3, pp. 94-105.
- Duh, R. R.; Lin, W. Th.; and W. Y. Wang (2009). "The Design and Implementation of Activity-Based Costing: A Case Study of a Taiwanese Textile Company". *International Journal of Accounting and Information Management*, Vol. 17, Issue. 1, pp. 27-52.
- Ebrahimi, Z. (2008). "Computation of Cost Price of ICU Services in Shafa Hospital in Kerman". M.A. Thesis, Health Service Administration. Health Management and Informatics Faculty: Kerman University of Medical Sciences and Health Services. [In Persian]
- Goeree, R.; Gafni, A.; Hannah, M.; Myhr, T.; and G. Blackhouse (1999). "Hospital Selection for Unit Cost Estimates in Multicentre Economic Evaluations: Does the Choice of Hospitals Make a Difference?". *Pharmacoeconomics*, Vol. 15, pp. 561-572.
- Goudarzi, Gh. (2006). "Computing Cost Price of ICU services in Imam Khomeini Hospital in Tehran". M.A. Thesis, Health Services Administration. Paramedical Faculty: Tehran University of Medical Sciences and Health Services. [In Persian]
- Gunasekaran, A. (1999). "A Framework for the Design and Audit of an Activity Based Costing System". *Managerial Auditing Journal*, Vol. 14, Issue. 3, pp. 118-126.
- Gunasekaran, A.; Marri, H. B.; and Y. Y. Yusuf (1999). "Application of Activity-Based

- Costing: Some Case Experiences". *Managerial Auditing Journal*, Vol. 14, Issue. 6, pp. 286-293.
- Hundal, M. S. (1997). "Product Costing: a Comparison of Conventional and Activity-Based Costing Methods". *Journal of Engineering Design*, Vol. 8, Issue. 1, pp. 91-103.
- Innes, J. (1995). "ABC: A follow-Up Survey of CIMA Members". *Management Accounting, US: July/August*, pp. 50-1.
- Innes, J.; Mitchell, F.; and T. Yoshikawa (1994). *Activity Costing for Engineers*. Chichester, UK: John Wiley and Sons Ltd.
- Joshi, P. L. (1998). "An Exploratory Study of Activity Based Costing Practices and Benefits in Large Size Manufacturing Companies in India". *Accounting and Business Review*, Vol. 5, Issue. 1, pp. 65-78.
- Kaplan, S. R. (1984). "Yesterday's Accounting Undermines Production". *Harvard Business Review*, July-August, pp. 95-101.
- Kingcott, T. (1991). "Opportunity-Based Accounting: Better than ABC". *Management Accounting*, US: October, pp. 36-37.
- Lere, J. (2000). "Activity-Based Costing: a Powerful Tool for Pricing". *Journal of Business and Industrial Marketing*, Vol. 15, Issue. 1, pp. 23-33.
- Morakul, S. and H. F. Wu (2001). "Cultural Influences on the ABC Implementation in Thailand's Environment". *Journal of Managerial Psychology*, Vol. 16, Issue. 2, pp. 142-158.
- Mostaque, H. and A. Gunasekaran (2001). "Activity-Based Cost Management in Financial Services Industry". *Managing Service Quality*, Vol. 11, Issue. 3, pp. 213-223.
- Nasiripoor, A. A.; Tabibi, S. J.; Maleki, M. R.; and T. Nourozi (2010). "Computing Cost Price of Clinical Laboratory Services in the Valiasr Hospital in Tehran in 2008 Using ABC Mode". *Journal of Hospital*, Vol. 8, No. 3, 4, pp. 7-18. [In Persian]
- Novack, D. D.; Paulos, A.; and St. G. Clair (2011). "Data-Driven Budget Reductions: a Case Study. The Bottom Line". *Managing Library Finances*, Vol. 24, Issue. 1, pp. 24-34.
- Payedar, A. (Trans.) (2004). *An Analysis of Hospital Costs: A Manual for Managers*. Tehran: Sogand. [In Persian]
- Schneeweiss, Ch. (1998). "On the Applicability of Activity Based Costing as a Planning". *International Journal of Production Economics*, Vol. 54, Issue. 3, pp. 277-284.
- Shank, K. J. and V. Govindarajan, (1993). *Strategic Cost Management*. New York: The Free Press, Oxford.
- Sohal, S. A. and W. Chung (1998). "Activity Based Costing in Manufacturing: Two Case Studies on Implementation". *Integrated Manufacturing Systems*, Vol. 9, Issue. 3, pp. 137-147.
- Tollington, T. and Ph. Wachter (2001). "ABC/TA for Internet Retail Shopping". *International Journal of Retail and Distribution Management*, Vol. 29, Issue. 4, pp. 149-155.
- Turney, B. B. P. (1996). Activity Based Costing: The Performance Breakthrough. London: CLA.