The exploration of medical resources utilization among inguinal hernia repair in Tw-DRGs

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Background: This study is to investigate the effects of the Diagnostic Related Groups (Tw-DRGs) practice on the medical resources utilization of inguinal hernia repair (IHR) in hospitals of different ownership, in order to provide a reference for hospital administrators.

Methods: In Taiwan, any operations of ICD-9-CM primary surgical procedure codes are 53.00-53.05, 53.21, and 53.29 are reimbursed as IHR under the Tw-DRGs. With the 2010-2011 data of three hospitals of different ownership extracted from the NHI claim database, retrospective study was applied to analyze the age, sex, length of stay (LoS), diagnosis and surgical procedure code and the change in the financial risk of medical costs on IHR cases after Tw-DRGs practice. The study adopted the corresponding cost calculated with the Tw-DRGs payment principles and compared it with estimated inpatient medical cost calculated based on the fee-for-service policy.

Results: During 2010 to 2011, there were 723 IHR cases meeting the Tw-DRGs criteria. The cost control of the medical care corporation hospital (US$764.2/case) is more efficient than the public hospital (US$902.7/case) and non-profit proprietary hospital (US$817.1/case) (p<0.001). In the difference between the Tw-DRGs reimbursement and estimated medical cost, the non-profit proprietary hospital with a difference of US$127.2 has the best cost control, while the public hospital with a difference of US$45.8 has the worst control (p<0.001).

Conclusion: The reimbursement scheme of the Tw-DRGs has a certain effect on hospitals. Hospital administrators should establish a hospitalization financial risk assessment system as early as possible to enhance healthcare quality and financial management efficiency, in order to benefit the hospital, patient, and Bureau of National Health Insurance (BNHI).

Biography
Yu-Hua Yan is a PhD in Graduate Institute of Management from the National Kaohsiung First University of Science and Technology, Taiwan, R. O. C. She is the Senior Specialist at Tainan Municipal Hospital, Tainan County, Taiwan, R. O. C. Her research interests include watermarking, health care industry and management performance. Most academic work is published in Health Policy, Journal of Nursing Research, Asia-Pacific Journal of Clinical Oncology, Asian Pacific Journal of Cancer Prevention and other Journals.

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