

Physician Workload Relative Value Scale and Procedure Duration for 86 Gastroenterologic Surgery Treatments in Taiwan

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Abstract

Objectives: This study investigated the workload Relative Value Scale (work-RVS) and the length of time for various gastroenterologic (GI) surgery procedures in Taiwan. The studies results may form the basis for reasonable resource-based assessment of future reimbursements to the hospitals.

Methods: Acting on a recommendation from the Taiwan Surgical Society of Gastroenterology, a technical consulting group (TCG) was organized to select the specific services/procedures (S/Ps) for investigation and the reference services/procedure (S/P). Two-round Delphi technique questionnaires were distributed to society members; respondents were asked to magnitude estimate the work-RVS and the time required for each S/P. The TCG then evaluated the questionnaire results to estimate work-RVS and time requirements for non-surveyed S/Ps. Finally, statistical analysis was applied to assess the reliability and validity of the study.

Results: The work-RVSs and the duration for 86 GI surgical procedures were established. The opinions of the GI surgeons were strongly correlated each other. There were no significant differences for medical center, regional hospital, local hospital or clinic for work-RVS and time required for the surveyed procedures. Multiple regression analysis for the procedures investigated demonstrated highly adjusted R². It means that physician's time, mental effort and judgment, technical skill and physical effort, and level of stress can be suitable explained by work-RVS.

Conclusion: (1) The magnitude estimate method, Delphi technique and using the method of a TCG are potentially useful tools for establishing the common work-RVS and duration of GI procedures. (2) Gastroenterology surgeons had a high degree of agreement for work-RVS and duration of each procedure. (3) Work-RVS proved to be an excellent estimator of physician time, mental effort and judgment, technical skill and physical effort, and degree of stress involved in performing GI surgical procedures.

Key Words: Relative value scale, procedure time, gastroenterology surgery, G. I. surgery

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