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Meeting abstract

The effect of medical needs to the disability based patient classification system – a critical review of disability based patient classification

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Background

Disability based patient classification systems have been studied/developed in several countries. The limitations of these systems are its complexity and low explanatory power, not representing medical needs of patients. Object of this study is to critically review limitations of disability based patient classification systems in the light of disability components and medical needs of the patients, then to construct a code-set, which identifies patients' functioning, medical and rehabilitation needs.

Methods

Disability based classification systems including RUG-III, FIM, TAI and the classification system for the long term care insurance (LTCI) law in Japan were reviewed with regard to explanatory and outcome variables including disability and medical needs. The author is especially interested in the use of medical and rehabilitation needs used as explanatory variables. In addition, attention was paid to complexity and the power of estimation of each system. For this purpose, a secondary analysis of a large scale one-minute time study was performed to understand the correlation between medical and disability variables.

Results

RUG-III had the largest number of rehabilitation related and medical care related explanatory variables, and it was followed by the Japanese LTCI classification system. FIM and TAI based system included variables related to patients' functioning.

A secondary analysis of TAI data suggested that disability scale used in the case-mix system explained total medical cost better than classification in case mix system. Variation of medical needs of the patients was large even in a same classification category and explanatory power of disability scale was not sufficiently high.

Conclusion

The scope of each disability based classification system depends on the framework of each model. For example, RUG-III and Japanese classification system for the LTCI law contained more medical explanatory variables compared to the others. These two were developed in relation to fee schedule of long-term nursing care facilities. Therefore these two systems included medical service use in long-term care facilities. In contrast, FIM, and TAI were developed as patient management tools. Although medical components had a positive effect to explanatory power, use of medical needs related variables increased the complexity of classification system, consequently restricting their use as patient management tools. It is suggested that simpler coding system to identify patients medical needs should be developed to improve case management and to represent real needs of the patients.