

MEETING ABSTRACT

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Health measurement for care management using the international classification of functioning codes

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Introduction

Case-mix systems for rehabilitation and geriatric care require information about a patient's functioning. In PCSI 2009, the author presented newly constructed health-measurement scales for elderly persons using the ICF codes. This year, the author presents a method for case-management using ICF-based health-measurement scales in geriatric rehabilitation facilities.

Methods

To construct a care-management tool based on the ICF, we developed 12 ICF-based health-measurement scales including basic behavior, mobility, orientation, communication, cognitive activities, eating function, eating behavior, toileting, bathing, oral hygiene, self-care and clothing.

The new scales have the following characteristics:

1. ICF codes are selected using the Rasch method. Therefore, the items included in the assessment scales are unidimensional and independent of measurement settings.

2. By hierarchically rearranging the items in the assessment scales, the authors constructed Guttman scales. Each Guttman scale is composed of four ICF items, dividing their functioning into five categories. This means that each scale includes only four ICF items, making the measurement simpler and less time consuming.

3. By adding illustrations, the user can identify the functional status of patients.

Results

The case-management tools are as follows:

1. Patients are assigned to one category in each scale.
2. In each scale, the case manager decides whether the patient is more likely to experience an improvement or a worsening of their functional level.
3. If the patient is more likely to improve, an intervention plan, such as rehabilitation or medical intervention, is decided upon. In the case of a patient's worsening, a risk management plan is selected.

Conclusions

When we use conventional ADL assessments, such as FIM or the Barthel index, users can only determine whether they require help for a certain level, such as bed transfer or toileting. With these new tools, we can now have a clear image of whether patients require rehabilitation intervention for improvement, or risk management for preventing a future worsening of their functioning. This was achieved by hierarchically rearranging ICF items and constructing Guttman-type scales according to the item difficulty using the Rasch model.

Therefore, the new ICF-based health-measurements have the following characteristics:

1. A method to simply describe elderly functional level
2. A method to provide standardized care
3. A method to measure change

By using ICF as common taxonomy, these scales are internationally valid and ready to be used as assessment scales worldwide in a geriatric-care setting. In addition, we can now better understand and manage patient care using functional information based on the ICF.

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