

Assessment of functioning status using a system called VAT to guide the assessment of rehabilitation within the ICF classification structure

Tuomas Leinonen,
Kumppaniksi Association, Kajaani, Finland

Summary

The international classification of functioning, disability and health (ICF), created by WHO, is the first information structure truly supportive of multidisciplinary cooperation. This classification system provides professionals in different fields with a common language for the description of the customer's functioning status in different, known environments. The ICF as such is not a *measuring tool* to evaluate performance but rather a hierarchical list of domains that can be used for describing functioning status. For the use of the ICF to be easy, a method is needed to produce the functioning status data. A method was developed for this purpose at our association, Kumppaniksi, starting at the time of the publication of the Finnish version of the ICF classification (2004). The development work was supported by the European Social Fund and State Provincial Office of Oulu.

Introduction

The *raison d'être* of the development work of the VAT, a system to guide the assessment of rehabilitation activities, has been the need of a system that would provide information on factors that either restrict or support the customer's (the rehabilitating person's) progress on his or her personal path to rehabilitation. This information should be available as early as possible in the rehabilitation process, and in addition, it must be possible to update the information during the process. We set the following requirements for the method:

- The method must produce information directly applicable to guiding the progress of a person's rehabilitation.
- The information produced by the method must be transferrable in a standard, readable form between the party creating the information (such as a rehabilitation unit or a vocational rehabilitation unit) and another user (such as a public official or a multidisciplinary team).
- The information produced must be graphic to make sure it provides a good framework for feedback discussions with the customer.
- In order to combine the produced data with functioning status assessment data created elsewhere, the data must be compatible with the ICF classification structure.
- The methodology must be flexible and adaptable both to the rehabilitating person's situation and his or her working environment.

Methods

Structure of the method

Information on functioning status is received from several assessments.

- A self-assessment by the customer concerning his or her performance in the environment (working environment) in which the functioning status is to be described.
- Written notes on observations by one or two other people in the particular environment. These may be professionals in rehabilitation or, for example, family members of the rehabilitating person.

Kumppaniksi Association
Tuomas Leinonen
Vienankatu 5-7, 87100 Kajaani
tel. +358 50 5210964,
email tuomas.leinonen@kumppaniksi.fi

The purpose of *self-assessment* is to form a picture of the customer's own subjective understanding of his or her performance level.

Observations taken down by *other observers* in the studied environment give us a picture of how the customer actually fares in the environment. The reference person is one with no impairments in the particular environment. It is essential that the other observers note down only their observations instead of their opinions, and that they refrain from judging performance in any way.

Both the self-assessment and the noting down of observations are done using *extended qualifier attributes* selected in advance, combined with the respective verbal descriptions. *Attribute groups* are formed of the selected extended qualifier attributes so as to make possible the gaining of the unique information that is needed along each customer's personal path to rehabilitation. As rehabilitation progresses, the attribute groups can be modified to match the progress of the process. This ensures that the data used is up-to-date and that the customer gets feedback as to the progress of his or her rehabilitation.

Information acquired through this methodology

The method allows the compilation of information concerning the different components of the customer's functioning status in accordance with the ICF structure, thus allowing also the describing of the customer's:

- physical prerequisites required in the working environment
- psychological prerequisites required in the working environment
- social prerequisites provided for him or her by the working environment

Information received in this way can be examined in accordance with the ICF structure per area and domain, and in addition, through the concrete observation data (expressed by the extended qualifier attributes) from the attributes in the VAT-system.

Data outputs are available in graphical form to make them easy to grasp and illustrative for, for example, multidisciplinary teams. In addition, the graphics make it easier not only to focus the rehabilitation activities correctly but also provide progress feedback for the customer.

The purpose of a functioning status assessment at a vocational rehabilitation unit is two-fold. First of all, it enables focusing the rehabilitating activities on elements that disturb or hinder the person's integration into society. For example, an assessment may bring up a sphere of impairments (such as learning difficulties) that other professionals can go into deeper and then focus the rehabilitation activities accurately. From the point of view of multidisciplinary cooperation, the importance of access to this information is highlighted in mild cases where the impairment is not so strong that it would have been diagnosed.

The other purpose of a functioning status assessment at a vocational rehabilitation unit is to bring up the strengths the rehabilitating person already has. When strengths and factors facilitating rehabilitation are made manifest it is easier to plan rehabilitation paths forward.

Transferability and combinability of information

Because all information produced by VAT is ICF-compatible and outputs are structured accordingly, information can be transferred and combined with ICF-compatible data produced elsewhere. This makes it possible to use the same scales for studying the impacts of a diagnosed disorder or disability on functioning status in different working environments.

For example, diagnosed worn joints of the shoulder region are said to form a moderate barrier (ICF s 70201.2). The impacts of the detected physical wear on the person's performance in different working environments can be studied and described in a way that allows multidisciplinary teams to plan either rehabilitating activities or, alternatively, aids to lessen the impacts of the impairment. Another possibility is to search for alternative forms of work where the detected impairment is not a hindrance and where the customer has all other prerequisites of successful performance.

Variability of the method

The methodology is structured to be freely varied according to the operating environment, customer group (groups in rehabilitation), and the personal starting point and progress of any individual customer. For example:

- When observing physically demanding work, the qualifier attributes used are different from those used for office work.
- Rehabilitating people can have qualifier attributes of their own to assess the impacts upon their work performance that the special delimiting factors detected in their case may have.
- Early in rehabilitation, the focus of assessment can be on factors connected to daily routine management skills and self-confidence. In later phases of rehabilitation, the focus of assessment can be switched to the prerequisites necessitated by the working environment.

This variability according to need supports the uniqueness and the progress of each individual rehabilitation process, providing the professionals (those guiding the rehabilitation) and the multidisciplinary teams the information they need at each point.

Results

The VAT method has substantially facilitated assessments required in rehabilitation. It produces transferrable, combinable ICF-compatible data that can be used for guiding rehabilitation activities and to support multidisciplinary work.

The following example (figure 1) will make clearer the use of assessment results. Information gained from individual qualifier attributes is used in guiding the rehabilitation process and training activities as well as in feedback discussions. When information is passed on to multidisciplinary teams, the totality is grouped into areas and domains describing the functioning status according to the ICF framework. The grouping can be modified according to the requirements of the customer's situation and his or her working environment. In our example, it is as follows:

- Global mental functions, ICF domains b 110 – 129
- Energy and drive functions (motivation), ICF domains 1300-1301

Kumppaniksi Association
Tuomas Leinonen
Vienankatu 5-7, 87100 Kajaani
tel. +358 50 5210964,
email tuomas.leinonen@kumppaniksi.fi

- Specific mental functions, ICF b 140 – 189
- General tasks and demands (domains concerning activities and participation)
- Social and interpersonal skills needed in the operating environment

This grouping helps us to understand the totality and to assess the impacts of the interaction of the various factors, making it easier to create an interpretation of the customer's functioning status in the multidisciplinary team.

Figure 1

An assessment result gained with the method is stored in a database (MySQL) so that it is possible to produce outputs from there that differ from the ICF hierarchy.

Conclusions

The ICF-classification by WHO offers an excellent basis for compiling and transmitting information. Practice has shown, however, that a tool is required to make information production easy and also to support the customer's self-assessment. The VAT method provides the following benefits, for example:

- The rehabilitating person can describe his or her functioning status so that the information gained is ICF-compatible and easily accessible by different professionals.
- The external observer does not need to know the ICF. He or she is an expert on the environment in which the assessment takes place.
- An assessment event is fast and easily done so that assessments can be performed whenever it is necessary to have guidance for the rehabilitation process.
- The use of graphics in presenting the results helps both the rehabilitating person and the multidisciplinary team grasp the strengths of the person's functioning status and understand his or her possible impairments.

10th Congress of
**European Federation
for Research in
Rehabilitation
EFRR**

Riga (Latvia), September 9 – 12, 2009

Kumppaniksi Association
Tuomas Leinonen
Vienankatu 5-7, 87100 Kajaani
tel. +358 50 5210964,
email tuomas.leinonen@kumppaniksi.fi