

EATS:

Efficiency of Assistive Technology and Services

Newsletter 1, May 1999

EATS Consortium:

- Jan Persson, Birgitta Öberg, Kersti Samuelsson, Gunn Tunberg
Center for Medical Technology Assessment
Linköping University
S-58183 Linköping, Sweden

- Taeke van Beekum, Wija Oortwijn, Håkan Brodin
TNO Prevention and Health
Division Public Health
P.O. Box 2215
2301 CE Leiden, The Netherlands

- Øivind Lorentsen, Alf Reiar Berge
Rehab-Nor AS,
Ovre Jahren
1825 Tomter, Norway

- Renzo Andrich, Massimo Ferrario
SIVA, Fondazione Pro Juventute
Don C. Gnocchi I.R.C.C.S.
Via Capecelatro 66
20148 Milano, Italy

- Luc de Witte, Roelof Wessels
IRV
P.O.Box 192
6430 AD Hoensbroek, The Netherlands

Editor:

W.J. Oortwijn
TNO Prevention and Health
Division Public Health
P.O. Box 2215
2301 CE Leiden, The Netherlands
Tel: +31-71/5181776
Fax: +31-71/5181920
Email: WJ.Oortwijn@pg.tno.nl

EATS website:

<http://www.siva.it/research/eats/index.htm>

Inside this issue:

Introduction
Background
International conference
Conclusion

Introduction

With this newsletter, we want to inform you about EATS, a European project on the effectiveness of Assistive Technology and Services.

The aims of the EATS project are:

1. To develop a methodology for comprehensive assessments of assistive technology and services (AT&S), including effectiveness.
2. To support decisions on group levels about AT&S by conducting field studies in specific areas, and providing information on effectiveness.
3. To provide recommendations for implementing the use of the instruments.

Through compilation and development of methodology for comprehensive assessment of AT&S, a framework for evaluation of effectiveness, focusing on user benefits and quality of life will be provided. Field studies will be accomplished in order to validate the framework.

The EATS project is funded by the European Commission (TIDE programme).

The background of the project is given below. The project is ambitious, and is primarily methodological. Its aim is to establish principles for the work in the field of assistive technology and related services.

Background

The need for assessment of assistive technologies

Assistive technologies and services are developed for and provided to disabled and elderly people in order to restore and enhance function, prevent deterioration and improve and maintain their quality of life.

The need for assessment of assistive technologies has been increased by:

- increased technical potential due to the rapid technological development;
- increased demand through increased awareness among disabled people of existing opportunities, changing attitudes in societies to disabilities and handicaps, and an increasing number of elderly people;
- increased need for cost containment in all European countries;
- the necessity of setting priorities due to the scarce resources; and
- the focus on the quality of service delivery to ensure outcome results of AT.

Assessment studies are used to provide information for decision making on clinical, administrative or political level. Decisions are made in the following five major areas:

- technological development;
- priorities between AT programmes;
- quality assessment programmes for service providers;
- professional guidelines in clinics and service units; and
- management of individual services.

Methodology

The choice of methodology depends on the purpose of measurement. In quality assessment programmes and in providing professional guidelines, evidence is found in former studies that global measures addressing the individuals' quality of life and participation in society are adequate.

Such global measures may be health profiles or utilities. However, from previous studies it appeared that health profiles are inadequate for the field of assistive technology due to their focus on health instead of disability and handicap. People with a disability can be very healthy. The use of an assistive device does not have to influence one's state of health at all. By using assistive technology often very individual and specific goals are pursued. The outcome then consists of the level of attainment of these individual, specific goals. Therefore, the EATS project addresses the appropriateness of utilities, with the so-called EATS 2D instrument, as an addition to the Euroqol (a standardised health utility instrument). Also, the Individual Prioritised Problems Analysis (IPPA) is applied, for determining the effectiveness of AT&S.

Instruments

In the EATS project the following instruments were developed:

- A. Individual Prioritised Problems Analysis (IPPA), which is derived from the Problem Elicitation Technique. This technique consists of the following steps:
 1. Identifying problems by the user;
 2. Scoring the impact of each problem from the subject's point of view;
 3. Scoring the difficulty of performing the activity related to the identified problem; and
 4. Summarising into a score.
- B. EATS 2D, which is developed to be used in addition to the EuroQol. Former studies showed that existing utility instruments are mainly health-related, which means that the dimensions and/or items, in several respects are inadequate for disabled people and AT&S. This is due to the fact that AT&S is focusing on ability aspects instead of the level of health.

Therefore, the EATS 2D rating scale was developed. The scale is based on the issue of how much the respondent's problems interfere with his or her life.

Both instruments are genuinely based on end-users' opinions and preferences, and are applied in an interview with the professional at the time when a disabled person applies for a new assistive device. The instruments are grounded on individual goal expectations felt among disabled persons. The IPPA instrument is new and is compatible with routines in the selection of devices for disabled persons. It should therefore provide a valuable tool to be used in daily practice by the health professional. EATS 2D, in addition to the Euroqol, is of interest since it provides a way of deriving utilities. It is a tool for making general comparisons, for example between services and technologies in different areas.

Validation

At this moment the developed instruments are being validated in field tests in four countries (Sweden, Norway, The Netherlands and Italy). Furthermore, a reliability study is performed in the Netherlands. In addition, a feasibility study is performed, in which among others, the following items are studied:

- the ease of understanding instructions and questions;
- the process of identifying problems;
- cultural variations;
- variations due to differences in service delivery systems in the countries; and
- emotional issues.

Halfway the validation study experiences have shown some difficulties in understanding instructions, sensitivity to guidelines conveyed by the assessor and minor frustrations caused by questions perceived as irrelevant. These issues will be taken into account in the refinement of

the prototype instruments. More results will be presented in a next newsletter.

International conference

EATS will provide results of great value for the market of assessment and validation of AT&S from an socio-economic point of view. The results will be available for assessors, user groups, suppliers, technology developers, service deliverers and policy makers in Europe. Therefore, the EATS Consortium will organise an **International Conference on outcome assessment in assistive technology on 24 –26 November 1999 in Oslo, Norway.** The objectives of the conference are to discuss the importance of, and methods for, assessing outcomes of assistive technology and related services. Key issues related to modern rehabilitation principles and technology assessment in the field of assistive technology will be presented and discussed, including theory, practices and experiences.

For more information, please contact:

Øivind Lorentsen, Rehab Nor
Ovre Jahren, N-1825 Tomter, Norway
Tel: + 47-69/920105/Fax: + 47-69/920104
Email: ovind.lorentsen@online.no

Or other partners of the EATS Consortium

Conclusion

The results of the EATS study will allow decision makers on different levels to choose more proper instruments to acquire the information necessary to support decision making in the field of assistive technology and related services.

The instruments will be of great value for the decision process of the professional, at the time when a disabled person applies for an assistive device. The instruments will provide information leading to priorities between AT programmes. Also, they will

provide evidence that could be used in (the development of) quality assessment programmes for service providers and professional guidelines in clinics and service units.

Although the instruments are not yet finished completely, the EATS study has contributed to the methodology of technology assessment in the field of assistive technology. Developing, validating and evaluating instruments and establishing wide spread acceptance requires far more time than was available in the study. Therefore, further application of the instruments is strongly recommended.