# Profile and development prospects of Assistive Technology Centres in Italy

## Renzo ANDRICH 1

Polo Tecnologico, Fondazione Don Carlo Gnocchi Onlus, Milano Italy

Abstract. The term Centri Ausili (Assistive Technology Centres, in short ATC) refers to non-profit organisations - independent on AT manufacturers or suppliers - providing information and guidance to individual clients in relation to the choice of assistive technologies. Over 50 ATCs are currently in operation throughout Italy. A study was carried out in 2005-2006 on 23 centres participating in GLIC (the major Italian association of ATCs) in order to provide an insight of services provided, methodologies used and resources involved, and develop common service standards. The services provided were clustered round six headings: 1) information / guidance services (including information dissemination, telephone helpline, first guidance meeting, guided visit to the AT exhibition) 2) individual assessment services (on-center or onsite) 3) support services (counselling to the professional team, usage training, supervision to installation or fitting, temporary AT lending) 4) consultation services (to Institutions or Companies) 5) educational services and 5) research activities. Based on observation of current practice, such services were distinguished according to seven competence areas, each requiring specific expertise and technical facilities: seating & mobility, daily living aids, environmental adaptation, environmental control systems, computer access, augmentative communication, educational software. Specifications were defined for each service and competence area, in terms of scope, methodology, expertise required, intake procedure and deliverables to be issued.

**Keywords.** Assistive technology centres. Assistive Technology assessment. Assistive Technology service delivery

## Introduction

Assistive Technology Centres (ATCs) are fundamental resources for people with disabilities, for their families and carers, for rehabilitation and education professionals. Over 50 ATCs are currently in operation throughout Italy, run by Local Health Authorities, Rehabilitation Institutions, School Authorities, Organisations of people with disabilities. Some of them exist since long, such as the *SIVA network* of the Don Gnocchi Foundation (in operation since 1981), and the *Ausilioteca* of AIAS Bologna (started in 1983); most others Centres were established more recently.

<sup>&</sup>lt;sup>1</sup> Corresponding Author: Renzo Andrich, Polo Tecnologico Fondazione Don Carlo Gnocchi Onlus, via Capecelatro 66, 20148 Milano, Italy. E-mail: renzo.andrich@siva.it



Figure 1. Map of Assistive Technology Centres participating in the GLIC Association.

## Method

A study was carried out in 2005-2006 on 23 centres participating in GLIC (the major Italian association of ATCs) in order to:

- 1) provide an insight of services provided, methodologies used and resources involved
- identify common service standards, in view of possible accreditation of ATCs by the National Health Service and by Regional authorities within the public AT service delivery system.

The methodology included brainstorming sessions with the responsible persons of all centres, data collections through questionnaires (filled-in by 16 Centres), and compilation of *case histories* (for a sample of ten centres). The study involved two steps: in the first stage, the current structure of ATCs was comparatively analysed; in the second stage, the roadmap for future development was designed. The final deliverable, available in Italian language, was refined and approved by the GLIC General Assembly (30/11/2006) [1].

#### Results

The profile of ATCs resulting from the study is extremely varied; however, some commonalities, trends and critical issues were identified.

The monthly *audience* of the various centres ranges from less than 20 clients to over 50; the staff ranges from 3 to 20 persons (average 5.2 full-time equivalent); personnel with *clinical* background (physiotherapists, occupational therapists, speech therapists etc.) or *pedagogic* background (teachers, educators etc.) are often permanently hired, while *technologists* (engineers, technicians etc.) are in most cases on temporary contract, which means continuity is sometimes at risk in hi-tech related services; *funding* comes from various public or private agencies and is mainly project-based.

A major result of the study was the agreement on a standard classification of the services each ATC should be able to provide. These are described as follows.

#### *Information / guidance services*

These include any first-contact activities with the client, in order to answer all questions that do not need thorough assessment (overview of assistive devices on the market, suppliers locally available, legislation references, useful literature, etc..), to help the client clarify his/her need, and to collect preliminary data in case the client wishes an individual assessment. Four services belong to this cluster:

- information production and dissemination (databases, websites, publications etc.)
- telephone helpline (experts available on the phone at given times)
- first guidance talk (on the phone or face-to-face; free or upon appointment)
- guided visit to the AT exhibition (each centre is supposed to avail one).

## Individual assessment services

These include observations, analyses, discussions and practical trials – carried out within one single meeting or distributed across several meetings – leading to the recommendations of specific solutions to the client's need. This stage often requires a multi-professional approach with the contribution of clinical, technological, educational, social and organisational competences. The ATC team should be able to understand and clarify the client's needs, help the client define his/her goals, suggest appropriate solutions, communicate them clearly, and link to the community services where the client lives. Two services belong to this cluster:

- Individual assessment, on centre (the client comes to the ATC)
- Individual assessment, on site (the ATC team comes to the client's place)

## Support services

These include follow-up activities helping the client achieve full command of the chosen assistive solution, cope with emergency situations and fix possibile problems arising in daily use. Four services belong to this cluster:

- counselling to the professional team
- usage training
- supervision to installation or fitting
- temporary AT lending

## Consultation services

These include consultancy to professionals, companies, institutions or public Bodies, on AT topics that are not related to the choice of assistive solutions to specific individual cases.

#### Educational services

These include any educational initiative organised by the ATC: formal training in conjunction with universities or other educational agencies, non-formal training, informal learning offered to external audience by participating in day-to-day activities [2].

#### Research activities

These include production of knowledge in the AT sector, through participation in formally established research projects.

Based on observation of current practice, the above services were distinguished according to seven competence areas, each requiring specific expertise and technical facilities:

- seating & mobility devices (wheelchairs, walkers, cars, lifts etc.)
- daily living aids (personal care, eating, dressing, housekeeping, leisure etc.)
- environmental adaptations (accessibility, furniture, worksite etc.)
- environmental control devices (home automation, remote controls etc.)
- computer access (interfaces and adaptations for motor or sensory impairments)
- augmentative communication (devices and strategies for communication)
- *educational software* (for ability training or learning limitations)

This two-dimensions grid (services Vs competence) allows each ATC to self-define its profile in a comparable manner: for instance, one centre may be prepared to offer *on-site* individual assessment on seating & mobility and environmental adaptations, while another may be prepared to offer *on-centre* individual assessment on all competence areas, usage training for computer access and temporary AT lending of augmentative communication devices. Specifications were defined for each service (table 1) in terms of scope, methodology, expertise required, intake procedure and deliverables to be issued. Such specifications now challenge all ATCs as a roadmap for their future development.

#### Individual Assessment, on centre

## Scope

Provide a comprehensive answer to the individual client's request, based on a detailed analysis or the client's need (clinical, technical, environmental etc.) and the identification of appropriate solutions. The client is usually the person with disabilities, however in some cases it may be a family member or a caregiver. The ATC recommendations may regard simple devices or ways to solve daily living problems, as well as complex hi-tech solutions; issues such as the client's motivation or predisposition to using AT devices; procedures for accessing to public funding schemes; instructions concerning purchase, usage and implementation of the proposed solutions in the client's living environment. All such recommendations should be communicated to the client in the course of the assessment in such a way to empower him/her to take informed and responsible decisions.

#### Methodology

Depending on the agreements taken in the first guidance talk, the client may come alone or accompanied by other persons involved in the client's problem, such as family members or community health care professionals. The assessment process is tentatively composed of the following phases:

- Introductory talk (preliminary analysis of the client's request)
- Clinical-functional assessment (analysis of motor / sensory / cognitive abilities)
- Socio-educational assessment (whenever the problem refers to school / educational context)
- Environmental assessment (analysis of the client's living context)
- Hands-on trials with AT devices available in the AT exhibition
- · Possible individual adjustment of AT devices for the practical trials
- Search for appropriate solutions available on the market
- Identification of the appropriate recommendations through team discussion whenever needed
- Final discussion with the client, where the recommendations are communicated and explained
- Compilation of the written report to be given to the client

## Output/deliverable

Written report containing the recommended solutions, instructions for implementation and related information (devices available on the market, manufacturers / suppliers, hints for use, references for funding etc...). The report is usually compiled as a back-office activity after the assessment is concluded, and then sent to the client.

## Intake procedure

Upon appointment, following a first guidance talk on the phone or face-to-face

## Professional resources involved

It depends on the competence area and the complexity of the individual case. Simple requests can be dealt with within a one-hour meeting, others may require more hours or even more meetings with different experts working together (inter-disciplinary mode) or in a sequence (multi-disciplinary mode). The time needed for preparation (analysing documentation, configuring the devices for the trials etc.) and for finalisation (rearranging the exhibition, compiling the written report etc.) should also be accounted as part of this service.

Table 1. Example of specifications for an ATC service ("individual assessment, on centre")

### Acknowledgements

This paper summarises a large-scale study carried out by a GLIC working group composed of representatives of 9 assistive technology centres: DATARC (Torino), SIVA Fondazione Don Gnocchi Onlus (Milano), Ausilioteca Aias Bologna Onlus (Bologna), Ausilioteca Independent L. (Merano BZ), Centro per l'Autonomia (Roma), Ausiliotecaroma Istituto Leonarda Vaccari (Roma), Ufficio H Comunità Piergiorgio Onlus (Udine), Centro Ausili Irccs Medea Polo Veneto (Conegliano / Pieve di Soligo TV), Coriss Ausilioteca Regionale per Disabili (Sarrotino-Tiriolo CS). The working group was led by Mauro Nesti (DATARC) and Renzo Andrich (SIVA). The compilation of the case histories was coordinated by Roberta Agusto (Ausilioteca Aias).

#### References

- [1] GLIC: I Centri Ausili in Italia: profilo e prestazioni. www.centriausili.it
- [2] KPT Consortium: Guidelines for Lifelong Learning in Assistive Technology. www.at4inclusion.org/kpt