STUDY

Barriers to the wider deployment of person centred technology in services for persons with disabilities

Executive Summary
This is an executive summary by the European Association of Service providers for Persons with Disabilities (EASPD) and its Interest Group on Person-Centred Technology based on the study “Barriers to the wider deployment of person centred technology in services for persons with disabilities” prepared by:

Authors:

Evgeniya Hristova, ASSIST – Assistive Technologies

Maurice Grinberg, ASSIST – Assistive Technologies

Sofia, Bulgaria, 2018
Contents

Contents ................................................................................................................................. 2
Summary ................................................................................................................................. 3
Abbreviations and Definitions ............................................................................................. 4
Barriers to PCT Usage for People with Disabilities .............................................................. 5
Discussion and Recommendations ....................................................................................... 9
Summary

This executive summary presents the main results obtained in the study “Barriers to the wider deployment of person centred technology in services for persons with disabilities” which were reported in detail in the deliverables of the project.

The identification of barriers to person centred technology has been done based on an extensive literature review. Their perceived severity is assessed by professionals working in social service providers for people with disabilities across Europe. The latter was done by an on-line questionnaire designed to cover all the main barriers identified.

As a result, the most severe barriers appear to be related to the lack of training (and therefore, to the lack of qualified professionals) and to insufficient financing (except for Northern Europe). Other important group of perceived barriers are legislation and regulatory barriers, resource barriers, environmental barriers, and barriers related to the lack of knowledge and skills among people with disabilities and their families.

To overcome these barriers, systematic efforts in updating existing qualifying programs at all levels from university studies to refreshing on-the-job courses – and related requirements and certification schemes need to be developed and implemented. Introductory courses for people with disabilities and their families should also be part of such a system. Additional factors like appropriate legislation and regulation and availability of resources and environment corresponding to the state-of-the art person centred technologies should also be taken care of.
## Abbreviations and Definitions

**AAC**  
*Alternative and Augmentative Communication* – a variety of methods of communication that can ‘add-on’ to speech and are used to get around problems with ordinary speech. AAC includes simple systems such as pictures, gestures and pointing, as well as more complex techniques involving powerful computer technology.

**AT**  
*Assistive Technology* – product or technology-based service or solution that enables people with activity limitations of all ages in their daily lives work education and leisure. This definition embraces fields of interest that reflect a wider orientation on disability, technology and inclusion, such as eAccessibility, Ambient Assisted Living, Design for All.

**PCT**  
*Person Centred Technologies* – technology-based solutions that affect directly the quality of life of the service users. Whether this is personal equipment for mobility, communication, social connectedness, access to digital environments, and technology for safety, telecare, remote monitoring, either embedded in the environment, installed on fixed or mobile platforms, or wearable. PCT definition encompass specialist and mainstream technologies that can be used to enhance people’s independence and safety making them less dependent on carers.

**PwD**  
*Persons with Disabilities*

**SPPD**  
*Service Providers for PwD*
Barriers to PCT Usage for People with Disabilities

The aim of the project “Barriers to the wider deployment of person centred technology in services for persons with disabilities,” commissioned by EASPD, was to identify what are the main barriers and what are the potential facilitating factors that would enable the uptake of PCT in the social sector.

The work on project proceeded in two logically related parts – a theoretical analysis of the barriers to PCT based on existing studies; and the design and deployment of a questionnaire aimed at gathering data from professionals in SPPD as to their perception of the identified barriers.

The theoretical part relies on some of the most important recent reviews and authoritative sources of information on the topic. Fifteen groups of barriers were identified. The questionnaire was developed following the theoretical analysis and it covers all identified groups of barriers.

While detailed presentation and discussion of the results of the project can be found in the deliverables, here the main results and the outline possible ways of overcoming the existing barriers are presented.

The questionnaire was administered in 5 languages and was filled in by 137 professionals from 18 European countries. 100 participants were included in the subsequent analysis.

These 100 respondents were grouped in four groups from Northern, Central, Eastern, and Southern Europe presented in Table 1.
Barriers to the wider deployment of person centred technology in services for persons with disabilities

The results of the questionnaire show that professionals in Europe are unanimous about the usefulness of PCT for PwD (mean rating of 6.4 out of 7). However, the data about the percentage of SPPD staff members using PCT is alarmingly low – 36% overall (about 25% for Central, Eastern, and Southern Europe; 78% for Northern Europe).

A similar large discrepancy between the North and the rest of Europe is also seen in the ratings about the good use of PCT in SPPD – 5.8 (out of 7) for the North and 4.5 for Central, 3.4 for Eastern, and 3.6 for Southern Europe. However, the average rating for Europe (4.2) is not satisfactory.

Another big issue is that only 22% of the SPPD staff is rated as being expert in PCT (50% for Northern Europe and about 12% for the rest of Europe). Additionally, according to the data, professionals working in SPPD have had on average less than 1 course in PCT during their formal education.

The summarized results from the questionnaire about the perceived barriers to PCT are presented in Table 2. The data is presented as average ratings (on 7-point scales from 1 = strongly disagree to 7 = strongly agree) for Europe as well as for Central, Eastern, Northern, and Southern Europe.

---

**Table 1**: Participants included in the analysis by European region

<table>
<thead>
<tr>
<th>Europe Region</th>
<th>Number of Participants by Country</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Hungary – 26, Croatia – 1, Poland – 1</td>
<td>28</td>
</tr>
<tr>
<td>Eastern</td>
<td>Bulgaria – 28, Latvia – 1, Romania – 1</td>
<td>30</td>
</tr>
<tr>
<td>Northern</td>
<td>UK – 9, Germany – 4, France – 3, Austria – 2, Norway – 2, Sweden – 2, Denmark – 1, Finland – 1, Netherlands – 1</td>
<td>25</td>
</tr>
<tr>
<td>Southern</td>
<td>Spain – 11, Greece – 5, Italy – 1</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>
Barriers to the wider deployment of person centred technology in services for persons with disabilities

Table 2: Main groups of barriers with severity ratings per Europe region. Ratings are made on a 7-point scale (from 1 = strongly disagree to 7 = strongly agree). Higher ratings mean stronger barriers.

<table>
<thead>
<tr>
<th>Group of Barriers</th>
<th>Central</th>
<th>Eastern</th>
<th>Northern</th>
<th>Southern</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1: Knowledge Barriers</td>
<td>4.1</td>
<td>4.3</td>
<td>4.2</td>
<td>4</td>
<td>4.2</td>
</tr>
<tr>
<td>Group 2: Skill Barriers</td>
<td>4.3</td>
<td>4.4</td>
<td>4</td>
<td>4.3</td>
<td>4.2</td>
</tr>
<tr>
<td>Group 3: Training Barriers</td>
<td>5.4</td>
<td>5.6</td>
<td>5.7</td>
<td>5.3</td>
<td>5.5</td>
</tr>
<tr>
<td>Group 4: Practice Barriers</td>
<td>4.6</td>
<td>4.2</td>
<td>4.1</td>
<td>3.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Group 5: Resource Barriers</td>
<td>5.2</td>
<td>5.1</td>
<td>4.9</td>
<td>5</td>
<td>5.1</td>
</tr>
<tr>
<td>Group 6: Qualified Professionals</td>
<td>5.6</td>
<td>6.3</td>
<td>4.5</td>
<td>5.2</td>
<td>5.5</td>
</tr>
<tr>
<td>Group 7: Attitudes toward PwD Barriers</td>
<td>2.5</td>
<td>2.2</td>
<td>1.9</td>
<td>3.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Group 8: Motivational Barriers</td>
<td>3.3</td>
<td>3.2</td>
<td>3.6</td>
<td>3.1</td>
<td>3.3</td>
</tr>
<tr>
<td>Group 9: Attitudes towards Technology Barriers</td>
<td>1.5</td>
<td>1.8</td>
<td>2.1</td>
<td>2.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Group 10: Legislative and Regulatory Barriers</td>
<td>4.6</td>
<td>5.1</td>
<td>4.5</td>
<td>4.8</td>
<td>4.7</td>
</tr>
<tr>
<td>Group 11: Financial Barriers</td>
<td>6.4</td>
<td>6.2</td>
<td>4.5</td>
<td>5.3</td>
<td>5.7</td>
</tr>
<tr>
<td>Group 12: Environmental Barriers</td>
<td>5.2</td>
<td>4.5</td>
<td>4.8</td>
<td>4.9</td>
<td>4.8</td>
</tr>
<tr>
<td>Group 13: Technology Barriers</td>
<td>3.4</td>
<td>3.6</td>
<td>3.9</td>
<td>3.9</td>
<td>3.7</td>
</tr>
<tr>
<td>Group 14: PwD and Families’ Knowledge and Skills Barriers</td>
<td>4.7</td>
<td>5.2</td>
<td>4.7</td>
<td>5.3</td>
<td>5.0</td>
</tr>
<tr>
<td>Group 15: PwD Psychological Barriers</td>
<td>2.7</td>
<td>2.7</td>
<td>3.2</td>
<td>3.8</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Figure 1 presents the most important barriers identified by the study. As the analysis shows, the highest ratings are given to the following groups of barriers: Financial (except for Northern Europe with rating 4.5, see Table 2, Training, and Qualified Professionals barriers. Next in severity come the Resource, PwD and their Families’ Knowledge and Skill, Environmental, and Legislative and Regulatory groups of barriers.
Figure 1: Ranking of the main groups of barriers according to the mean severity ratings of SPPD professionals. Ratings are made on a 7-point scale (from 1 = strongly disagree to 7 = strongly agree). Higher ratings mean stronger barriers.
Discussion and Recommendations

The results of the study show that despite some differences in perceived severity, the barriers to PCT in SPPD are common to Central, Eastern, Northern, and Southern Europe. The analysis of the literature review and of the results of the questionnaire shows that the there are seven barriers which according to the evaluation of professionals working in SPPD are the most important and deserve the most attention (the severity ratings is larger than 5, with 7 standing for maximum severity).

The groups of barriers related to training and qualification with respect to PCT seem the most prominent for all Europe. These barriers are related to the lack of courses in the university programs and regular required refresher certification courses on-the-job. The problem of lack of training is identified as a major barrier to PCT usage in SPPD. The Training barrier is the first in severity also in the Northern European countries as well, although the financial barriers are milder there.

An additional problem is the Knowledge and Skills in using PCT of PwD and their Families which again would require professionals to be able to offer the needed training which needs additional qualification.

The efficient usage of innovative PCT requires overcoming also the Financial, Legislative and Regulatory, and Environmental barriers which can guarantee the successful adoption and usage of the full potential of PCT for PwD by professionals and PwD.

In conclusion, the successful overcoming of the barriers to PCT requires a change in the system of SPPD provision starting from the standards and requirements for the university curricula which will account for the exponential progress in PCT and will provide the needed competencies for professionals working with PwD. The university curricula should be supported by a system of on-the-job courses which provide updates on new PCT and sharing
of good practices. This whole process should be integrated and strongly supported by policies at all levels which guarantee the needed financing, resources and environmental changes for PCT to effectively and efficiently meet the needs of PwD.
EASPD is the European Association of Service providers for Persons with Disabilities. We are a European not-for-profit organisation representing over 15,000 social services and disability organisations across Europe. The main objective of EASPD is to promote equal opportunities for people with disabilities through effective and high-quality service systems.

www.easpd.eu
Follow us on Facebook and Twitter

This publication has been produced with the financial support of the European Union Programme for Employment and Social Innovation “EaSI” (2014-2020). The information contained in this publication does not necessarily reflect the official position of the European Commission.

Copyright © EASPD 2017

All rights reserved. No part of this publication may be reproduced, stored in or introduced into a retrieval system without the prior permission of the copyright owners.