Abstract: Based on notions from the Capability Approach, this study investigates the service delivery process for assistive technology in Hungary. The research aimed to explore whether the service delivery is person-centered, with a specific focus on the users’ possible choices. In addition to a comprehensive analysis of legislative and policy documents, qualitative data were collected in semi-structured interviews with users and professionals \((n=31)\) to gain a deeper understanding of personal experiences. Our findings indicate that the service delivery system is product-centered and dominated by financial considerations. The policy and legislation framework does not provide an institutional guarantee for users to be able to have their voices heard; the extent to which their opinions and preferences prevail depends on the attitude, knowledge, and goodwill of the professionals involved in the process. The realization of a person-centered approach will be hindered as long as the users’ needs are viewed from a medical point of view.

Keywords: assistive technology provision; person-centered service delivery; choice; Capability Approach

1. Introduction

The aim of assistive technology service delivery systems is—at least in principle—to improve the users’ quality of life. The idea behind providing assistive technology is to maintain, increase, or improve the functional capabilities of individuals with disabilities, thereby supporting their autonomy and participation in society [1,2]. Assistive technology (AT) covers devices, instruments, equipment, and services necessary to match the products to the users’ needs and goals [3]. The positive impacts reach beyond the individual; AT can improve the lives of families, communities, and the whole of society. AT is considered a means to enjoy the right to education, participate in employment, express citizenship, access health care, participate in sports, or engage in social activities [4]. It has been pointed out that AT plays a crucial role in achieving human rights, and enhancing accessibility which is essential for reaching the Sustainable Development Goals [5,6]. Considering the socioeconomic benefits for health and welfare systems, such as lower rates of poverty, reduced care needs, and labor participation, strengthening research evidence points out that it is worth investing in AT [7–9].

Despite the potential of assistive technology, it is not used as frequently as expected or not used at all. Scholars estimate an average 30 percent abandonment rate in the first year, but in some cases, this rate might reach up to 90 percent [10–14]. From a service delivery point of view, the non-use of AT suggests inappropriate and ineffective intervention and a potential waste of resources.

Several studies investigate the reasons why users abandon AT [15]. These note that the lack of user involvement is one of the leading factors of dissatisfaction and non-use in both low- and high-income settings [16,17]. There are different practices of how users can participate in AT interventions, various ways scholars operationalize, and practitioners interpret user involvement. Generally, it means users influence the whole service delivery process. Its common elements are engaging in design, testing, and research; adequate information transmission;
being able to express preferences and priorities during selection and assessment; evaluating individual conditions and circumstances; management; communication and collaboration with professionals during service delivery; tryout, customization, monitoring, adequate training, and follow-up services; and being key stakeholders in policymaking [16–20].

While no ideal model is applicable anywhere, the most ethical and effective practice is where professionals and users work together as a team [21,22]. Studies indicate that a person-centered, collaborative, multisectoral approach is needed, with the users at the center of AT ecosystems [23–27]. The World Health Organization (p. 157) defines person-centered practice as “individuals are involved in decisions about the support they receive and have maximum control over their lives” [28]. Person-centered solutions mean we understand and respect user preferences, salience, and preferred outcomes, and decisions on assistive solutions are not led by technological, product-centered, or financial considerations [29].

This article critically examines Hungary’s service delivery process (SDP) of assistive technology. It aims to explore whether the service delivery is person-centered, focusing on the users’ choices. In order to evaluate if any AT policy intervention is person-centered, a concept is needed that strongly acknowledges human diversity, an approach that views AT users as active agents and considers assistive technology as an interface between the person and the life they wish to lead [30]. In this study, the Capability Approach (CA) [31] was applicable. From a policy perspective, the study investigated what kind of efforts policymakers make to respond to the needs and interests of each person as an end; and how the right to choose is involved in AT-related policy documents. As Steel [32] (p. 22) argues, “such policies would emphasis access to ongoing services for AT users, recognizing that AT itself enhances individuals’ autonomy and opportunities to function in society, making choices on an equal basis to others in society.” However, principles in policy documents do not necessarily mean free choices in practice [33]. Thus, in parallel, based on interview narratives (n = 31), we investigated the extent to which users realize choice as an act during the different steps in the service delivery process.

Although assistive technology markets are fragmented, and there are considerably different models of how assistive technology service delivery is organized, the case of Hungary provides an example and might contribute to the debate about ethical and effective service delivery systems [34,35].

After introducing the context of Hungarian service delivery, the third section describes the Capability Approach and demonstrates the argument of why it is an applicable concept for AT SDP evaluation. The fourth section explains the methodology and research ethics; the findings are then discussed. In the concluding paragraphs, some policy implications are suggested, and the limitations of the research are clarified.

2. Context

There is no available data on AT needs, use, or accessibility in Hungary. According to the latest census data from 2011, 4.9 percent of the population (more than 490,000 persons) reported themselves to be disabled [36]. However, we might assume that more people need at least one AT in their everyday lives. In 2016, a representative sample was asked about whether they feel impaired in instrumental activities of daily living due to their health conditions. A total of 1.5 million people—15 percent of the population—reported severe or moderate difficulties, regardless of disability status [37]. They experience difficulties in walking, self-care, concentration, communication, accessing information, using public services, and participation in community and family life. Considering the aging population, one can describe the potential need for assistive technology as significant.

Generally, Hungarian citizens can be provided with assistive technology\(^1\) devices with a price subsidy or free of charge, although there are considerable challenges regarding accessibility [38]. Assistive technology provision began in the medical environment in around 1918 due to the emerging need to support injured soldiers who had returned from the First World War [39]. The basis of the service delivery system has not changed considerably since.
The allocation of assistive devices falls under the responsibility of the health care system. The Hungarian constitution guarantees the right to optimal health and a healthy environment through social security. The social security system is organized around the National Health Insurance Fund of Hungary (NHIF), an institution responsible for distributing cash and in-kind benefits related to health. The health insurance fund is financed by contributions paid by employers and employees supplemented with an annual contribution from the national central budget.

Although anyone with social insurance can be provided with subsidized AT, doctors must prove that potential users are in medical need of a device. Doctors can prescribe from a national list of products eligible for public provision [40].

3. The Capability Approach

The Capability Approach is a theoretical framework for well-being, development, and justice, pioneered by Amartya Sen and further developed by Martha Nussbaum and other scholars. It is an evaluative approach based on the notion that well-being should be understood in terms of freedoms people have [31,41–44]. These freedoms—real opportunities—are capabilities to achieve certain functionings—beings and doings—that people value and have reason to value.

The Capability Approach is ethically individualistic; everyone counts as morally equal [45]. It views each person as an active agent with different perceptions of what constitutes a good life. Human agency is the ability to act on behalf of an individual’s values [46,47]. Two people with the same capability set are likely to achieve various functionings because they can make different choices.

People differ in their abilities to convert means—goods, services, and resources—into functionings. Functionings do not only depend on personal choices but are enabled or constrained by personal, social, and environmental characteristics and contexts. Personal conversion factors cover characteristics like physical conditions, age, and sex; social conversion factors are shaped by the society the person lives in, for example, attitudes and social norms. Factors such as the built environment, climate, or public transport also influence how specific resources contribute to valued functionings [48]. The notion of conversion factors highlights that providing two persons with the same resource might lead to inequalities because of their different personal, social, and environmental circumstances.

Since the 2000s, researchers have dealt with disability-related aspects of the Capability Approach. Studies conceptualize disability with the concepts of capabilities and functionings [49–51], compare CA with other disability models [52–54], and use the approach to evaluate policies [55–57]. Though fewer studies have applied the approach in the context of assistive technology so far [58–61], we argue that the CA is helpful in evaluating if AT service delivery is person-centered.

Sen noted that the Capability Approach is “essentially people-centered” [62] (p. 6), which is mainly because of the intrinsic value and central emphasis on personal choices. The meaning of choice is twofold. It is an act of choosing between two or more possibilities, and at the same time, it is a possibility of choosing, the right to choose [33]. In assistive technology provision, choice as an act is an interactive process of decision making and negotiating [32]. At the same time, the AT policy framework shapes the range of available options and possibilities the users can choose from.

Choices are interpreted as features of autonomy in disability studies. Making real choices is power, which people gain through empowerment; this leads to greater autonomy and provides “the ability to plan one’s own life, to enter into relationships with others and together actively participate in the construction of society” [65] (p. 22). Improving or maintaining the users’ autonomy is the ultimate goal of assistive technology provision [2]. As Sen [31] (p. 75) states, choosing itself “can be seen as a valuable functioning, and having an x when there is no alternative may be sensibly distinguished from choosing x when substantial alternatives exist.” Despite the best intentions, forcing people into particular functionings means we disrespect them and their choices [64].
Consequently, in terms of policy interventions, people should not be seen as passive recipients of programs, transfers, and services, but rather the processes—and whether people can engage actively and freely—should receive special attention. Sen argues that good societies should promote people’s capabilities, not their functionings. The absolute political goal is to provide real opportunities that people may or may not exercise in action. We should focus on the options available to everyone because everyone is valuable, worthy of respect, and has one life to live [44]. Nussbaum calls it the “each person as an end principle”; thus, in line with the Capability Approach, we should ask how the interests of everyone are served and protected [45] (p. 58).

4. Materials and Methods

This paper draws on research data from a doctoral exploratory study investigating the accessibility of assistive technology in Hungary. The basics of SDP were explored through a comprehensive analysis of legislative and policy documents. A total of 52 pieces of legislative documents were reviewed that explicitly or implicitly concern assistive technology and disability policy. In addition to legislation analysis, empirical data were collected using sociological in-depth interviews with assistive technology end users (n = 20) and professionals working in the field of AT provision (n = 11).

4.1. Sample

The recruitment stage targeted end users who received subsidized assistive devices. All user participants reported having impairments that affect their participation in everyday-life activities—mobility, self-management activities, work, socializing, and communication—and they use at least one assistive device regularly. The participants were targeted with purposive snowball sampling without collecting personal identifying information. The first participant was approached with the help of an NGO. It is important to note that users without experience in the public provision of AT were not recruited. It means that people who had not been provided with assistive devices for any reason—including systematic constraints—were not represented. Therefore, the research did not concern unmet needs.

In the findings section, all participants were referred to as they identified themselves at the beginning of the interviews regarding age, gender, disability, and assistive technology use. The age distribution covered the range between 20 and 78 years. The proportion of women was 55 percent, including two mothers of children with high support needs.

The recruitment criteria for professionals were to have practical experience with assistive technology public provision. The professional participants were also targeted with purposive snowball sampling. The professional backgrounds of the experts were diverse as we included physicians, distributors, manufacturers, distributors, physiotherapists, health policy professionals, and social workers in this study. One expert identified themselves as an AT user, too.

4.2. Method

The AT user and professional interview guide focused on the assistive technology service delivery process, from the realization of the needs to the period after receiving a device through public provision. Open-ended questions were asked about the informants’ experiences with the service delivery process and their everyday lives using assistive devices or, in the case of professionals, supporting assistive device users in their praxis. The interview questions followed the process of receiving and using AT through the service delivery steps defined by the Association for the Advancement of Assistive Technology in Europe (AAATE) [2]. The HEART report defined the following seven steps [65]: initiative, assessment, selection of assistive solutions and equipment, authorization, implementation, management and follow-up. These are not definite but common steps employed independently of the service delivery model or the country in question [66].
The author conducted in-person, semi-structured interviews between 2017 and 2020 in Budapest. The interviews took place at the location chosen by the participants. The interviews were conducted and transcribed in Hungarian.

A thematic approach was used to analyze qualitative data, a widely–used method to understand the participants’ experiences, meanings, and perceptions of a given phenomenon [67]. After the interviews were transcribed, the author familiarized themselves with the data, generated initial codes, and coded the transcripts. The themes were then reviewed and defined. “Choice” was one of the conceptualized themes that appeared in the dataset in connection with accessibility. This study reports the findings concerning this theme.

4.3. Research Ethics

The study was conducted in accordance with the Declaration of Helsinki, EU General Data Protection Regulation, and was approved by the Council of the Doctoral School of Sociology, Eötvös Loránd University. Participants were informed that their participation was voluntary, anonymous, and confidential and that they could refuse to reply at any time. Informed consent was obtained from all persons involved in the study. All the interviews were audi-taped with the consent of the participants, and field notes were obtained. The audio files and field notes were stored securely in a password-protected hard drive that only the author could access and then transcribed by the author anonymously.

5. Findings

In this section, the AT-related legislative and policy framework is described, focusing on the right to choose. Then, the findings of the interviews are presented with the aim of illustrating the extent to which users realize choice as an act during the different steps in the service delivery process.

5.1. Legislative and Policy Framework for Assistive Technology

Hungary was one of the first countries that ratified the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) [68]. The UNCRPD not only commits states to providing access to affordable, accessible, high-quality assistive technology but highlights how important it is that people with disabilities are included in the relevant decision-making processes [69]. Although ensuring this right is a national responsibility, political will is required to formulate and implement the related policies and strategies [70].

To date, there is no national assistive technology policy or program nor a comprehensive legislative environment in Hungary that would ensure that citizens in need of AT have access to affordable, quality assistive technology. However, more than fifty acts and directives concern assistive technology directly or indirectly. These cover “safe and effective provision” [71], the professional requirements for distributors [72], and regulations regarding the inclusion of devices into social security subsidization [73]. Meanwhile, no pieces of legislation state and protect the role of the users in the service delivery per se. Legal regulation does not exclude but does not create any guarantee for the users to have their voices heard.

According to the relevant legislation, assistive devices are considered a means to support health care and rehabilitation services. Users are referred to as patients, and independent living, empowerment, or autonomy are not among the preferred outcomes. Despite the Hungarian translation of the UNCRPD, the term assistive technology is not used in legislation. Instead, medical devices or medical aids describe “those medical technology products or care-related technology products which are directly used by people with permanent/temporary impairments or people with disabilities; the use of which does not require the persistent presence of a medical professional” [71]. Act XXVI. of 1998 on the Rights and Equal Opportunities of Persons with Disabilities provides a different definition: “a device that serves to partially or fully make up for the partial or full lack of physical or sensory capacity in a person living with disabilities” [74].
There are three stakeholders in the service delivery process: users (patients), doctors, and distributors. The legislator assigned considerable responsibility to doctors. They are required to address needs, decide whether the user’s health condition requires the use of a device, provide information, and choose the appropriate product from the national list. The distributors inform medical professionals and contract NHIF if their application is successful. A new product can be added to the list if it meets certain quality criteria and the distributor offers a lower price than similar listed products elsewhere.

Up to 3400 devices and pieces of equipment are on the national list eligible for public provision, although this number does not reflect the needs covered. The list is based on the ISO:9999 standard on Assistive Products for Persons with Disability [1]. However, the 2003-version is used, which is not in line with the development of the standard. Consequently, some devices—and because of that, user groups—are indirectly excluded from public provisions, including devices for work, communication, leisure, or sport [38]. The World Health Organization published a priority list of fifty device groups in 2017; the Hungarian list contains less than half of these [75].

As for policy documents, the Hungarian government created the National Disability Policy Program 2015–2025 (Program) based on the UNCRPD, Act XXVI. of 1998, and in line with the European Union Strategy for the Rights of Persons with Disabilities (former European Disability Strategy) [76]. The Program is the only strategic document that provides a framework for disability policy [77]. The preambular of the National Disability Policy Program states the importance of a holistic approach in policymaking. The main principles are (1) prevention, (2) autonomy, (3) social participation, (4) universal design, (5) anti-discrimination, (6) subsidiarity, (7) reasonable accommodation, and (8) the ‘Nothing about us without us!’ principle. These declare that “people with disabilities are not subjects of charity, they have rights, they are independent, autonomous persons with free will.” According to this document, autonomy should be enforced by expressing opinions freely. The Program states that persons with disabilities must be ensured the opportunity to take part—or delegate someone on their behalf—in decision–making processes regarding their lives.

Among the health-related areas of intervention, policymakers state the importance of medical devices in the Program. It says that access should be improved. The revision and modernization of the support system is a priority strategic goal by applying the current national and international standards. Additionally, this document states that “medical devices must be distinguished from devices supporting independent living” (p. 9). While the reasons for this differentiation are not provided, we might assume that the latter refers to assistive technology. Nevertheless, the Program’s goals and areas of intervention refer to medical devices only.

5.2. User and Professional Narratives

5.2.1. Initiative

In Hungary, common routes for first contact between the user and the service delivery system is through peer support, word of mouth, NGO workers, and doctors. There are no AT centers nor advocacy organizations working in the field of assistive technology; thus, knowledge transfer might be challenging regarding both assistive technology in general and the public provision system.

As argued above, the legislation states that transferring accessible information on AT service delivery is the prescribing doctors’ responsibility. This responsibility is significant, as it is primarily up to them if users are aware of their opportunities during public provision. However, participants highlighted that finding a competent doctor is not effortless and often lacks adequate information. A woman with chronic conditions described how she purchased her first wheelchair:

“I was told I would get a wheelchair; I was advised not to walk. The rehabilitation doctor prescribed a mechanic wheelchair in the hospital that I had to buy. They told me I had
two options, two distributors. I know now that there were other companies . . . but I was
told so. Given how much I knew about this . . . I was glad I was alive.”

The health professionals participating in the study confirmed the lack of profes-
sional competence by explaining that assistive technology intervention was not—or not
adequately—part of their educational curriculum. Consequently, the extent to which doc-
tors can fulfill their obligations, namely, informing their patients, depends on their personal
and professional experiences.

5.2.2. Assessment

Based on the interview narratives, the evaluation of user needs varies considerably,
depending on the product type and the context of the doctors’ appointments. For instance,
users who received their mobility device after hospital treatment were more likely to
have had contact with other professionals—psychologists, physiotherapists, and social
workers—who supported doctors with the assessment.

The assessment is the doctors’ responsibility; however, doctors are thought to be often
underinformed and inexperienced, which means there is a possibility of inappropriate
selection. Most of the user participants have had experiences with uncomfortable, unusable
mobility devices received through public provision. Discomfort might be so demotivating
that users would rather not use the type of device, as was the case for an interview
participant who gave up on their prosthetics.

“I have a prosthetic I cannot use. I have a big belly and have never been able to put it
on, not in my entire life. It was put on me the first time. I walked to the shop. It fell off.
( . . . ) It was so uncomfortable that I asked the doctor not to prescribe it again. It was
four years ago.”

5.2.3. Selection

The output of the assessment and selection is a prescription signed by a doctor. This
prescription contains the name and ISO code of the selected product and an ICD code
representing the medical need. The doctors can prescribe a product from the national list
mentioned above; however, they are obliged to choose the cheapest appropriate product,
unless there is a professional argument in favor of a costlier device. These arguments do
not include the users’ preferences, only health conditions or costs.

The list of products is definite; changes are not possible even if the user can pay an ad-
ditional charge. Visually impaired users highlighted that the most significant improvement
would be to subsidize mainstream technology, for example, smartphones, which would be
exceptionally useful for persons who need screen readers. Another significant shortcoming
is the scarce availability of communicational devices. For these reasons, users often try to
purchase products with questionable quality from the secondary market.

The devices on the list are basic; complex needs requiring personalized solutions are
often left unattended. As a physiotherapist said,

“These are the hard cases, special people. For example, we have a very short patient in
the hospital who needs a wheelchair. She is tiny. Pediatric wheelchairs are not suitable for
her, she would need unique sizing, but nothing like that is eligible for public provision.
She must have been provided with a wheelchair; she has the right to be mobile just like a
person with an average size.”

Despite what is written in the National Disability Policy Program [77], there seems to
be no practical effort to revise the list. The professionals could not name definite reasons
and reported that they feel like they do not have the power to influence decisions like this.
Neither have the users. When people think they are not in the position to choose certain
things or some options are not available, they tend not to wish for those [78]. The mother
of a child with severe multiple disabilities put it this way:

“There is the risk of being asked, why you are so choosy . . . So, I became more or less
satisfied with the worse option. At least there is that.”
It is possible to receive personalized equipment or devices that are not on the list if a doctor can justify the medical need. It is the so-called equity subsidization of individuals. Users must apply by providing a signed prescription, medical history, and a price offer from a manufacturer or distributor. The health insurance committee—which does not necessarily meet the applicant in person—considers the medical history, the severity of health conditions, medical reasonableness, costs and cost-effectiveness, if using that specific device is inevitable, and the expected health profits. As users highlighted, this process can take months, and the final decisions depend primarily on the AT budget of the health insurance fund.

“I don’t know if it is official information, but the doctors used to say that applications in the first months of the year are more successful. They run out of money until the end of the year.” (A health professional)

Furthermore, more professionals found that younger and more active persons are more likely to have their applications evaluated positively, supposedly because of cost-efficiency considerations.

5.2.4. Authorization

Every year, a certain amount of money is allocated for AT public provision from the central budget. Allocation is performed annually, meaning that the amount is calculated based on the expenditures in the previous years and is not flexible. One cannot say whether the funding is enough to meet the demand because a limited number of device groups are subsidized, and unmet needs are not measured. The government allocates the budget to the health insurance fund, which pays for the contracted distributors directly after a prescription is used on their device. However, users do not necessarily know about these processes and agreements.

Suppose we compare two persons with the same AT needs. One can afford to buy a device themselves, and the other needs a subsidy. The first one can act as a general consumer and buy a product they like, from a distributor they prefer, without proving medical eligibility. The second needs to visit a doctor and ask for a prescription. The doctor then prescribes a product from the national list, keeping in mind that the cheapest applicable product is preferable. The user then needs to visit a pharmacy or a distributor contracted to the health insurance fund and pay the co-payment. This distinction is what Steel et al. [20] refer to as the shopping experience versus the prescription experience.

The co-payment ranges from 2 to 55 percent of the price depending on the product type. Some devices are free of charge if the person has a public health card, which is provided to socially disadvantaged persons who need financial support to maintain or improve their health status.

5.2.5. Implementation

Implementation—delivery, fitting, and training—largely depends on the type of AT. Except for custom-made products, the regulation is not straightforward regarding who is responsible for these steps and the minimum standards. In other words, it is not guaranteed that the devices are adapted to the users; as a result, users cannot be sure that they will not have to change their habits or lifestyles. As one of the elderly interview participants narrated, “This is not right. Let them adapt the devices to us, do not make us adapt to them!”

However, this step is essential as assistive technology may even work as a barrier to autonomy. For instance, mobility AT user participants reported having experiences with uncomfortable equipment leading to abandonment.

“They gave me a rollator. I was given the rollator when I was in rehabilitation. I was told I should not walk around with a cane. They told me the rollator would be fine. It turned out to be unusable. I am 5–6 cm higher than I should be. I cannot use it. So . . . I have it at home; I put flowers on the top.” (A woman with chronic conditions)
A similar problem was found with the lack of training services. A doctor in a rehabilitation hospital reported that patients often fear leaving the facility because they are not confident in AT use.

“Elderly people like spending time in our hospital. They like being here because they are scared to go home. ‘Who will help me at home?’ There is no assistant there. They are provided with a device but fail because they do not know how to use it. Nobody checks that.”

In addition to difficulties in physical functioning, a common reason for the non-use of AT is that the users do not feel they can integrate the device into their identity and self-image [79,80]. Since the Hungarian national list of devices is definite, making choices regarding features such as color or design are mostly impossible. For cases requiring personalization, participants revealed relying on the goodwill of the distributors.

5.2.6. Management and Follow-Up

Maintenance and periodic verifications might be needed when using a particular assistive device. Users reported the most significant inconveniences in this regard. As a young man with quadriplegia described, for him, “every day is a terror. You never know which day your device breaks down. You never know what comes next.” Every product on the Hungarian list has a “warranty period.” It does not only mean that management is guaranteed for this period but that no other product from the same ISO group can be prescribed during the period of its use. Thus, for instance, if a person needs an electric wheelchair for outside and a manual wheelchair for inside, they cannot be provided with both.

Maintenance is the distributors’ responsibility. The process is the same as when a new product is provided, i.e., the users need a prescription from a doctor, and the pre-defined maintenance costs are paid by the health insurance fund directly to the distributors. A young wheelchair user explained the maintenance process in detail:

“Let’s take an example of breaking down with an electric wheelchair. What can I do? Say, I have no family or friends to help me, and the neighbors are not around. I called the service station, ‘Good afternoon! I have an urgent issue. My wheelchair broke down, I have a flat tire, I have to go to work in the morning; I cannot miss a workday, please help.’ The answer is: Have I already made it to the doctor to get a prescription? They will not do a thing until I have the prescription in my hands. How could I get to the doctor with a flat tire? If I need an appointment, that might take weeks. ( . . . ) When the serviceman comes for the prescription, and I’m lucky, he tells me they have the spare parts at hand. If not, I only need to wait for the order to arrive, and it’s done already! (laughs ironically)”

The long and challenging process encourages the users to find other ways to access AT. They turn to family, friends, and peers to find support. The outcome of the service delivery was found to be dependent on the people in the process, including the attitude of the professionals: “What makes this system work is human added value. Sometimes, there is a doctor or an administrator somewhere who takes the trouble. We are very vulnerable.” Both users and professionals reported that distributors “try their best,” although they strive to avoid deficits:

“They helped, but after that, they told me I should be silent for eight years. I should keep my mouth shut, don’t do anything, don’t mess it up.” (Electric wheelchair user man, eight years refer to the warranty period for wheelchairs.)

6. Discussion

This article aimed to investigate if the Hungarian assistive technology service delivery is person-centered through the users’ choices. The author argues that the Capability Approach is applicable because of the significance of personal choices. The findings highlight that the principle of each person as an end cannot be found in policy or practice. However, many pieces of legislation refer to assistive technology—or rather medical devices—that do not serve and protect the users’ interests. The users’ freedom of choice can be violated
at many points in the process, and the active participation of end users is not guaranteed. Allocation is standardized and inflexible, aiming to prevent overspending.

The service delivery is the same standard process regardless of the users’ needs and the assistive technology in question. It has been evidenced that people use assistive technology if they believe it improves their abilities and empowers their capabilities for their personal goals and values. These terms are not generalizable as each person has unique and diverse needs, personal characteristics, and different social, environmental, physical, political, financial, and cultural circumstances that should be respected. In the Hungarian process, while medical needs are acknowledged, the individual, socioeconomic, and environmental characteristics are not; in other words, the conversion factors are unrecognized. Whether the user can convert the assistive solutions into valued beings and doings is not considered. Instead of compensating for social disadvantages, this support system further limits the opportunities of people who experience multiple and intersectional inequalities, for example, poor people with functional limitations and persons with disabilities living in rural areas. We might assume that the freedom of choice of people and families with the most disadvantaged backgrounds can be hindered to the greatest extent.

The assistive solution is a hardly applicable term in Hungarian service delivery; services like environment modifications or personal assistance are not considered and provided with devices. The end of the service delivery is a person owning a device. The follow-up service is entirely missing. To date, not even the functional outcomes are measured. There is no available information regarding how the use or non-use of the devices changed the users’ subjective well-being and quality of life. On the other hand, follow-up could provide information for policymakers on the efficiency of the investment and whether it was worth it to provide a device with a subsidy. Thus far, this information has not shaped decisions regarding AT provision expenditures.

Behind the standardized system lies the assumption that doctors can and should be responsible for the decisions regarding assessing needs and selecting appropriate devices. The extent to which they involve the users in decision making depends on their knowledge, competence, experiences, attitudes, and goodwill. The same was true for the AT distributors in cases where users need personalized solutions or modifications. Persons with disabilities can find themselves at the bottom of hierarchical relationships based on their health conditions. These factors indicate a medical approach towards AT and disability.

Furthermore, personal choices are hindered by the inflexibility of the system. The list of subsidized devices is an outdated, definite list, complemented with minimal options provided by the equity subsidization of individuals. The content of the list does not demonstrate the needs of potential users; in other words, it does not consider the needs that shape the range of devices eligible for public provision. Instead, the satisfaction of needs depends on the available devices, suggesting a device-centered logic instead of a person-centered approach. The outcomes of the provision are not measured, but the costs are carefully controlled. The expenditures are adjusted to the annual budget rather than the emerging needs.

Evidence shows that people who do not feel involved are more likely to be dissatisfied and abandon AT, leading to ineffective service delivery and, possibly, an increase in care needs. The prevention of overspending could have a role in legal regulation without being the fundamental principle and without excluding a person-centered approach. The promotion of recognizing user rights and choices could be the first step towards a person-centered approach.

7. Recommendations

Considering the characteristics of the current Hungarian system, some policy recommendations can be formulated toward person-centered service delivery to enhance the users’ freedom of choice.

First, as evidence shows, an interdisciplinary team—with diverse professional knowledge and with the user at the center of service delivery—can address needs and provide
the appropriate assistive solutions to the greatest extent. One important step would be for
the legislator to assign responsibility to professional actors other than doctors. At the same
time, the active involvement of the users should be stated within the legislative and policy
documents with institutional guarantees.

Second, the latest version of the ISO:9999 standard should be adapted and used. The
most important advantage of this would be that the concept of assistive technology could
be reconsidered, and a broader range of devices could be provided with subsidies. On the
other hand, the target group might also be reviewed, leading to a shift in the approach to
disability, i.e., moving past the discourse that potential users are patients with illnesses and
health conditions.

Correspondingly, the concept of assistive solutions should be adapted. A significant
shortcoming of the current provision is the lack of related services, including adaptation,
training, and follow-up services. Furthermore, the potential of AT and assistive solutions
reaches far beyond the individual level.

Any reform undoubtedly has cost implications. As financial resources are limited, pub-
lc provision should not only be ethical but effective. Moreover, reform considerations by
policymakers are shaped by institutional arrangements, different interests, public debates,
support among citizens, conditions and constraints to policy change, etc.; thus, complex
social systems might change depending on many factors, at the cost of long-term processes.

The ethical basis of AT provision is that it is a social responsibility to support persons
with disabilities in overcoming disadvantages. These carry the principles of equality and
justice; political will and engagement are essential in realizing these values. Policymakers
should not—exclusively—consider the allocation of AT as expenditure but as an investment
in users. A universally designed service delivery is proposed, which should not necessarily
mean infinite choices, but that the type of disability, support needs, or financial status of the
users should not determine and limit accessibility. By understanding and applying the UN-
CRPD principles, respecting wills, preferences, and rights (see, e.g., [81]), policymakers can
implement ideas for providing support and assistance during decision-making processes.

8. Limitations

Some limitations of the study should be noted. The findings are not generalizable;
qualitative interviews aimed to understand the users’ and professionals’ experiences. Our
findings do not represent the perspectives of all assistive technology users and profes-
sionals in Hungary. In addition, the interviews were conducted in Budapest. Census
data show that in Hungary, people living in poverty and families with disabled members
are overrepresented in the most disadvantaged regions in Hungary, where labor market
opportunities, accessibility, and access to services are most often limited [36,37]. These
inequalities should be explored with more data and research. As mentioned above, further
research is needed to explain the unmet needs.

However, the findings raise important questions regarding the service delivery process
that professionals and policymakers should be aware of. How AT service delivery is organized
substantially affects the lives and well-being of people with disabilities and their families.

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Notes: 1. However, the term assistive technology and the abbreviation AT are used in this article, no non-device technological assistive solutions are eligible for public provision in Hungary. Moreover, the term medical device is used in official English-language legal documents.

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