

# THE ROMANIAN WHEELCHAIR SECTOR NEEDS ASSESSMENT

## RESEARCH REPORT



### Authors:

**Gabi Mihaela Comănescu**  
(Motivation Romania Foundation)

**Claudia Ungureanu**  
(Motivation Romania Foundation)

### Consultant:

**Dr Rosemary Joan Gowran**  
University of Limerick, Ireland (on behalf of ISWP)

**October 2017**

# **The Romanian wheelchair sector needs assessment**

## **Research report**

|  |  |
|--|--|
| <b>Subaward Number:</b>                    | 0043806 (410495-1)   |
| <b>Subrecipient:</b>                       | Motivation Romania Foundation  |
| <b>Project location:</b>                   | Romania  |
| <b>Date:</b>                               | October 15 <sup>th</sup> , 2017  |
| <b>Authors:</b>                            | <p><b>Gabi Mihaela Comănescu</b> (Motivation Romania Foundation):<br/><i>Executive Summary, Chapter I Background, Subchapter II.1 Level of need, Subchapter II.2 Funding (Part 1 Public funding), Subchapter II.4 In-country providers, Subchapter II.6 Other research, Subchapter II.7 Stakeholders meetings, Chapter III Conclusions &amp; Recommendations</i></p> <p><b>Claudia Ungureanu</b> (Motivation Romania Foundation)<br/><i>Executive Summary, Subchapter II.2 Funding (Part 2 Private funding), Subchapter II.3 Access to wheelchairs and wheelchairs services, Subchapter II.4 In-country providers, Subchapter II.5 Formal education &amp; Training, Subchapter II.7 Stakeholders meetings, Chapter III Conclusions &amp; Recommendations</i></p> |
| <b>Affiliate coordinator / consultant:</b> | <b>Dr Rosemary Joan Gowran</b> , University of Limerick, Ireland<br>(on behalf of ISWP)  |

This research was made possible by the generous support of the **International Society of Wheelchair Professionals** (ISWP). The contents are the responsibility of Motivation Romania Foundation (MRF) and do not necessarily reflect the views of ISWP.

|                              |
|------------------------------|
| <b>LIST OF ABBREVIATIONS</b> |
|------------------------------|

|       |  |
|-------|--|
| CHIA  | County Health Insurance Authorities                                  |
| CRPD  | United Nations Convention on the Rights of Persons with Disabilities |
| FSA   | Financial Supervisory Authority                                      |
| GD    | Government Decision  |
| ICF   | International Classification of Functioning, Disability and Health   |
| ISWP  | International Society of Wheelchair Professionals                    |
| LLC   | Limited Liability Company  |
| MRF   | Motivation Romania Foundation  |
| NAMMD | National Agency of Medicines and Medical Devices                     |
| NAPD  | National Authority for Persons with Disabilities                     |
| NHIA  | National Health Insurance Authority                                  |
| PwD   | persons with disabilities  |
| SCI   | spinal cord injuries   |
| WHO   | World Health Organization  |
| WSTP  | Wheelchair Service Training Package                                  |

# CONTENTS

|  |         |
|--|---------|
| EXECUTIVE SUMMARY .....  | page 7  |
| <b>I. BACKGROUND</b> .....                                       | page 10 |
| <b>I.1. PERSONS WITH DISABILITIES</b> .....                      | page 10 |
| I.1.a) The Romanian context .....                                | page 10 |
| I.1.b) Categories of persons with disabilities .....             | page 11 |
| I.1.c) Policy & legislation .....                                | page 14 |
| <b>I.2. WHEELCHAIR SERVICE DELIVERY</b> .....                    | page 17 |
| I.2.a) Appropriate wheelchair service delivery .....             | page 17 |
| I.2.b) Characteristics of wheelchair users in Romania .....      | page 20 |
| <b>II. RESEARCH</b> .....  | page 25 |
| <b>II.1. LEVEL OF NEED</b> .....                                 | page 26 |
| II.1.a) Methodology .....  | page 26 |
| II.1.b) Findings .....   | page 26 |
| <b>II.2. FUNDING</b> .....                                       | page 30 |
| II.2.a) Methodology .....  | page 30 |
| II.2.b) Findings .....   | page 31 |
| <b>II.3. ACCESS TO WHEELCHAIRS AND WHEELCHAIR SERVICES</b> ..... | page 35 |
| II.3.a) Methodology .....  | page 35 |
| II.3.b) Findings .....   | page 35 |
| <b>II.4. IN-COUNTRY PROVIDERS</b> .....                          | page 40 |
| II.4.a) Methodology .....  | page 40 |
| II.4.b) Findings .....   | page 40 |
| <b>II.5. FORMAL EDUCATION &amp; TRAINING</b> .....               | page 44 |
| II.5.a) Methodology .....  | page 44 |
| II.5.b) Findings .....   | page 44 |

**II.6. OTHER RESEARCH** ..... page 55

II.6.a) Methodology ..... page 55

II.6.b) Findings ..... page 55

**II.7. STAKEHOLDERS’ MEETINGS** ..... page 57

II.7.a) Methodology ..... page 57

II.7.b) Stakeholder participants ..... page 547

II.7.c) Findings ..... page 59

**III. CONCLUSIONS & RECOMMENDATIONS** ..... page 62

**IV. ANNEXES** ..... page 67

**V. BIBLIOGRAPHY** ..... page 68

## TABLES

|          |  |    |
|----------|--|----|
| Table 1  | – Categories of persons with handicap by type of impairment .....                                    | 13 |
| Table 2  | – CRPD in Romania .....  | 14 |
| Table 3  | – Legislation relating to social protection of PwD in Romania .....                                  | 15 |
| Table 4  | – WHO eight steps of wheelchair service provision .....  | 19 |
| Table 5  | – Physical environment accessibility .....   | 24 |
| Table 6  | – Number of wheelchairs subsidized by the state between 2010 and 2016 .....                          | 27 |
| Table 7  | – Information about the healthcare system in Romania .....   | 31 |
| Table 8  | – Synthesis of relevant pieces of legislation in the health field regarding wheelchairs .....        | 33 |
| Table 9  | – Distribution of universities and bachelor / master programs by development region in Romania ..... | 45 |
| Table 10 | – Master programs presentation .....   | 46 |
| Table 11 | – Curriculum content .....   | 48 |
| Table 12 | – University formal training programs .....  | 50 |
| Table 13 | – Motivation trainers on WSTP .....  | 53 |
| Table 14 | – Attendees at the stakeholder meetings .....  | 57 |

## FIGURES

|           |   |    |
|-----------|---|----|
| Figure 1  | – The biopsychosocial model of functioning, disability and health .....                                     | 11 |
| Figure 2  | – Categories of persons with disabilities in Romania .....  | 12 |
| Figure 3  | – Types of wheelchairs commonly used in Romania .....   | 18 |
| Figure 4  | – Level of education for general population, persons with any type of disability and wheelchair users ..... | 21 |
| Figure 5  | – Employment rates in general population, PwD in general, as well as in wheelchair users .....              | 22 |
| Figure 6  | – Types of wheelchairs used in Romania .....  | 23 |
| Figure 7  | – Comparison between number of wheelchairs approved and reimbursed .....                                    | 28 |
| Figure 8  | – The bureaucratic process of obtaining a subsidized wheelchair .....                                       | 36 |
| Figure 9  | – Way to website information about wheelchair suppliers .....   | 39 |
| Figure 10 | – Imported wheelchairs' value .....   | 41 |
| Figure 11 | – Prices of manual wheelchairs situated under 1,000 USD .....   | 43 |
| Figure 12 | – Bachelor and Master programs .....  | 45 |
| Figure 13 | – Bachelor programs presentation .....  | 46 |

## EXECUTIVE SUMMARY

People with a personal posture and mobility impairments living in Romania require appropriate wheelchairs, services, environment accessibility, and support to enable equal opportunity to good quality of life, education, employment and community (re)integration. Currently the healthcare scheme and a medically focused welfare system are underfunded and poorly managed to meet peoples' personal posture and mobility needs.

A clear understanding of wheelchair service delivery in Romania is lacking, given limited statistical data and research evidence available. In order to address the needs of people who use wheelchairs, greater awareness and understanding of these issues is required.

This research aims at offering elements to create an overall picture of the wheelchair services sector in Romania. The study is divided into three parts. Section one provides an overview of the Romanian context, considering the trajectory of disability, policy and visible characteristics of wheelchair services. Section two presents the scope of research conducted utilizing mixed methods to gain an in-depth understanding of the current situation from a number of perspectives. Based on this information Section three generates conclusion and recommendations for improving the current wheelchair service delivery system.

### I. BACKGROUND

The "Background" chapter defines wheelchair users within the category of persons with disabilities in the context of the Romanian legislation framework. Starting with the World Health Organization (WHO) guidelines, the chapter specifies what the national and international regulations in force are and offers a perspective of the wheelchair users' situation and needs; thus, the chapter describes their access to healthcare services, their participation to education, employment and social life. Romania signed the **United Nations Convention on the Rights of Persons with Disabilities (CRPD)** in 2007 and ratified it in 2010; thus, the Romanian legislation assumes to a certain extent the Convention's recommendations about the right to personal mobility. Even so, persons with disabilities remain one of the most vulnerable groups in Romania facing many challenges to access education, employment and daily living opportunities on an equal basis with others.

### II. RESEARCH

#### II.1. LEVEL OF NEED

Using various sources of data, this section offers estimations of the number of persons that need and/or use a wheelchair in Romania. Statistics of the national authorities, findings of other research conducted by Motivation Romania Foundation (MRF), data from the National Health Insurance Authority on the number of wheelchairs subsidized by the state between 2010 and 2016 and estimations from international organizations were combined to establish a picture of people requiring wheelchairs. Based on international figures, is it estimated that the percentage of people requiring a wheelchair should be around 1.5%; referring to Romania's population (19,820,000), approximately 297,000 people would need a wheelchair.

## II.2. FUNDING

This section describes the national public health insurance scheme for the procurement of a wheelchair specifying the following elements: legislation in place, institutions involved, budget allocation, subsidy, reference price and suppliers' authorization. A survey among the private insurance companies was conducted to investigate insurance schemes which include wheelchair products and services (if any). The Romanian government provides through the national health scheme a small subsidy for a wheelchair every five years (currently about USD 263). The subsidy covers only the wheelchair product cost excluding wheelchair services. Private insurance does not specifically cover the cost of a wheelchair; this is usually included within an overall lump sum compensation for invalidity.

## II.3. ACCESS TO WHEELCHAIRS AND WHEELCHAIR SERVICES

Information about procedures to access wheelchairs and wheelchair services (conditions, steps and necessary documents) and difficulties encountered in practice are included in this section.

The process of prescribing a wheelchair does not include a comprehensive assessment. Referred by the family physician, the user goes to the specialist physician (neurologist or orthopedist) and gets a prescription for a wheelchair. The prescription includes no specific details or requirements about the wheelchair, just a general recommendation about the need for a device. With the prescription, the person submits a request to the County Health Insurance Authority (CHIA). Once approved by CHIA, the user gets a voucher and the approved list of the local contracted suppliers. Suppliers provide a wheelchair within the agreed fixed price, this does not include wheelchair services.

## II.4. IN-COUNTRY PROVIDERS

Wheelchairs products in Romania are imported, usually at low cost and quality; they are delivered by a number of more than 70 suppliers in all regions of the country. Follow up and maintenance services are limited. This section specifies types and prices of wheelchairs offered, providing examples of products that are commonly used.

## II.5. FORMAL EDUCATION AND TRAINING

Physical therapists are trained within the higher education system comprising 27 bachelor programs and 10 master programs. Some related subjects on wheelchair services are incorporated within in a few of the programs course content, however no specific courses exist which solely address this subject. Non-formal programs with specific focus on WHO wheelchair service training packages are provided only by Motivation Romania Foundation.

## II.6. OTHER RESEARCH

This section reviews existing research in the Romanian wheelchair sector. Limited published scientific research exist regarding the wheelchair user population and service delivery.

## II.7. STAKEHOLDERS MEETINGS

Stakeholder meetings (involving key stakeholders as wheelchair service users, providers and policy makers) generated a collective perspective, revealing a number of priorities to build a sustainable wheelchair service delivery system. These priorities included increasing awareness of all, at societal, government, provider and user levels; national review of services, establishing a database with overall service needs; education and training; accessible public environments.



### **III. CONCLUSIONS AND RECOMMENDATIONS**

This research provides the basis for Romania Strategic Plan for the wheelchair sector, that aims at designing a strategy for improving the situation of wheelchair users, in order to “enable persons with disabilities to live independently and participate fully in all areas of life”<sup>1</sup>. A national review of wheelchair services is required to develop a national database, assessment and delivery processes, education for all to raise awareness as to the importance of appropriate wheelchair provision, education and training for personnel involved. Government commitment to address wheelchair service delivery in Romania is essential to develop a sustainable system.

---

<sup>1</sup> United Nations Convention on the Rights of Persons with Disabilities:  
<https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html>

## I. BACKGROUND

The purpose of this report is to understand the development of wheelchair service delivery in Romania and identify what changes are required to improve the current system. A situational analysis was conducted to understand how wheelchair services are prioritized given the rights and supports available for persons with disabilities living in Romania.

### I.1. PERSONS WITH DISABILITIES

#### I.1.a) THE ROMANIAN CONTEXT

Persons with disabilities (PwD) in Romania face many challenges to access education, employment and daily living opportunities on an equal basis with others. Historically PwD were institutionalized with little or no opportunity to actively participate within society. Prior to the revolution in 1989, the communist government chose to ignore the needs of PwD, failing to respect peoples' basic human rights. Since 1990, Romanian policies acknowledge PwD all the rights that naturally belong to all citizens of any democratic state.

The legislative measures taken in Romania, the many projects funded by European funds aiming at the employment of PwD, development of social economy (sheltered workshops), awareness campaigns, all these have made the issues of people with disabilities more visible, more present. Thus, the social perception of people with disabilities has changed over the years.

Tolerance is greater when it comes to people with personal mobility (e.g. wheelchair users) and sensory disabilities (e.g. visual and hearing impairments) compared to other groups. However, according to public perception, people with mental and physical disabilities are one of the groups most often subject to discrimination. Romania has already brought anti-discrimination provisions in the employment and social assistance laws, but further efforts are needed to raise awareness and establish the impact of the provisions. The policy focus is shifting from a medical model to an integrated biopsychosocial model of functioning, disability and health. This paradigm shift should take into account all the components that can influence a person's lived experience. However, in practice changes are slow, PwD face many barriers and the Romanian society is confronted with the discrepancy between the existing social policies and their implementation.

Inconsistencies exist regarding terminology used and the application of laws into practice. For example Law no.448/2006 regarding the protection and promotion of the rights of persons with disabilities currently represents the main piece of legislation that governs this field, introducing the term “**disability** as the generic term for impairments, limitations of activity and participation restrictions”, as defined according to the International Classification of Functioning, Disability and Health (ICF)<sup>2</sup> (WHO 2001).

---

<sup>2</sup> World Health Organization, International Classification of Functioning, Disability and Health: <http://www.who.int/classifications/icf/en/>

The ICF adopts a universal model perspective including body functions and structures, activities and participation components, to define functioning and disability as a result of the interaction between a 'health condition' and 'personal' and 'environment' factors (see figure 1).

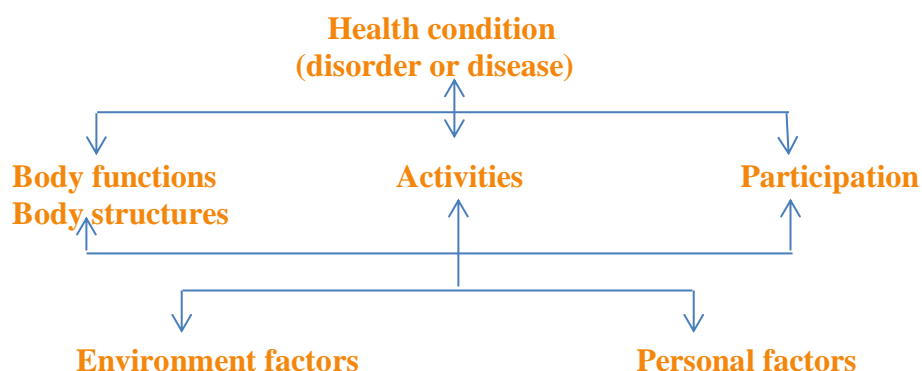


Figure 1. The biopsychosocial model of functioning, disability and health

Law no.448/2006 only mentions the term “disability”, but, as with other Romanian legal documents in this area, it operates with the terms “persons with handicap” and “persons with invalidity” (see categories below). This represents a system, which applies a medical model, focusing on diagnosis rather than a holistic assessment of individual needs, thus limiting social benefits and resources provided to enable PwD to live independently with equality of opportunity. The overall approach affects the support and development of assistive technology provision, for example wheelchairs, the focus of this report.

#### I.1.b) CATEGORIES OF PERSONS WITH DISABILITIES

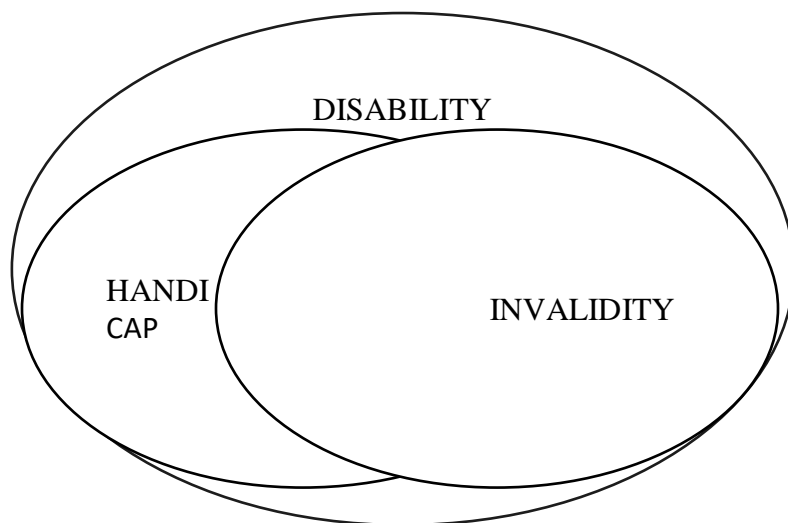
Giving consideration to Romanian legislation and the current allocation for resources, Persons with disabilities (PwD) include two categories of people, with wheelchair users placed within both:

- 1) **persons with handicap** = persons with health conditions, usually from a young age, who have not contributed to the pension system receive a handicap certificate and a handicap benefit/allowance. For example, a person born with cerebral palsy would be enlisted in this category, no matter if he/she has ever worked in his/her life. This category is managed centrally by the National Authority for Persons with Disabilities (NAPD<sup>3</sup>) and organized at county / Bucharest sector level by decentralized structures that operate under the coordination of the county / sector councils, called General Directorates of Social Assistance and Child Protection.
- 2) **persons with invalidity** = people who are permanently incapable of work because of illness or deficiency and are paid pensions. For example, in this category a person who has sustained a spinal cord injury could be included, if he/she had worked and contributed to the pension system before the accident. The pensions are based on a claimant's social insurance contribution and are not means tested.

<sup>3</sup> <http://anpd.gov.ro/web/>

At the end of March 2017, there were 784,527 persons with handicap certificate<sup>4</sup>; in parallel, 594,845 persons received invalidity pensions<sup>5</sup>, according to official figures made public by the Ministry of Labor and Social Justice, the main central authority in the disability field.

It is important to note that these two categories of persons overlap (see figure 2) to some extent, however, there is no available information to determine the extent of this overlap. Therefore pinpointing the precise size of the category of PwD is difficult. There may also be people with specific medical conditions affecting body structures or functions, limiting activity and participation that are not categorized within disability, indicating a further gap when determining the overall provision system.



*Figure 2. Categories of persons with disabilities in Romania*

However, the handicap and invalidity criteria have potential limitations, as some PwD (according to the ICF definition) might not meet the criteria, therefore they may not come under this figure. The data collected by Eurostat seem to confirm that there is potential this would be the case: 3,263,600 Romanians consider that they have a longstanding difficulty in activities of household care.<sup>6</sup>

There is willingness to create a unified system by establishing a combined database for persons with handicap and persons with invalidity. The NAPD is currently developing a process of harmonizing the two sets of assessment criteria.

Researchers indicate that PwD have a low quality of life, because of low income and other types of obstacles such as lack of accessibility; discrimination; poor health services; low access to education and labor market.<sup>7</sup> The Academic Network of European Disability elaborated in 2017 a report on how Article

<sup>4</sup> [http://www.mmuncii.ro/j33/images/buletin\\_statistic/ANPD\\_I2017.pdf](http://www.mmuncii.ro/j33/images/buletin_statistic/ANPD_I2017.pdf)

<sup>5</sup> [http://www.mmuncii.ro/j33/images/buletin\\_statistic/Pensii\\_I2017.pdf](http://www.mmuncii.ro/j33/images/buletin_statistic/Pensii_I2017.pdf)

<sup>6</sup> [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth\\_dsi080&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_dsi080&lang=en)

<sup>7</sup> Motivation Romania Foundation, "Life in wheelchair: from Isolation to Participation - Sociological Study on Wheelchairs and Wheelchair User Services in Romania", 2014: [http://motivation.ro/wp-content/uploads/2016/02/Studiu\\_SR.pdf](http://motivation.ro/wp-content/uploads/2016/02/Studiu_SR.pdf)

28 of United Nations Convention on the Rights of Persons with Disabilities<sup>8</sup> is implemented in Romania. It indicates that PwD have a poor standard of living, caused by low income. This finding is further supported by a study commissioned by MRF in 2009, which found that an entire average household including a person with disabilities had an income of about 60% below the national average level of households<sup>9</sup>.

As mentioned previously, presenting an accurate demographic of the Romanian population with disabilities in terms of types of impairment and age, is challenging due to the separation between the two categories persons with handicap and persons with invalidity (partly overlapping). Available figures indicate the following types of impairment for persons with handicap<sup>10</sup> at the end of the first quarter of 2017:

*Table 1. Categories of persons with handicap  
by type of impairment*

| <b>type of impairment</b> | <b>total</b>   | <b>children</b> | <b>adults</b>  |
|---------------------------|----------------|-----------------|----------------|
| <b>physical</b>           | 189,700        | 4,693           | 185,007        |
| <b>somatic</b>            | 151,208        | 12,298          | 138,910        |
| <b>hearing</b>            | 23,333         | 1,619           | 21,714         |
| <b>visual</b>             | 99,328         | 2,891           | 96,437         |
| <b>mental</b>             | 126,272        | 11,337          | 114,935        |
| <b>psychic</b>            | 89,680         | 11,323          | 78,357         |
| <b>associated</b>         | 93,920         | 16,118          | 77,802         |
| <b>HIV/AIDS</b>           | 7,344          | 189             | 7,155          |
| <b>rare diseases</b>      | 3,635          | 1,028           | 2,07           |
| <b>deafness-blindness</b> | 107            | 8               | 99             |
| <b>total</b>              | <b>784,527</b> | <b>61,504</b>   | <b>723,023</b> |

Persons with mobility impairments are not considered as an independent category by official statistics. They are included in the category of persons with physical disabilities, and may also be part of the associated impairments' or other categories. It is important to note that people who do not own a handicap certificate are not included in this data, adding to the challenge when trying to determine the extent and characteristics of wheelchair users living in Romania (*see II.1*).

<sup>8</sup> Academic Network of European Disability, "Country report on Social Protection and Article 28 United Nations Convention on the Rights of Persons with Disabilities", 2017: <http://www.disability-europe.net/country/romania>

<sup>9</sup> Romanian Academic Society, "Diagnosis: excluded from the labor market – Setbacks in the employment of persons with disabilities in Romania", 2009: <http://motivation.ro/wp-content/uploads/2016/02/Diagnostic-exclus-de-pe-piata-muncii.pdf>

<sup>10</sup> idem 4

## I.1.c) POLICY & LEGISLATION

Romania signed the **United Nations Convention on the Rights of Persons with Disabilities (CRPD)**<sup>11</sup> in 2007 and ratified it through Law no.221/2010, assuming the government's moral and legal obligation to implement it. The Optional Protocol to the Convention was signed by Romania in 2011, but it is not yet ratified (see table 2).

| <i>Table 2. CRPD in Romania</i> |                                   |                                  |
|---------------------------------|-----------------------------------|----------------------------------|
| <b>Romania</b>                  | signed                            | ratified                         |
| <b>UN CRPD</b>                  | September 26 <sup>th</sup> , 2007 | November 11 <sup>th</sup> , 2010 |
| <b>Optional Protocol</b>        | December 31 <sup>st</sup> , 2011  | no                               |

The CRPD includes the obligation of signatory governments to recognize and support persons with disabilities' right to personal mobility and assistive technology provision. It is important to state that without the right to personal mobility, people who have difficulty in walking or moving around have limited access to other rights stipulated by the CRPD: to enable independent living at home and in the community, accessing education, health, work and employment and participation in cultural life, recreation, leisure and sport. Therefore, access to mobility devices, such as wheelchairs, should be provided as a basic right rather than just afforded by those insured under the national health system.

In Romania, the NAPD was originally assigned as the central coordinating authority to implement the CRPD. Subsequently however another institution under Law no.8/2016 took on this role with the creation of the **Council for monitoring the Convention's implementation**, under the Parliament control. The council's main purpose is to monitor the exercising of rights for individuals with disabilities in residential public or private facilities, as well as hospitals and psychiatry units. The impact made by the council is not yet evident, as implementation of services is still under development, with personnel and infrastructures currently being established.

The Romanian legislation on disability assumes to a certain extent the Convention's recommendations about the right to mobility. The social protection of PwD is regulated mainly by three important pieces of **legislation** (see table 3):




-  Law no.448/2006 sets out the general framework of rights and obligations of persons with disabilities, dedicated to social integration and inclusion
-  Law no.292/2011 on social assistance defines and regulates the national welfare system
-  Government Decision (GD) no.655/2016 approves the National Strategy "A society without barriers for persons with disabilities" 2016 – 2020 and the Operational Plan for implementing the National Strategy

Table 3 provides the main aspects covered by these laws, with impact on all PwD in Romania:

---

<sup>11</sup> idem 1

*Table 3: Legislation relating to social protection of PwD in Romania*

|                        | General provisions (selection)  | Provisions on assistive technology  |
|------------------------|---|---|
| <b>Law no.448/2006</b> | PwD benefit from rights to: health protection and prevention, training, employment services, social assistance ( <i>i.e.</i> social services and social benefits), dwelling, transport, access to environment, access to culture, sport, tourism, legal assistance, fiscal facilities, and house calls for disability assessment.<br>The law sets out obligations for the public authorities to take specific measures in these fields.   | Assistive technology ensures “the access of persons with disabilities, with equal chances, to the physical, informational and communicational environment”. Specific measures should be taken by public authorities to promote and implement the “Access for all” concept and to support the research, development, production of and access to new assistive technologies. |
| <b>Law no.292/2011</b> | The law mainly refers to social assistance benefits and social services. It also describes the institutional system of social assistance in Romania:<br>- the central authority in this field is the Ministry of Labour and Social Justice <sup>12</sup> ;<br>- authorities at county level have the responsibility to fund specialized social services (usually residential services);<br>- local authorities (at city, town or village level) should finance basic social services, with the aim to enable the person to remain at home with family and community, preventing social exclusion. | One priority component of protecting the PwD refers to ensuring and facilitating access to (re)habilitation programs, medical devices meant to recover body structures and functions’ deficiencies, as well as to assistive technical devices.  |
| <b>GD no.655/2016</b>  | The National Strategy’s objectives refer to promoting:<br>- accessibility in all areas of life,<br>- full participation of PwD,<br>- non-discrimination,<br>- access to support services for employment, inclusive education and training,<br>- decent living conditions,<br>- access to good quality health services, and<br>- developing the statistics on disability issues.   | Assistive technologies and devices are defined as “any article, device or product used for increasing, maintaining or improving the functional capacities of persons with disabilities”.  |

<sup>12</sup> <http://www.mmuncii.ro/j33/index.php/ro/>

In conclusion, the legal documents listed above formulate the general framework of the policies regarding the access of persons in need to mobility devices. More specific references to wheelchairs appear in the legislation relating to health which is presented in the Research section (*see II.2 below*).

Despite these legal provisions, the current system of social assistance for PwD in Romania does not appear to be not oriented towards active support for reducing the level of dependence and indirect poverty. The focus is rather on **passive assistance based on social benefits** perceived as income rather than continuous services.



## I.2. WHEELCHAIR SERVICE DELIVERY

### I.2.a) APPROPRIATE WHEELCHAIR SERVICE DELIVERY

Persons with mobility impairments have difficulties with walking or moving around independently. For those requiring a wheelchair, appropriate wheelchair provision equips them with the means to participate in daily life, access education, employment, enhancing overall health, wellbeing and quality of life. As every person is different, providing a wheelchair to meet individual needs is essential. The WHO (2008) “Guidelines on the provision of Manual Wheelchairs in less resourced settings” define an **appropriate wheelchair as**

*“a wheelchair that meets the user’s needs and environmental conditions; provides proper fit and postural support; is safe and durable; is available in the country; and can be obtained and maintained and services sustained in the country at the most economical and affordable price”.*<sup>13</sup>

An individual’s lifestyle and living environment should be taken into account, in addition to his/her physical (postural and functional) abilities. For example for a person who has sustained a spinal cord injury, the level of injury, postural problems, decreased sensation, muscle tone issues, risk of pressure injury need to be considered alongside daily living activities.

An appropriately fitted wheelchair influences a persons’ posture and health condition and can prevent negative future conditions such as postural deformity and pressure injuries, in addition to lack of comfort and mobility difficulties. If appropriate, a wheelchair can increase an individual’s level of activity and independence.

A comprehensive assessment is required as part of the process to provide the right type of wheelchair to meet the needs of each wheelchair user. As an example, there are several **types of wheelchairs** available and most commonly used in Romania (see figure 3).

---

<sup>13</sup> World Health Organization, “Guidelines on the provision of Manual Wheelchairs in less resourced settings”, 2008:

[http://www.who.int/disabilities/publications/technology/English%20Wheelchair%20Guidelines%20\(EN%20for%20the%20web\).pdf?ua=1](http://www.who.int/disabilities/publications/technology/English%20Wheelchair%20Guidelines%20(EN%20for%20the%20web).pdf?ua=1)



*Photo 1. Orthopedic-type manual wheelchair*  
These wheelchairs are usually appropriate for users with limited or lack of ability to self-propel. Although recommended for temporary use, these wheelchairs are the most widely available for daily use in the Romanian market.



*Photo 2. Active manual wheelchair*  
These wheelchairs are adaptable for proper fit to meet active users' individual needs and provide good postural support and pressure relief.



*Photo 3. Positioning system*  
A smaller proportion of persons with mobility disabilities use **positioning systems** including multiple elements for postural support. These people lack balance and coordination and have reduced or non-existing motor functioning, high spasticity, low wheelchair mobility skills etc.



*Photo 4. Power wheelchair*  
Many people with tetraplegia and other complex health conditions would need a **power wheelchair**; provision is limited due to prohibitive costs.

*Figure 3: Types of wheelchairs commonly used in Romania*

According to WHO “Guidelines on the provision of Manual Wheelchairs in less resourced settings”<sup>14</sup>, wheelchair service delivery should be accompanied by eight key steps (**wheelchair services**). Table 4 presents a brief overview of each step:

| <i>Table 4. WHO eight steps of wheelchair service provision</i> |  |
|---|--|
| Step  | Brief description  |
| <b>1. Referral and appointment</b>                              | <ul style="list-style-type: none"> <li>- self-referrals of users</li> <li>- governmental or nongovernmental health and rehabilitation workers or volunteers working at community, district or regional level</li> <li>- potential users actively identified by some services</li> </ul>  |
| <b>2. Assessment</b>  | <ul style="list-style-type: none"> <li>- gathering information to help choose the most appropriate wheelchair for the wheelchair user from those available and the type of training the wheelchair user may need</li> <li>- individual assessment, taking into account lifestyle, home environment and physical condition</li> <li>- including two parts – interview assessment and physical assessment</li> </ul> |
| <b>3. Prescription (selection)</b>                              | <ul style="list-style-type: none"> <li>- developed together with the user, family member or caregiver</li> <li>- details the selected wheelchair type and cushion, size, special features and modifications + the training needs of the user to effectively use and maintain the wheelchair and cushion</li> </ul>   |
| <b>4. Funding and ordering</b>                                  | <ul style="list-style-type: none"> <li>- identifying a funding source and ordering the wheelchair</li> </ul>   |
| <b>5. Product preparation</b>                                   | <ul style="list-style-type: none"> <li>- preparing the wheelchair: assembly and possible modification to match the wheelchair user’s prescription (selection)</li> <li>- checking the wheelchair to make sure that it is safe to use and all parts are working properly</li> </ul>   |
| <b>6. Fitting</b>   | <ul style="list-style-type: none"> <li>- trying the wheelchair (checking size and adjustments, posture and pressure; checking fit while the wheelchair user is moving) + final adjustments</li> <li>- if necessary, additional fittings</li> </ul>   |
| <b>7. User training</b>   | <ul style="list-style-type: none"> <li>- user and caregivers are instructed on how to safely and effectively use and maintain the wheelchair and the cushion, and how to prevent pressure injuries</li> </ul>  |
| <b>8. Follow-up, maintenance and repairs</b>                    | <ul style="list-style-type: none"> <li>- check wheelchair fit and provide further training and support</li> <li>- maintenance and repairs</li> </ul> <p>It is appropriate to carry out follow-up activities at the community level as much as possible.</p> <p>If the wheelchair is no longer appropriate, a new wheelchair needs to be supplied starting again from step 1.</p>                                   |

<sup>14</sup> Idem 13





The brief overview presented in Table 4 represents an ideal guide to wheelchair services delivery, however many inconsistencies to this process appear to exist within the Romania context.

## I.2.b) CHARACTERISTICS OF WHEELCHAIR USERS IN ROMANIA

Based on information readily available, this section presents three MRF studies to outline the characteristics of people who use wheelchairs in Romania: “Life in wheelchair: from Isolation to Participation”, „Independent and active in the community – Research report about the situation of persons with spinal cord injuries in Romania” and the online application Accessibility Map.

1) MRF’s study entitled “Life in wheelchair: from Isolation to Participation”<sup>15</sup> provides a comprehensive perspective on the **situation of wheelchair users in Romania**. The survey was completed by using a questionnaire to guide observation, structured interviews and focus groups. It is important to note that participants (n=1034) in the study are also (potential) beneficiaries of MRF wheelchair services, therefore the results are not generalizable to national wheelchair user population. However, results provide an indication of impact of wheelchair assistive technology and services from a wheelchair users’ perspective and a foundation for future research.

A brief description of overall demographic, daily living characteristics and access to rights for this population is presented below:

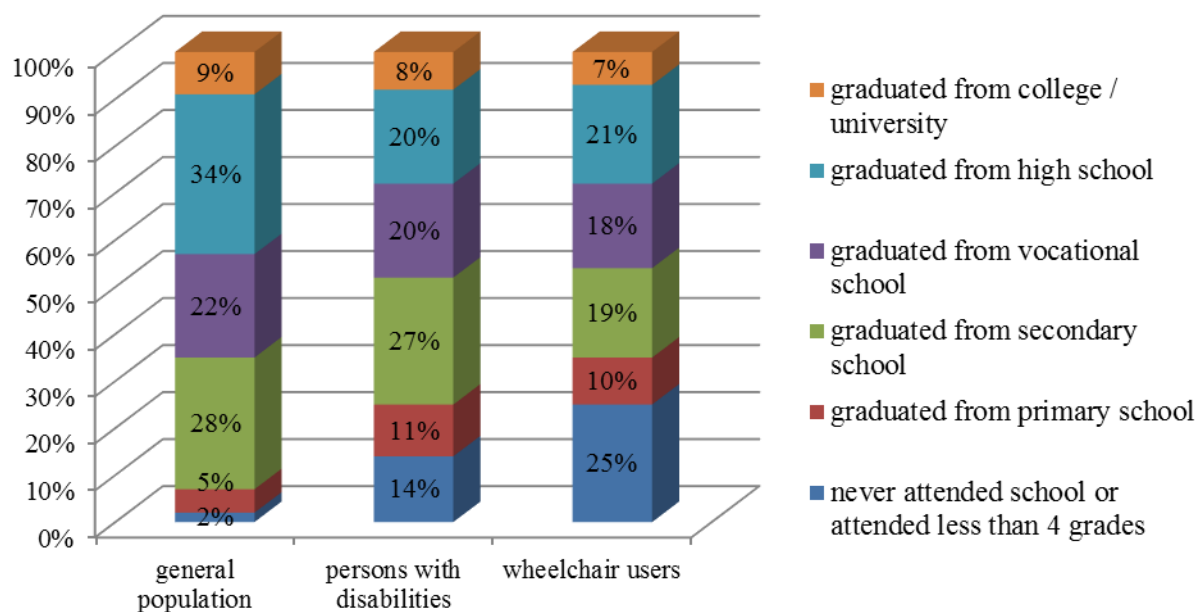
-  Age of participants included the following: twenty-eight per cent (n = 289) were children, fifty three per cent were between eighteen and sixty years old (n = 548) and nineteen per cent (n = 197) were over sixty. It was interesting to note that the majority of the beneficiaries aged eighteen and fifty nine years were not married (n = 289), did not have children (n = 367) and lived with their parents (n = 252).
-  Over half of those surveyed (n = 581, 56%) did not exceed the basic level of self-care abilities and wheelchair mobility skills.
-  In terms of right to **healthcare**, referring to rehabilitation, where persons with mobility disabilities are entitled to 14 to 21 days of rehabilitation per year, in centers throughout the country or as outpatients: the services covered by the healthcare system seemed insufficient to meet the needs of forty one per cent of the respondents (n = 423).
-  The number of wheelchair users accessing **education** is low and evidence suggests that a large proportion of respondents never attended school (17%, n = 177). Disability decreases opportunities and the duration of school attendance. A comparison between school attendance in the case of wheelchair users (children who have the required age and adults), as well as in the case of the entire category of PwD and that of the general population<sup>16</sup> was made. Results indicated that the percentage of PwD who did not attend school (14%) is 7 times higher than that

---


<sup>15</sup> Idem 6

<sup>16</sup> The numbers for the entire category of PwD are taken from the document at footnote 9. The data referring to the general population mentioned in the report are taken from the 2002 National Census.

of general population (2%), while for wheelchair users, it is 12 times higher (25%) (see Figure 4).



*Figure 4. Level of education for general population, persons with any type of disability and wheelchair users*

-  The survey indicated that, as for the integration on the **labor market**, when compared to the general population, the proportion of PwD who are employed was notably reduced<sup>17</sup>, and this is valid also for wheelchair users<sup>18</sup>. In many European countries the rate of PwD who are employed can be as high as 50%<sup>19</sup>.

<sup>17</sup> The employment rate of PwD (who have the required age and work capacity) is about 15% (source: presentation made by the President of the NAPD, December 2016)

<sup>18</sup> The employment rate in general population has ranged around 60% in the last several years; it was 61,60% in 2016, according to press release no.98/18.04.2017 of the National Statistics Institute:

[http://www.insse.ro/cms/sites/default/files/com\\_presa/com\\_pdf/somaj\\_2016r.pdf](http://www.insse.ro/cms/sites/default/files/com_presa/com_pdf/somaj_2016r.pdf)

<sup>19</sup> Idem 9

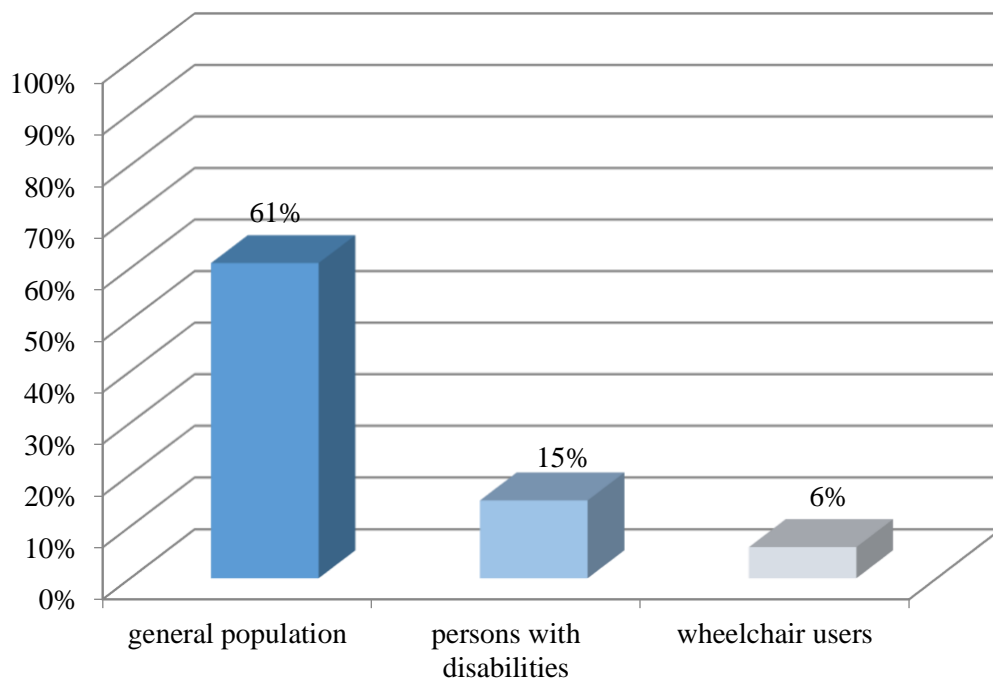


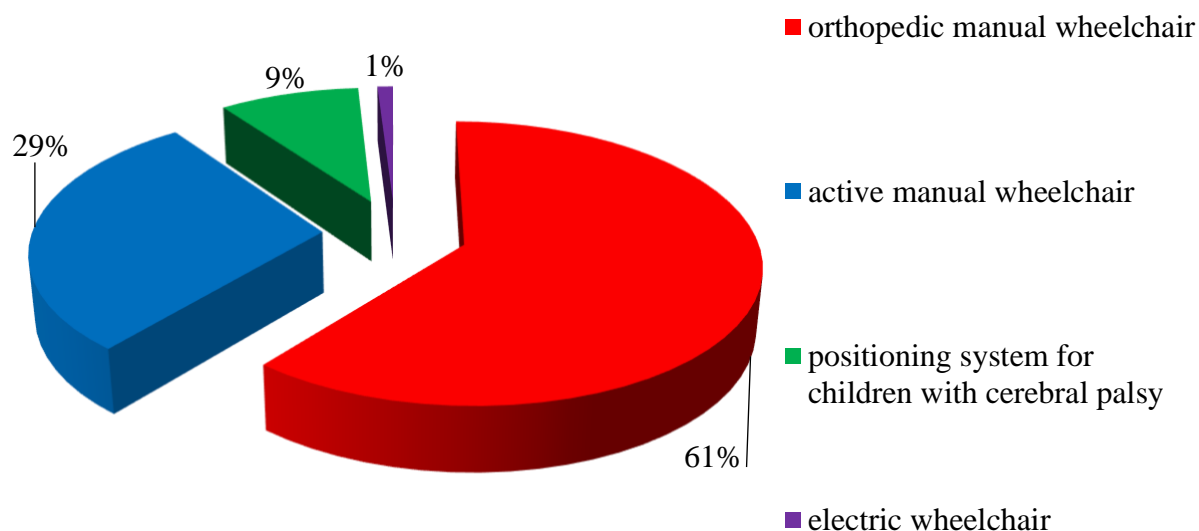
Figure 5. Employment rates in general population, PwD in general, as well as in wheelchair users.

Participants in the study (wheelchair users’) described their perceptions of **discrimination** as either attitudes of specific individuals in private or professional capacity, or at system level and included the following examples:

- poor implementation of legal provisions regarding accessibility of public buildings and transportation;
- low number of persons who have access to medical rehabilitation services;
- lack of policies that really support access to assistive technology and high quality mobility devices;
- perpetuated prejudice that adults or children with mobility disabilities also have, as a rule, learning disabilities, the prejudice that PwD cannot work;
- lack of support and home care services;
- lack of consistency in policies that support positive discrimination for employment.

In order to find out what **types of wheelchairs** used, processing findings of “Life in wheelchair: from Isolation to Participation”<sup>20</sup> obtained a general description:

<sup>20</sup> Idem 7



*Figure 6. Types of wheelchairs used in Romania*

Considering the need of having a wheelchair appropriate for each individual's needs, evidence indicate that generally speaking **wheelchairs do not have many adaptations** and only 72% of the provided manual wheelchairs have a cushion (not included here are positioning systems and power wheelchairs that have an integrated cushion). The main reason for this may be the lack of information on behalf of the wheelchair users, the additional cost, as well as the lack of expertise of devices' suppliers.

It is interesting to note that most respondents ( $n = 759$ , 83%) within the MRF study were generally satisfied with their wheelchairs. Researchers consider that this positive perception is influenced by participants' limited experience in using the wheelchair; some of them either do not use their wheelchair to its full capacity, or cannot make a real comparison, since they never had the chance to use a very good quality mobility device and their expectations may be low.

In terms of **financing resources** for procuring wheelchairs:

- 47% of the wheelchair owners ( $n = 428$ ) received it as a donation from private sources (non-profit organizations or individuals)<sup>21</sup>;
- 34% ( $n = 312$ ) purchased it through the subsidy from the CHIA;
- about 5% ( $n = 49$ ) borrowed the mobility device;
- about 5% ( $n = 48$ ) purchased it using their own or their families' financial resources;
- others received from authorities, sponsorships or used a combination of resources.

**Many wheelchair users do not receive wheelchair services.** The survey demonstrated that only 62% of them (566 persons) declared to have been measured prior to ordering the wheelchair and only 57% (519 persons) were trained when the device was delivered to them.

<sup>21</sup> The results were influenced by the important share of Motivation's clients in the poll.



2) There is no exhaustive study about the **causes of mobility disabilities**. We refer to the recent research entitled “Independent and active in the community – Research report about the situation of persons with spinal cord injuries in Romania”, conducted within a MRF’s project<sup>22</sup>. Keeping in mind that only some people with spinal cord injuries (SCI) need a wheelchair, according to the research results, in the years of 2013, 2014 and 2015 50,770 persons with SCI (as unique patients) received treatment within the public health system in Romania. Figures were obtained by reviewing the database of the National Health Insurance Authority (NHIA) according to diagnosis. The most frequent diagnoses are those of multiple sclerosis, tetraplegia, paraplegia, spinal cord compression and fracture of lumbar vertebrae. The most frequent external causes of SCI are those of ‘falls’ followed at long distance by ‘road traffic crashes’. Causes of ‘injured passenger’ and ‘diving’ reach the highest frequency at 16 – 24 age.

3) A third source for this section is the online application Accessibility Map. One cannot speak about using a wheelchair for mobility in the absence of **environment accessibility**. A good indication about for this in Romania is the Accessibility Map<sup>23</sup>, an instrument created by MRF to audit the level of buildings’ accessibility based on Law no.448/2006 and on legislation about the construction of public spaces<sup>24</sup>. Looking at access to outdoor spaces, indoor spaces and other available facilities according to the specific features of each location, the map currently includes data about 2,175 private dwellings and 1,352 public and private buildings (accommodating hotels and restaurants, authorities’ offices and buildings dedicated to culture, trade, entertainment, health, sports, education, financial institutions etc.). Here is the current situation:

| <i>Table 5. Physical environment accessibility</i> |                              |                              |                     |
|--|------------------------------|------------------------------|---------------------|
|  | <b>completely accessible</b> | <b>moderately accessible</b> | <b>inaccessible</b> |
| <b>people’s houses</b>                             | 16%                          | 34%                          | 50%                 |
| <b>buildings</b>                                   | 23%                          | 26%                          | 51%                 |

The only official information on this topic refers to school accessibility for persons with all types of disabilities. The control visits paid by representatives from public social inspection authorities in 2016 proved that only 7% of Romanian schools offered their students unobstructed access to the physical, informational and communicational environment<sup>25</sup>. Following the authorities’ recommendations, 20% of schools became accessible by the end of the campaign.

<sup>22</sup> Motivation Romania Foundation, „Independent and active in the community – Research report about the situation of persons with spinal cord injuries in Romania”, 2017:

[http://bit.ly/Independent\\_si\\_activ\\_in\\_comunitate\\_Raport\\_de\\_cercetare](http://bit.ly/Independent_si_activ_in_comunitate_Raport_de_cercetare)

<sup>23</sup> [www.accesibil.org/](http://www.accesibil.org/)

<sup>24</sup> Rule no. 051-2012 approved by Order no.189/2013 issued by the Ministry of Regional Development and Public Administration

<sup>25</sup> <http://www.mmanpis.ro/wp-content/uploads/2016/06/Rap.accesibilitati-2016.pdf>



## II. RESEARCH

A clear understanding of wheelchair service delivery in Romania is lacking, given the limited statistical data and research evidence available. In order to address the needs of people who use wheelchairs, greater awareness and understanding of the issues is required.

The aim of this study is to investigate the wheelchair sector in Romania, generating a better understanding of the situation and in turn produce a Strategic Plan to address disparities that exist to provide appropriate wheelchairs.

To investigate the wheelchair sector in Romania, the following objectives were set out:

- To understand the **LEVEL OF NEED** for wheelchairs and wheelchair services, looking particularly at the number of wheelchair users and types of wheelchairs used.
- To identify mobility devices **FUNDING** and procurement procedures within the public and private sector, taking into account the existing policy and legislation in the health area: budget allocation, approval of suppliers, the reference price, private funding and the products offered by private insurance companies.
- To understand the procedure of obtaining a wheelchair with state funded subsidies, including **ACCESS TO WHEELCHAIRS AND WHEELCHAIR SERVICES**.
- To describe **IN-COUNTRY PROVIDERS**, meaning wheelchair product supplier process, given that products are imported and supplied through vendors, with no Romanian company currently manufacturing wheelchairs. Wheelchair services are not financially supported by the state, therefore available to a small extent, for instance Motivation Romania's clients.
- To identify the **FORMAL EDUCATION & TRAINING** available within bachelor and master programs (in terms of curricula and subjects) from the Faculties of physical education and sport, and medicine and pharmacy, in addition to the activity of MRF as the sole provider of WHO training package in Romania: courses, attendees and trainers.
- To conduct a scoping review of the existing **RESEARCH** to enhance the overall objectives.
- To conduct **STAKEHOLDERS' MEETINGS** involving participants across Romania with an interest in the wheelchair sector.

Each objective is addressed and presented separately, using mixed methods and content analysis to identify categories within the findings. The findings are then collated to represent a cosmopolitan narrative (story from a number of perspectives) of the Romanian wheelchair sector situation, presented as overall conclusions and recommendations.

## II.1. LEVEL OF NEED

Any sector analysis should have the level of need as starting point. It is important to understand how many people need and/or use wheelchairs in Romania, what types of wheelchairs and services exist, and how these are funded. This objective investigates the size and characteristics of the target group examined by this research.

### II.1.a) METHODOLOGY

A review of grey and scientific literature was conducted to understand the wheelchair user population demographic. The researchers scoped a number of sources including the following:

- 🔍 Desk / online research: study of documents, laws, other research reports, official information / statistics, official correspondence, websites
- 🔍 Requests for official information from authorities
- 🔍 Secondary analysis of published research report documents

Data included:

- Official statistics made available online by Romanian central authorities,
- WHO documents,
- Motivation Romania research report,
- Correspondence between MRF and the National Health Insurance Authority.

### II.1.b) FINDINGS

Analysis of the data revealed that there were no official statistics found specifically about the people with mobility disabilities or about the people who need and/or use a wheelchair. Comparisons were also made between the number of wheelchairs approved and reimbursed.

In order to describe this category of persons and their needs and, therefore, estimate some figures, there are several aspects taken into consideration based on the findings:

#### 1. The number of people with physical disabilities

The NAPD indicated that 189,700 persons with a handicap certificate relate to physical disabilities<sup>26</sup> at the end of March 2017. This number includes people who have difficulty in walking or moving around and use or need a wheelchair for mobility; it also comprises people with other physical problems or other mobility devices.

On the other hand, not all wheelchair users (especially older people) own a handicap certificate and are listed in the category mentioned above. There are a number of reasons for this situation: one is that these persons don't ask for a handicap certificate, because either they are not interested in obtaining the consequent rights, due to fear of social stigma, because they have a satisfactory financial situation, or

---

<sup>26</sup> Idem 4

because they are not aware that legislation gives them this opportunity. In addition, compared to other countries, the Romanian criteria for enlisting people as ‘persons with handicap’ are narrow.

## 2. The number of people with SCI

A considerable number of people use a wheelchair due to a SCI; therefore this research took into account the WHO Report entitled International Perspectives on Spinal Cord Injuries<sup>27</sup>. Although data on SCI incidence and prevalence are inadequate and inconsistent, the researchers consider that the global incidence of SCI, both traumatic and non-traumatic, is likely to be between 40 and 80 cases per million population, which could be translated into 800-1,600 persons per year who sustain a SCI in Romania. As mentioned above, a recent research commissioned by MRF<sup>28</sup> identified about 50,000 people in Romania who suffered a SCI at some point in their lives, not all of them need a wheelchair, as this diagnostic is not the only one causing mobility problems.

## 3. The number of wheelchairs funded by the state

The Romanian NHIA provided the following statistics on the number of wheelchairs approved to be reimbursed (see Table 6):

| <i>Table 6. Number of wheelchairs subsidized by the state between 2010 and 2016</i>  |        |        |        |        |        |        |                   |
|--|--------|--------|--------|--------|--------|--------|-------------------|
|  | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016              |
| wheelchairs approved to be reimbursed  | 4,649  | 4,633  | 3,677  | 7,326  | 8,188  | 8,589  | 9,687             |
| wheelchairs reimbursed   | 3,887  | 4,401  | 3,639  | 6,420  | 7,064  | 7,900  | 9.824             |
| applications on the waiting list at the end of the year  | 2,378  | 2,365  | 3,405  | 1,494  | 2,117  | 1,100  | No info available |
| coverage of demand, as ratio between the number of wheelchairs approved and the total of wheelchairs approved + waiting list | 66.16% | 66.20% | 51.92% | 83.06% | 79.46% | 88.65% | No info available |

This data indicates a difference between the number of wheelchairs approved to be reimbursed and the number of wheelchairs that were actually reimbursed during the same year. This could be explained by the fact that a considerable amount of time passed between the moment when the decision of approving the wheelchair (voucher) was issued by the County Health Insurance Authorities (CHIA) and the moment when the voucher was claimed. Figure 7 provides a graphic representation of this situation between 2010 and 2015:

<sup>27</sup> World Health Organization, “International Perspectives on Spinal Cord Injuries”, 2013: [http://apps.who.int/iris/bitstream/10665/94190/1/9789241564663\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/94190/1/9789241564663_eng.pdf?ua=1)

<sup>28</sup> Idem 22

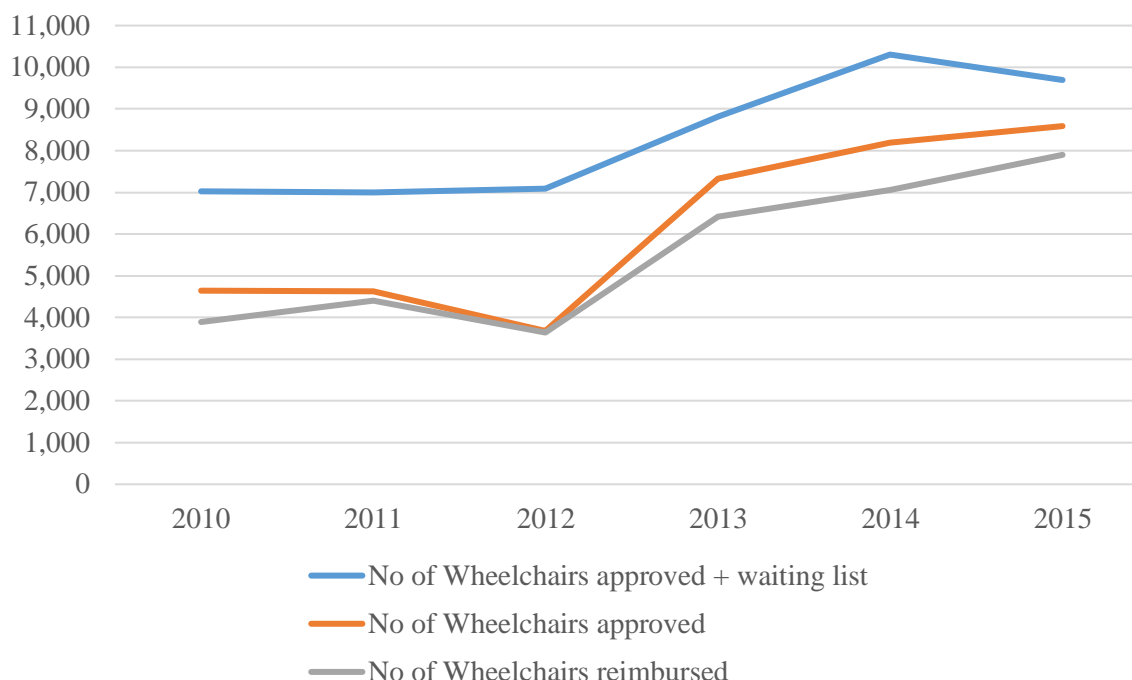


Figure 7. Comparison between number of wheelchairs approved and reimbursed

Over a five years period, between 25,000 and 30,000 wheelchairs were reimbursed by the state. However, this number does not cover the applications on the waiting list at the end of the year, which probably turn into approvals the following year.

Figures do not cover the number of persons who purchase their wheelchairs without government funding. Although both limited methodologically<sup>29</sup>, two studies<sup>30</sup> emphasize that only 34 to 42% of users get subsidized wheelchairs. These percentages are calculated in relation to the number of people who actually own a wheelchair. The same sources mention that only 80 to 89% of people who need a wheelchair actually have one in Romania.

#### 4. The percentages estimated by international organizations

The WHO<sup>31</sup> estimates that approximately 10% of PwD require a wheelchair. The same organization<sup>32</sup> and the World Bank<sup>33</sup> appreciate that about 15% of the world's population live with disability. Therefore, the percentage of people requiring a wheelchair should be around 1.5%. Referring to Romania's population (of about 19,820,000), approximately 297,000 people would need a wheelchair.

<sup>29</sup> The manner of respondent selection did not reach national level representation.

<sup>30</sup> Romanian Academic Society, „Immobilized at home – The crisis of wheelchair financing in Romania”, 2009: <http://motivation.ro/wp-content/uploads/2016/02/Raport-de-cecetare-Imobilizat-la-domiciliu.pdf>. Also see 6.

<sup>31</sup> Idem 13

<sup>32</sup> World Health Organization, World Report on Disability, 2011: [http://www.who.int/disabilities/world\\_report/2011/report.pdf](http://www.who.int/disabilities/world_report/2011/report.pdf)

<sup>33</sup> The World Bank: <http://www.worldbank.org/en/topic/disability>

Since there are no precise statistics available for this particular field, the current situation in Romania is estimated. In conclusion, when looking at these four areas, the number of (potential) wheelchair users in this country is estimated to **range between 110,000 and 297,000 persons**.

## II.2. FUNDING

People with mobility disabilities' access to wheelchairs depends on the potential funding sources. The Romanian government assumes responsibility to provide a subsidy for a wheelchair every five years. It is important to analyze the legal provisions in this respect, the budget allocation for medical devices, the terms of contracting suppliers and the reference price. The private funding is also taken into consideration.

### II.2.a) METHODOLOGY






To understand the funding situation for wheelchairs in Romania data was collected in two parts.

PART 1: To study the public funding, WHO's Global Health Expenditure Database, Euro Health Consumer Index 2016 and the Organization for Economic Co-operation and Development as sources of information about the national health system were utilized. Analysis of the national health insurance budget was conducted and corroborated with the financial aspects acquired from the NHIA, at our official request.

A review of all references to wheelchairs public funding existing in the healthcare legislation was also conducted with relevant data extracted.

PART 2: To understand private funding, online questionnaires (*see Annexes 2 and 4*) were sent to all insurance companies; however no responses were received. Telephone interviews using the questionnaires were then conducted with 26 companies. Some of them provided additional written information. The list of insurance companies was extracted from the Financial Supervisory Authority (FSA)<sup>34</sup> website. The FSA is the Romanian competent authority to authorize, supervise and control the insurance and reinsurance companies. Findings from interviews with Motivation company staff relating to "private funding" has also been included.

Methods included:

-  Questionnaire based survey among private insurance companies
-  Interviews by telephone / skype with private insurance companies' representatives and with Motivation Romania staff<sup>35</sup>
-  Desk / online research: study of laws, official information / statistics, official correspondence, websites
-  Requests for official information from authorities
-  Secondary analysis of published research report documents

---

<sup>34</sup> <https://asfromania.ro/supraveghere/registre-electronice/asiguratorii-si-intermediarii-din-romania>

<sup>35</sup> Romanian staff were interviewed and two types of information were collected: private funding and access to wheelchairs.

## II.2.b) FINDINGS

**The national health scheme covers technology products, including wheelchairs, excluding wheelchair services.** The Ministry of Health is responsible for the provision of wheelchair products, but not services.

### PART 1: PUBLIC FUNDING

**Evidence suggests that the Romanian health system is seriously underfunded and poorly managed.** These deficiencies have a direct impact on the market for medical devices:

| <i>Table 7. Information about the healthcare system in Romania</i>                 |  |
|--|--|
| Source of evidence   | Information  |
| WHO's Global Health Expenditure Database <sup>36</sup>                             | Romania is on position 122 in a global top of 192 countries on total expenditure on health as percentage of Gross domestic product, in 2014, with 5.57%, behind all European countries. <sup>37</sup>  |
| Euro Health Consumer Index 2016 <sup>38</sup> edited by Health Consumer Powerhouse | Romania was awarded the lowest score out of 35 European countries in comparative terms for national healthcare systems. Criticism refers to severe problems with the management of the entire public sector and an antiquated healthcare structure, with a high and costly ratio of in-patient care over out-patient care. |
| Organization for Economic Co-operation and Development <sup>39</sup>               | The <b>budget allocation for medical devices</b> in Romania was in 2007 the lowest (in USD per capita) in Europe and the last but one in percentages out of the general health expenses.   |

To obtain more specific data on this topic, researchers undertook an analysis of the National Fund for Social Health Insurance in the last three years<sup>40</sup>. It shows that its budget has increased by 16% between 2014 and 2016, reaching last year about 6,360 million USD. Out of this general budget, almost 0.8% is dedicated to expenses with medical devices; the list of medical devices includes hearing prostheses, urinary products, colonoscopy products, limbs' prostheses and orthoses, oxygen dispenser, canes, crutches, wheelchairs, tricycles etc.

Out of this category, approximately 5.5% was spent for reimbursements for purchased and rented wheelchairs and tricycles. The calculation was made as a report between the amount spent on this category of mobility devices and the total amount spent on medical devices.

The main document in the field of wheelchair funding is currently the GD no.161/2016. It describes the package of basic services to be provided to insured persons; it includes medical services, health care

<sup>36</sup>

[http://apps.who.int/nha/database/World\\_Map/Index/en?id=REPORT\\_4\\_WORLD\\_MAPS&mapType=3&ws=0](http://apps.who.int/nha/database/World_Map/Index/en?id=REPORT_4_WORLD_MAPS&mapType=3&ws=0)

<sup>37</sup> Here are some other figures from the list: USA 17.14%, Sweden 11.93%, Bulgaria 8.44%, Poland 6.35%.

<sup>38</sup> [http://www.healthpowerhouse.com/files/EHCI\\_2016/EHCI\\_2016\\_report.pdf](http://www.healthpowerhouse.com/files/EHCI_2016/EHCI_2016_report.pdf)

<sup>39</sup> Idem 30

<sup>40</sup> [http://www.cnas.ro//theme/cnas/js/ckeditor/filemanager/userfiles/BUGET\\_FNUASS/Buget\\_2014.pdf](http://www.cnas.ro//theme/cnas/js/ckeditor/filemanager/userfiles/BUGET_FNUASS/Buget_2014.pdf),  
[http://www.cnas.ro//theme/cnas/js/ckeditor/filemanager/userfiles/BUGET\\_FNUASS/Buget\\_2015.pdf](http://www.cnas.ro//theme/cnas/js/ckeditor/filemanager/userfiles/BUGET_FNUASS/Buget_2015.pdf),  
[http://www.cnas.ro//theme/cnas/js/ckeditor/filemanager/userfiles/BUGET\\_FNUASS/Buget\\_2016.pdf](http://www.cnas.ro//theme/cnas/js/ckeditor/filemanager/userfiles/BUGET_FNUASS/Buget_2016.pdf)

services, medication, sanitary materials and medical devices (including wheelchairs). These mobility devices are provided by **suppliers** approved by the Ministry of Health that **are contracted on a yearly basis by CHIA**. In order to sign a contract with CHIA, medical devices' suppliers have to be assessed at national and county level according to Order no.106/32/2015 issued by the Ministry of Health and the National Health Insurance Authority. The assessment uses reference standards referring mainly to organizational capacity and compliance with legal requirements in terms of:

- working space and product,
- personnel capacity,
- transparency towards clients (for instance, instructions for product use and maintenance), and
- level of service (e.g. certificates / declarations of conformity, warranty certificates, sales documents, and compliance with personal data regulations).

The maximum amount of funding provided by the state for each medical device is based on the **reference price**. If the selling price is less than the reference price, the cost is fully reimbursed by the CHIA. If the selling price is greater than the reference price, the cost difference must be covered through the personal contribution of the insured person.

GD no.161/2016 is completed with Order no.803/2016 issued by the NHIA. The reference prices corresponding to medical devices are calculated as the arithmetic average of 3 of the lowest retail prices of wheelchairs on the market, after the elimination of the minimum extremes and the adjustment, if necessary, by + 5%, so that they are not higher by + 5% compared to the reference prices stipulated in the legislation from the previous year. The process of calculating the reference price is not transparent and it appears to be overcomplicated and arbitrary, in our opinion.

The figures for wheelchairs in 2017 were calculated based on random data about different types of wheelchairs available. This led to the situation of reducing the already low reference price for a wheelchair with 12% (from a level where it was situated for the last several years), to 1,104.44 lei (about 263 USD<sup>41</sup>). This is the amount of money that is reimbursed for purchasing any type of manual or power wheelchair in Romania in 2017.

The same type of calculation is made for the rental amounts. For renting a wheelchair, the state pays 8.30 USD per month in 2017. There is an insignificant number of rented wheelchairs whose cost is reimbursed: i.e. 488 in 2014, 106 in 2015 and 225 in 2016.

The CHIA analyze monthly the applications for medical devices and issue decisions regarding the approval / rejection of the procurement / rental. For all categories of medical devices to be sanctioned they must stay within the approved fund. Where there are not enough funds available to approve devices, a priority list is drawn up. Priority criteria are established by each health insurance authority, taking into consideration the following two mandatory priorities:

- the date of the application and
- the emergency level.

CHIA also may consider additional criteria such as:

- if the life of the user depends on it (for instance, oxygen dispenser),

---

<sup>41</sup> An exchange rate of 4.20 lei for 1 USD was used.



- if the client is a child,
- client is a handicap certificate owner,
- device is substituting an important function (e.g., mobility devices),
- client needs the device for school or work reintegration,
- client is self-supporting him/herself,
- client needs an emergency operation etc.

Details for putting into practice the GD no.161/2016 in 2017 are included in Order no.196/139/2017 for approving the Methodological Norms, issued by the Ministry of Health and the National Health Insurance Authority, that entered into force on April 1<sup>st</sup>, 2017. Table 8 provides a synthesis of the most relevant pieces of legislation in the health field regarding the wheelchair:

| <i>Table 8. Synthesis of relevant pieces of legislation in the health field regarding wheelchairs</i> |  |   |
|---|--|---|
|   | <b>Issued by</b>   | <b>Refers to</b>  |
| <b>Order no.106/32/2015</b>   | Ministry of Health and National Health Insurance Authority | Approving the Framework Regulations on the organization and operation of assessment committees and standards for providers of healthcare services, medical devices, medication, sanitary materials, as well as the framework methodology for the assessment of these categories of providers. |
| <b>GD no.161/2016</b>   | Government   | Approving the health services packages and the Framework Contract that governs the conditions for providing medical care, medication and medical devices within the social health insurance system for years 2016-2017  |
| <b>Order no.803/2016</b>  | National Health Insurance Authority                        | Approving the methodology for setting the reference prices and the rental amounts corresponding to the categories and types of medical devices meant to recover body structures and functions' impairments in outpatient settings, within the health insurance system.                        |
| <b>Order no.196/139/2017</b>  | Ministry of Health and National Health Insurance Authority | Putting into practice the GD no.161/2016 in 2017  |

Unfortunately, no link exists between the legislation in the health and disability.

## PART 2: PRIVATE FUNDING

As mentioned above, the information in this section was obtained through telephone interviews with 26 private insurance companies. In addition to this, interviews with 3 long experienced staff of Motivation Company (eight, six and two and a half years of experience) were used.

The minimal package funded by the state is actually the only option for most beneficiaries, since it is not supplemented by private insurance products. Most companies providing life, health and accident insurance do not offer an insurance package that covers the cost of a wheelchair (*see Annex 1*). Usually, they have a clause attached to an insurance policy insuring risks as permanent and total invalidity. An insured person can purchase a wheelchair from the lump-sum compensation for invalidity. Of course, when subscribing for the insurance the client must be healthy.

The telephone survey showed that in the case of Groupama and Generali companies, they have a clause for medical expenses like prosthetics and orthotics but not wheelchair. There is the possibility to include a clause related to the wheelchair within a policy for permanent invalidity. In the case of Uniqa company, there is an accident insurance; covered expenses include costs with a wheelchair based on a medical prescription.

Motivation staff explained that they had never met a user buying a wheelchair with a private insurance policy.

If a wheelchair is more expensive than the amount reimbursed by the state, the users raise money from family members, donations or sponsors. However, this is not a regular occurrence. Usually, due to the lack of financial resources, the users purchase a wheelchair of a maximum amount reimbursed by the state even if it does not meet his/her needs. Another possibility to get money for the price difference is to access the benefits of social assistance system granted by social services of mayoralties. This is not a common practice as requires to meet the eligibility criteria (low level of income per family member and lack of assets, being a priority among other situations of emergency needs), a consistent file with lots of proving documents and the process is time consuming.

## II.3. ACCESS TO WHEELCHAIRS AND WHEELCHAIR SERVICES





In this section the process of obtaining a state-funded wheelchair product is described. It is important to note that wheelchair services are not supported by the state.

### II.3.a) METHODOLOGY

Aiming to identify the way the law provisions are put into practice, semi-structured interviews were conducted with three experienced staff working with Motivation Limited Liability Company (LLC). Participants are long term wheelchairs users working in the wheelchair services area. The semi-structured individual interviews were conducted, via skype, using an interview guide (*see Annex 6*).

Legislation was also analyzed, 42 websites belonging to all CHIA and other research reports. Aspects about policies, procedures and practices were revealed. Some of Motivation Romania's practices are provided as example.

Methods:

-  Interviews by skype with Motivation staff
-  Desk / online research: study of official information, laws, websites
-  Document secondary analysis: study of other research reports
-  Case study

### II.3.b) FINDINGS

The data from interview and documentation were combined to present the findings in this section.

Most medical devices are made available to users through the **health insurance system**. Wheelchairs are available without any means-testing for an indefinite period (to be purchased) or for a definite period (to be rented) to people who are insured through the public scheme. It is estimated that the lifespan of an average quality wheelchair is about two years<sup>42</sup>, whereas the period when one can obtain a new one through the state insurance is **every five years** (three years in case of a tricycle for children).

In brief, the applicant must submit a file to the CHIA. They should make a decision about approving or rejecting the application in 3 days. With this voucher referring to the reference price, the (potential) user is purchasing the wheelchair directly from a supplier who eventually receives the reimbursement from the state.

In reality, this process takes longer, up to several months in some cases. This in turn leaves people requiring a wheelchair immobile, with some having to borrow a wheelchair or use other devices.

Below is a detailed description of the process of a person getting government funding for a wheelchair, how the legislation is put into practice and what the difficulties are faced by the users.

---

<sup>42</sup> Idem 30

The description of the process is based on the interviews with the three long experienced staff of Motivation LLC (peer group trainers), delivering wheelchair services in 9 out of 42 counties within the country (see Annex 10).

### Process

The first step in getting government funding is to see the family physician. Then, with a referral from the family physician, the user goes to the specialist physician (neurologist or orthopedist) and gets a prescription for a wheelchair. The prescription includes no specific details or requirements about the wheelchair, just a general recommendation to get such a device. The specialist physician does not make an assessment according to WHO guidelines; they just deliver the diagnosis, decide that the person needs a wheelchair and provide a prescription in this respect.

With the prescription, the person submits a request to the CHIA. The prescription of the specialist physician is the most important document among the others that make up the file: copies of the identity card, a document showing that the person is insured, and the handicap certificate (if the case). Then, the user receives the decision for a wheelchair subsidy from the CHIA. At the same time, the user gets the approved list of the local suppliers contracted by CHIA. Next step is to contact one of the suppliers on the list and receive the wheelchair. The user does not receive any money; the reimbursement of the wheelchair cost is between the CHIA and the supplier (see figure 8):

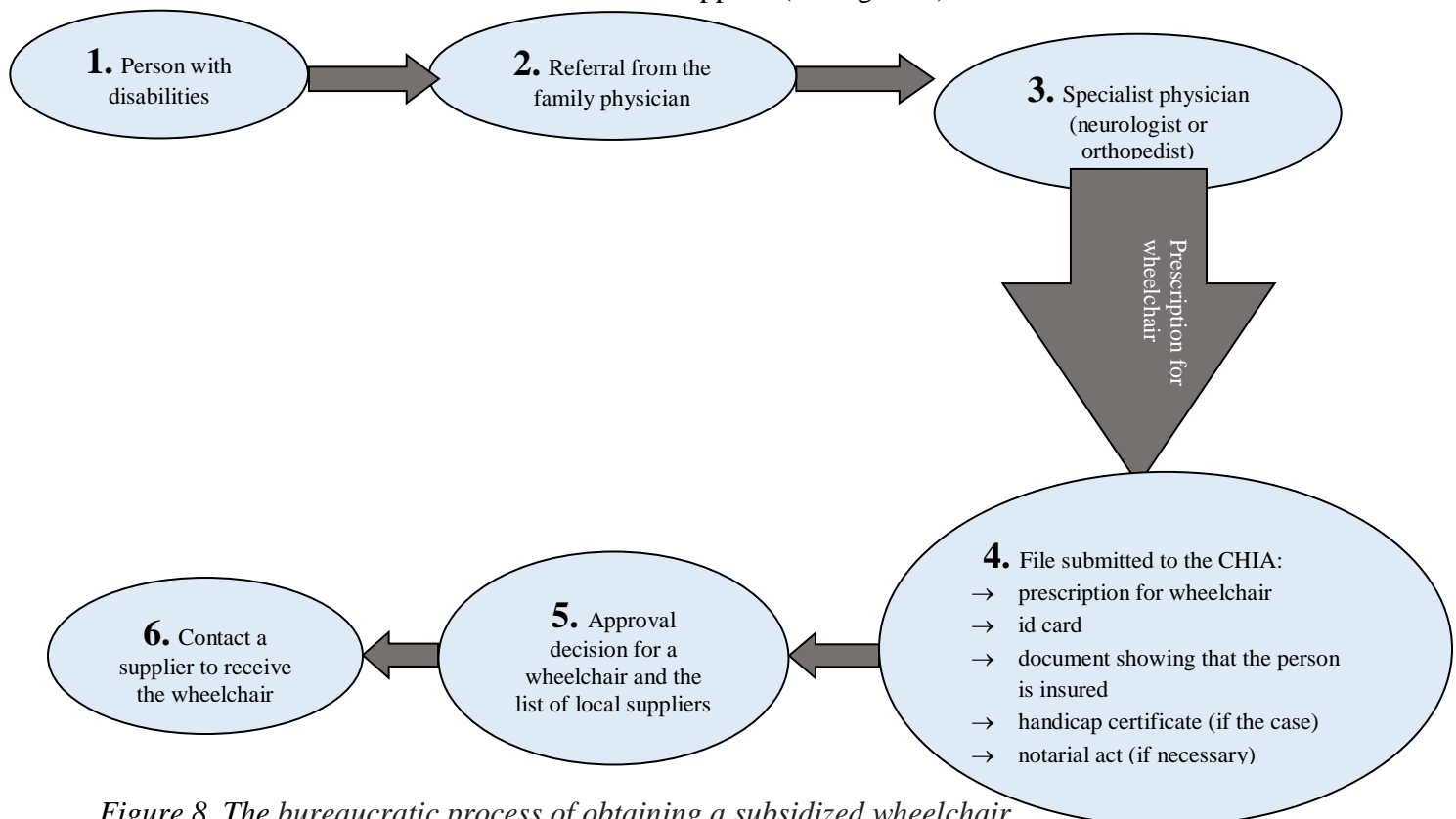


Figure 8. The bureaucratic process of obtaining a subsidized wheelchair

### Difficulties encountered

There are two moments in this process where the users face difficulties: when **getting the prescription from the specialist physician** and when **submitting the file to the CHIA**. In the first situation it's

necessary for the user to be present in person and this is difficult to achieve as most users do not have transportation, especially in the case of those living too far, for instance in rural areas.

The referral from the family physician has a validity of 30 days. Sometimes, the specialist physicians are very busy and the user cannot schedule an appointment within this period and therefore needs a new referral. Normally, if a person is unable to walk, the specialist physician must go to his/her home; in practice this does not happen as physicians are few in number (usually in big cities) and therefore time constrained. The prescription from the specialist physician has the same period of validity (30 days). Motivation staff interviewed noted the following:

- ♿ *“We recommend to our beneficiaries to make an appointment to the specialist physician first and then to take the referral from the family physician as this takes less time” (C)*
- ♿ *“Some of our beneficiaries who didn’t have contact with doctors and the health system do not know where to find a specialist physician, they do not know where to go; some refuse to go through this process; it takes a lot of effort and time.” (I)*
- ♿ *“It is difficult for specialist physicians to go to users’ home as they have appointments scheduled for 3-4 months.” (G)*

For the second situations in some cases (it’s not a rule of all the CHIA), the CHIA requires that the file to be submitted in person. If this is not possible, the file can be submitted by the legal representative of the person with disabilities, a first-degree relative or another person appointed to act on his/her behalf based on a notarial act (power of attorney). This involves travelling to the notary office and additional expenses as such kind of notarial act costs around 50 lei (12 USD).

According to Order no.196/139/2017 there is the possibility to rent a wheelchair but the specialist physicians do not choose this option when releasing the prescription. The three interview participants re-laid that they had never experienced clients who opted to rent the wheelchair.

### Waiting time

The time between the file submission and getting the decision of funding the wheelchair varies from one CHIA to another, from one week to several months. Thus, in case of Cluj and Galati counties the waiting time is about 7-10 days, in case of Vrancea county, from 6 months to 1 year, in case of Braila County, about 1 week for children and about 2 months for adults, in case of Bistrita Nasaud up to 5 months.

### Getting a new wheelchair

A user can get a new wheelchair by government funding only every 5 years. If he/she needs a new wheelchair earlier then he/she must buy it on his/her own.

When submitting for a new wheelchair, the user must follow the same steps.

The tricycle for children can be replaced every 3 years.

### Choosing the wheelchair





The decision of CHIA for approving a wheelchair has a one month validity. In this period, the user must contact a local supplier. Some users are searching information about the wheelchair that better fits their needs. In other cases, the specialist physician or someone from the CHIA makes suggestions on local suppliers; such practices are illegal.

A customer can return a wheelchair to supplier within 30 days from delivery in case of damage or if it is inappropriate.

## Other services

Motivation (both through the foundation and the LLC) is apparently the only company in Romania providing all services for users along with the wheelchair, as mentioned in the WHO 8 Steps model. All these services are free. The user should pay the repair services after the warranty period of 2-years but such cases are few.


Many other suppliers provide a wheelchair based on information related to customer weight and height, disability and age, information collected on phone conversation. Then, the customer receive the wheelchair through postal or courier services. It is often the case that the customer and the supplier never meet. Interview participants commented:

-  *"As far as I know, there is no other company to offer these wheelchair services." (I)*
-  *"Some companies only provide the products. Others may provide also repairs. I don't know all the suppliers, but from what I know there is no other company to provide services like assessment, prescription and training." (C)*
-  *"There is no other company to provide other services than the wheelchair. I know that for sure. I don't know any other company to offer this package of services with assessment, prescription, training, fitting, monitoring." (G)*
-  *"And many companies offers wheelchairs without a cushion and ask extra-money for this. It shouldn't exist a wheelchair with no cushion." (C)*

## Standards of wheelchair

The wheelchair must meet the quality standards required by the manufacturer's declaration certificates. The National Agency of Medicines and Medical Devices (NAMMD) is the Romanian authority responsible to control and periodically check medical devices<sup>43</sup>, subordinated to the Ministry of Health. The NAMMD is the only institution assigned and able to assess performance and safety of medical devices in use.

In practice, with regard to wheelchairs suppliers, the NAMMD verifies every two years not the products, but the way in which the supplier operates, if it has all the necessary authorizations, if it works based on management procedures.

-  *"Yes, they check us every two years. They come at our office and check documents, including human resources files. We had a verification visit this year! They have asked us how we are delivering a wheelchair, I mean what the procedure is. They wanted to know if we know what we are selling, if we know what to sell. They've just asked! They did not check with the beneficiaries." (I)*

In Romania, wheelchair buyers have the right to have access to and choose a product and its supplier, a right that can be limited by the insufficient financial resources and **transparency** from authorities. Transparency issue include: information referring to the bureaucratic route towards obtaining a wheelchair, state funding, and product requirements and options. A clear explanation about the process of getting a wheelchair paid for by the state does not appear to exist in written or online materials.

The process of spending the wheelchair voucher is also complicated as the information on the CHIA website is extremely difficult to navigate, because the language is complicated and there is no clear

---

<sup>43</sup> <http://www.anm.ro/anmdm/en/index.html>

instruction, no clear guidelines of how to purchase a wheelchair. Online there are many steps to get to the list of authorized suppliers:

Home page → Information for suppliers → Suppliers of medical services → Medical devices → Lists of suppliers under contract → List for year 2017.

*Figure 9. Way to website information about wheelchair suppliers*

Sometimes these lists do not specify a reference to the products the suppliers' offer. Therefore, the potential customer might be in the situation of searching for wheelchair suppliers among producers of hearing aids, prostheses and orthotics, oxygen dispensers, home-care services etc. So many wheelchair users do not make an informed decision, don't take the advantage of a genuine opportunity to purchase a wheelchair using a customer-type approach.

Research conducted in 2014<sup>44</sup> suggested that wheelchair users who received independent living training were more involved in the social life and had better self-care abilities and wheelchair mobility skills. **In Romania many wheelchair users do not receive any services** along with the receipt of the product. The same study showed that only 13% of wheelchair users who had not received their wheelchair from Motivation Romania (n = 51) had the recollection of being assessed prior to wheelchair delivery. All suppliers are bound to offer a two-year warranty period for the product. It would appear that their personnel are not properly trained according to WHO requirements<sup>45</sup> to provide all wheelchair services and their resources do not cover the corresponding costs. Still, according to their declarations, some suppliers might superficially assess the potential users in the beginning and give some information about the wheelchair maintenance when they deliver it (unless they are sending it by courier). There is no uniformity in this field and it is unclear who is providing what, since there is no way of monitoring this. To our knowledge, Motivation Romania Foundation is the only provider of the full WHO package of wheelchair services (*see II.4*).

---

<sup>44</sup> Idem 7

<sup>45</sup> WHO Wheelchair Service Training Package (*see section II.5*).

## II.4. IN-COUNTRY PROVIDERS

Wheelchair service provision is not widely developed in Romania, due to lack of funding and awareness on this subject, both from policy makers and providers. There is no investment in service delivery at government level; any existing services are supported from the suppliers' own resources. So the information in this section is about wheelchair product rather than services.

Romanian people with personal mobility impairments are provided with either imported or second-hand products, as wheelchairs are no longer produced in Romania. An analysis of available types of wheelchairs and corresponding prices is quite revealing.

### II.4.a) METHODOLOGY

A review of 42 CHIA websites revealed lists of suppliers contracted with the CHIA. In many cases the lists contain providers of mobility devices without specifying the supplied products, meaning that a provider could offer wheelchairs or/and crutches or/and walkers or/and rollators etc. Researchers then reviewed each supplier's product list. Data was then collated on products delivered by each supplier using a data sheet developed by researchers.

Additional research reports and other online sources are also included in this analysis. The stakeholders meetings (described in the next section) also provided insights on this topic. A number and categories of wheelchairs imported and distributed in Romania were assessed.

An annex with products, photos and prices is attached (*see Annexes 11 and 12*).

Methods included:

- 🔍 Desk / online research: study of websites of CHIA and wheelchair suppliers, other research reports
- 🔍 Focus groups with stakeholders in the wheelchair sector
- 🔍 Case study of Motivation Romania Foundation and LLC

### II.4.b) FINDINGS

In the recent years, wheelchairs on the Romanian market have been imported, as local production ceased due to competitive production costs<sup>46</sup>. The value of the imported wheelchairs in 2016<sup>47</sup> was more than 1.7 million USD; most products were manufactured in China (worth about 600,000 USD), Germany (350,000 USD) and Poland (285,000 USD).<sup>48</sup> Approximately 60% of the wheelchairs brought to Romania are imported from the EU. The chart below illustrates the value of imported wheelchairs to Romania in the last several years, showing a growth trend from 2010 onwards:

---

<sup>46</sup> For instance, Motivation Romania has stopped its wheelchair production in 2009.

<sup>47</sup>

<https://comtrade.un.org/db/dqBasicQueryResults.aspx?px=HS&cc=8713,871310,871390,871420&r=642&p=0&rg=1&y=2007&so=8>

<sup>48</sup> According to the same source, Romania imported wheelchairs from the USA in value of 3,500 USD in 2016.



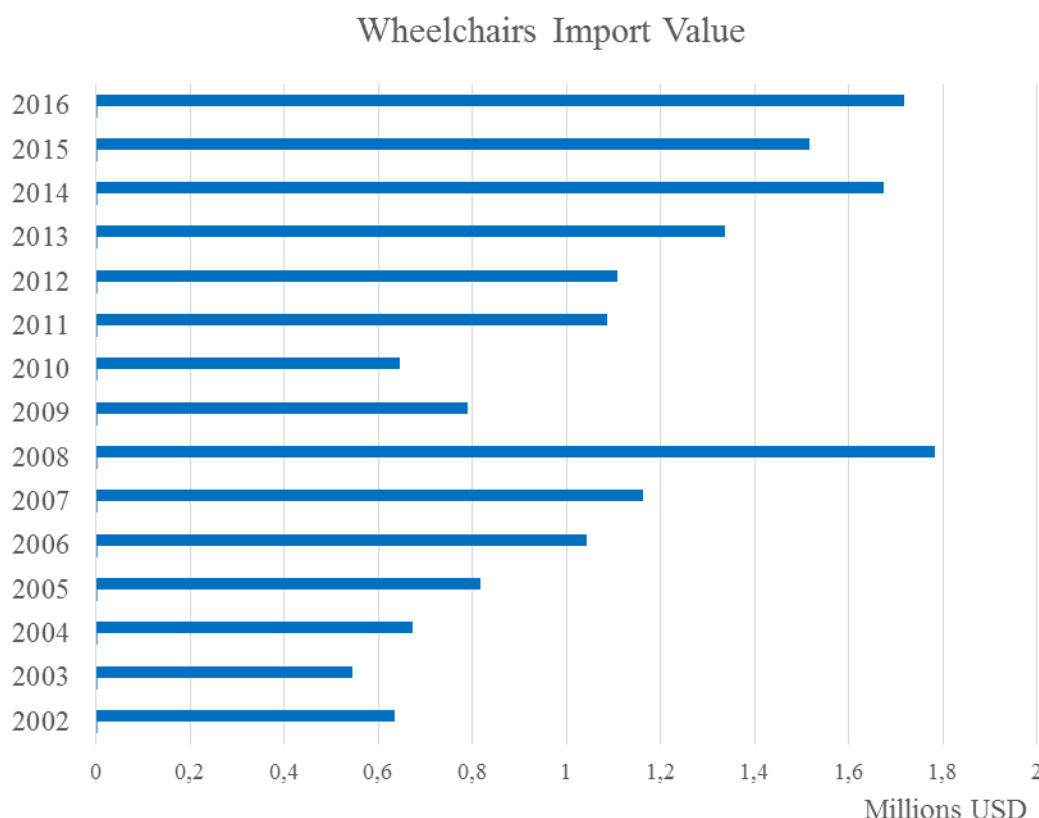


Figure 10. Imported wheelchairs' value

These numbers do not include the second-hand wheelchairs, but it is probable that this growth trend has characterized the entire wheelchair market in the country. From our understanding, second-hand products are usually provided in an ad-hoc way as charitable donations from other countries or, in some cases, from Romanian wheelchair users who no longer use these products.

**The Romanian wheelchair providers are only product suppliers;** in most instances, they do not provide services. Most suppliers are not aware of the WHO eight steps of wheelchair service provision, with only a few of them including several assessment elements in their procedures. From the researchers' long term experience, it seems that suppliers record brief information about the wheelchair user: size, age, type of health condition or trauma, limbs' mobility and available funding and recommend a type of wheelchair that they consider appropriate. The personnel in charge is usually a salesperson and their approach appears exclusively a for profit one.

In contrast, **Motivation Romania Foundation** practices an atypical approach, focusing both on business and quality services that consider the individual needs of the users. With a long history of collaborating with WHO and other international organizations, Motivation Romania provides wheelchairs and other mobility products (either through subsidies<sup>49</sup> or donations<sup>50</sup>) and wheelchair services based on the eight

<sup>49</sup> Motivation Romania covered a share of 12 to 18% of the market of wheelchairs paid by the state every year between 2010 and 2015.

<sup>50</sup> Motivation Romania donated between 1,000 and 1,400 wheelchairs every year in the last four years.

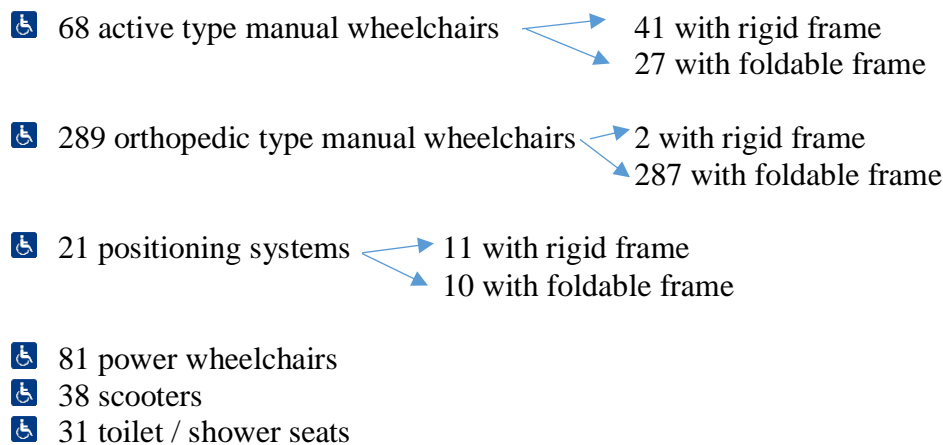
step model. Through the foundation and the LLC (whose sole shareholder is the foundation), Motivation Romania is able to combine product delivery with wheelchair service provision. All personnel involved in service provision has benefited from the Wheelchair Service Training Package (WSTP) created by WHO, at least at basic level, and consistent efforts are being made to ensure their continuous training and periodical meetings and exchanges of experience. Motivation Romania has contributed to the development of WSTP and is the only implementer of this training package in Romania, using external funding (*see II.5*).

Motivation Romania also focuses on teaching independent living skills to wheelchair users. For more information about the Motivation Romania's service approach, *see Annex 13*.

The Romanian wheelchair market is product rather than process focused, as only wheelchair products are directly funded by the state, unlike services. It is difficult to estimate the size of the wheelchair market: the same type of calculation realised at II.1.c) shows that **the number of existing wheelchairs is between 88,000 and 238,000**.

Seventy-two suppliers were identified as active in 2016 (*see Annex 11*), with the vast majority having contracts with the CHIA and therefore providing subsidized wheelchairs. Twenty-two suppliers have contracts with more than 35 out of the 42 counties (Bucharest included), which means that they not necessarily are present in most regions of Romania, but are able to deliver almost anywhere in the country.

Detailed information was obtained from the forty-five most important suppliers; the types of products they offer are:

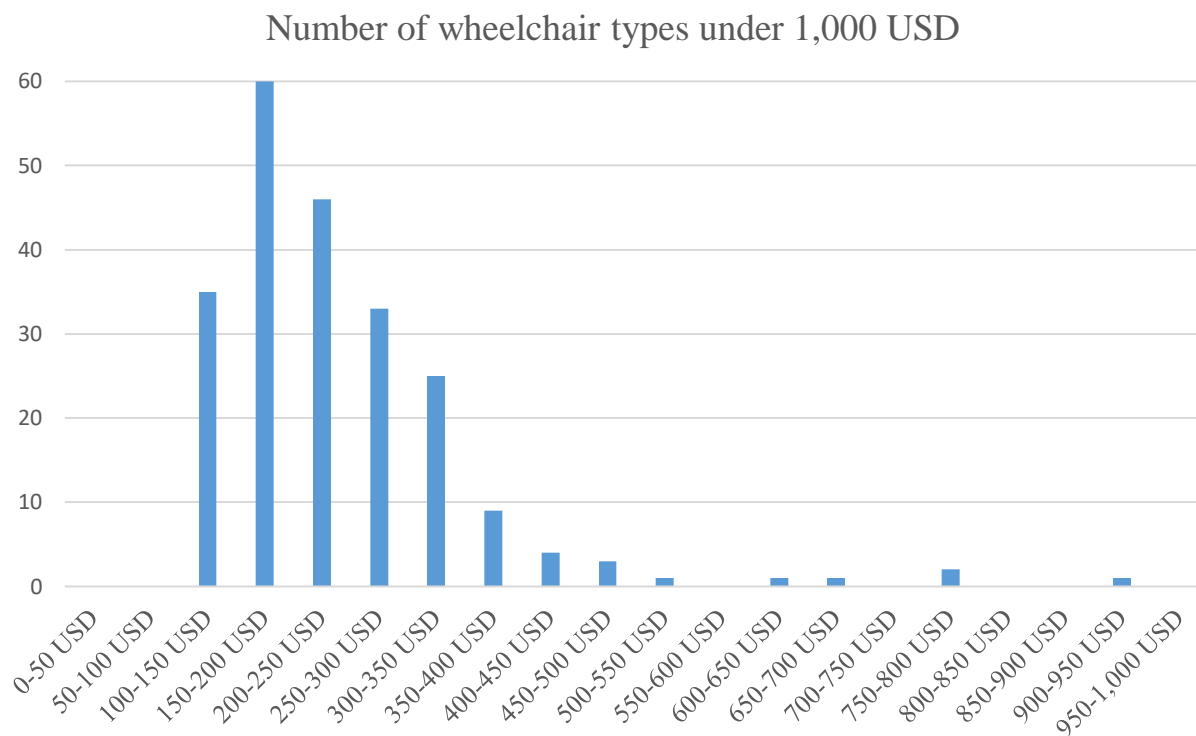


Evidence suggests that the orthopedic wheelchairs are dominating the market, while the offer for positioning systems is much narrower. 483 are products to be used by adults and 54 for children (6 products can be used by both categories). To confirm an information mentioned above, the manufacturers of the wheelchairs distributed in Romania are from: China, France, Germany, Hungary, Italy, Poland, Sweden, UK and USA.

It is important to note that this analysis of the data available mostly on the suppliers' websites is not a reflection of their sales, but only of the types of wheelchairs that they would supply when necessary. In other words this study is only reporting on the types of wheelchairs available in Romania, not on the numbers of products distributed.

Based on the amount of money that they invoice, number of wheelchairs available, number of CHIA that they have contract with and by their reputation, the most commonly utilized suppliers in our country are: MEDICAL EXPRESS, MOTIVATION ROMANIA, ORTOPEDICA, ORTOPROFIL PROD ROMANIA, ORTOTECH, TEHNORTOPRO and THERANOVA PROTEZARE (in alphabetical order). They have important stocks, can deliver nationwide and are able to respond to various needs of their clients'; they may have exclusive distribution contracts for Romania with some foreign producers. People with mobility impairments can also buy wheelchairs from pharmacies; some of them have contracts with the suppliers assessed and contracted by the state.

The prices of manual wheelchairs vary from 100 USD to 12,000 USD, but almost half of them cost less than 300 USD, suggesting poor to average product quality and lack of additional postural support elements. Most types of manual wheelchairs available are concentrated around the reference price reimbursed by the state (about 263 USD):



*Figure 11. Prices of manual wheelchairs situated under 1,000 USD*

## II.5. FORMAL EDUCATION & TRAINING

This section presents formal and non-formal education available to specialized personnel who work with wheelchair users and suppliers. Data was collected in two parts:

1. Content within formal education within Bachelor and Master programs at university level.
2. Non-formal training programs provided to different categories of specialists active in this field, namely the WHO training package implemented by MRF.



### II.5.a) METHODOLOGY

1. Data was gathered from all universities websites where relevant **“formal education programs”** mention wheelchairs/ wheelchair use (*see Annex 14*). Besides type of the existing programs (bachelor / master) researchers have collected data related on courses held by each program (using curriculum program content). Collection of data was recorded on data sheets which were developed to include the following information:
  - University / faculty name and contact details
  - Geographic area
  - Type of the program (bachelor / master)
  - Courses taught

Data was also collected on courses with wheelchair education material/subjects following analysis of course descriptions.

2. Data was collected from Motivation staff and organization records on non-formal training courses as Motivation Romania is the only provider of training in wheelchair services area.

Methods included:

-  Desk / online research: study of documents, laws, other research reports, official information / statistics, websites
-  Case study

### II.5.b) FINDINGS

#### FORMAL EDUCATION PROGRAMS

In Romania, the professionals delivering services of rehabilitation to wheelchair users are trained within the higher education system. Mostly, they have a degree in **“physical therapy and special motricity”**<sup>51</sup> or **“balneo-physio-kinetotherapy and rehabilitation”**.

There are **23 public and private universities** offering programs in one or another specialization through their faculties.

The faculties are divided into two major groups:

---

<sup>51</sup> In the Annex 14 it is called “kinetotherapy and special motricity” as many universities use this translation on their websites.

- **Faculties of physical education and sport** offer mainly programs of “physical therapy and special motricity” offering programs in the area of sport

- **Faculties of medicine and pharmacy** offer mainly programs of “balneo-physio-kinetotherapy and rehabilitation”, offering programs in the area of health

The twenty three universities offer **twenty seven bachelor programs** and **ten master programs**. Approximately 2,400 professionals graduate from the thirty seven programs, each year (see figure 12).

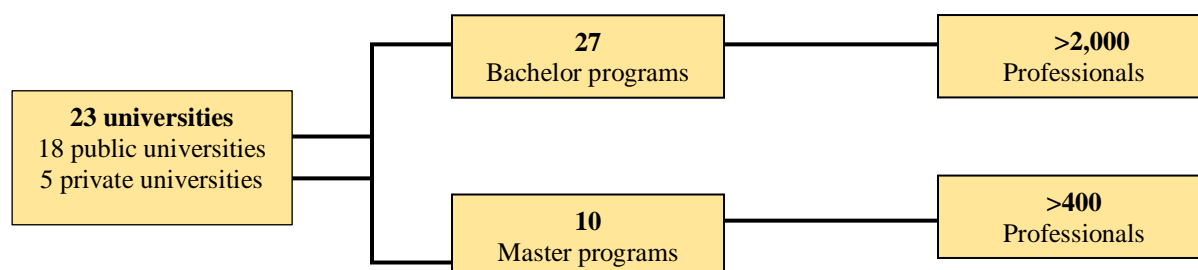


Figure 12. Bachelor and Master programs

The twenty three universities are located in all regions of the country (see Annex 10). In each region there are at least two bachelor programs (see table 9).

|                             | Bucuresti-Ilfov<br>Region | South-East<br>Region | North-East<br>Region | North-West<br>Region | West Region | South-West<br>Region | Center Region | South<br>Muntenia<br>Region | Total |
|-----------------------------|---------------------------|----------------------|----------------------|----------------------|-------------|----------------------|---------------|-----------------------------|-------|
| Number of universities      | 3                         | 2                    | 4                    | 1                    | 3           | 2                    | 6             | 2                           | 23    |
| Number of bachelor programs | 3                         | 2                    | 5                    | 2                    | 3           | 2                    | 7             | 3                           | 27    |
| Number of master programs   | 2                         | 2                    | -                    | 1                    | 2           | -                    | 2             | 1                           | 10    |

The bachelor programs are three years in duration (180 ECTs),

Figure 13 presents a breakdown of the bachelor programs offers, with the majority (n = 18) being “Physical therapy and special motricity”, offered mainly by the faculties of Physical Education and Sport and six bachelor programs of Balneo-physio-kinetotherapy, offered by faculties of Medicine.

Only two universities offering bachelor programs of “**Occupational Therapy**”: University of Bacau, Faculty of Movement, Sports and Health Science and University of Pitesti, Faculty of Science, Physical Education and Informatics (both programs are in the psychology domain). There is one bachelor program of “Hydrotherapy, kinesiology and medical rehabilitation”.

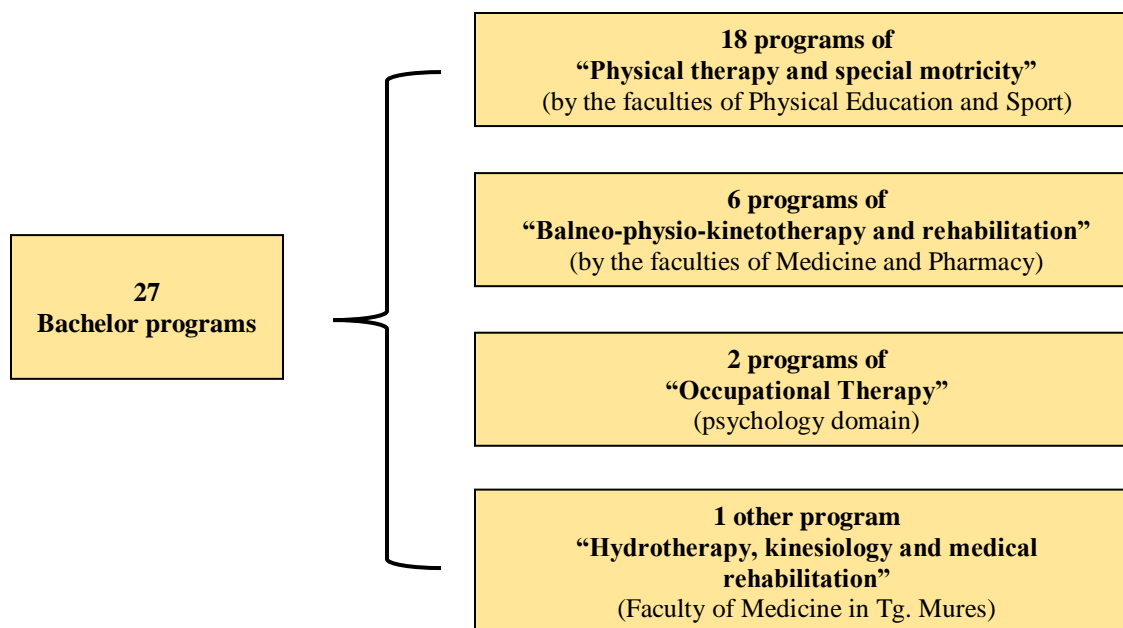


Figure 13. Bachelor programs presentation

The master programs are two years in duration (120 ECTs)<sup>52</sup>.

The ten master programs are different and run in the domain of “physical education and sport” and of “health”. Just one master program is offered by a faculty of Medicine, in the domain of “health” (“Physical therapy and functional rehabilitation”); all the others are offered by faculties of Physical Education and Sport (see Table 10).

Table 10. Master programs presentation

| No. | University name                                      | Faculty name   | Master program                                      |
|-----|--|--|---|
| 1.  | National University of Physical Education and Sports | Kinetotherapy Faculty  | Motor and Somato-Functional Recovery-Rehabilitation |
| 2.  | West University of Timisoara                         | Faculty of Physical Education and Sports                                 | Kinetotherapy in Orthopedic - Trauma Pathology      |
| 3.  | Spiru Haret University                               | Faculty of Physical Education and Sport                                  | Kinetotherapy in motor skills disorders             |
| 4.  | Babes Bolyai University                              | Faculty of Physical Education and Sport                                  | Kinetotherapy in motor skills disorders             |
| 5.  | University of Oradea                                 | The Faculty of Geography, Tourism and Sports                             | Kinetotherapy in functional re-education            |
| 6.  | University of Medicine and Pharmacy of Targu Mures   | Faculty of Medicine  | Physical therapy and functional rehabilitation      |
| 7.  | University Ovidius of Constanta                      | Faculty of Physical Education and Sport                                  | Kinetotherapy, recovery and motric re-education     |
| 8.  | "Dunarea de Jos" University of Galati                | Faculty of Physical Education and Sport                                  | Home kinetotherapy                                  |
| 9.  | "Vasile Goldis" Western University of Arad           | Faculty of Social Sciences, Humanities and Physical Education and Sports | Kinetoprophylaxis and physical recovery             |
| 10. | University of Pitesti                                | Faculty of Science, Physical Education and Informatics                   | Kinetotherapy for persons with disabilities         |

<sup>52</sup> European Credit Transfer and Accumulation System

## Curriculum

Among the bachelor programs of “physical therapy and special motricity” the courses are different depending on the **study domain**: physical therapy, sport, health or psychology.

The curriculum analysis of each program shows that there are some courses met with high frequency such as:

- “physical therapy for physical and sensory deficiencies”,
- “physical therapy in geriatrics”,
- “physical therapy in orthopedic disorders”,
- “physical therapy in neurology”,
- “patients handling techniques”,
- “measurement and assessment in physical therapy”.

Analyzing the curriculum of 23 bachelor programs, we found out that:

- modules of “Patients Handling Techniques” are offered by 14 programs;
- modules of “Occupational Therapy” (OT) are offered by 13 programs;
- modules of “Orthotics-Prosthetics” (OP) are offered by 16 programs.

In many cases the modules of OT and OP are short and not compulsory.

All the programs are offering traineeship in rehabilitation centers of public health system or of the various NGOs.

The two bachelor programs of “Occupational Therapy” (in Bacau and Pitesti) offer similar courses such as:

|   |
|---|
| - Fundamentals of Psychology  |
| - Fundamentals of Occupational Therapy  |
| - Anatomy and biomechanics  |
| - Physiology  |
| - Kinesiology   |
| - Human Occupation and Performance  |
| - Developmental Psychology  |
| - Occupational Therapy process / Evaluation in Occupational Therapy   |
| - Pediatric Occupational Therapy / O.T. in mental health / O.T. for elderly / O.T. for street children / O.T. for disabled / O.T. in Orthopedics and Trauma |
| - Occupational Therapy – applied theories   |
| - Elements of applied engineering for adapted devices and assistive technology  |
| - Adaptations of physical environment   |
| - Orthotics, Prosthetics  |

The module of “Prosthetics, Orthotics” is a compulsory one in the case of University of Pitesti and optional in the case of University of Bacau.

## Courses subjects. Integration of WSTP subjects

Based on the analysis of the description of the most relevant courses of the bachelor and master programs, researchers found out that there are few cases in which WSTP subjects are integrated into some modules content:

| <i>Table 11. Curriculum content</i>   |  |   |
|---|--|---|
| Topics / Subjects   | addressed mainly by courses of                                       | Program   |
| <b>transfer techniques and wheelchair mobility skills</b>   | “Patients Handling Techniques”                                       | “Kinetotherapy and Special Motricity” bachelor programs in Alba Iulia, Pitesti, Iasi, Targu Mures   |
| <b>accessibility and assistive devices for activities of daily living</b>   | “Elements of Occupational Therapy” and “Orthotics – Prosthetics”     | “Hydrotherapy, kinesiology and medical rehabilitation”, Faculty of Medicine in Targu Mures<br>“Kinetotherapy and Special Motricity” and “Occupational Therapy” bachelor programs in Pitesti |
| <b>WSTP:</b><br>- wheelchair prescription and assessment;<br>- appropriate positioning in the wheelchair;<br>- safety rules for wheelchair use  | “Occupational Therapy”   | “Hydrotherapy, kinesiology and medical rehabilitation”, Faculty of Medicine in Targu Mures  |
| <b>WSTP:</b><br>- assessment of participation and occupational performance for wheelchair users;<br>- elements of assessments, prescription, provision and fitting of wheelchairs)<br><i>WHO and ICF are used as reference.</i>   | “Assessment in Occupational Therapy”                                 | “Occupational Therapy” bachelor program of University of Pitesti  |
| <b>Accessibility and assistive devices:</b><br>- housing adaptations (ramps, thresholds, door widths);<br>- kitchen adaptation (cupboards, drawers, plates, glasses, various utensils etc.);<br>- bathroom adaptations (adapted toilet, using non-slip materials);<br>- design and adaptations of houses and public buildings;<br>- accessibility policies for persons with disabilities; national regulations on accessibility of physical environment;<br>- ensuring safe mobility and comfort for persons with locomotor impairments | “Adaptations of physical environment for self-care activities”       | “Occupational Therapy” bachelor program of University of Pitesti  |
| <b>International Classification of Functioning, Disability and Health (ICF)</b>   | “Elements of Occupational Therapy”                                   | “Kinetotherapy and Special Motricity” in Alba Iulia (“1 Decembrie 1918” University)   |
| <b>International Classification of Functioning, Disability and Health (ICF)</b>   | “International Classification of Functioning, Disability and Health” | “Kinetotherapy for persons with disabilities” master program of University of Pitesti   |



The “Occupational Therapy” bachelor program of University of Pitesti addresses a larger and more consistent subjects related to the wheelchair users.

By examination of **bibliography** used for each course mentioned above researchers found out that only in the case of “Occupational Therapy” bachelor program in Pitesti the training package of WHO is used as reference. They also use the ICF as reference.

The master program of “Kinetotherapy for persons with disabilities” of University of Pitesti has a **module of ICF** itself.

Table 12 below provides a description of the most relevant modules related to wheelchair users conducted within the specialized faculties in Romania.

We consider that the physical therapists with knowledge of assessment, prescription, fitting or user training exist in a very small extent and they do not work as specialists of wheelchair services. Graduates of specialized higher education are met in rehabilitation centers, hospitals, clinics being focused on the medical rehabilitation process.

Evidence suggests that there is a lack of awareness of the importance of an appropriate wheelchair among specialist physicians and they do not guide the user in this respect. The suppliers of wheelchairs do not work with wheelchair services professionals and not provide services of assessment, prescription, fitting etc. known as the WHO model of wheelchair service provision.

Table 12. University formal training programs

| University name                                    | Faculty  | Program name   | Program type (B/M)* | Course name                              | WSTP Subjects (or/and ICF)  | Other remarks   | Bibliography   |
|--|--|--|---------------------|--|---|-----------------|--|
| "1 Decembrie 1918" University of Alba Iulia        | Faculty of Law and Social Science                      | Kinetotherapy and Special Motricity                  | B                   | Patients Handling Techniques             | Wheelchair transfer techniques and wheelchair use   | 2 hours lecture |  |
|  |  |  |                     |  | Transfer of patients from the wheelchair to floor, from floor to wheelchair, transfer of highly dependent patients, transfer of the patients with the help of two nursing assistants, transfer with the help of mechanic elevator | 2 hours seminar |  |
|  |  |  |                     | Orthotics - Prosthetics                  | Main mobility aids and impact on the proper walking program   | 2 hours lecture |  |
|  |  |  |                     |  | Kinetic programs for patients with mobility aids: description, characteristics, way to apply the program  | 2 hours seminar |  |
| University of Pitesti                              | Faculty of Science, Physical Education and Informatics | Kinetotherapy and Special Motricity                  | B                   | Patients Handling Techniques             | Transfer from the wheelchair to chair; transfer from the chair to wheelchair  | 2 hours lecture |  |
|  |  |  |                     |  | Wheelchair transfer techniques  | 2 hours seminar |  |
|  |  |  |                     | Elements of Occupational Therapy         | Activities of daily living: means of assessment and therapy for intervention. Role of assistive devices for facilitating functional independence  | 2 hours lecture | <a href="http://www.who.int/classification/icf/">www.who.int/classification/icf/</a> |
| "Alexandru Ioan Cuza" University of Iasi           | Faculty of Physical Education and Sport                | Kinetotherapy and Special Motricity                  | B                   | Patients Handling Techniques             | Mobility aids for maintaining orthostatic position and assist walking   | 2 hours lecture |  |
|  |  |  |                     |  | Wheelchair mobility skills:<br>-rolling forward, rolling backwards (with and without assistance);<br>-turnings;<br>-up steps, down steps  | 2 hours seminar |  |
| University of Medicine and Pharmacy of Targu Mures | Faculty of Medicine                                    | Hydrotherapy, kinesiology and medical rehabilitation | B                   | Occupational Therapy in Physical Therapy | Transfers and wheelchair use; considerations related to wheelchair prescription and assessment; safety rules for wheelchair use; transfer techniques  | lecture         |  |

|                              |  |  |   |  |   |                 |  |
|------------------------------|--|--|---|--|---|-----------------|--|
|                              |  |  |   |  | Transfers and wheelchair use; assessment of wheelchair; appropriate positioning in the wheelchair; wheelchair accessories; transfer techniques            | seminar         |  |
|                              |  |  |   | Orthotics - Prosthetics                                      | Orthotics, prosthetics and assistive devices in daily living activities   | lecture         |  |
| Babes Bolyai University      | Faculty of Physical Education and Sport                | Kinetotherapy and Special Motricity            | B | Orthotics - Prosthetics                                      | Main mobility aids and impact on the proper walking program   | 1 hour lecture  |  |
|                              |  |  |   |  | Kinetic programs for patients with mobility aids: description, characteristics, way to apply the program  | 2 hours seminar |  |
| West University of Timisoara | Faculty of Physical Education and Sports               | Kinetotherapy in Orthopedic - Trauma Pathology | M | Occupational Therapy in orthopedics and trauma               | Applications of occupational therapy in SCI   | 2 hours lecture |  |
|                              |  |  |   |  | Occupational therapy in SCI – way of intervention   | 2 hours seminar |  |
| University of Pitesti        | Faculty of Science, Physical Education and Informatics | Occupational Therapy                           | B | Adaptations of physical environment for self-care activities | Housing adaptations: ramps, thresholds, door widths. Specific adaptations of the physical environment for persons with mobility impairments               | 2 hours lecture |  |
|                              |  |  |   |  | Kitchen adaptations: various utensils, cupboards, drawers, plates, glasses etc. Bathroom adaptations: adapted toilet, using non-slip materials            | 2 hours lecture |  |
|                              |  |  |   |  | Design and adaptations of houses and public buildings   | 2 hours seminar |  |
|                              |  |  |   |  | Accessibility policies for persons with disabilities. Access of PwD at various environments. National norms on accessibility of physical environment      | 2 hours seminar |  |
|                              |  |  |   |  | Ensuring safe mobility and comfort for persons with locomotor disabilities  | 2 hours seminar |  |
|                              |  |  |   | Assessment in Occupational Therapy                           | Assessment of participation and occupational performance for wheelchair users. Elements of assessment, prescription, provision and fitting of wheelchairs | 2 hours lecture | WHO – Wheelchair Service Training Package: Basic |
|                              |  |  |   |  |   |                 |  |

|   |  |   |   |  |   |                                      |   |
|---|--|---|---|--|---|--------------------------------------|---|
|   |  |   |   |  | Assessment of occupational needs of the wheelchair users.<br>Wheelchairs assessment and fitting – practical applications                                  | 2 hours seminar                      | Level, <i>Bucuresti, 2013</i><br><br>WHO – International Classification of Functions, <i>Geneva, 2004</i>   |
| "1 Decembrie 1918" University of Alba Iulia | Faculty of Law and Social Science                      | Kinotherapy and Special Motricity         | B | Elements of Occupational Therapy                                   | International Classification of Functioning   | 2 hours lecture                      | <a href="http://www.who.int/classification/icf/">www.who.int/classification/icf/</a>  |
| University of Pitesti                       | Faculty of Science, Physical Education and Informatics | Kinotherapy for persons with disabilities | M | International Classification of Functioning, Disability and Health | Structure, contents, components.<br>Rights of PwD – national & international regulations.<br>Changing the paradigm.<br>Environment and contextual factors | 14 hours lecture<br>14 hours seminar | <i>Classification of Functioning, Disability and Health (ICF)</i> , Geneva: WHO, 2001;<br><i>Classification of Functioning, Disability and Health – children &amp; youth version</i> , Bucuresti, 2012. |

(\*) B = Bachelor  
M = Master

## WSTP TRAINING OF PROFESSIONALS

### Qualified providers

**Motivation Romania Foundation** (MRF) organized and provided the first training courses for professionals on wheelchair assessment, prescription, provision and adaptation, based on the WHO Wheelchair Service Training Package (WHO WSTP) curricula for basic and intermediate modules by the WHO<sup>53</sup>. These **certified professional training programs** have been translated into Romanian and accreditation obtained from the National Authority for Qualifications<sup>54</sup> for both basic and intermediate modules. Previously, this subject area was not addressed in the university education system, or through certified training or practice. Training certification was a result of a longer process that included other significant accomplishments, as the inclusion of a new occupation ‘*Technician for wheelchair assessment, prescription, provision and adaptation*’ in the Romanian Code of Occupations, the development of the occupational standard and the qualification for this new occupation approved by the National Authority for Qualifications. Advancing this new occupation with a description of gained competencies and existence of specialized training are important milestones for the wheelchair sector in Romania.

In addition, to the WSTP Basic and Intermediate modules, MRF organized training courses for managers based on WHO WSTP module for managers.

MRF is the sole wheelchair services training provider in Romania, delivering all the four WHO modules: Basic (WSTPb), Intermediate (WSTPi), Managers (WSTPm) and Stakeholders (WSTPs).

### Qualified trainers

MRF carried out Training of Trainers sessions aiming to develop trainers of WHO WSTP modules. Thus, there is now a total of eleven (co)trainers for all four WHO WSTP modules. Nine trainers can provide the Basic module as trainers or cotrainers and five trainers can provide the Intermediate module.

Seven trainers have taken and passed the Basic ISWP test in English.

More details on the trainers can be found in the table below.

*(Note: all the trainers are MRF staff)*

| Table 13. Motivation trainers on WSTP |                |                              |       |       |       |                 |          |                         |
|---------------------------------------|----------------|------------------------------|-------|-------|-------|-----------------|----------|-------------------------|
| No                                    | Trainer name   | Type of training can provide |       |       |       | Language spoken |          | ISWP test (Basic level) |
|                                       |                | WSTPb                        | WSTPi | WSTPm | WSTPs | English         | Romanian |                         |
| 1                                     | Katharina Kiss | 1                            | 1     |       |       | 1               | 1        | 1                       |
| 2                                     | Gabriela Niță  | 1                            | 1     |       |       | 1               | 1        | 1                       |
| 3                                     | George Ștefan  | 1                            | 1     |       |       | 1               | 1        | 1                       |
| 4                                     | Elena Miron    | 1                            | 1     |       |       | 1               | 1        | 1                       |

<sup>53</sup> Idem 13

<sup>54</sup> <http://www.anc.edu.ro/>

|    |                        |   |   |   |   |   |   |   |
|----|------------------------|---|---|---|---|---|---|---|
| 5  | Cristina Pop (*)       | 1 |   |   |   | 1 | 1 |   |
| 6  | George Cernucan        | 1 |   | 1 |   | 1 | 1 | 1 |
| 7  | Iasmina Stoianov       | 1 | 1 |   |   | 1 | 1 | 1 |
| 8  | Mirela Cîrlan (**)     | 1 |   | 1 | 1 | 1 | 1 |   |
| 9  | Adina Vuță (**)        | 1 |   | 1 | 1 | 1 | 1 | 1 |
| 10 | Gabi Mihaela Comănescu |   |   | 1 | 1 | 1 | 1 |   |
| 11 | Claudia Ungureanu      |   |   |   | 1 | 1 | 1 |   |
| 12 | Alexandra Catrina (**) | 1 |   | 1 | 1 | 1 | 1 |   |

(\*) *former staff of MRF*

(\*\*) *cotrainers for basic*

### Training of professionals

During the period 2014 – 2016, MRF provided WSTP training of different levels to a total number of **161 professionals**, in different regions of the country. The participants were mainly MRF staff and in a very small proportion were members of Physical Therapists associations and other private organizations.

The training sessions were free of charge for participants as they were part of the projects implemented by MRF.

A number of **9 Basic modules** were held and attended by 99 participants and a number of **3 Intermediate modules** were attended by 21 participants.

MRF will provide WSTP training on a continuous basis depending on available funds.

| Type of course        | Number of courses held in country | Number of participants |
|-----------------------|-----------------------------------|------------------------|
| WHO WSTP Basic        | 9                                 | 99                     |
| WHO WSTP Intermediate | 3                                 | 21                     |
| WHO WSTP Managers     | 3                                 | 41                     |

## II.6. OTHER RESEARCH

Other published research within the Romanian context was explored.

### II.6.a) METHODOLOGY

A review of the existing expertise in the wheelchair field, looking specifically at research was conducted. Methods used included:

 Desk / online research: study of documents, other research reports, websites

### II.6.b) FINDINGS

Unfortunately, the importance of meeting wheelchair user' needs cannot be observed both at policy and research level in Romania. WHO documents represent our best reference in this field. There is no official institution dedicated to researching the disability issues, and occasional studies undertaken by public or private organizations do not usually approach aspects as specific as the mobility devices, result in a scarcity of research and recommendations to address issues.

The following materials are recommended as the best sources currently available in Romania on this topic:

| Research  | Content  |
|---|--|
| Romanian Academic Society, „Immobilized at home – The crisis of wheelchair financing in Romania” („Imobilizat la domiciliu. Criza finanțării de scaune rulante în România”), 2009   | This research report approaches the access to appropriate wheelchairs and indicates that the main problem is the insufficient funding of medical devices in Romania, not differentiated according to potential users' needs. It remarks the opening of the public funding to multiple private wheelchair suppliers and the lack of information for clients. It predicts an increase of the market due to aging population. |
| Romanian Academic Society, „Imobilized or integrated? The state and the access to mobility devices and independent life services” („Imobilizat sau integrat? Statul și accesul la echipamente de mobilitate și la servicii de viață independent”), 2010 | This policy brief supports the idea that policies to support persons with mobility disabilities should be integrated in a coherent health and social policy approach. Ensuring access of these people to living as independently and actively possible can increase their social inclusion and reduce the social protection costs.   |
| Motivation Romania Foundation, “Life in wheelchair: from Isolation to Participation - Sociological Study on Wheelchairs and Wheelchair User Services in Romania” (“VIAȚA ÎN SCAUN   | This study conveys the necessity of benefits and services that can meet the needs of persons with mobility disabilities, especially in terms of customized wheelchairs and assistive devices, along with wheelchair services (including independent living training), so that they can achieve the highest degree of   |

|  |  |
|--|--|
| <p>RULANT: DE LA IZOLARE LA PARTICIPARE – Raport de cercetare sociologică privind scaunele rulante și serviciile pentru utilizatorii de scaun rulant din România”), 2014</p> | <p>health and independence. Policies in the fields of healthcare and education, as well as those targeting social and political inclusion should be based on the reality of this category’s access to mobility devices and appropriate services.</p> |
|--|--|



## II.7. STAKEHOLDERS' MEETINGS

It is evident from the desktop research that wheelchair service delivery, education and training and specific policy related to this field lacks uniformity, with many gaps in the system regarding appropriate provision visible within the grey or limited scientific literature available. There are many stakeholders involved in the process of providing wheelchairs. In order to generate greater insights on the Romanian wheelchair sector, stakeholders were invited to attend consultation meetings to share their perspectives.

### II.7.a) METHODOLOGY

Three stakeholder meetings using the WHO Stakeholders training package were organized and implemented, with the following objectives:

1. To share knowledge and generate awareness among participants in establishing appropriate wheelchair provision in Romania
2. To work together to identify and prioritize issues regarding the current status of wheelchair provision in Romania
3. To formulate a plan of action for future initiatives – when planning for specific wheelchair provision strategy development.

The stakeholders meetings were held in **three different regions** of Romania.

- Brasov (Centre Region), in a conference room at ARO Palace Hotel in Brasov, on May 19th, 2017;
- Bucharest (Bucharest – Ilfov Region), in a conference room at Sheraton Bucharest Hotel, on May 25th, 2017;
- Ploiesti (South Muntenia Region), in a conference room at Hotel Central in Ploiesti, on May 30th, 2017.

### II.7.b) STAKEHOLDER PARTICIPANTS

Representatives of all-important stakeholders in the wheelchair sector in Romania were invited to participate. The attendees were composed from the following 61 participants (see table 14) (excluding meetings' moderators):

| <i>Table 14. Attendees at the stakeholder meetings</i>            |  |                           |                              |                             |                         |
|---|--|---------------------------|------------------------------|-----------------------------|-------------------------|
| Representatives of the following public and private organizations | Organization's role  | Brasov: number of persons | Bucharest: number of persons | Ploiesti: number of persons | Total number of persons |
| <b>NAPD</b>   | the main central authority in the protection of rights of PwD in Romania, institution under the coordination of the Ministry of Labor and Social Justice |                           | 2                            |                             | <b>2</b>                |

|  |   |                                     |             |          |           |
|--|---|-------------------------------------|-------------|----------|-----------|
| <b>CHIA</b>  | authorities decentralized at county level from the National Health Insurance Authority, institution under the coordination of Ministry of Health; authorities responsible for managing the National Fund of Social Health Insurance   |                                     | 3           |          | <b>3</b>  |
| <b>County Directorates for Social Assistance and Child Protection</b>              | authorities at county level responsible for funding specialized social services for children and adult PwD (usually residential services, day-care, emergency intervention, case management, disability assessment) and social benefits; institution under the coordination of the County Council | 1 physical therapist + 1            | 5           | 4        | <b>11</b> |
| <b>County Directorates for Public Health</b>                                       | authorities decentralized at county level responsible for health problems prevention and health regulations inspection, institutions under the coordination of Ministry of Health   |                                     |             | 1 doctor | <b>1</b>  |
| <b>Social workers / representatives from public social services at local level</b> | authorities at local level responsible for funding primary social services, for preventing the social exclusion of different categories of persons in distress; institution under the coordination of the city/town hall  | 2                                   |             | 5        | <b>7</b>  |
| <b>NGOs</b>  | Social services providers or lobby promoters  |                                     | 6           | 2        | <b>8</b>  |
| <b>Doctors</b>   |   |                                     | 1           |          | <b>1</b>  |
| <b>Physical therapists</b>   |   | 1                                   |             |          | <b>1</b>  |
| <b>Suppliers of wheelchairs</b>  | Private companies that import and distribute wheelchairs  | 2                                   |             | 1        | <b>3</b>  |
| <b>University representatives</b>  | University of Medicine and Pharmacy Bucharest and Transilvania University from Brasov   | 1 professor + 1 student at physical | 1 professor |          | <b>3</b>  |

|   |  |                    |                 |                          |          |
|---|--|--------------------|-----------------|--------------------------|----------|
|   |  | therapy<br>faculty |                 |                          |          |
| <b>Residential center for persons with disabilities</b>                             |  |                    |                 | 1                        | <b>1</b> |
| <b>Nursing home</b>   |  |                    |                 | 2                        | <b>2</b> |
| <b>Wheelchair users</b>   |  | 1                  | 1               | 3                        | <b>5</b> |
| <b>Parents + personal assistants of wheelchair users</b>                            |  |                    |                 | 2                        | <b>2</b> |
| <b>Experts / community leaders</b>  |  |                    | 1               |                          | <b>1</b> |
| <b>MRF staff / expert in WHO training (except for moderators)</b>                   |  | 2                  | 1               | 1                        | <b>5</b> |
| <b>Motivation LLC representative / wheelchair technicians / peer group trainers</b> |  | 2                  | 1 support staff | 1 physical therapist + 2 | <b>6</b> |

The Stakeholders meetings were designed as one half-day sessions and taking into consideration their objectives they were a mix of presentations, debate and focus groups. After finalizing the sessions' agenda, plans were made and the venue, equipment and catering for all three meetings were booked. Then invitations were sent to participants and key speakers (at least 10 days before the meeting) and their confirmation of participation was received. The necessary resources were prepared: Power Point presentations, selected videos, service steps posters, legislation summary, WHO materials, evaluation forms, participants register form, consent form for taking notes and photos, and stationary.

The three stakeholders' meetings were carried out in May 2017. Afterwards the notes were transcript and the data was processed and reported. MRF staff was supported in this process by the international consultant.

#### II.7.c) FINDINGS

The agenda included the following items:

|   |
|---|
| The current situation in Romania, legislative and institutional framework, WHO approach                               |
| Policy to practice  |
| The wheelchair sector – accomplishments and challenges  |
| What providing an appropriate wheelchair means?   |
| Working together for change – elaborating a Strategic Plan for future development of the wheelchair sector in Romania |

The discussions (*see Annex 15*) focused on the analysis of the wheelchair sector in Romania, as compared to WHO recommendations in this field in terms of products and services. The legislation in the field was reviewed, the importance of training the personnel was highlighted. Participants noticed that they all could contribute to two important steps in wheelchair services: Appointment and referral and Maintenance, repairs and follow-up. One important gain of all meetings was the fact that everybody realized that a wheelchair service was necessary (it's not enough to provide the product). The participants particularly acknowledged the importance of assessment, fitting, and wheelchair training.

The participants identified the main stakeholders in the field and their roles and responsibilities in the wheelchair service provision. Throughout the discussions, accomplishments and challenges in the wheelchair sector came out and a series of priority measures were proposed in order to improve this situation, actions to be taken to answer the challenges.

The **key priorities and actions proposed** were:

#### **WHEELCHAIRS AND WHEELCHAIR SERVICES**

- To standardize the necessary forms and to simplify the procedure in the files that users submit to the CHIA in order to obtain funding for a wheelchair;
- To decrease the time interval for replacing people's wheelchairs (currently every 5 years);
- To differentiate the funding for wheelchairs according to the needs of the users; to offer individualized reimbursement, including for power wheelchairs;
- To include services for wheelchair users in the state funding;
- To impose and comply with quality standards for wheelchairs and wheelchair services;
- To focus on early intervention (in the hospital) in terms of identification and response to the needs of people with mobility disabilities;
- To promote and fund new mobility devices and other assistive devices; to reimburse the cost of tricycle for adults;

#### **PERSONNEL AWARENESS & TRAINING**

- To train specialists from public institutions, wheelchair providers, medical staff (family doctor, specialized doctor, hospital staff), and social assistance, on issues related to wheelchairs;
- To increase the competencies of the staff with responsibilities on informing beneficiaries;
- To emphasize the importance of collaboration between institutions and organizations (cooperation among stakeholders) and multidisciplinary team working; to promote public – private partnerships;

#### **WHEELCHAIR USERS EMPOWERMENT**

- To provide (potential) users with information about the wheelchair and house accessibility, legal provisions, services made available by public and private providers;
- To mobilize people with disabilities to defend their rights;
- To make wheelchair users and their families aware of the importance of wheelchair adaptations;
- To offer independent living skills training to wheelchair users;
- To offer psychological counselling to families of wheelchair users;

#### **GENERAL PUBLIC AWARENESS**

- To promote the general understanding and raise public awareness of the situation of people with disabilities and the need to make the public space accessible to wheelchair users;
- To increase the involvement of the civil society;

#### **PUBLIC SPACE ACCESSIBILITY**

- To correctly implement the legislation on accessibility of public space and transportation and to strengthen the control measures and sanctioning of law violations;
- To include people with mobility disabilities as part of the new buildings' reception committees to verify compliance with accessibility rules for wheelchair users;
- To support complaints submission.

Overall meeting participant appeared committed to contribute further to the wheelchair subject. At the end of each meeting evaluation was completed. The final meeting assessment questionnaires showed that 39 participants (almost 85% of the respondents) would share the information with their colleagues, 36 (78%) committed to attend other similar meetings and 19 to a working group on wheelchair sector (if the case). 31 participants will support the activity of other stakeholders, to the extent of their professional responsibilities and 20 will advocate for fulfilling the proposed measures (specific examples were given).

Unlike other countries, where there are multiple wheelchair organizations, in Romania there is no unique stakeholders' group of wheelchair users. There are charities or service providers, also several organizations of parents of children with disabilities, with limited expertise in self-advocacy. There is no strong group to support lobby actions towards the government, to endorse the implementation of a strategic plan for the wheelchair sector in Romania.

That is why the stakeholders' meetings represented a good opportunity to bring together services providers and people who benefit from these services, which is important, is a change in itself.

### III. CONCLUSIONS & RECOMMENDATIONS

There is greater visibility regarding the needs of people who use wheelchairs in Romania; however, the existing services and benefits cannot fully satisfy these needs. Romania has ratified the UN CRPD in 2010. Its ratification should have been the key moment for the analysis and adjustment of the national legislation, so that the assumed obligations can be performed and complied with. In reality, the system's response is limited at only taking a medical and assistive-type approach rather than addressing all aspects of a person's life in a holistic manner. The social policies focus on passive compensation of disability through benefits, and not on social and employment services dedicated to active (re)integration in the community. In addition wheelchair users appear to be one of the most disadvantaged groups, characterized by lack of income, services and environment accessibility, which creates major barriers when accessing to education, employment, culture and sport activities.

There is an estimated range of people who use wheelchairs between 110,000 and 297,000 living in Romania. Current wheelchair service delivery is limited with information regarding obtaining and using wheelchair products not easily accessed from hospitals or family physicians. Once a person is referred to the specialist physician for a wheelchair prescription, delays can occur during submission of the file to the CHIA. The current state funding structure discourages people to procure a wheelchair. Approximately ten to twenty per cent of people who require a wheelchair do not have one, negatively affecting every aspect of living, physically, psychologically and socially.

Based on the analysis of the Romanian situation, the following recommendations are made to work towards advancing wheelchair service delivery in the longer term:

#### **WHEELCHAIRS AND WHEELCHAIR SERVICES - AWARENESS**

- *Information on how to get an appropriate wheelchair (procedure, steps, documents), life skills and living as a wheelchair user should be offered in primary health care (hospitals, family physicians).*
- *Information for users and their families on the importance of an appropriate wheelchair should be provided, along with awareness training on disability issues.*

In Romania, wheelchair services are product focused which are prescribed and delivered without an adequate assessment, resulting in wheelchairs that are not appropriate to meet individual needs. Motivation Romania is the only organization that provides, through its trained specialists, the complete range of services recommended by the WHO eight step guidelines. The other wheelchair suppliers do not appear to have the necessary knowledge and capacity and do not offer such services.

Most wheelchair owners get their mobility device as a donation from private sources or procure it through a state subsidy. Currently the subsidy is 1,104.44 lei (about 263 USD) for purchasing any type of manual or power wheelchair. Setting such a low reference price and allocating limited

funds for wheelchairs show, in our opinion, no concern for the quality of the product, nor respect for clients' needs. If a wheelchair is more expensive than the amount reimbursed, the user has to raise money from family members, donations, sponsorships or other social benefits. Usually, due to the lack of financial resources, the users purchase a wheelchair of the maximum amount reimbursed by the state, even if it does not meet their needs.

An inappropriate wheelchair can have significant consequences on one's health and quality of life, leading to pressure injuries, progression of deformities or contractures, postural instability, respiration and digestion problems and other secondary health conditions and premature death<sup>55</sup>. Given the limitations imposed by public financing system, it can be surmised that most wheelchair users in Romania do not have a real opportunity to choose the device that most suits their needs.

Once a wheelchair has been provided, the term for replacing the device, subsidized from the public health insurance fund, is five years in case of a wheelchair and three years in case of a tricycle for children. This poses major limitations for meeting people's changing needs across the life course. For example growing children, people with progressive health conditions, general wear and tear wheelchairs or when used in physically challenging environment (in a rural area, for instance).

All providers are selling imported wheelchairs, as there are no manufacturers anymore in Romania. They sell a complex range of products: manual and power wheelchairs, positioning systems, wheelchairs for adults and children, wheelchairs with rigid or foldable frame. Evidence suggests an availability of a range of wheelchairs, however the majority of Romanian wheelchair users have limited choices due to restrictions in state funding and the procurement of low-cost products to meet the reference price calculated under Romanian law. Most people with disabilities do not have access to private insurance to cover product costs. The government is the main buyer of wheelchairs; therefore the Romanian wheelchair market is quite unbalanced. Most products purchased are cheaply manufactured (in order to maximize their profits), with low to average quality wheelchairs flooding the market place, without cushion or additional accessories, adaptations or extra postural support elements (which require additional funding).

By setting a (low) reference price as reimbursement for the purchase of any wheelchair, Romania uses the cost control as sole criterion for funding this type of mobility device. There is no concern to individual needs of the user and no quality standards are in place. WHO recommends that government authorities develop and adopt national wheelchair standards applicable to all wheelchairs supplied in a country: locally produced and imported, whether donated or purchased<sup>56</sup>. All wheelchairs in the market are imported and, therefore, some of them might respect the ISO international standards 7176 or other national or producer's standards. Standards are not regulated, monitored or validated by Romanian authorities or vendors. The National Agency of Medicines and Medical Devices only checks the functioning and operating process of the suppliers and the administrative and commercial procedures they use (not clinical ones).

---

<sup>55</sup> World Health Organization, "Joint position paper on the provision of mobility devices in less-resourced settings", 2011: [http://www.who.int/disabilities/publications/technology/jpp\\_final.pdf](http://www.who.int/disabilities/publications/technology/jpp_final.pdf)

<sup>56</sup> Idem 13



### **WHEELCHAIRS AND WHEELCHAIR SERVICES – ASSESSMENT AND FUNDING**

- *All the supplied wheelchairs should be provided with a cushion and must be appropriate to the user's individual needs.*
- *The amount of subsidy for a wheelchair should be increased and the legislation should allow the reimbursement of wheelchair services too, especially assessment, prescription, fitting, user training and follow-up services.*
- *The five-year term for a new subsidy for a wheelchair should be reduced.*
- *A prioritization system should be put in place to meet people's need across their life course – for example in case of children.*
- *Reimbursement of a power wheelchair for those who need this kind of device is necessary.*
- *Reimbursement of tricycle for adults is necessary.*

Over 70 wheelchair suppliers were identified; most of them with yearly contracts with the CHIA and are also subject to authorization and evaluation by the National Agency of Medicines and Medical Devices (NAMMD) every 2 years.

The procurement of a wheelchair through a private insurance is not a practice in Romania; usually, the insurance companies do not include this mobility device or wheelchair services among their products

### **WHEELCHAIRS AND WHEELCHAIR SERVICES – QUALITY SYSTEMS**

- *National review to develop quality systems for wheelchairs and wheelchair services provision is necessary as a government responsibility (for example, the NAMMD criteria to be based on WHO 8 step approach).*
- *Informing the private insurance companies on the wheelchair users' needs and on the necessity of financing wheelchair services.*

In order to understand and assume all necessary improvements of the current legal provision, procedures and practices, a mindset-changing campaign seems necessary, at different levels in many stakeholders, also in the general public.

### **GENERAL PUBLIC AWARENESS - EDUCATION FOR ALL**

- *All stakeholders (especially policy makers) should become aware of necessary policy and practice change in wheelchair (service) provision in Romania. Greater awareness among the general public should also be developed to generate a better understanding of wheelchair users' needs and the importance of appropriate wheelchair provision.*

Physical environment accessibility is a huge challenge that persons using mobility devices face in their everyday life in Romania. Although this was not a subject approached by this research, the stakeholders that were consulted stressed the need for advocacy and specific measures to be taken in order to fully implement the existing legislation in this field.

### **PUBLIC SPACE ACCESSIBILITY**

- *Compliance with the existing regulations in the field of public space accessibility for wheelchair users should be ensured.*



Physical therapists are trained within the higher education system having 27 bachelor programs and 10 master programs in all regions of the country. Out of these, only two bachelor programs offer courses of “Occupational Therapy” with subjects of WHO’s Wheelchair Service Training Package. More specifically, it is about wheelchair prescription and assessment, appropriate positioning in the wheelchair, provision and fitting of wheelchairs, safety rules for wheelchair use. Physical therapists with knowledge of wheelchair services exist to a very small extent. Graduates of specialized higher education are focused on the recovery process. Suppliers of wheelchairs do not work with wheelchair service professionals and do not provide the services known as the WHO 8 steps model.

MRF is the sole WSTP provider in Romania, delivering all the four WHO modules: Basic (WSTPb), Intermediate (WSTPi), Managers (WSTPm) and Stakeholders (WSTPs). Until now, MRF provided WSTP on all levels mainly to its own staff and can provide this training package on a continuous basis depending on available funds. Moreover, a new occupation was created, namely the wheelchair assessment technician.

In a wider perspective, various other categories of professionals working with/for wheelchair users (such as medical staff, social workers etc.) need more information on related subjects, in order to prescribe appropriate wheelchairs, inform beneficiaries of their rights, options and opportunities and be able to notice when users have problems with the existing wheelchairs.

On the other hand, wheelchair users themselves need to be empowered to more efficiently exercise their rights.

#### **PERSONNEL AWARENESS & TRAINING**

- *Specialists in wheelchair services must be prepared within the formal education system by integrating subjects of WSTP into courses curricula.*
- *Providers should involve trained technicians in delivering wheelchair services.*
- *Training of professionals delivering homecare services is needed.*
- *Specific information and training courses for family members and for personal care assistants are needed.*
- *All personnel working in the wheelchair sector and wheelchair users themselves need awareness, support and training.*

The Romanian disability field is facing a severe lack of statistical data to describe the situation. This can be either a sign or a consequence of the lack of vision that characterizes public policies in this field. With regard to research, there are only occasional studies on disability undertaken by public or private organizations and usually they do not approach specific aspects such as mobility devices.

#### **STATISTICAL DATA ABOUT WHEELCHAIR USERS**

- *Improving data collection on wheelchair users and research in this area.*
- *Introduce “user of wheelchair” item into the data collected by the public institutions and creating an information flow allowing centralization of information.*
- *The National Statistics Institute to produce statistics based on data gathered from Health Insurance Authorities, NAPD, County Directorates for Social Assistance and Child Protection and providers.*

It is necessary for all stakeholders, for the Romanian society in general, to be aware of the situation of persons that need and/or use a wheelchair, as they represent a significant demographic. The lack of appropriate wheelchairs available leads to inequalities of opportunity to benefit from fundamental rights of all citizens, including access to personal mobility, and social and professional life. In addition, the level of need for wheelchairs and services is important to understand when considering other health conditions (e.g. pressure injuries, postural deformity, digestive and respiratory conditions) that are costly for individuals and society, adding to medical expenditures, support services, assistive technology and accessibility, and loss of earnings (since this category of people are less likely to be employed), as indirect costs that generally exceed direct costs<sup>57</sup>.

This research provides the basis for the Romania Strategic Plan for the wheelchair sector, that aims at designing a strategy for improving the situation of wheelchair users, in order to “enable persons with disabilities to live independently and participate fully in all areas of life”<sup>58</sup>.

---

<sup>57</sup> idem 27

<sup>58</sup> idem 1

## **IV. ANNEXES**

### **II.2. FUNDING**

Annex 1- Data collected sheet Private insurance funding for wheelchairs

Annexes 2 and 3 - Letter of request insurance companies

Annexes 4 and 5 – Questionnaire insurance companies

### **II.3. ACCESS TO WHEELCHAIRS AND WHEELCHAIR SERVICES**

Annexes 6 and 7 - Access to WC interview guide

Annex 8 - Interviews audio recording

Annex 9 - Interviews transcriptions

Annex 10 - Romania's map with regions and Motivation Romania offices

### **II.4. IN-COUNTRY PROVIDERS**

Annex 11 - Data collected sheet Products and providers

Annex 12 - Print screens products

Annex 13 - Motivation Romania service delivery

### **II.5. FORMAL EDUCATION AND TRAINING**

Annex 14 - Data collected sheet Universities programs

### **II.7. STAKEHOLDERS MEETINGS**

Annex 15 - Report of Stakeholders Meetings

Annexes 16, 17 and 18 - Stakeholders' meetings' lists

## V. BIBLIOGRAPHY

- Academic Network of European Disability, “Country report on Social Protection and Article 28 United Nations Convention on the Rights of Persons with Disabilities”, 2017: <http://www.disability-europe.net/country/romania>
- Euro Health Consumer Index 2016: [http://www.healthpowerhouse.com/files/EHCI\\_2016/EHCI\\_2016\\_report.pdf](http://www.healthpowerhouse.com/files/EHCI_2016/EHCI_2016_report.pdf)
- EUROSTAT: [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth\\_dsi080&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_dsi080&lang=en)
- INSOMAR, Study on social inclusion on the labor market, 2011: <http://www.stpsudmuntenia.ro/docs/studiu%20privind%20incluziunea%20sociala%20pe%20piata%20muncii%20in%20regiunea%20sm.pdf>
- Ministry of Labor and Social Justice, National Strategy on Social Inclusion and Poverty Reduction 2015-2020 - Romania: [http://www.mmuncii.ro/j33/images/Documente/Familie/2016/StrategyVollEN\\_web.pdf](http://www.mmuncii.ro/j33/images/Documente/Familie/2016/StrategyVollEN_web.pdf)
- Motivation Romania Foundation, “Life in wheelchair: from Isolation to Participation - Sociological Study on Wheelchairs and Wheelchair User Services in Romania”, 2014: [http://motivation.ro/wp-content/uploads/2016/02/Studiu\\_SR.pdf](http://motivation.ro/wp-content/uploads/2016/02/Studiu_SR.pdf)
- Motivation Romania Foundation, „Independent and active in the community – Research report about the situation of persons with spinal cord injuries in Romania”, 2017: [http://bit.ly/Independent\\_si\\_activ\\_in\\_comunitate\\_Raport\\_de\\_cercetare](http://bit.ly/Independent_si_activ_in_comunitate_Raport_de_cercetare)
- Motivation Romania Foundation, Accessibility Map: [www.accesibil.org/](http://www.accesibil.org/)
- National Agency for Payments and Social Inspection, National Report on schools’ accessibility, 2017: <http://www.mmanpis.ro/wp-content/uploads/2016/06/Rap.accesibilitati-2016.pdf>
- National Council for Combating Discrimination, TNS CSOP, “Perceptions and attitudes of Romanian population towards the National strategy for preventing and combating discrimination”, 2015: [http://nediscriminare.ro/uploads\\_ro/112/106/Sondaj\\_TNS\\_CNCD\\_2015.pdf](http://nediscriminare.ro/uploads_ro/112/106/Sondaj_TNS_CNCD_2015.pdf)
- National Fund for Social Health Insurance, 2014, 2015, 2016: [http://www.cnas.ro/theme/cnas/js/ckeditor/filemanager/userfiles/BUGET\\_FNUASS/Bug et\\_2014.pdf](http://www.cnas.ro/theme/cnas/js/ckeditor/filemanager/userfiles/BUGET_FNUASS/Bug et_2014.pdf), [http://www.cnas.ro/theme/cnas/js/ckeditor/filemanager/userfiles/BUGET\\_FNUASS/Bug et\\_2015.pdf](http://www.cnas.ro/theme/cnas/js/ckeditor/filemanager/userfiles/BUGET_FNUASS/Bug et_2015.pdf), [http://www.cnas.ro/theme/cnas/js/ckeditor/filemanager/userfiles/BUGET\\_FNUASS/Bug et\\_2016.pdf](http://www.cnas.ro/theme/cnas/js/ckeditor/filemanager/userfiles/BUGET_FNUASS/Bug et_2016.pdf)
- National Statistics Institute, press release no.98/18.04.2017: [http://www.insse.ro/cms/sites/default/files/com\\_presa/com\\_pdf/somaj\\_2016r.pdf](http://www.insse.ro/cms/sites/default/files/com_presa/com_pdf/somaj_2016r.pdf)
- REACT Association, “Research on attitudes towards people with disabilities”, 2011: <http://asociatiareact.ro/nou/wp-content/uploads/2014/01/Cercetare-privind-atitudinea-fata-de-persoanele-cu-dizabilitati.pdf>
- Romania National Census 2002: [http://www.insse.ro/cms/files/RPL2002INS/index\\_rpl2002.htm](http://www.insse.ro/cms/files/RPL2002INS/index_rpl2002.htm)

- Romanian Academic Society, “Discrimination in academic environment”, 2015: <http://sar.org.ro/wp-content/uploads/2015/12/Raport-de-cercetare-Mob-univ-2.pdf>
- Romanian Academic Society, ”Diagnosis: excluded from the labor market – Setbacks in the employment of persons with disabilities in Romania”, 2009: <http://motivation.ro/wp-content/uploads/2016/02/Diagnostic-exclus-de-pe-piata-muncii.pdf>
- Romanian Academic Society, „Imobilized at home – The crisis of wheelchair financing in Romania”, 2009: <http://motivation.ro/wp-content/uploads/2016/02/Raport-de-cecetare-Imobilizat-la-domiciliu.pdf>
- Romanian legislation:
  - Law no.221/2010 for ratifying the United Nations Convention on the Rights of Persons with Disabilities
  - Law no.8/2016 regarding the establishment of mechanisms stipulated by the United Nations Convention on the Rights of Persons with Disabilities
  - Law no.448/2006 regarding the protection and promotion of the rights of persons with disabilities
  - Law no.292/2011 on social assistance
  - Government Decision no.655/2016 for approving the National Strategy “A society without barriers for persons with disabilities” 2016 – 2020 and the Operational Plan for implementing the National Strategy
  - Order no.106/32/2015 for approving the Framework Regulations on the organization and operation of assessment committees and standards for providers of healthcare services, medical devices, medication, sanitary materials, as well as the framework methodology for the assessment of these categories of providers
  - Government Decision no.161/2016 for approving the health services packages and the Framework Contract that governs the conditions for providing medical care, medication and medical devices within the social health insurance system for years 2016-2017
  - Order no.803/2016 for approving the methodology for setting the reference prices and the rental amounts corresponding to the categories and types of medical devices meant to recover body structures and functions’ impairments in outpatient settings, within the health insurance system
  - Order no.196/139/2017 for putting into practice the Government Decision no.161/2016 in 2017
  - Order no.189/2013 for approving the technical regulations regarding the adjustment of civil buildings and urban space to the individual needs of persons with handicap
  - Rule no. 051-2012 approved by Order no.189/2013 issued by the Ministry of Regional Development and Public Administration
- Statistical Bulletin on Disability, 1<sup>st</sup> Quarter 2017, Ministry of Labor and Social Justice: [http://www.mmuncii.ro/j33/images/buletin\\_statistic/ANPD\\_I2017.pdf](http://www.mmuncii.ro/j33/images/buletin_statistic/ANPD_I2017.pdf)
- Statistical Bulletin on Pensions, 1<sup>st</sup> Quarter 2017, Ministry of Labor and Social Justice: [http://www.mmuncii.ro/j33/images/buletin\\_statistic/Pensii\\_I2017.pdf](http://www.mmuncii.ro/j33/images/buletin_statistic/Pensii_I2017.pdf)
- UN COMTRADE:  
<https://comtrade.un.org/db/dqBasicQueryResults.aspx?px=HS&cc=8713,871310,871390,871420&r=642&p=0&rg=1&y=2007&so=8>

- United Nations Convention on the Rights of Persons with Disabilities:  
<https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html>
- World Bank, “Background study for the National strategy on social inclusion and poverty reduction 2015 – 2020”, 2015:  
<http://documents.worldbank.org/curated/en/290551467995789441/pdf/103191-WP-P147269-Box394856B-PUBLIC-Background-Study-EN.pdf>
- World Bank, “Understanding Poverty: Topics”:  
<http://www.worldbank.org/en/topic/disability>
- World Health Organization, “Guidelines on the provision of Manual Wheelchairs in less resourced settings”, 2008:  
[http://www.who.int/disabilities/publications/technology/English%20Wheelchair%20Guidelines%20\(EN%20for%20the%20web\).pdf?ua=1](http://www.who.int/disabilities/publications/technology/English%20Wheelchair%20Guidelines%20(EN%20for%20the%20web).pdf?ua=1)
- World Health Organization, “International Perspectives on Spinal Cord Injuries”, 2013:  
[http://apps.who.int/iris/bitstream/10665/94190/1/9789241564663\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/94190/1/9789241564663_eng.pdf?ua=1)
- World Health Organization, International Classification of Functioning, Disability and Health: <http://www.who.int/classifications/icf/en/>
- World Health Organization, World Report on Disability, 2011:  
[http://www.who.int/disabilities/world\\_report/2011/report.pdf](http://www.who.int/disabilities/world_report/2011/report.pdf)
- World Health Organization’s Global Health Expenditure Database:  
[http://apps.who.int/nha/database/World\\_Map/Index/en?id=REPORT\\_4\\_WORLD\\_MAPS&mapType=3&ws=0](http://apps.who.int/nha/database/World_Map/Index/en?id=REPORT_4_WORLD_MAPS&mapType=3&ws=0)