



Development of a VET curricula for Personal Assistant professional profile based on the European Framework of Qualifications

# EU-Assistant: Development of a VET curricula for Personal Assistant professional profile based on the European Framework of Qualifications

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## ***MODULE 9 – MOBILIZATIONS***



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## 1. MODULE DESCRIPTION

<b>MODULE TITLE</b>	Mobilizations
<b>KEYWORDS</b>	Mobilization, physical support for person with special needs, mobility aid, transfer device
<b>TARGET GROUP</b>	The target group of the module are people who want to obtain some knowledge to become a personal assistant for a person with disability
<b>LEVEL</b>	beginner
<b>CAREER OPPORTUNITIES</b>	Independent persons who want to become personal assistant for persons with disabilities
<b>AIMS OF MODULE</b>	This module provides participants practical, comprehensive knowledge and skills necessary to learn how to mobilize and offers physical support to the user, how to use different techniques of transfer and mobilization, how to mobilize others without damaging them or himself/herself, how to manage own force/physical efforts for self-safety; etc.
<b>LEARNING OUTCOMES</b>	Up on successful completion of the module the participant will learn how to mobilize and offer physical support, how to use different techniques of mobilization and transfer, how to mobilize others without damaging them or himself/herself, how to manage own force/physical efforts for self-safety; etc.
<b>PREREQUISITE(S) SKILLS:</b>	use of basic ICT

<b>PREREQUISITE(S) COURSE:</b>	none
<b>GUIDED LEARNING HOURS:</b>	10 hours
<b>COMPENTENCY</b>	Learn about mobilization and transfer methods that can help the person with disabilities in daily life
<b>ASSESSMENT</b>	Assessment will consist of a multiple-choice test. Each test will consist of multiple-choice questions which will test candidates' knowledge and understanding across the learning outcomes.
<b>CATEGORY</b>	cost (cost optimization) time (efficient time management) s-quality (service quality) m-quality (management quality)
<b>SUPLEMANTARY MATERIAL(S)</b>	none

## 2. INTRODUCTION

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Dear Participant,

Welcome to this Module! This module is created for people who want to become a personal assistant for persons with special needs. In this module you will learn about assistive technologies and tools who can help a person with special needs to perform some tasks alone.

The Module includes knowledge and skills necessary to learn how to mobilize and offers physical support to the user, how to use different techniques of transportation, transfer and mobilization; how to mobilize others without damaging them or himself/herself, how to manage own force/physical efforts for self-safety; etc.

In the other modules you will learn about:

- the history of term: from handicap to disability and functional diversity;
- the philosophy of Independent Living;
- what is a Personal Assistant;
- communication abilities with disabled person;
- what is autonomy promotion and how to support the person with disability to develop his/her personal autonomy and build a self-positive image;
- to manage your working plan;
- assistive tools that can help the person with special needs;
- how to provide primary care, first aid and feeding the person with disability.

After these modules, you will be ready start working as a professional personal assistant!

Warm regards,

EU-Assistant Project Team

### 3. BASIC MOBILIZATIONS AND POSTURAL CHANGES

#### General rules for making transfers

- Separate the feet, one next to the object and another behind;
- From the crouching position (sitting position), keep your back straight (which is not always vertical);
- A right back causes that the spine, muscles and abdominal organs to be in correct alignment;
- It minimizes intestinal problems understanding that causes hernias;
- Neck and head should follow the alignment of the back;
- Fingers and hands must be spread over the object to be raised with the palm. The fingers alone, have little power;
- Approach the object, arms and elbows next to the body. If the arms are extended, they lose much of their strength. The weight of the body is concentrated on the feet. Begin lifting with a push of the back foot;
- To prevent body torsion, as it is the most common cause of back injury, the front foot must be changed in the direction of movement;
- If the object is too heavy for a person, the two persons, performing the movement together, should coordinate with each other by counting: one, two, three, up.

Sometimes, it's necessary to do between two people:

1. Place each person on each side of the bed, facing the patient;
2. We must place the feet apart as well as the knees slightly flexed;
3. Remove top clothing from the bed as well as the patient's pillow;
4. Assistants or caretakers introduce one arm under the user's shoulder and the other under the thigh. They hold the patient and lift it carefully until it is brought to the desired position;

NOTE: When mobilizing the user to the desired position it is necessary to avoid sudden or abrupt friction and jolts, for which step 4 is best performed with the aid of an intermediary.

You can also place the two people on the same side of the bed, like this:

1. The first person places one arm under the patient's shoulders and the other arm under the chest;
2. The second person slides his or her arms to the height and below the gluteal region;
3. Then carefully lift the user to the required position.

#### Moving the user from bed to wheelchair

- The first thing to do is to fasten the wheels. If there is still danger of the chair moving, it will take two people, one of which will hold the chair by the back to prevent its movement;

- If the bed is very high, a step will be placed that is firm and has enough surface for the user to move without falling;
- The person will sit on the edge of the bed and put, with the help of the PA, the gown and the slippers (so that they do not go away easily);
- If the user can not just make the necessary movements to sit at the edge of the bed, he will be helped in the manner indicated in.
- The chair is placed with the backrest at the foot of the bed and parallel to it;
- The PA is placed in front of the person with the foot that is closest to the chair in front of the other;
- The user places his or her hands on the shoulders of the PA while he holds him by the waist;
- The person puts his/her feet on the floor and the PA holds with the knee more advanced the corresponding knee of the user so that it does not bend involuntarily;
- The PA turns holding the client and, once placed in front of the chair, flexes the knees so that the user can gently go down and sit in the chair. When the chair is not wheeled, it proceeds in the same way, but the danger of the chair moving back away is lower.

#### **Mobilization of the user helped by a sheet**

- For this technique we will help a sheet folded in its length in half;
- We will place the user underneath, so that it reaches from the shoulders to the thighs.
- To do this we will place the user in the lateral position, as close to one edge of the bed and insert the sheet on the opposite side to the one that is turned, then we will return to the other side and remove the part of sheet that is missing.
- Once the sheet is placed, it is rolled by the sides, holding each person tightly, so that the person can move sliding to either side of the bed avoiding friction

#### **Mobilization of the user towards one side of the bed**

- The PA is placed on the side of the bed to which he is going to move the person and will place the arm closest to the patient on his chest:
- We stop the bed and place it in a horizontal position (without angulation), removing the pillows and uncovering the person's body
- We pass an arm under the person's head and neck until he grasps the furthest shoulder;
- Place the other arm below the lower back;
- Once held with both arms, we will gently and simultaneously pull the patient to the desired position;

- Once this part of the body is displaced, we will place one of our arms under the buttocks and the other under the inferior third of them, proceeding to move the other part of the user's body to the desired position

### **User's rotation bed of supine to lateral decubitus**

- The PA should be placed on the side of the bed to which the user is to turn:
- First, the person is moved to the side of the bed opposite the desired decubitus position, so that the patient is placed in the center of the bed when the patient is rotated.
- The person is asked to stretch the arm toward the side that will rotate the body and flex the other arm over the chest;
- You are asked to flex the knee of the limb that is going to be above;
- Then the PA must place one of his/her arms under the shoulder and the other under the hip;
- Turn the person to the side where the PA is located, leaving him/her placed in the lateral decubitus position.

NOTE: In the lateral decubitus position, precautions should be taken with ears, shoulders, elbows, iliac crest, trochanters and malleolus so that pressure ulcers do not occur.

## 4. MOBILIZATION AND TRANSPORTATION OF PERSONS WITH SPECIAL NEEDS

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### 4.1. Introduction

You should already know that the mobilization and transportation of persons with special needs could be problematic, especially for those who have physical disability. People with special needs describe how transportation barriers affect their life and how difficult is for them to mobilize.

To those persons (with special needs or elderly), who have interacted during their lives with different barriers in mobilization and transportation, different devices (mobility and transfer aids) have been created. These mobility aids can offer them and to the personal assistant or caregivers better solutions than, for example, performing the mobilisation with the help of arms. These aids can help with mobility or doing transfer within a building, room or where it is necessary to change the sitting level (for example from bed to chair).

A short definition of **mobility aid** said that "it's a device designed to assist walking or otherwise improve the mobility of people with mobility impairment".

Some of these mobility aids are known and used since many years, such as: cane or walking sticks and wheelchairs for those who have mobility impairment; white cane and guide dog for those who are blind or visually impaired.

### 4.2. Walking aids

As we have mentioned before some of the most known walking aids are: cane or walking stick and crutches. In the last years it is used outside the hospitals the walker.



These devices help to maintain an upright position offering an improved stability, reduce forces on lower-limbs helping the movement.



The **cane** or **walking stick** is the simplest form of walking aid. It is held in the hand and transmits loads to the floor. The load which can be applied through a cane is transmitted through the user's hands and wrists and limited by these.

A **crutch** is a mobility aid that transfers weight from the legs to the upper part of the body. It is often used by people who cannot use their legs to support their weight, because of short-term injuries or lifelong disabilities.



A **walker** or **walking frame** is a tool for persons with special needs or elderly people who need additional support to maintain balance or stability while walking. It is the most stable walking aid and consists of a freestanding metal framework with three or more points of contact which the user places in front of them and then grips during movement.

A **gait trainer** is a wheeled device that assists a person who is unable to walk independently to learn or relearn to walk safely and efficiently as part of gait training. Gait trainers are intended for children or adults with physical disabilities, to provide the opportunity to improve walking ability.



#### 4.3. Wheelchairs and scooters

A **wheelchair** is a chair with wheels, used when a person have walking difficulties or impossible due to illness, injury, or disability. There are a wide formats of wheelchairs created to meet the specific needs of their users: wheelchairs with seating adaptations, individualized controls or used to particular activities (sports wheelchairs and beach wheelchairs).



Wheelchairs can be powered manually (the user push the wheels by hand or the wheelchair it is pushed by another person) or with batteries and electric motors (electric wheelchair).

Mobility scooters are used by people who have a limited ability to walk.



There have been developed smart wheelchairs, which is a wheelchair powered with batteries and using a system control. Its purpose is to reduce or eliminate the user's task of driving a power-chair.

There it is possible the propulsion of a manual wheelchair by foot. The occupant is possible for users who have limited hand movement capabilities or simply do not wish to use their hands for propulsion. Foot propulsion also allows patients to exercise their legs to increase blood flow and limit further disability. Users who do this commonly may elect to have a lower seat height and no footplate to better suit the wheelchair to their needs.

Robotic mobilization devices and standing wheelchairs, allow the user to obtain a nearly standing position. They can be used as both a wheelchair and a standing frame, allowing the user to sit or stand in the wheelchair as they wish. Some versions are entirely manual, others have powered stand on an otherwise manual chair, while others have full power, tilt, recline and variations of powered stand functions available. The benefits of such a device include, but are not limited to: aiding independence and productivity, raising self-esteem and psychological well-being, etc. Standing wheelchairs are used by people with mild to severe disabilities including: spinal cord injury, traumatic brain injury, cerebral palsy, muscular dystrophy, multiple sclerosis, stroke, post-polio syndrome, rett syndrome, etc.



*A robotic mobilization device*

#### **4.4. Access in buildings and public transport**

As you already know, the build environment started to be adapted for wheelchair users and for those who have visual impairment. Universal design is the core principle of access - that all people regardless of disability are entitled to equal access to all parts of society like public transportation and buildings. For example: a wheelchair user is less disabled in an environment without stairs.

In order to allow access in buildings for wheelchair users or for other kind of mobility impairments it is necessary to make some adaptation with ramps or elevators. Other adaptations are for persons with mobility impairments: wide powered doors, accessible toilets with space and grab bars, lowered sinks and water fountains, etc. For those who have visually impairments could be useful Braille labeling and high visibility markings on the edge of steps.



*Wheelchair seating in a theater*



*Wheelchair user in a library*

Regarding the public transportation, nowadays it is increasing the requirement to be accessible; so, low floor trams and buses started to be created; but, of course it will take time to be diffused everywhere substituting the old ones.



## 5. MOBILITY AND TRANSFER DEVICES FOR DAILY USE

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### 5.1. What are mobility and transfer devices

Mobility and transfer devices are assistive tools that can help a personal assistant or caregivers to move a person with special needs from one place to another. Taking into consideration the degree of disability, some of these devices can even be used by person with special needs by himself/herself (see 4.3.). There are many types of devices available, such as: transfer boards, bed assists, leg lifters, and gait belts. They are used in hospitals, nursing homes, rehabilitation facilities, clinics and, of course, at home.

With a mobility and transfer device you can move the person with special needs from a bed to a wheelchair, from a wheelchair to a toilet, or from a wheelchair to car seat. For those who can move themselves with an aid, these devices help the individual move from a couch to standing, a bed to standing, or in and out of a wheelchair. Other devices allow the personal assistant to give support to person with special needs while walking in case they trip or get weak.

### 5.2. Mobility and transfer devices most used



**Transfer board** is an assistive device designed to help an individual move from a wheelchair to a bed, car, toilet, stair lift, or other location. It can be used for those with limited mobility even if they are not in a wheelchair. It is small enough to fit on the seat of a wheelchair or balance on the rim of a toilet, and its design is sturdy, flat, and stable so it supports the person while sliding along any given surface. It increases personal mobility by allowing individuals to set up their own transfer board and move themselves.

A transfer board can be made of many types of materials and shaped in various ways, depending on its purpose. Most are wooden, plastic or metal, and may or may not have handles or notches for grabbing onto. Some have an end which conforms to a toilet seat while others have a pivot in

the middle for easy turning when getting into a car. Since the board supports and stabilizes the individual's weight, you, as the personal assistant don't put too much effort on your back and legs.



**Swivel device/seat** - A transfer device that turns or swivels provides support for an individual between seated positions and also provides ergonomically correct positioning for the personal assistant. This tool reduces the risk of falling or accidents and can be easily pushed out of the way when not in use. It should only be utilized with those who can stand with support and can bear their own weight, and is designed to aid in transfers between a wheelchair and a bed or toilet.



**Hoist** - are usually fitted to the car to help lift someone in and out, but necessity much time than other devices. Hoists may not be suitable for all children. A child that is prone to spasms will be difficult to hoist safely, and the sling can cause damage to the skin through shearing.



**Leg Lifter** – is a webbing strap with stiffened stem which enables the user to move a stiff or immobile leg, when getting into or out of a bed, a wheelchair, or using a footstool, and is also an ideal aid when performing some daily tasks, such as dressing. The upper loop fits around the hand and wrist, and the lower stiffened loop slides over the foot to give control when lifting the leg.

### 5.3. Mobility and transfer devices that can increase the personal mobility

Some innovative mobility and transfer devices that can be used by person with special needs and increase their personal mobility. These are:



#### **Leg Lifter for Weak Hip Flexor**

It is ideal for hip replacement patients who have weak hip flexors



**Transfer Board** – how we have mentioned before it is very useful for transferring safely the person with special needs. Using this you can avoid any danger that can appear when you make the transfer using your arms.



#### **Commode transfer board**

It's uniquely shaped with strategically placed cut-outs; this board does not need to be removed during the person's toileting routine after he/she transfers to the commode.



**Transfer pole / Grab pole** – can be used to promote safe and independent standing and transfers, by providing the user with secure and stable support in exactly the right location. The Transfer pole can be used almost anywhere around the home, and can be perfectly positioned to help a user with transferring to and from the bed, toilet or bath.



**Bed pull-out assist strap mobility aid** - helps persons with special needs to use upper body strength in order to sit up in bed. A fantastic hook-and-loop strap design keeps the bed attachment buckle secure. Simply attach the bed mobility assistance device around a leg or bed frame with the attached loop for secure.



**Gait and transfer belt** - can be used as a gait belt or as an aid in safe patient transfer, preventing the back injury of personal assistant



**Independent Living Modular Bed** – provided with multitude of features that allow the person with special needs to be self-sufficient and independent: transfer bar for repositioning without assistance, snake lights for reading or doing crossword puzzles, TV/monitor mount for watching on TV or web browsing, over the mattress night stands to hold the personal items, etc.



**Orbi Patient Turner** – created for personal assistant /caregiver to assist in transfer of person with special needs. It is the perfect solution for persons with moderate upper and lower limb capabilities and strength, as it enables persons with special needs to participate in the transfer and ensure acceptable working posture for others.

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## 6. VIDEOS

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In the followings videos you can see how you can make the transfer of a person with special needs in order to avoid any back injury for you:

- From bed to a wheelchair: [Transfer bed-wheelchair](#)
- From wheelchair to bed: [Transfer wheelchair-bed](#)
- [Transfers from bed to wheelchair, car, bath etc](#)

Other helpful videos on how you can make transfer for a person with mobility impairment you can find here: [https://ablethrive.com/life-skills/transfers?qclid=CjwKCAjwzrrMBRByEiwArXcw279-Q7gnOY12Bx1oAeaZUgGseNGbeLIVC\\_yl16pGkHN737R7kCBRNhoC3ogQAvD\\_BwE](https://ablethrive.com/life-skills/transfers?qclid=CjwKCAjwzrrMBRByEiwArXcw279-Q7gnOY12Bx1oAeaZUgGseNGbeLIVC_yl16pGkHN737R7kCBRNhoC3ogQAvD_BwE)

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## 7. REFERENCES

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