## Mobility and Manipulation

1. Indicate the description that reflects the participant’s/subject’s current ability to sit.

Without any difficulty

Slight imbalance of the trunk, but needs no back support

Unable to sit without back support

Can sit only with extensive support (geriatric chair, posy, etc.)

Unable to sit

1. Indicate the description that reflects the participant’s/subject's current level of difficulty walking.

Without any difficulty

With some difficulties walking or getting around

With difficulty, difficulty walking interfered with activities of daily living

Unable to walk on their own

1. If participant/ subject is unable to walk on their own, indicate reason why:
2. If participant/subject needs intermittent support for walking, indicate age of participant when support first needed.

(years)  Unknown

1. If participant/subject needs permanent support for walking, indicate age of participant when support first needed.

(years)  Unknown

1. Indicate if the participant/subject uses an assistive device.

Yes  No (Skip to Question 24)  Unknown

1. If participant/subject uses a wheelchair as their primary means of mobility, indicate age of participant when they first began to use a wheelchair as their primary means of mobility.

(years)  Unknown

1. Indicate if the participant/subject uses a cane.

Yes  No  Unknown

1. If yes to cane, indicate age participant/subject began using a cane.

(years)  Unknown

1. Indicate if the participant/subject uses two canes/ crutches.

Yes  No  Unknown

1. If yes to canes/ crutches, indicate age participant/subject began using two canes/ crutches. (years)

Unknown

1. Indicate if participant/subject uses a walker.

Yes  No  Unknown

1. If yes to walking, indicate age participant/subject began using a walker. (years)

Unknown

1. Indicate if the participant/subject uses a wheelchair.

Yes  No  Unknown

1. If yes to wheelchair, indicate age participant/subject began using wheelchair.

(years)  Unknown

1. Indicate if the participant/subject uses any other assistive device.

Yes  No  Unknown

1. If yes to other assistive device, indicate age participant/subject began using other assistive device.

(years)  Unknown

1. Indicate the amount of time the participant/subject uses the primary assistive walking device.

: (hh:mm)  N/A

1. Does the participant use mobility devices?

Yes  No (Skip to Question 20)  Unknown

| Mobility Devices | Device Used? |
| --- | --- |
| Manual wheelchair | Yes  No  Not Applicable  Unknown  If yes:  Full-time  Part-time  Use distance –  Long distance  Short distance  Used at:  Home  School/Work  Community  Other, specify:  Propel –  Independent  Partial Independence  Dependent  Other, specify: |
| Power assist wheelchair | Yes  No  Not Applicable  Unknown  If yes:  Full-time  Part-time  Use distance –  Long distance  Short distance  Used at:  Home  School/Work  Community  Other, specify:  Propel –  Independent  Partial Independence  Dependent  Other, specify: |
| Power wheelchair | Yes  No  Not Applicable  Unknown  If yes:  Full-time  Part-time  Is the wheelchair driven by the participant/ subject?  Yes  No  Unknown  Use distance –  Long distance  Short distance  Used at:  Home  School/Work  Community  Other, specify:  Propel –  Independent  Partial Independence  Dependent  Other, specify: |
| Positioning in wheelchair | Regular/daily tilt:  Yes  No  Not applicable  Supported standing use:  Yes  No  Not Applicable |
| Scooter | Yes  No  Not Applicable  Unknown  If yes:  Full-time  Part-time  Use distance –  Long distance  Short distance  Used at:  Home  School/Work  Community  Other, specify: |
| Medical/Adaptive Stroller | Yes  No  Not Applicable  Unknown  If yes:  Full-time  Part-time  Use distance –  Long distance  Short distance  Used at:  Home  School/Work  Community  Other, specify: |
| Walker | Yes No  Not Applicable  Unknown  If yes:  Full-time  Part-time  Anterior  Posterior  Wheeled  (circle) 2 4  Type of walker:  Front or Forward Walker (no wheels, two-wheeled, or four wheeled)  Reverse Rolling Walker  Use distance –  Long distance  Short distance  Used at:  Home  School/Work  Community  Other, specify: |
| Gait Trainer/Weight Supported Walkers | Yes  No  Not Applicable  Unknown  If yes:  Full-time  Part-time  Use distance –  Long distance  Short distance  Used at:  Home  School/Work  Community  Other, specify: |
| Crutches | Yes  No  Not Applicable  Unknown  If yes:  Full-time  Part-time  Lofstrand or Forearm Crutches  Bilateral  Unilateral:  Left  Right  Underarm  Bilateral  Unilateral:  Left  Right  Other Specify:  Use distance –  Long distance  Short distance  Used at:  Home  School/Work  Community  Other, specify: |
| Cane / Stick | Yes  No  Not Applicable  Unknown  If yes:  Full-time  Part-time  Quad cane  Bilateral  Unilateral:  Left  Right  Single Point Cane  Bilateral  Unilateral:  Left  Right  Use distance –  Long distance  Short distance  Used at:  Home  School/Work  Community  Other, specify: |
| Other mobility devices: | Scooter  Stroller  Mobile standers  Standing wheelchairs  Other, specify:  Use distance –  Long distance  Short distance  Used at:  Home  School/Work  Community  Other, specify: |
| Other, specify: |  |
| Upper extremity devices | Yes specify:  No  Not Applicable |

1. Does the participant use orthoses?

Yes  No (Skip to Question 21)  Unknown

| Orthoses | Device Used? |
| --- | --- |
| Wrist Splints | Yes  No  Not Applicable  Unknown  If yes, Night Use?  If yes,  Bilateral  Unilateral:  Left  Right |
| Ankle-foot orthosis (AFO) | Yes  No  Not Applicable  Unknown  If yes:  Night Use?  Bilateral  Unilateral:  Left  Right  Type:  Solid  Articulating  DAFO  Posterior Leaf Spring  Carbon Fiber  Use:  Walking  Resting splints (choose all that apply) |
| Supramalleolar orthotic (SMO) | Yes  No  Not Applicable  Unknown  If yes,  Bilateral  Unilateral:  Left  Right |
| Abduction wedge | Yes  No  Not Applicable  Unknown  If yes,  Bilateral  Unilateral:  Left  Right |
| Knee immobilizer(s) | Yes  No  Not Applicable  Unknown  If yes,  Bilateral  Unilateral:  Left  Right |
| Knee-ankle-foot orthosis (KAFO) | Yes  No  Not Applicable  Unknown  If Yes,  ischial weight bearing?  Bilateral  Unilateral:  Left  Right |
| Stander | Yes  No  Not Applicable  Unknown  If yes, Type:  Supine  Prone  Static  Dynamic  Mobile |
| Orthoses | Device Used? |
| Positioning/feeding chair | Yes  No  Not Applicable  Unknown |
| Compression garment | Yes  No  Not Applicable  Unknown |
| Other upper extremity device | Yes  No  Not Applicable  Unknown |
| Other lower extremity device | Yes  No  Not Applicable  Unknown |

| Upper Extremity Orthoses | Device Used? |
| --- | --- |
| Elbow orthosis | Yes (choose all that apply)  Night  Day  Static  Dynamic  No  Not Applicable |
| Wrist hand orthosis | Yes (choose all that apply)  Night  Day  Static  Dynamic  No  Not Applicable |
| Hand only | Yes (choose all that apply)  Night  Day  No  Not Applicable |

| Orthoses | Device Used? |
| --- | --- |
| Shoe inserts of any type | Yes  No  If yes,  Bilateral  Unilateral:  Left  Right |
| Hip-knee-ankle foot orthosis (HKAFO) | Yes  No  If yes,  Bilateral  Unilateral:  Left  Right |
| Dynamic Upper Extremity Orthosis/Splints | No  Yes – If yes,  Left  Daytime use  Full-time use  Part-time use  Nighttime use  Anatomic Site:  Thumb  Wrist/hand  Hand/fingers  Elbow  Right  Daytime use  Full-time use  Part-time use  Nighttime use  Anatomic Site:  Thumb  Wrist/hand  Hand/fingers  Elbow |
| Static Upper Extremity Orthosis/Splints | No  Yes – If yes,  Left  Daytime use  Full-time use  Part-time use  Nighttime use  Anatomic Site:  Thumb  Wrist/hand  Hand/fingers  Elbow  Right  Daytime use  Full-time use  Part-time use  Nighttime use  Anatomic Site:  Thumb  Wrist/hand  Hand/fingers  Elbow |
| Dynamic Lower Extremity Stretching Orthosis/Splints | No  Yes – If yes,  Left  Daytime use  Full-time use  Part-time use  Nighttime use  Anatomic Site:  Ankle  Knee  Hip  Right  Daytime use  Full-time use  Part-time use  Nighttime use  Anatomic Site:  Ankle  Knee  Hip |
| Static Lower Extremity Stretching Orthosis/Splints | No  Yes – If yes,  Left  Daytime use  Full-time use  Part-time use  Nighttime use  Anatomic Site:  Ankle  Knee  Hip  Right  Daytime use  Full-time use  Part-time use  Nighttime use  Anatomic Site:  Ankle  Knee  Hip |
| Other, specify: |  |

1. Does the participant/subject use positioning devices?

Yes, specify  No (Skip to Question 22)

| Positioning Devices | Device Used? |
| --- | --- |
| Seated or Lying Position Device | No  Yes – If yes:  Abduction wedge  Saddle seats/Bolster seats  Seat inserts  Corner chair |
| Stander | No  Yes – If yes:  Number of minutes per day:  Number of days per week: |
| Truncal Support Devices | No  Yes – If yes:  Neoprene trunk support  Thoracic-lumbar-sacral orthoses (TLSO)  Body jacket  Sitting Support Orthosis (SSO)  Other, specify: |
| Other, specify: |  |

| ADL Devices | Device Used? |
| --- | --- |
| Eating / Drinking Assistive Devices | No  Yes – If yes,  Cutlery / Chopsticks  Plates / Bowls  Cups, Mugs, Drinking Aids (e.g., Straws, grip adapters / attachments)  Stoppers and Funnels  Bib / Clothing Protectors  Feeding Systems (enteral / parenteral)  Feeding Apparatus (manual)  Food Guards  Other, specify: |
| Bathing Devices | No  Yes – If yes,  Bath chair/Bench  Roll-in shower  Removable shower head  Bathroom grab bars  Other, specify: |
| Toileting Devices | No  Yes – If yes,  Toilet chair/Commode  Toilet riser/Adaptive seat over toilet  Bathroom grab bars  Other, specify: |
| Other, specify: |  |

1. Does the participant use ADL (Activities of Daily Living) devices?

Yes, specify  No (Skip to Question 23)

1. Does the participant use transfer/transportation devices?

Yes, specify  No (Skip to Question 24)

| Transfer/Transportation | Device Used? |
| --- | --- |
| Transfer Devices | No  Yes – If yes,  Transfer bars  Transfer slings/belts  Transfer boards  Lift system (e.g., Hoyer, ceiling track system)  Other, specify: |
| Transportation Devices | No  Yes – If yes,  Adaptive car seat/Booster seat  Vehicle Lifts (e.g., Platform/Rotary)  Seating restraints (e.g., Manual, Electronic, Torso, Wheel Wells)  Vehicle with driver modifications  Other, specify: |
| Other, specify: |  |

## Rehabilitation

1. Were rehabilitation therapy/services received? (choose all that apply)

Received rehabilitation therapy during hospitalization

Did not receive rehabilitation therapy because symptoms resolved

Ineligible to receive rehabilitation therapy due to impairment severity or medical issues

Other, specify:

1. Provided with durable medical equipment?  Yes  No  Unknown
2. IF YES, type(s) of durable medical equipment: (choose all that apply)

Bedside commode

Hospital bed

Bathroom grab bars

Raised toilet seats

Shower seats

Suction devices

Oxygen

Other, specify:

1. Provided with home modifications?  Yes  No  Unknown
2. IF YES, type(s) of home equipment used: (choose all that apply)

Bathroom renovations (i.e., grab bars, hand-held shower head)

Stair lift

Exterior ramp

Elevator

Other, specify:

1. Besides use of mobility devices, orthoses, and positioning devices, does the participant/ subject utilize other therapies?

Yes  No  Unknown

1. Patient was assessed for or received rehabilitation services?

Yes  No  Unknown

1. Type of Therapy:

Physical therapy  Occupational therapy  Speech language pathology

Child life therapy  Therapeutic recreation  Psychology

Supplemental nursing  Social work/case management

Respiratory therapy  Art, music or play therapy

Exercise physiology/kinesiology  Personal trainer  Other, specify:

1. Duration of a therapy or rehabilitation session

15 minutes  30 minutes  45 minutes  60 minutes  Other, specify:

1. Frequency the participant/subject received the therapy or rehabilitation?

Days/week:  0  1  2  3  4  5  6  7

1. Stretching:  Active  Passive
2. Use of assistive devices used to enhance upper extremity function

Never or less than monthly

Not daily, but one or more times weekly

Not weekly, but one or more times monthly

Used daily

1. If you fell while walking, were you using an assistive device (choose all that apply):

Cane  Walker  One crutch  Two crutches  Other, please specify:

1. Indicate the description that reflects the participant’s/subject’s current rate of falls.

Normal

Rare falling (less than once a month)

Occasional falls (once a week to once a month)

Falls multiple times a week or requires device to prevent falls

Unable to stand

1. Do you wear a body jacket/back brace /TLSO?

Yes  No

1. If yes,  Night only  Day only  All the time
2. Do you use any other type of orthosis (Choose all that apply):

Neck  Hip  Shoulder

1. GMFCS Level?

I  II  III  IV  V

GMFCS Levelrefers to the Gross Motor Function Classification System expanded and revised

1. MACS Level?

Level I  Level II  Level III  Level IV  Level V

MACS Levelrefers to the Manual Ability Classification System

1. Type(s) of rehabilitation therapy/services received:
2. AE/ orthotic?

Prescription  Fabrication  Maintenance/repair  Ergonomic intervention

Training  Fitting/Adjustment

1. Orthoses

Ankle foot orthosis

Supramalleolar orthosis

Foot orthosis

Hip knee ankle foot orthosis

Thoraco-lumbo-sacral orthosis

Serial casting knee

Serial casting ankle

Knee immobilizer

Neuroprosthesis (FES)

Knee ankle foot orthosis

Elastic wraps/suits

Therapeutic taping

Shoe insert off the shelf

1. Serial casting: Start date: Stop date:
2. Provided with assistive devices?  Yes  No  Unknown

IF YES, current type(s) of assistive devices: (choose all that apply)

AFO/ brace/ prosthetic/ orthotic/ splints

Cane (Straight/ Tripod/ Quad)

Walker

Power wheelchair

Scooter

Manual wheelchair

Adaptive or Activities of Daily Living (ADL) equipment (e.g. modified eating utensils, reachers, etc.)

Other, specify:

## **General Instructions**

This form contains data elements to track and evaluate assistive technologies and mobility devices used by the participant. It was designed to be inclusive of the possible Assistive Technology interventions that participants could use. All focus areas may not be addressed in every study.

Important Note: All data elements on this CRF are classified as NeuroRehab Supplemental – Highly Recommended for studies assessing use of mobility and manipulation related assistive technologies.

## **Specific Instructions**

Please see the Data Dictionary for definitions for each of the data elements included in this CRF Module.

GMFCS Levelrefers to the Gross Motor Function Classification System expanded and revised which is available at [www.canchild.ca](http://www.canchild.ca)

MACS Levelrefers to the Manual Ability Classification System [www.macs.nu/index.php](https://www.macs.nu/index.php)

* Sitting ability status – Choose only one.
* Walking own unable reason – After answering this question skip to "Wheelchair primary mobility means age value", "If participant/subject uses a wheelchair as their primary means of mobility, indicate age of participant when they first began to use a wheelchair as their primary means of mobility.”
* Walking difficulty age support first needed value – Answer should be recorded in years.
* Walking difficulty age need intermittent support indicator – Leave age blank if unknown and choose Unknown.
* Walking difficulty age permanent support started value – Answer should be recorded in years.
* Walking difficulty age need permanent support indicator – Leave age blank and choose Unknown.
* Walking assistive device indicator – Choose one. History can also be obtained from a family member, friend, or chart/ medical record. If the informant is unable to answer the question or is deemed unreliable (e.g., the participant/ subject has dementia) the history should be obtained from the medical record. Unknown includes the scenario where information is not documented in the medical record. Choose one. If answer is "No" skip to Therapy or rehabilitation received status.
* Wheelchair primary mobility means age value – Answer should be recorded in years.
* Wheelchair primary mobility means age indicator – Choose Unknown if age is not known.
* Walking 1 cane use indicator – If "No" or "Unknown" skip to "Walking cane or crutches pair use indicator."
* Walking cane use age started value – Answer should be recorded in years.
* Data unknown text – If age unknown, leave age blank and choose Unknown.
* Walking use 2 cane crutch indicator – If "No" or "Unknown" skip to "Walker use indicator."
* Walking cane or crutches pair use age started value – Answer should be recorded in years.
* Walker use age started value – Answer should be recorded in years.
* Wheelchair use indicator – If "No" or "Unknown" skip to "Walking other assistive device use indicator."
* Wheelchair use age started value – Answer should be recorded in years.
* Walking other assistive device use indicator – If "No" or "Unknown" skip to "Walking primary assistive device daily use duration".
* Walking other assistive device use age started value – Answer should be recorded in years.
* Walking primary assistive device daily use duration – Answer should be recorded in hours:minutes format (HH:MM) and should be less than 24 hours. If subject/participant does not use an assistive walking device, leave blank and choose N/A.
* Mobility device type – For each mobility device type record if it is used.
* Mobility device type use indicator – For each mobility device type record if it is used. Choose one for each device type.
* Wheelchair use frequency – If the participant/subject uses a manual wheelchair or power wheelchair then record the extent of use. Choose one option.
* Mobility device use distance type – If the participant/subject uses mobility device(s) then record the distance use. Choose one option.
* Mobility device use location type – If the participant/subject uses mobility device(s) then record the location use.
* Mobility device use propel type – If the participant/subject uses mobility device(s) then record the propulsion use.
* Mobility device use frequency type – If the participant/subject uses mobile device(s) then record the extent of use. Choose one option.
* Walker use type – If the participant/subject uses a walker, then record the type used. Choose one option.
* Crutch use type – If the participant/subject uses crutches, then record the type used. Choose one option.
* Crutch use laterality type – Select laterality for type of crutches used.
* Cane stick use type – If the participant/subject uses a cane, then record the type used. Choose one option.
* Other mobility device type – Choose all that apply.
* Mobility device other text – Specify whether mobility devices other than Manual wheelchair, Power assist wheelchair, Power wheelchair, Scooter, Medical/Adaptive Stroller, Walker, Gait Trainer/Weight Supported Walkers, Crutches, Cane / Stick, Other Mobility Device are used. For each mobility device type record if it is used.
* Orthosis type – For each orthosis type record if it is used.
* Orthosis type use indicator – Indicate whether the participant/subject currently uses the selected types of orthosis.
* AFO type – Only answer if Ankle-foot Orthosis is answered Yes. Choose all that apply.
* Ankle foot orthosis use type – Choose all that apply.
* Orthosis knee ankle foot orthosis ischial weight bearing indicator – Only answer if Knee-ankle-foot Orthosis is answered Yes. Choose one.
* Elbow wrist orthosis type – Choose all that apply.
* Hand Orthosis Type – Choose all that apply.
* Dynamic upper extremity orthosis splint frequency use laterality type – Only answer if dynamic upper extremity orthosis/splints is answered Yes.
* Dynamic upper extremity orthosis splint use anatomic site laterality type – Only answer if dynamic upper extremity orthosis/splints is answered Yes.
* Dynamic upper extremity orthosis splint use frequency type – Only answer if dynamic upper extremity orthosis/splints is answered Yes.
* Dynamic upper extremity orthosis splint use anatomic site – Only answer if dynamic upper extremity orthosis/splints is answered Yes.
* Static upper extremity orthosis splint frequency use laterality type – Only answer if static upper extremity orthosis/splints is answered Yes.
* Static upper extremity orthosis splint use anatomic site laterality type – Only answer if static upper extremity orthosis/splints is answered Yes.
* Static upper extremity orthosis splint use frequency type – Only answer if static upper extremity orthosis/splints is answered Yes.
* Static upper extremity orthosis splint use anatomic site – Only answer if static upper extremity orthosis/splints is answered Yes.
* Dynamic lower extremity stretch orthosis splint frequency use laterality type – Only answer if dynamic lower extremity stretching orthosis/splints is answered Yes.
* Dynamic lower extremity stretch orthosis splint use anatomic site laterality type - Only answer if dynamic lower extremity stretching orthosis/splints is answered Yes.
* Dynamic lower extremity stretch orthosis splint use frequency type – Only answer if dynamic lower extremity stretching orthosis/splints is answered Yes.
* Dynamic lower extremity stretch orthosis splint use anatomic site – Only answer if dynamic lower extremity stretching orthosis/splints is answered Yes.
* Static lower extremity stretch orthosis splint frequency use laterality type – Only answer if static lower extremity stretching orthosis/splints is answered Yes.
* Static lower extremity stretch orthosis splint use anatomic site laterality type – Only answer if static lower extremity stretching orthosis/splints is answered Yes.
* Static lower extremity stretch orthosis splint use frequency type – Only answer if static lower extremity stretching orthosis/splints is answered Yes.
* Static lower extremity stretch orthosis splint use anatomic site – Only answer if static lower extremity stretching orthosis/splints is answered Yes.
* Orthosis other text – Specify whether orthoses other than Wrist splints, Wrist splints - night use, Ankle-foot orthosis (AFO), Ankle-foot orthosis (AFO) - night use, Supramalleolar orthotic (SMO), Abduction wedge, Knee immobilizer(s), Knee-ankle-foot orthosis (KAFO), Stander, Positioning/feeding chair, Compression garment, Other upper extremity device, Other lower extremity device, Shoe inserts of any type, Hip-knee-ankle-foot orthosis (HKAFO), Dynamic Upper Extremity Orthosis/Splints, Static Upper Extremity Orthosis/Splints, Dynamic Lower Extremity Stretching Orthosis/Splints, or Static Lower Extremity Stretching Orthosis/Splints are used.
* Position device use indicator – Choose one. If a positioning device is used specify the type.
* Position device type – For each positioning device type record if it is used.
* Seat lie position device type – Only answer if seated or lying position device is answered Yes.
* Stand time use type – Only answer if stander position device is answered Yes.
* Number minutes day duration – Enter the number of minutes a stander is used per day, if applicable.
* Number days week count – Enter the number of days a stander is used per week, if applicable.
* Truncal support device type – Only answer if truncal support devices is answered Yes.
* Position device type other text – Specify whether positioning devices other than Seated or Lying Position Device, Stander and Truncal Support Devices are used.
* Activity daily living device type – For each ADL device type record if it is used.
* Activity daily living device type use indicator – For each activity daily living device type record if it is used. Choose one for each device type.
* Eat drink assistive device type – Only answer if eating / drinking assistive device is answered Yes.
* Bath device type – Only answer if bathing devices is answered Yes.
* Toilet device type – Only answer if toileting devices is answered Yes.
* Activity Daily Living device type other text – Specify whether ADL devices other than Eating / Drinking Assistive Devices, Bathing Devices, and Toileting Devices are used.
* Transfer transportation device type – For each transfer/transportation device type record if it is used.
* Transfer transportation device type use indicator – For each transfer/transportation device type record if it is used. Choose one for each device type.
* Transfer device type – Only answer if transfer devices is answered Yes.
* Transportation device type – Only answer if transportation devices is answered Yes.
* Transfer transportation device type other text – Specify whether transfer/transportation devices other than those included in Transfer and Transportation Devices are used.
* Therapy or rehabilitation received status – Choose all that apply.
* Durable medical equipment type – Choose all that apply.
* Home modification durable medical equipment type – Choose all that apply.
* Therapy rehabilitation frequency – days/week
* Therapeutic stretching type – Choose all that apply.
* Spinal cord injury upper extremity assistive device use frequency value – UEDEVICE- (all equipment like splints, adaptive equipment, surface functional electrical stimulation (FES), etc.)
* Fall details assistive device type – Choose all that apply.
* Fall rate – Choose only one.
* Therapy rehabilitation ICD 10 CM code – Code the therapy or rehabilitation service received using the ICD-10-CM codes to enable data aggregation.
* Assistive device use indicator – Choose one.
* Assistive device type – Choose all that apply.