All Terrain Assessment Form
Clinician's Guide

Introduction

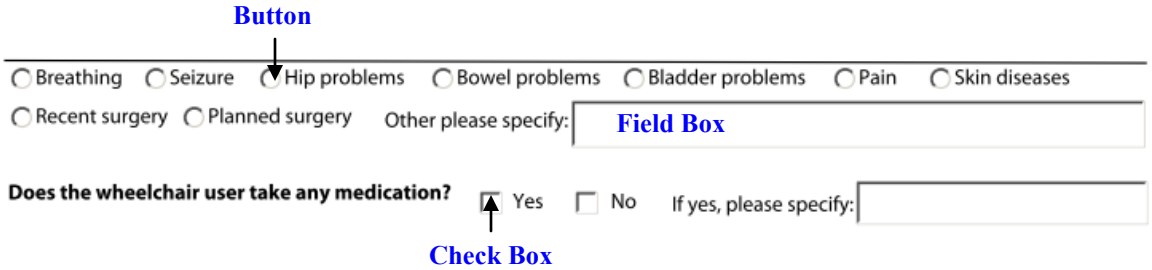
The All Terrain Assessment Form Clinician's Guide will guide you on how to use the All Terrain Assessment Form. This guide has instructions as well as examples of actual assessment form.

Before proceeding with the assessment, greet the wheelchair user and/or attendant. Inform the wheelchair user and/or attendant of the assessment procedure including interview and physical contact. Inform them that the assessment may take an hour to accomplish.

Also ask for informed consent from the wheelchair user and/or the attendant before proceeding with the assessment.

Assure the wheelchair user and/or attendant that the information gathered will be used to provide the most appropriate wheelchair and that the information will be confidential. Make sure to involve the wheelchair user and/or the attendant in all the process of assessment and prescription.

Write in the field boxes or tick the click boxes and buttons to record or indicate information needed. Leave the space blank if not applicable. See the example of **Button, Field box, and Check Box** below.



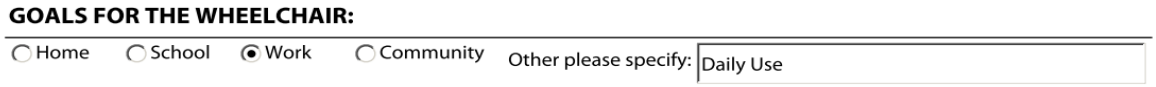
Wheelchair User's Information

Interview the wheelchair user and/or the attendant. Record the date of assessment (months/day/year), wheelchair user's name, age, height in feet and in inches (e.g. 5'8") and weight in kilograms (e.g. 50kg).

NOTE: Maximum load capacity of All Terrain Wheelchair is 100kg.

Goals for the Wheelchair

Click all buttons that are applicable for the intended use of the wheelchair. Specify in the field box other goals for wheelchair use.



Medical Information

Review the prescription letter from the doctor, if available, to determine the diagnosis and impairment history. If there is no prescription, indicate your case impression and interview the wheelchair user and/or the attendant about the impairment history.

MEDICAL INFORMATION:

Diagnosis: SCI T10 complete Case impression:

Impairment history: Vehicular Accident year 2000

Other Health Issues

Ask other health issues that may affect the use of wheelchair. Check all buttons and check boxes that apply.

OTHER HEALTH ISSUES:

○ Breathing ○ Seizure ■ Hip problems ○ Bowel problems ○ Bladder problems ○ Pain ○ Skin diseases

○ Recent surgery ○ Planned surgery Other please specify:

Does the wheelchair user take any medication? ☐ Yes ☒ No If yes, please specify:

Sensation

Check the wheelchair user's sensation (light touch and pressure) around the wheelchair user's sit bones, tailbone, hip bones, under the thighs, and side of thighs.
Note any history of pressure sore. Recommend a pressure relief cushion for any indications that the wheelchairs user has a risk of developing pressure sore. Such indications, include, but are not limited to:

- Decrease sensation at seat surface
- Age
- Pressure
- Limited or restricted mobility
- Expected compliance for pressure relief
- Urinary incontinence
- Overall health
- Moisture
- Heat
- Weight
- History of Pressure sore
- Fidgety

If the wheelchair user has no sensory impairment and there is no other risk factor in developing pressure sore then recommend a comfortable flat cushion.

SENSATION:

Does the wheelchair user have any sensory impairment at seat surface? ☒ Yes ☐ No

Does the wheelchair user have/had pressure sore? ☐ Yes ☒ No

Equipment

Ask if the wheelchair user has or had a wheelchair in the past?

NOTE: What were the major limitations and shortcomings of the previous wheelchair? What dangerous situations have occurred related to wheelchair use? Experienced wheelchair users usually know what's best for them.

The devices or equipment refers to orthoses, prostheses, and other medical devices presently used by the wheelchair user that will possibly be accommodated when he/she sits.

EQUIPMENT:

Does the wheelchair user have/had a wheelchair? ☐ Yes ☒ No

Does the wheelchair user have any additional assistive devices or medical equipment?

○ Prosthesis ○ Orthosis ○ Catheter Other please specify: _____

Will these devices or equipment be used while in the wheelchair? ☐ Yes ☐ No

Environment

Check the type of terrain and physical barriers that could prevent the user from freely navigating at home, school and/or workplace.

NOTE: Check basic things at home that may need modifications such as doorknobs, faucets, switches, sink, tables and other equipments they need to operate while on wheelchair.

ENVIRONMENT:

Terrain: ○ Smooth ● Rough ○ Sandy ○ Hilly Other please specify: _____

Are there any physical barriers that will affect wheelchair use in the home and community? ☐ Yes ☒ No

Can the wheelchair user operate or reach household fixture and furniture? ☒ Yes ☐ No

Functional Abilities

Assess user's ability to sit. If he/she cannot sit without support, determine the level of support while simulating wheelchair backrest starting from pelvis to upper trunk and note the level of support as minimal, moderate and maximum. The data is useful in determining the backrest height of wheelchair.

NOTE: If the user has poor head control an all terrain wheelchair may not be appropriate.

How long the wheelchair user can sit without feeling dizzy or any kind of discomfort. This serves as a baseline on how long the wheelchair user should stay on wheelchair during and after fitting.

NOTE: Advise wheelchair user and/or attendant to gradually increase the time of sitting.

Check wheelchair user's ability to independently transfer from wheelchair to chairs, table, toilet and back. If the wheelchair user cannot transfer independently indicate the level of assistance required in minimum, moderate or maximum.

One way to assess self-propulsion is to let the wheelchair user sit on a wheelchair and let him try it. If a wheelchair is unavailable, make an intelligent guess based on the wheelchair user's upper and lower extremity strength, range of motion, and coordination.

Check wheelchair user's ability to relieve pressure such as leaning forward, sideward and sitting push ups.

Indicate how the wheelchair user communicates.

Check wheelchair user's vision and hearing it may affect the wheelchair user's ability for a safe wheelchair use.

FUNCTIONAL ABILITIES:

Sitting Balance - Can the wheelchair user sit without support? ☐ Yes ☒ No

If wheel user can not sit without support what level does he/she needs support?

○ Pelvic Level ○ Lower Trunk ● Mid Trunk ○ Upper Trunk ○ Head

Degree of assistance: ○ Minimum ● Moderate ○ Maximum

Sitting tolerance: ○ ≤ 15min(Poor-) ○ 15-30min(Poor+) ○ 30-40min(Fair) ● 45-60min(Fair+) ○ >60min(Good)

Can the wheelchair user transfer independently? ☒ Yes ☐ No

Can the wheelchair user self propel? ☒ Yes ☐ No

Can the wheelchair user perform pressure relieving exercises? ☒ Yes ☐ No

Communication: ● Verbal ○ Gesture Other please specify: _____

Vision: ● Normal ○ Impaired ○ Non-seeing

Hearing: ● Normal ○ Impaired ○ Non-hearing

Activities of Daily Living (ADL)

Check wheelchair user's activities of daily living that could be integrated on wheelchair use.

ACTIVITIES OF DAILY LIVING:

Eating:	● Independent	○ Dependent
Dressing:	● Independent	○ Dependent
Toileting:	● Independent	○ Dependent
Personal Hygiene:	● Independent	○ Dependent

Referral to Other Services

Refer wheelchair user for intervention to professionals for other needs identified during the assessment.

REFERRAL TO OTHER SERVICES:

- ◯ Physical Therapist
- ◯ Occupational Therapist
- ◯ Prosthetist & Orthotist
- ◉ Social Worker
- ◯ Medical Doctor
- ◯ Special Educator
- Other please Specify: _____

Lower Extremity Joints

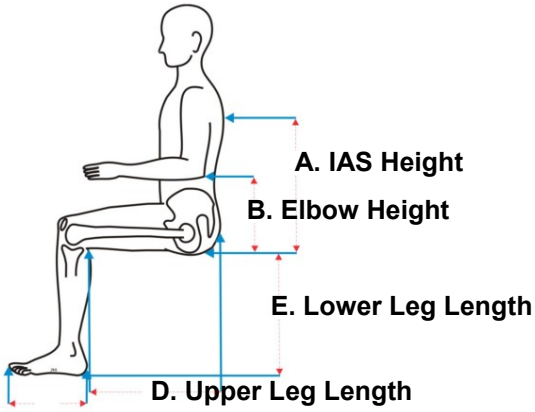
Check the lower extremity for any contractures and record the laterality and posture of the corresponding joints. Record the approximated contracture position in degrees.
NOTE: All terrain model positions the user at 90 degrees angle at hip, knee, and ankle joints.

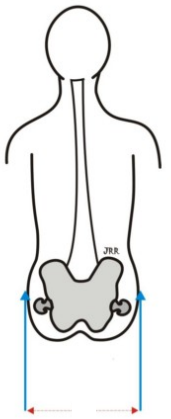
Is there any significant contracture on lower extremities joints that may affect the wheelchair user from sitting safely on the wheelchair?

☐ Yes ☒ No If yes, please specify: _____

Body Measurements

During body measurement the wheelchair user is positioned as much as possible to neutral sitting. Always use inches (”) in measuring and recommending wheelchair dimensions. Below are formulas to determine the actual wheelchair dimensions. Check the box to indicate the recommended dimension using the standard conversion formula. After conversion, if the result does not match the exact wheelchair dimension available round off to the safest and appropriate dimension available.





Body Measurements (cont.)

A. Inferior Angle of Scapula (IAS)

Height is measured from IAS to top of seat. To determine the backrest height subtract one inch (1”) from inferior angle of scapula height.

NOTE: Wheelchair users needing more trunk support may need a higher backrest. However, the backrest should not be higher than the armpit. For a wheelchair user who has good trunk balance or is an experienced wheelchair user a lower backrest may be appropriate.

B. Elbow Height

Measured perpendicular from the lower tip of a flexed elbow joint to top of seat. All terrain standard armrest height is 7 inches, The armrest height can be raised by adding a padded armrest. The seat cushion can also be raised if the standard armrest is too high for the wheelchair user.

C. Hip Width

Measured between the widest parts of the hips using the hip bones as bony landmarks. To determine the seat width dimension of wheelchair add one inch (1”) to the wheelchair user’s hip width.

D. Upper Leg Length

Measured from back of buttocks to back of knee. To determine the seat depth subtract one inch (1”) to the wheelchair user’s upper leg length.

E. Lower Leg Length

Measured perpendicular from back of knee to sole of the foot or sole of everyday footwear. Footrest height is the distance from the front top of seat cushion to top of footrest. Footrest height is equal to wheelchair user’s lower leg length.

NOTE: Footrest height can be adjusted by sliding the footrest in the clamp. The minimum footrest height is 10” and maximum height is 14.5”.

F. Footrest Length

Measured from back of heel to front of longest toe or length of footwear. Footrest length is fixed at 7” and should support an average Filipino foot length. If more foot support is needed indicate it in additional details part for possible modifications. You can choose to have a footrest or none.

BODY MEASUREMENTS AND RECOMMENDATIONS

Body Measurements (inches)		Standard Conversion	Recommended Dimensions	
A. IAS Height	18	- 1 =	Backrest Height	○ 15" ◉ 17" ○ 19"
B. Elbow Height	8	=	Armrest	◉ Curved ○ Padded
C. Hip Width	13	+ 1 =	Seat Width	○ 12" ◉ !4" ○ 16" ○ 18"
D. Upper Leg Length	17	- 1 =	Seat Depth	○ 12" ○ 14" ◉ 16" ○ 18"
E. Lower Leg Length	14	=	Footrest Height	10" - 14.5"
F. Foot Length	11		Footrest	Standard size

Other recommendations

Please check the appropriate box if additional recommendation is needed.
In deciding on the type of cushion, recommend pressure relief cushion for any indication in developing pressure sore.
NOTE: The pressure relief cushion does not substitute the need to perform pressure relieving exercises.

H. Seat Cushion	○ Comfortable flat ◉ Pressure relief

Axle Position

Measured from the front of the axle to rear of the axle.

- First axle position decreases the distance between rear axle and front caster.
- Third axle position is standard.
- Fifth axle position provides maximum stability because it increases the wheel base.

I. Axle Position	○ First	○ Second	◉ Third	○ Fourth	○ Fifth

Backrest Cushion

Thickness can be 1” or 2” inches. Backrest cushion is optional. Check none if not required.

J. Backrest Cushion	○ 1"	○ 2"	◉ None

Rear Tires

All Terrain Wheelchair rear tires has mountain bike tire.

K. Rear Wheel	◉ MTB

Color

All Terrain Wheelchair is color black.

L. Color	◉ Black

Additional Details

Additional Details. (Please specify)

flex foam 14" x 16"

Wheelchair User's Informed Consent

Have the wheelchair user and/or attendant read the informed consent form clause, Have wheelchair user and/or attendant tick the box and sign the photo consent once the wheelchair user and/ or attendant agree. Take a front and side view photograph of wheelchair user in the seated position. See the examples below.

WHEELCHAIR USER'S INFORMED CONSENT

Freedom Technology Wheelchair, Inc. (FTWFI) requests your permission to use your photograph and personal information for the general mission of promoting the empowerment of persons with disabilities. Your photograph and personal information may be used, but not limited to, archiving, communication with other organizations, and educational and/or promotional materials.

Declining permission in no way will affect Freedom Technology Wheelchair, Inc. FTWFI from providing appropriate and quality service or your current or future involvement with Freedom Technology Wheelchair, Inc. FTWFI.

Permission maybe rescinded at any time.

[x] I hereby grant Freedom Technology Wheelchair, Inc. (FTWFI) permission to use personal information and my photograph.

Wheelchair User's Printed Name: Jason Rome

Wheelchair User's Signature:

Date: 03-27-2011

If wheelchair user is under 18 years of age the legal guardian must witness this document authorizing permission for Freedom Technology Wheelchair, Inc. (FTWFI) use the wheelchair user's personal information and photograph.

Guardian's Printed Name:

Guardian's Signature:

Date:

Wheelchair Clinician's Informed Consent

WHEELCHAIR CLINICIAN'S INFORMED CONSENT

Freedom Technology Wheelchair, Inc. (FTWFI) requests your permission to use your photograph and personal information for the general mission of promoting the empowerment of persons with disabilities. Your photograph and personal information may be used, but not limited to, archiving, communication with other organizations, and educational and/or promotional materials.

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Permission maybe rescinded at any time.

[x] I hereby grant Freedom Technology Wheelchair, Inc. (FTWFI) permission to use personal information and my photograph.

Clinician's Name: Don Cruz

Clinician's Signature:

Date: 03-27-2011

Send the All Terrain Assessment Form and photos with scanned photo consent form showing the signature through email: freedom.technology@yahoo.com.ph or mail at: Freedom Technology PHIVIDEC Estate, Sta. Cruz, Tagoloan, 9001, Misamis Oriental, Philippines.

Please do not hesitate to contact Freedom Technology if you have questions or need assistance at phone number +63 (08822) 742 702.

Thank You,

Freedom Technology Wheelchair Foundation Inc. Team