

# Transfer Assessment Instrument Questionnaire (TAI-Q) – Independent Transfers

This tool is designed to objectively unassisted transfers. The tool breaks down the transfer into three components: wheelchair setup, body set up, and flight/landing. Scoring differs based on whether the user is transferring from a manual or power wheelchair. Each section of the tool should be completed before advancing to the next phase. It is written in user-centered language but can be utilized by end users, their caregivers, and clinicians. Space is allotted to score a transfer to and from a surface (2 total transfers), however only one transfer is necessary to use the tool.

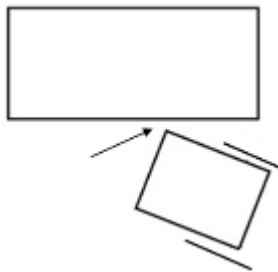
Select Wheelchair Type:  Power wheelchair  Manual wheelchair

Do you use a sliding board when transferring?  Yes  No

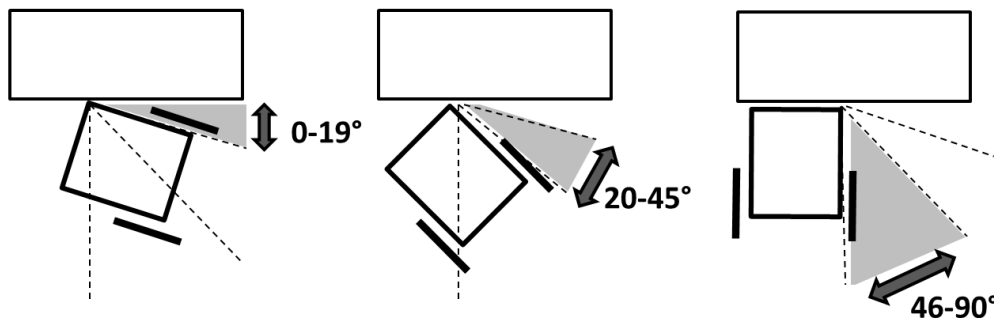
## Phase I: Wheelchair Setup

Set up your wheelchair to transfer to another surface (bed, mat table, couch), then answer the following questions.

- Using a ruler (if available), measure the distance from the front corner of your wheelchair to the object to which you are transferring. What is the distance?
  - Less than 3 inches
  - 3-5 inches
  - Greater than 5 inches



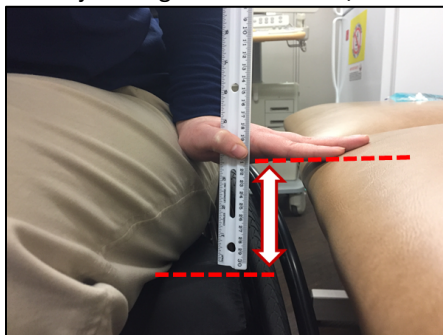
- What is the angle between your wheelchair and the mat? Use an angle measurement tool if possible (see appendix).
  - 0-19 degrees
  - 20-45 degrees
  - 46-90 degrees



- Did you lock the brakes on your wheelchair?
  - Yes, I engaged the brakes (manual wheelchair)
  - Yes, I turned my wheelchair off (power wheelchair)
  - No
  - Not applicable, my wheelchair does not have brakes

| Scoring                 |  |
|-------------------------|--|
| Transfer 1   Transfer 2 |  |
| Transfer 1   Transfer 2 |  |
| Transfer 1   Transfer 2 |  |

4. Did you remove the armrest from your chair?
  - a. Yes
  - b. No, but my wheelchair does have armrests
  - c. Not applicable, my wheelchair does not have armrests
  - d. Not possible, my wheelchair has armrests but they cannot be removed (bolted in, welded)
  
5. Did you remove the clothing/sides guards or postural supports (thigh guides, lateral supports) from your chair?
  - a. Yes
  - b. No
  - c. No, however my clothing/sideguards don't go any higher than my wheel
  - d. Not applicable, my wheelchair does not have clothing/side guards
  - e. Not possible, my wheelchair has clothing/side guards but they cannot be removed (bolted in, welded)
  
6. Was your transfer set up to be level (top of cushion is level with the surface you are transferring to)? Use a ruler (if possible) to measure the difference in height between the top of the front corner your cushion and the surface you are transferring to. What is the distance?
  - a. My cushion height is within 1 inch of the surface
  - b. My cushion is more than 1 inch higher
  - c. My cushion is more than 1 inch lower
  - d. Not possible to adjust height of wheelchair/transfer destination



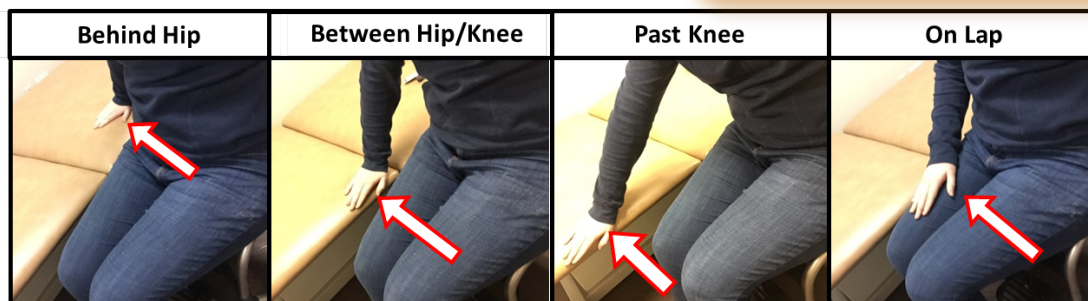
| <b>Scoring</b>                 |  |
|--------------------------------|--|
| <b>Transfer 1   Transfer 2</b> |  |
|                                |  |
| <b>Transfer 1   Transfer 2</b> |  |
|                                |  |
| <b>Transfer 1   Transfer 2</b> |  |
|                                |  |

## Phase II: Body Setup

Position your body for the transfer, adjusting your hips and legs as you normally would, then answer the following questions

7. Where are your feet?
  - a. Both on footplate
  - b. One on footplate, one on the ground
  - c. Both up on the surface I am transferring to
  - d. One up on the surface I am transferring to and one on the ground/footplate
  - e. Both on the floor
  - f. One on floor (I am a single limb amputee)
  - g. One on footplate (I am a single limb amputee)
  - h. Not touching any surface (I am a double limb amputee)
  
8. Did you scoot to your hips to the front of your seat, so at least 1/3 of your thigh was off the surface?
  - a. Yes
  - b. No
  - c. Not possible, I am unable to maintain my balance in this position
  
9. Where is your leading arm (see images) once you position it to transfer?
  - a. On the surface I am transferring to behind my hip
  - b. On the surface I am transferring to between my hip and knee
  - c. On the surface I am transferring to past my knee
  - d. It is in my lap, I don't use this arm during my transfer

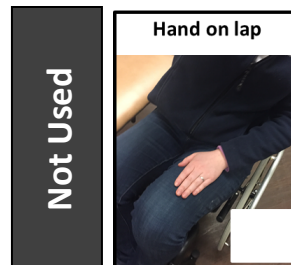
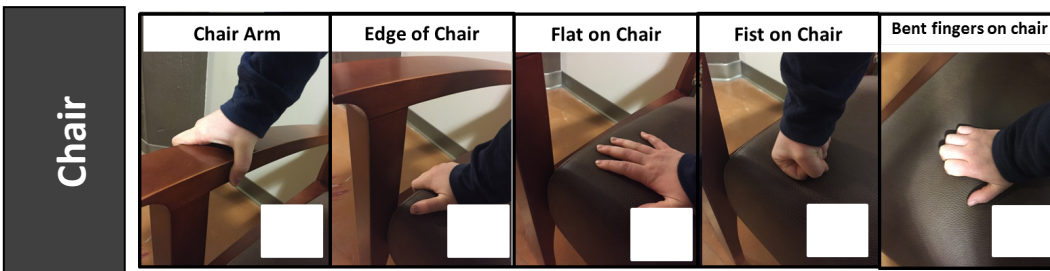
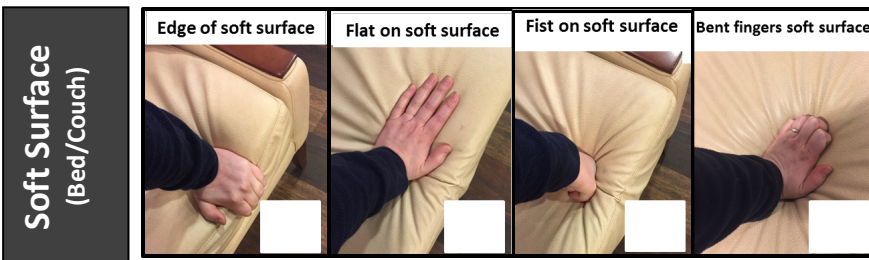
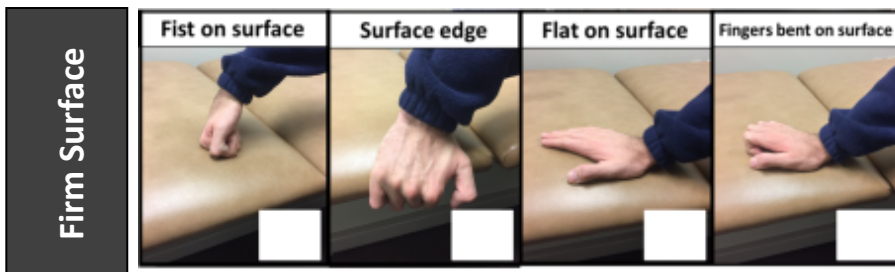
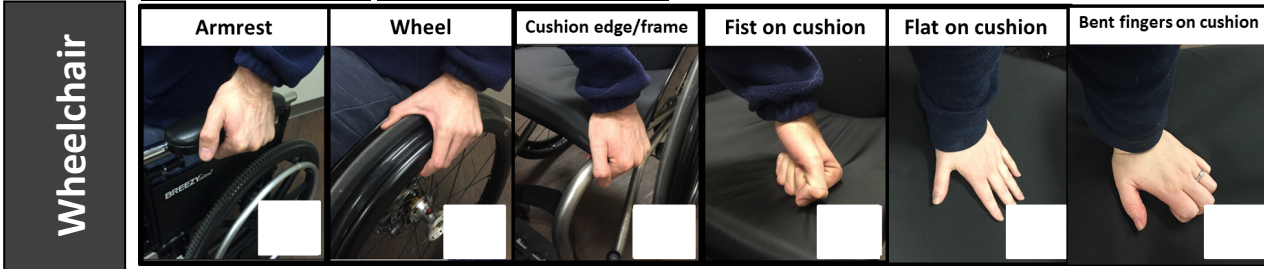
| Scoring                 |                         |
|-------------------------|-------------------------|
| Transfer 1   Transfer 2 | Transfer 1   Transfer 2 |
|                         |                         |
| Transfer 1   Transfer 2 | Transfer 1   Transfer 2 |
|                         |                         |
| Transfer 1   Transfer 2 | Transfer 1   Transfer 2 |
|                         |                         |



## Phase III: Flight

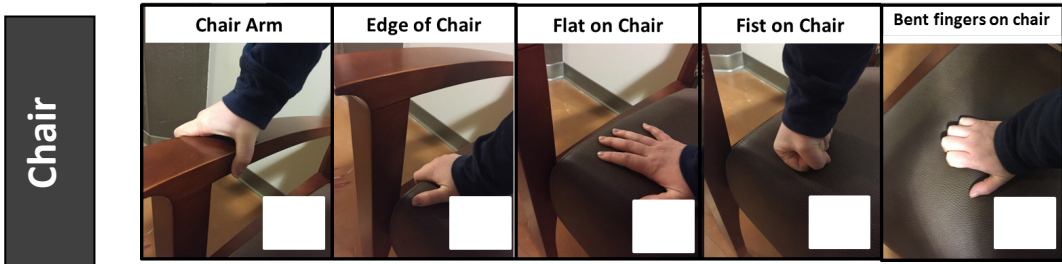
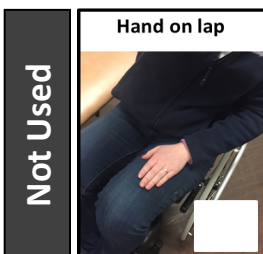
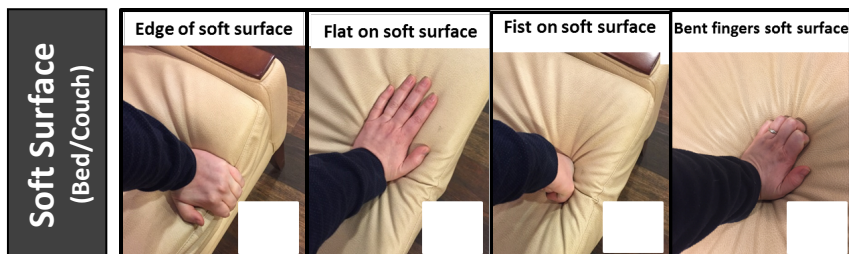
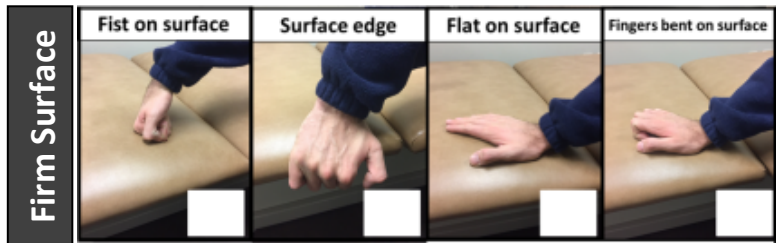
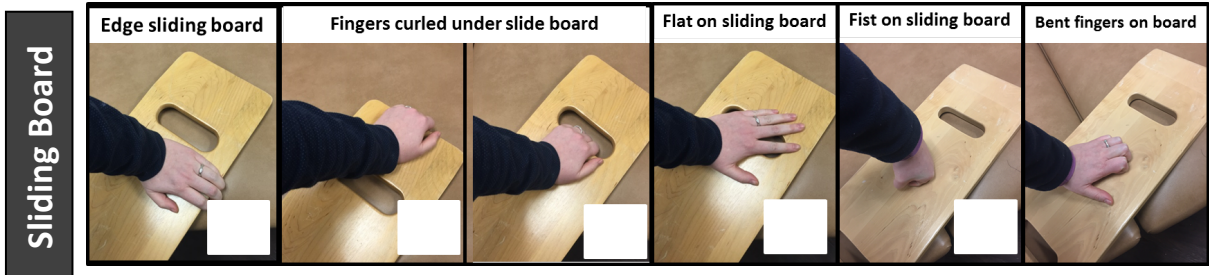
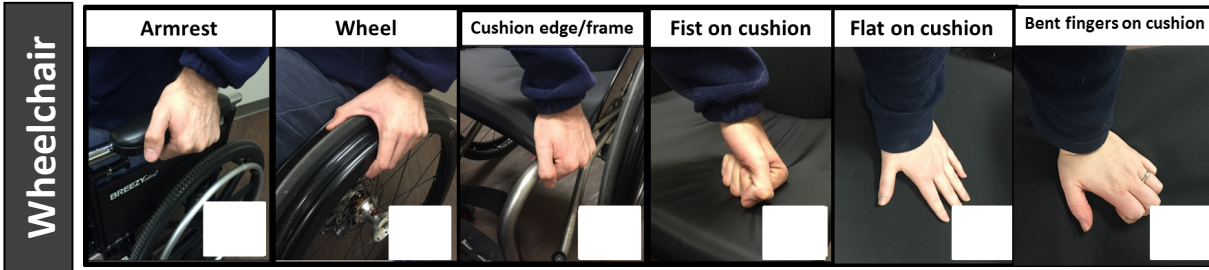
Complete your transfer between surfaces, then answer the questions on the following pages

10. Identify the type of surface you transferred **FROM**. Then, check the box of the type of hand position that most closely represents the hand position you used for your **push off hand** when **your hips were moving between surfaces**. **CHECK ALL THAT APPLY**.



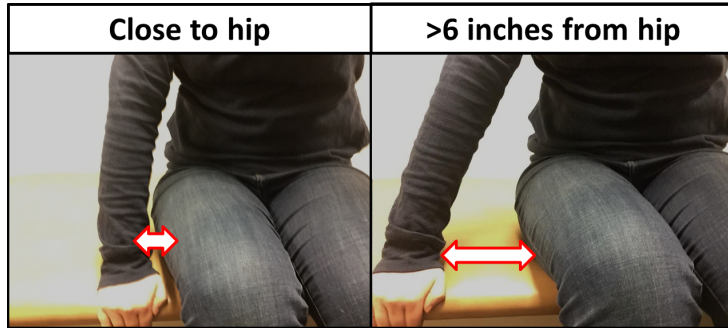
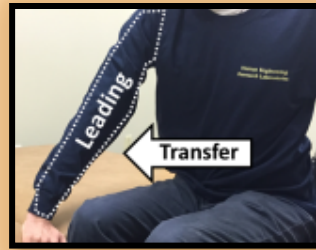
| <b>Scoring</b>             |                            |
|----------------------------|----------------------------|
| Transfer 1                 | Transfer 2                 |
| A) Total Score:            | A) Total Score:            |
| _____                      | _____                      |
| B) Total # Positions Used: | B) Total # Positions Used: |
| _____                      | _____                      |
| Score = A/B                | Score = A/B                |
| _____                      | _____                      |

11. Identify the type of surface you transferred **TO**. Then, check the box of the type of hand position that most closely represents the hand position you used for your **leading hand** when **your hips were moving between surfaces**. **CHECK ALL THAT APPLY.**

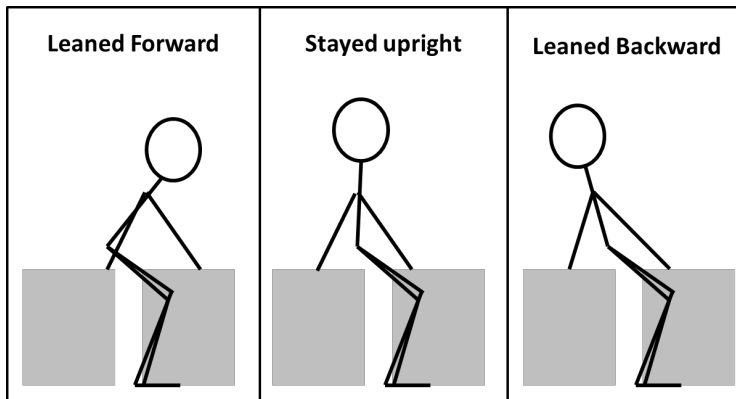


| <b>Scoring</b>                   |                                  |
|----------------------------------|----------------------------------|
| <b>Transfer 1</b>                | <b>Transfer 2</b>                |
| A) Total Score: _____            | A) Total Score: _____            |
| B) Total # Positions Used: _____ | B) Total # Positions Used: _____ |
| Score = A/B _____                | Score = A/B _____                |

12. When you **finished** the transfer, where was your **leading hand** (see image) in relation to your hips?
- Close to my hip
  - More than 6 inches from my hip



13. When you transferred between surfaces which way were you leaning?
- I was leaning backward, towards the surface I was transferring to
  - My body remained upright
  - I was leaning forward, away from the surface I was transferring to
  - I'm not sure



14. When you transferred between surfaces did you (please circle all that apply):
- Perform the movement in one smooth and fluid motion
  - Use multiple 'scoots' to complete my transfer
  - Land or rest on the tire
  - Perform the movement in an abrupt manner where you had to change directions or body positions in rapid manner to avoid falling (unintentionally landing on an undesired surface)
  - Experienced a near fall (unintentionally landing on an undesired surface)
  - Experience a fall (unintentionally landing on an undesired surface)

15. When you landed on the target surface (please circle all that apply):
- No excessive movement occurred (no loss of balance)
  - Experienced excessive movement (loss of balance) but did not unintentionally land on an undesired surface (experience a fall)
  - Experienced excessive movement (loss of balance) and some part of your body unintentionally landed on an undesired surface (experience a fall)

### Scoring

Transfer 1 | Transfer 2

|  |  |
|--|--|
|  |  |
|--|--|

Transfer 1 | Transfer 2

|  |  |
|--|--|
|  |  |
|--|--|

Transfer 1 | Transfer 2

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| -----<br>(lowest possible score: 0) | -----<br>(lowest possible score: 0) |
|-------------------------------------|-------------------------------------|

Transfer 1 | Transfer 2

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| -----<br>(lowest possible score: 0) | -----<br>(lowest possible score: 0) |
|-------------------------------------|-------------------------------------|

16. When you transfer do you:
- a. Always lead with the same arm
  - b. Alternate which arm you lead with

**Assistive Technology**

17. I use assistive technology (such as a transfer board or lift) :
- a. Never, I am strong enough to perform the transfer without a struggle
  - b. Never, however I sometimes feel that I struggle to complete the transfer
  - c. Sometimes when I feel tired or weak
  - d. Sometimes, due to pain
  - e. Sometimes for safety or to preserve my arms
  - f. All of the time because of fatigue or strength limitations
18. If a sliding is used, when using the board do you:
- a. Perform the transfer as multiple 'lifts'/'scoots', picking up your hips and placing them over several steps
  - b. Slide your hips along the board

| <b>Scoring</b> |            |
|----------------|------------|
| Transfer 1     | Transfer 2 |
|                |            |
| Transfer 1     | Transfer 2 |
|                |            |
| Transfer 1     | Transfer 2 |
|                |            |

**To calculate total score for Independent Transfers:**

- 1. Sum all scores for Transfer 1 items (Box A)**
- 2. Count # N/A items for Transfer 1 (Box B)**
- 3. Calculate a score for Transfer 1 (Box C):**
  - a.  $100\% \times A (19-B)$**

*Ignore remaining steps if only 1 transfer completed*

- 4. Sum all scores for Transfer 2 items (Box D)**
- 5. Count # N/A items for Transfer 2 (Box E)**
- 6. Calculate a score for Transfer 2 (Box F):**
  - a.  $100\% \times D (19-E)$**
  
- 7. Calculate the total score:**
  - a.  $C + F / 2$**

| Transfer 1<br>Total Score | Transfer 1<br># items N/A | Transfer 1<br>TOTAL |
|---------------------------|---------------------------|---------------------|
| A                         | B                         | C                   |

| Transfer 2<br>Total Score | Transfer 2<br># items N/A | Transfer 2<br>TOTAL |
|---------------------------|---------------------------|---------------------|
| D                         | E                         | F                   |

| TOTAL |   |
|-------|---|
|       | % |



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