### APPENDIX 1:

Modified Ashworth Scale

| Grade | Description |
|-------|-------------|
| 0     | No increase in muscle tone |
| 1     | Slight increase in muscle tone, manifested by a catch and release or by minimal resistance at the end of the ROM when the affected part(s) is moved in flexion or extension |
| 1+    | Slight increase in muscle tone, manifested by a catch, followed by minimal resistance throughout the remainder (less than half) of the ROM |
| 2     | More marked increase in muscle tone through most of the ROM, but affected part(s) easily moved |
| 3     | Considerable increase in muscle tone, passive movement difficult |
| 4     | Affected part(s) rigid in flexion or extension |
APPENDIX 2:

Tardieu Scale: Principles

Grading always performed:

- On a muscle at rest before the stretch maneuver
- At a reproducible velocity of stretch. Once the fast velocity is selected for a muscle, it remains the same for all subsequent tests.
- At the same time of the day
- In a constant body position for a given limb
- Other joints, particularly the neck, must also remain in a constant position throughout the assessment and for all other assessments.

Velocity of Stretch

- SLOW = V1: As slow as possible (slower than the rate of natural drop of the limb segment under gravity)
- FAST = Either V2 or V3
  - V2: Speed of the limb segment falling under gravity
  - V3: As fast as possible (faster than the rate of natural drop of the limb segment under gravity)

Tardieu Scale: Grading

\[ X = \text{Spasticity Angle (Threshold)} \]
\[ \text{Angle of arrest at slow speed } X_{V1} \text{ minus Angle of catch at fast speed } X_{V3} \]

\[ Y = \text{Spasticity Grade (Gain)} \]

0. No resistance throughout passive movement
1. Slight resistance throughout passive movement
2. Clear catch at precise angle, interrupting passive movement, followed by release
3. Fatigable clonus (<10s when maintaining pressure) occurring at a precise angle, followed by release
4. Unfatigable clonus (>10s when maintaining pressure) occurring at a precise angle
   - Catch without release: graded 0 if \( X_{V1} = X_{V3} \); “unratable” spasticity otherwise
   - Catch with “minimal” release: graded 2 if \( X_{V3} \) is consistent and consistently less than \( X_{V1} \)
   - Angle 0° = position of minimal stretch of the tested muscle
   - For grades 0 and 1, spasticity angle \( X=0° \) by definition