

Action Statement 3: ANKLE-FOOT ORTHOSIS (AFO) OR FUNCTIONAL ELECTRICAL STIMULATION (FES) TO IMPROVE OTHER MOBILITY **Action Statement** Clinicians **SHOULD** provide an AFO or FES for individuals with decreased lower extremity motor control due to acute or chronic post-stroke hemiplegia who have goals to improve OTHER MOBILITY Evidence quality: I Recommendation strength: strong **Outcome Measures** Functional Ambulation Category Modified Emory Functional Ambulation Profile **Evidence Summary CLINICAL EFFECTS FES AFO Acute AFO/FES Immediate Effect** No evidence Level II (Level I= strongest level) Therapeutic Effect Level II Level I **Training Effect** No evidence No evidence **Combined Effect** Level II No evidence **Evidence Summary AFO FES Chronis AFO/FES** Immediate Effect Level II Level II Therapeutic Effect Level I Level I **Training Effect** Level I Level I No evidence **Combined Effect** No evidence **AFO** compared to FES Chronic: FES = AFO Acute: FES > AFO **Key Dose Considerations** Research for dose parameters remains variable In the acute phase improvements may be seen following 40 minutes of wear 5 days/wk for 4-6 weeks with both AFO and FES In the chronic phase at least 12 weeks of wear may be needed to see an effect

Clinical Application/Interpretations

- In acute or chronic phase post-stroke a custom AFO or AFO that meets the needs of the individual provides the best results
- Individuals with lower admission FIM scores may benefit from earlier introduction of AFO to improve mobility
- Early provision of an AFO or FES may improve mobility and enhance recovery in the acute phase
- For those with chronic stroke already using an AFO, evidence supports assessment for revisions to meet the changing needs of the individual
- Benefits of device and potential for recovery are more clinical meaningful when combined with skilled PT intervention in both acute and chronic phases

