

Orthotic Management

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What are Orthotics?

-an externally applied device used to modify the structural and functional characteristics of the neuromuscular and skeletal system."



International Standards Organization (ISO)5



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Types of Orthotics

- ▶ Static - Fixed with no movement allowed
- ▶ Static Progressive - Adjustable locking motion for desired positioning
- ▶ Dynamic - Provides motion in response to movement



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Static Orthotics



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Static Progressive Orthotics



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Dynamic Orthotics



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How do I get an Orthotic and who pays for it?

- ▶ Contact local vendor/orthotist
- ▶ Order out of catalog (Sammons)
- ▶ Fabricate in the clinic



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Coverage

- ▶ Medicare A - No coverage for orthotics
- ▶ Medicare B - generally pays 80% (Will not cover contracture management)
- ▶ Private Ins - coverage varies per policy
- ▶ Medicare replacement policies (HMO A and Skilled HMO)- coverage varies by policy (may cover under skilled stay)
- ▶ Medicaid- Coverage varies by state



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Evaluation Considerations

- ▶ Range of Motion (AROM and PROM)
- ▶ Joint alignment
- ▶ Goal of splinting/orthosis - What are you trying to do?
- ▶ Bony Landmarks
- ▶ Tone/spasticity
- ▶ Previous orthotic management
- ▶ Shoes (if appropriate)
- ▶ Gait deviations
- ▶ Joint and skin integrity
- ▶ Sensation



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Acute Stroke	Chronic Stroke
Functional -vs- Positional Management	Functional -vs- Positional Management
Recovery time	Gait Considerations
Patient goals	Trial or Diagnostic Systems
Insurance coverage	Shoes
D/C timing	Static -vs- dynamic or progressive
	Tone and Spasticity
	Home Environment
	Contracture Management

**Patient compliance is always key!

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Case Study Lab

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Mary

- ▶ Mary is a 72-year-old female living in a long term care facility. The chart only states hx of CVA as a diagnosis. She has several co-morbidities including dementia. She was referred to therapy secondary to increased difficulty with CNAs completing hygiene and UB dressing tasks.
- ▶ Mary is dependent with most ADL tasks; however she continues to participate with self feeding and simple grooming with assistance. She requires maximal assistance of 1-2 for functional transfers and is in a w/c for meals only.
- ▶ Mary has a MAS of 2 for elbow and finger extension and a MAS of 3 for wrist extension. She is able to reach full elbow and finger extension passively. She can also achieve 75% wrist extension passively. She is currently unable to reach elbow and wrist extension simultaneously.

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Mary

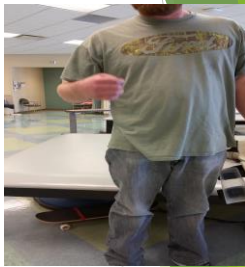


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Josh

-35 y/o
-2 years post stroke
-Receives Botox every 3 months

-Pig farmer
-Husband
-Dad
-Baseball coach



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Solid Ankle Foot Orthotics



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Articulated Ankle Foot Orthotic



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Anterior Shelf Fiber Carbon



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Posterior Leaf Spring Brace



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Walk On Fiber Carbon



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AFO Set in Dorsiflexion



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PHAT Braces



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BiCAAL - Bichannel Adjustable Ankle Locking



