Whose Job is it Anyway?

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Motion Specialties
Participants will be able to:

• List essential steps involved in provision of seating for postural support

• Outline roles team members play in provision of seating for postural support

• Discuss essential skills that vendor must be able to deliver to provide custom seating to clients
Disclaimer
Where Did This Come From?
Steps in Creating (Custom) Seating

- Assessing  (goal setting)
- Molding    (defining the shape)
- Shape capture  (technology)
- Manufacturing  (materials)
- Mounting   (set-up on base)
- Fitting    (to the client)
- Secondary supports  (selecting, mounting, fitting)
Steps in Creating Seating

- Assessing *(goal setting)*
- Molding *(defining the shape)*
- Shape capture *(technology)*
- Manufacturing *(materials)*
- Mounting *(set-up on base)*
- Fitting *(to the client)*
- Secondary supports
# Steps in Creating Seating

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Standards of Practice - Assessment

- Stage 1—Initiation
- Stage 2—Assessment of the Client
- Stage 3—Analysis
- Stage 4—Documentation
- Stage 5—Use of information

STANDARDS FOR OCCUPATIONAL THERAPY ASSESSMENTS, COTO, 2013
“It is important for anyone accessing the record to understand not only the assessment and interventions but also how the two are related....”

(College of Physical Therapists of Ontario, 2013 pg. 9)
Clinical Practice Guidelines
Developing Technical Competencies
Developing Technical Competencies
RESNA Guidelines

- Referral
- Assessment
- Equipment Recommendation and Selection
- Funding and Procurement
- Product Preparation
- Fitting, Training and Delivery
- Follow-up, Maintenance and Repair

Assessment

Client needs

- Physical shape / degree of deformity
- Muscle tone
- Skin health / allergies
- Size / stage in growth
- Functional abilities
Person + Function = Prescription Details

- **Seat Width**: Widest part of lower extremities (+ seating)
- **Seat Depth**: Upper leg - 1" (dependent)
- **Seat Depth**: Upper leg - 3" (foot propelling)
- **Finished Seat to Floor Height**: Lower leg - 1" (foot propelling)
- **Finished Seat to Floor Height**: Lower leg + 3" (stand pivot transfer)
- **Finished Seat to Floor Height**: Lower leg + ??
- **Back Cane Height**: For user, carer, or seating?
- **Finished Back Height**: Top of pelvis + 2"
- **Finished Back Height**: Bottom of scapula + 2" (arm propelling)
- **Finished Back Height**: Top of shoulder + 2" (shoulder straps)
- **Finished Leg Rest Length**: Lower leg (shoes, AFO’s)
Assessment

Environmental needs

- Mobility base size / configuration
- Caregiver needs
- Skill / resources of
  - therapist
  - vendor
  - technician
A goal without a plan is just a wish.
- Antoine de Saint-Exupery
Soooo many options .....
Categories of Seating

- Custom Fabricated
- Custom Modular
- Customized Modular
- Standard Modular

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Orthopedic Deformity
What’s Your Comfort / Skill Level?

Store Bought
(modular, single source ordering)

Cake Mix
(customized modular, assembly from multiple sources)

Baked from Scratch
(custom)
When Should I Choose Custom?

Tweeked, added, padded, cut, taped, stuffed .... everything but ...
Custom Seating Systems

- Foam in place / Casted foam in place ('Foam in box')
- Laminar foam on a substrate (wood or ABS)
- Interlocking link systems (Freeform)
- Roho
- Digitized systems (OBSS, Silhouette, Contour U, PRM, Ride)
- Mold-in-bag (Shurshape)
- Orthotics
- Impression foam (Ride Designs cushion)
- Configured systems (Silhouette Custom Basic, PRM Precision-Fit, AEL, AES)
Comparing & Contrasting Custom Systems

- Capturing & translating shape
- Product
- Interface
Mold + Scan = Product
Factors in Choice of Custom System

Client

• Degree of deformity, tone and skin risks
• Function and active movements
• Tolerance to handling & effect of fabrication
• ADL issues (continence, transfers)
• Cosmesis
• Need for ‘trial’
Factors in Choice of Custom System

Environment

• Technician’s skills
• Manufacturer support
• Base configuration
• Need to modify
• Cost
Which is Correct?
Correct or Accommodate?
Manufacturer or Team Issue?

Old Seating

Simulation
Mounting to a Base

45° Bracket

90° Bracket

Image from: www.comfortcompany.com/back_supports/main
Mounting to a Base
Maximizing Chair Ranges
Fitting to the Client
Fitting to the Client
Secondary Supports

- Posterior / lateral head
- Lateral trunk
- Anterior trunk
- Pelvic
- Medial / lateral knee
- Lateral thigh
- Posterior calf
- Anterior / lateral foot
- Tray
Secondary Supports
All at the Same Time??
Prescription Process

- Evaluation of person & goal setting
  - (key environments & activities)
- Evaluation of products
- Equipment set-up & trial
- Dispensing
- Follow-up
Training and Follow-up

Getting The Most Out Of Your Wheelchair Seating

- Headrest (optional)
  - Supports natural neck posture

- Backrest
  - Angle matches user’s stance
  - Contact back of neck
  - Doesn’t restrict functional arm movements

- Cushion Length
  - 1/2” between back of knee and front of cushion

- Gusset Straps/Pad (optional)
  - Prevents feet from sliding off the back of boots
  - Doesn’t limit foot or ankle movement

- Footrest
  - Matches user’s natural foot placement

- Armrest/Tray
  - Height supports arm’s natural resting position

1. Prop the Wheelchair
   - Brakes on
   - Foot plate out of the way

2. Cushion Positioning
   - Centered, front aligned, right side up
   - Secures wheelchair castor cushion covers (wheelchair must be tipped or tilted)

3. Use of Tilt (when available)
   - “10, 20, 30” to get buttocks to the back of the chair during transfers
   - Use seating pillows throughout the day to relieve pressure on the shoulder

4. Transfer Tilt Position
   - Lowered forward
   - Scoot buttocks back until touching the backrest
   - Sit up straight
   - Ensure sit bones are as level as possible

5. Deal With
   - Tendons - behind back under legs, behind knees, around arms
   - Wedges - ensure pants are not bunched up
   - Slings - remove wherever possible or away from under legs

6. Postural Supports Set for User
   - Belt
   - Tray
   - Headrest
   - Elbow panel
Teamwork

- Who are members of seating & mobility team?
- What are their skills & competencies?
- Who is responsible for what?
Seating Challenges

Degree of Deformity (Support Required)

Functional Movements

Modular

Custom

???
There is no right way to do the wrong thing!

(Weesie Walker and Chris Maurer, ISS 2017)
Questions

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