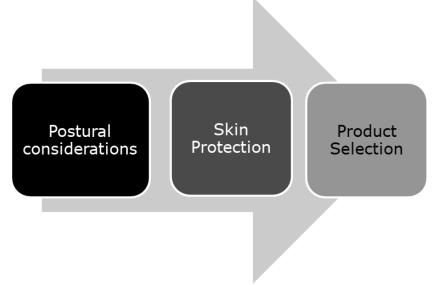


MAT Assessments Effective Efficient

Successful



Amy Bjornson amy.bjornson@sunrisemedical.com.au Clinical Director Sunrise Medical

5 P'S FOR SUCCESS



Promote Function

Provide Rest

Protect the skin

Ensure Physiologic function



Prevent further deformities

Making It Real



Encourage resting posture

REST IS BEST





Making It Real

Allow transitions into task specific postures



IMPROVING PEOPLE'S LIVES

Making It Real



Allow for Gross Motor tasks







THE WHOLE ASSESSMENT



Patient Demographics

- Age
- Diagnosis / prognosis / co-morbidities

Medications Special needs

- Respiratory, GI, orthotics
- Communication devices or other assistive technology

Surgical History / plans Physical status

- Strength, neuromotor, tone
- ROM

Sensation / skin integrity



THE ASSESSMENT



Cognition / behaviour

- Integrate, sequence, retain 🝕
- Judgement

Visual limitations Performance requirements

- Home environment
- Types of terrain indoors / outdoors
- Inclines, ramps
- Travel distance

Transport Functional skills



THE ASSESSMENT







THE ASSESSMENT







MAT STEP 1 – REVIEW CURRENT CHAIR



- Look for areas of high pressure/shear
- What do you like most and least about the posture?
- What does the client like most and least?

Create a problem list and a priority list!

















MAT STEP 2 – SUPINE ASSESSMENT



Assess available movement at the pelvis

- Anterior / posterior pelvic tilt
- Lateral superior / inferior movement
- Rotation

Assess effects on other body segments

Consider tone, spasticity

Assess comfort/tolerance

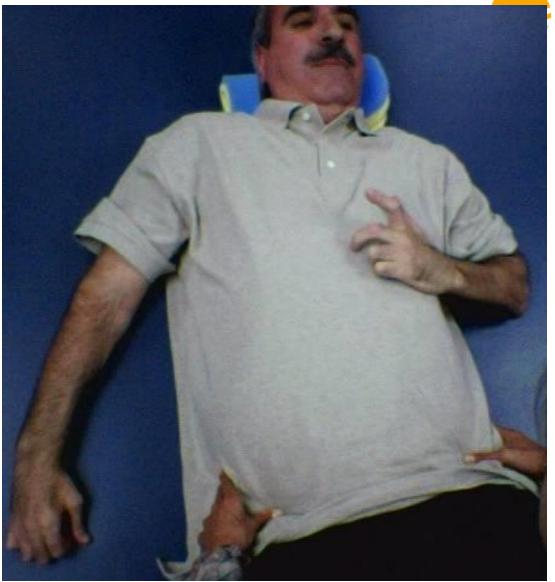
Assess ROM lower limbs



CONSIDERATIONS FOR SUPINE MAT EVAL



- Plinth is not available a full length transfer board on a soft bed can be used for a short duration. Consider their skin integrity and time taken for completion of this part of assessment
- Current pressure injuries delay supine assessment until such time all wounds have healed
- Urinary catheter should be emptied prior to supine assessment.
- Bariatric clients Monitor breathing
- Spasms may be common for clients with SCI when initially positioned in supine











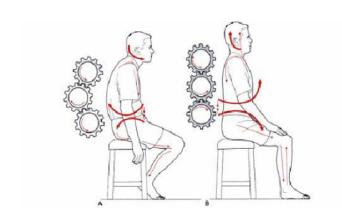


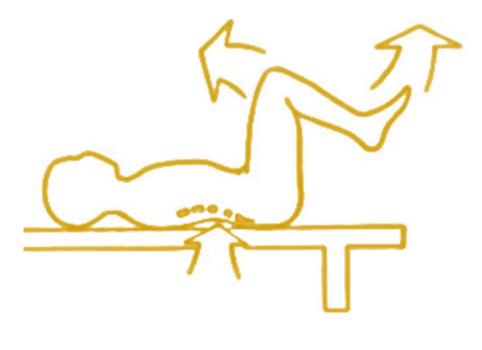


SUPINE MAT ROM



- Hip flexion
- Hip ab/adduction
- Hip rotation
- Knee extension
- Ankle dorsiflexion











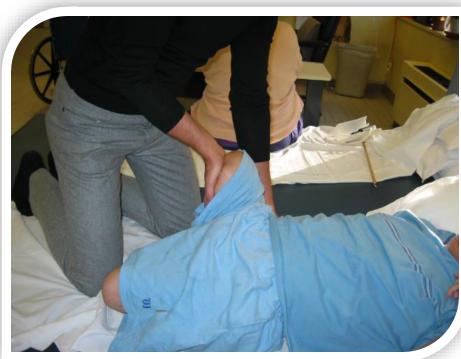




■ IMPROVING PEOPLE'S LIVES















Right hip flexion ~ 120°

Left hip flexion ~ 145°











Right knee extension ~ 110°



Left knee extension ~ 120°











MAT EVALUATION STEP 3



Sitting assessment

- Sitting balance
- Confirm findings from supine



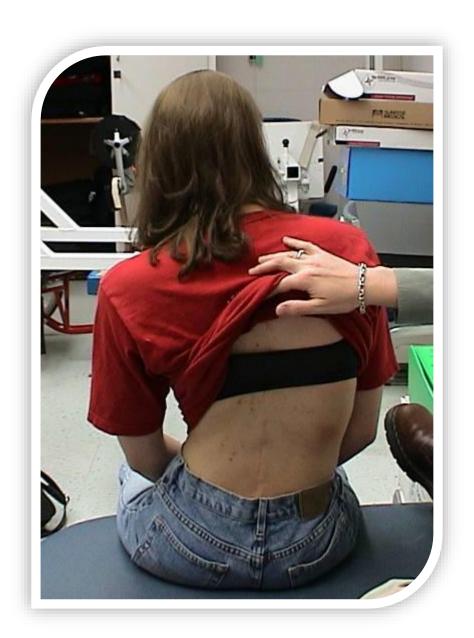












MAT EVALUATION STEP 4



- Simulate postural supports
 - Skin protection
 - Postural support
 - temp/ humidity/ shear at seating interface
- Consider frame type
 - What can you delete from the list of options?
- Configure chair close to what you think the client will need

HAND SIMULATION





IMPROVING PEOPLE'S LIVES





Simulate correction with lateral support and L build-up

SITTING BALANCE

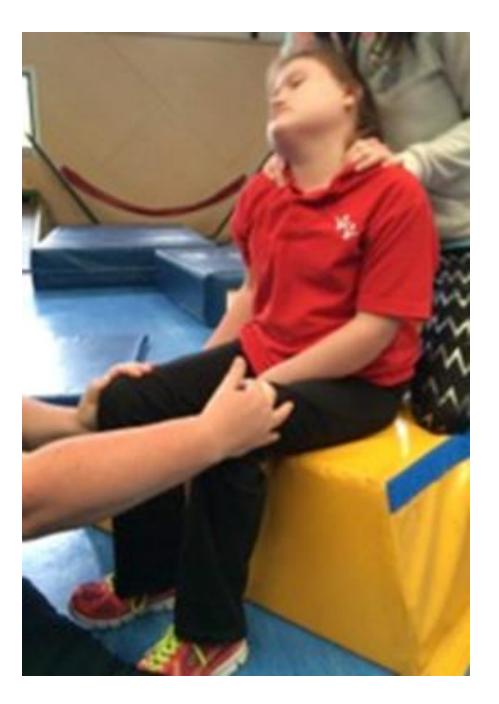














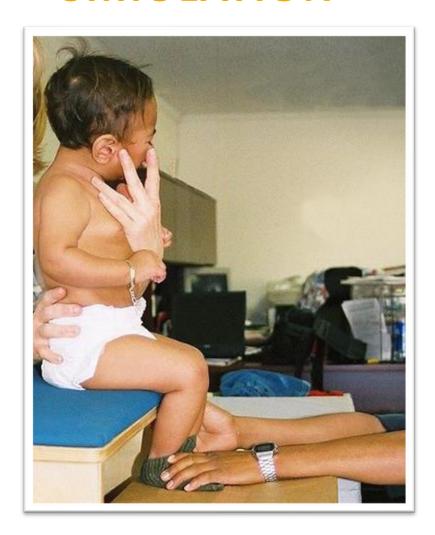




IMPROVING PEOPLE'S LIVES

MAT - STEP 4 SIMULATION







WHY THE ASSYMETRY



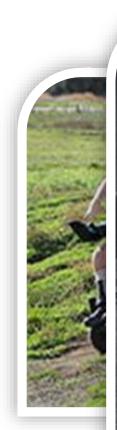
Is it stability related?

Is it used for gross motor function?

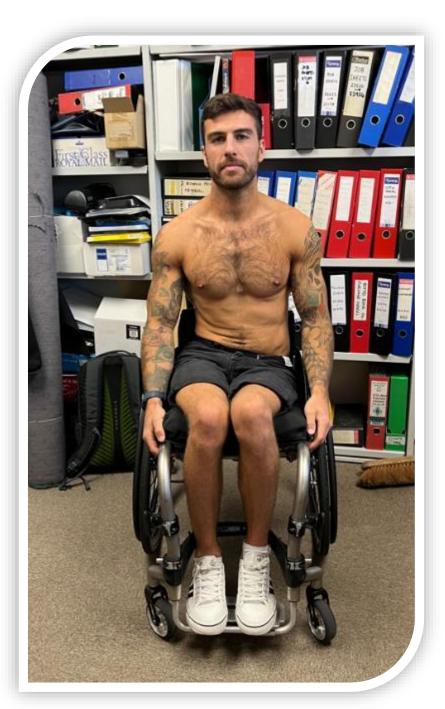
Is it tone related?

Pain related?

Is it ROM / body shape related?

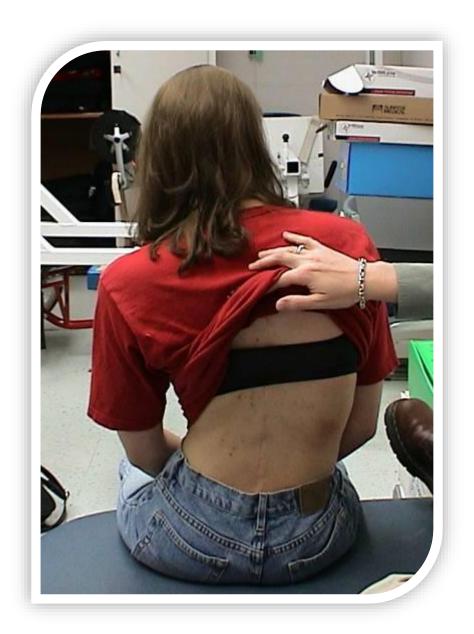






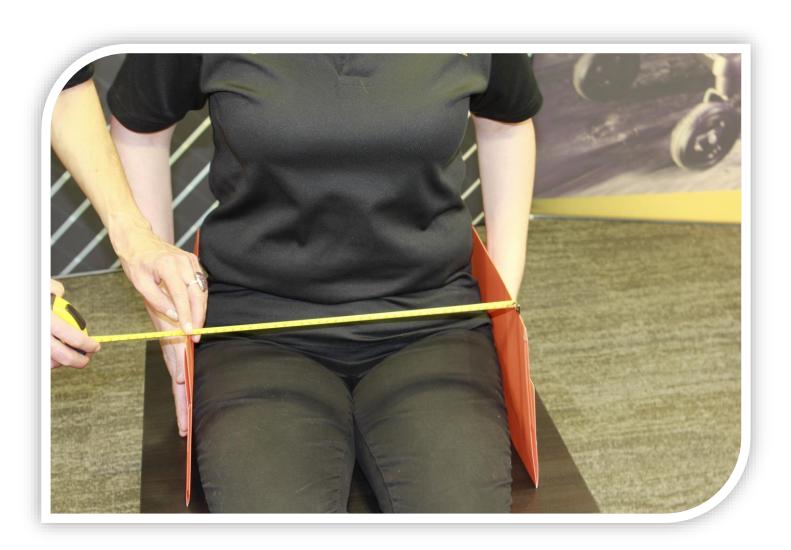






HIP WIDTH





SEAT DEPTH





BACK HEIGHT





LOWER LEG LENGTH





Facilitating Posture



- Support posterior and lateral pelvis
- Support thoracic spine
 - Height and shape required
- Ishial contour in cushion
- Appropriate loading thru femurs



Shapes, Angles, Orientation

APPROPRIATELY CONFIGURED ACTIVE MWC





PELVIC OBLIQUITY







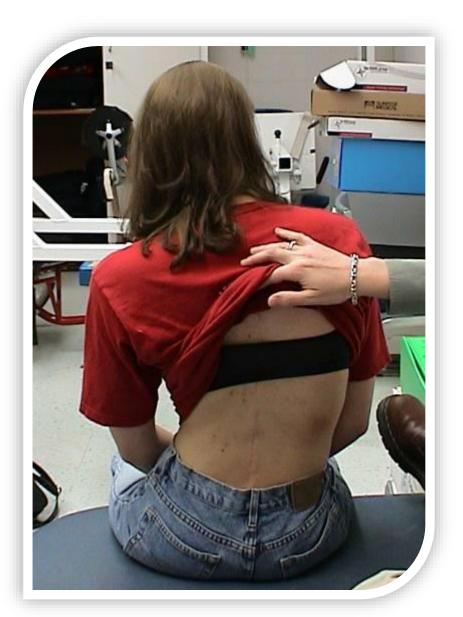
ADD OBLIQUITY BUILD UP











Amber

- T8 Paraplegia
- Active going to Uni
- Living independently



Key points:

- Jay 3 with Shims
- Jay X2 with fluid 1" obliquity build up



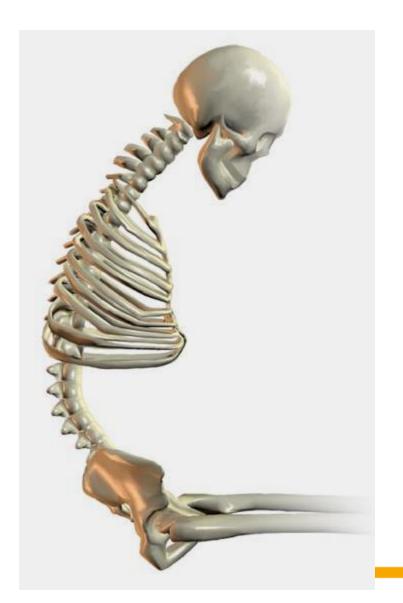




POSTERIOR PELVIC TILT





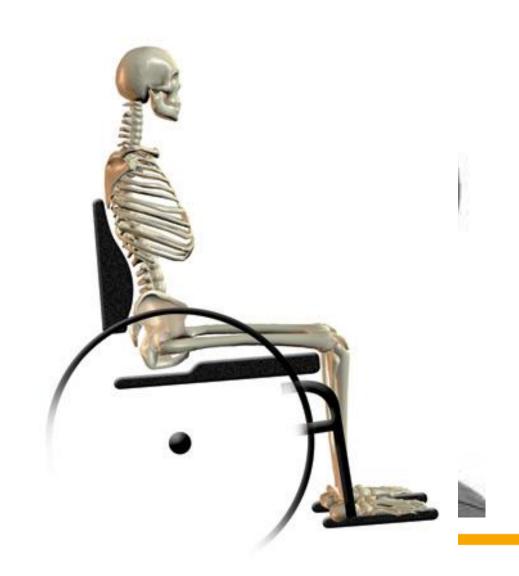


REDUCE POSTERIOR PELVIC TILT





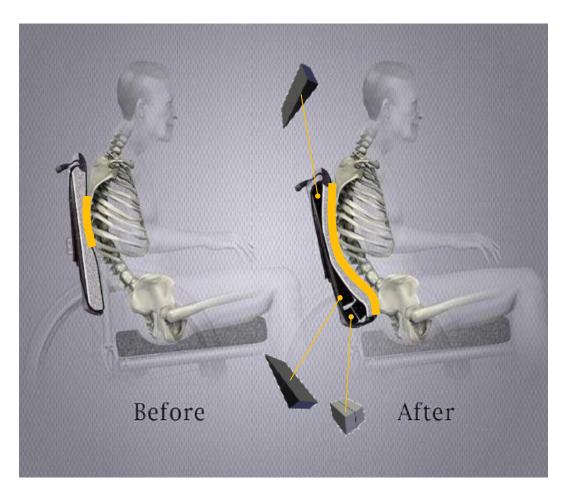
Don't Forget:
you need the
Ishial shaping in
the cushion



FIXED POSTERIOR PELVIC TILT





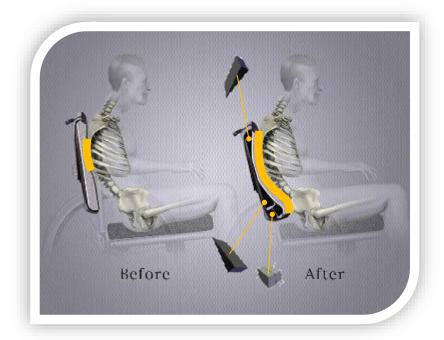


FIXED POSTERIOR PELVIC TILT SUNRISE MEDICAL.





Accommodate







- Neck and back pain
- Skin issues
 - GT
 - Sacral
- Poor mobility





Key points:

- Jay 3 PAMTM
 backrest sacral
 shims
- Jay J2 cushion
- GT cutouts
- New Chair!!!

POSTURAL COLLAPSE



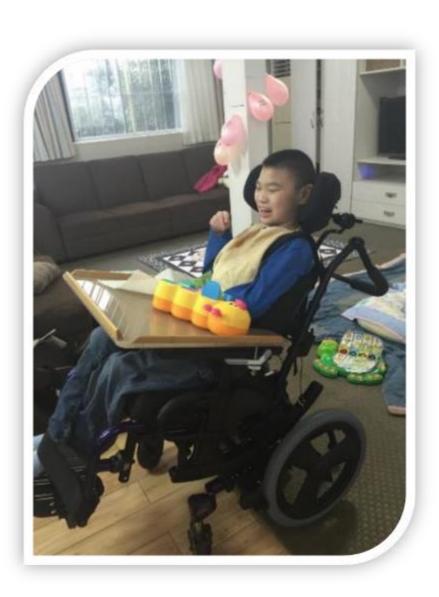












Key points:

- Jay 3 PDL backrest
 - Sacral block
- Jay Fusion
- Large Adjusta-plush

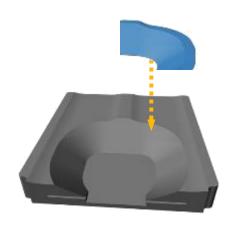






REDUCE THE ROTATION





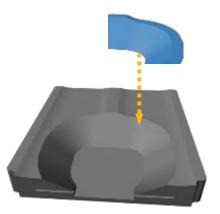
- Posterior lateral wedge in backrest
- Anterior well reducer in cushion





ACCOMMODATE FIXED ROTATION







- Adjust well shape to match pelvic shape
 - Reduction ring
 - Fluid supplement pads

7 year old CP - Adam



Using standard stroller

- Skin breakdown pelvis
- Trouble breathing
- Not able to sit >2 hours
 - Lies in bed
- Increasing tone and motor control issues







CONTRACTURE CUT



Leg length Cut - right

Contracture Cut







- Zippie TS
- Jay GS cushion
- Jay Fit backrestPosterior Deep shape
- Whitmyer SOFT
- Custom footrests

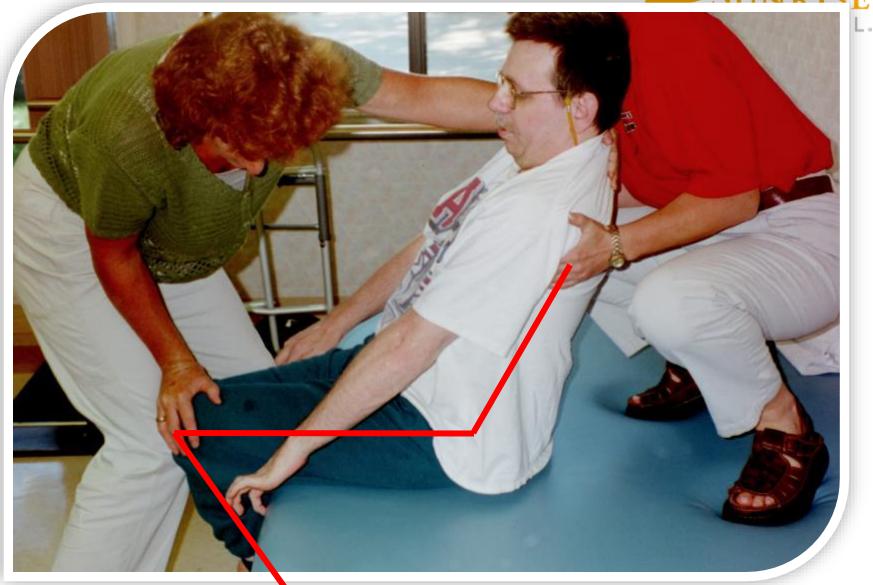
45 YEAR OLD TBI - RAY





- Standard wheelchair
- Sliding out, injuring self and staff





LEG TROUGH CUT



Clinical Usage

Accommodate hip extension contracture Protect residual limb Increase contour around upper leg





JAY J2[®] Series Cushions

JAY Fusion® Cushion

JAY Easy® Cushion

JAY 13[®] Cushion

JAY Lite Cushion

JAY GS® Cushion

IMPROVING PEOPLE'S LIVES

CONTRACTURE CUT



Clinical Usage

Accommodate tight hamstrings
Allow bent knee position



 JAY X2® Cushion
 JAY J2® Series Cushions
 JAY Zip® Cushion

 JAY Ion® Cushion
 JAY Union® Cushion
 JAY Fusion® Cushion

 JAY BasicPRO® Cushion
 JAY Basic Cushion
 JAY GO Cushion

 JAY Soft Combi® P Cushion
 JAY Easy® Cushion
 JAY J3® Cushion



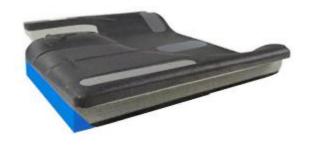


- Tolerating sitting majority of day
- Stable, less sliding

Quickie IRIS with contracture platform

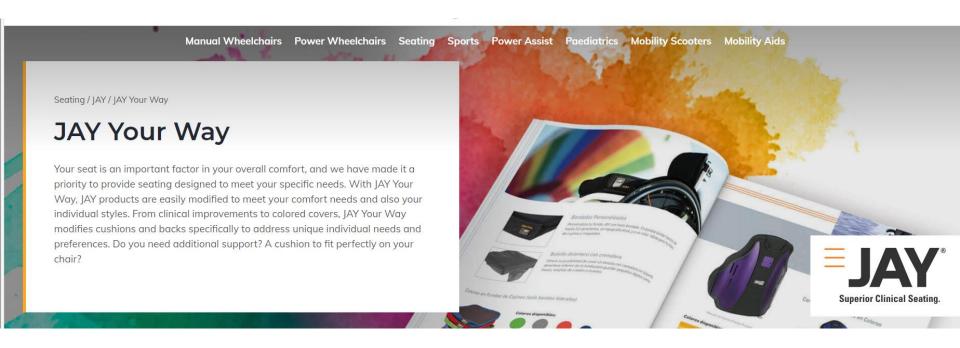
- Jay 3 PD backrest
- Jay FusionContracture cutLeg troughing











JAY Your Way | Sunrise Medical

HIGH TONE ISSUES









Key points:

- Jay GS
 - Fluid segmentation
 - Longer well
- Jay Fit Backrest
- Thoracic laterals





















XABIAN



- Undiagnosed movement disorder resulting in severe global dystonia
- No limits regarding joint range and prefers 90° upright posture
- Xabian is very bright and wants to be able to engage more at school and increase participation both in the classroom and outdoors with family and friends
- Issues around arms getting caught in areas of the chair which causes pain, stress and anxiety

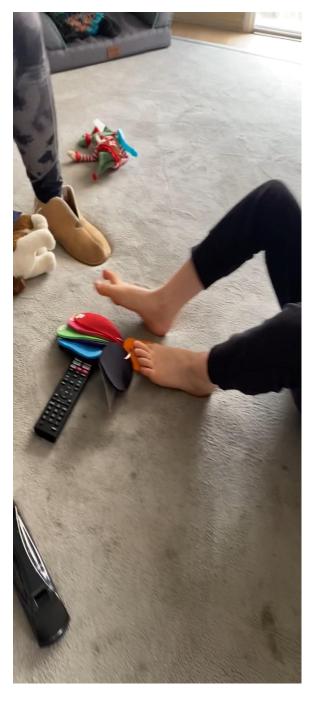


CASE STUDY























Thanks for Attending

Amy.bjornson@sunrisemedical.com.au