

## Appendix 1: Semi-structured interview guide

*Project title: Exploring the rationale for prescribing ankle-foot orthoses and supra-malleolar orthoses for children with cerebral palsy.*

### **INTRODUCTION**

Hello my name is *[insert researcher name]*.

I am conducting this interview as part of a project for my master's by research at La Trobe University.

During today's interview, I would like to learn more about your rationale for providing ankle-foot orthoses and supra-malleolar orthoses to children with cerebral palsy, as well as the outcome measures you use to evaluate its effect.

I expect the interview will take approximately 45 minutes. Therefore, we have plenty of time to work through the questions. Please take your time in answering the questions, pausing to think is perfectly okay.

We will first start with the formal questions such as consent, then move to demographics to learn who you are, and then finally work through the more interesting rationale and outcome measure related questions.

We learn the most from interviews that are more like a conversation, so you should feel free to be open in describing your clinical reasoning for orthotic provision.

Your responses will be combined with those from lots of other clinicians that we are interviewing, and we will be looking for common themes.

For the purpose of this interview, ankle-foot orthoses will be abbreviated to AFOs, supra-malleolar orthoses to SMOs and cerebral palsy to CP.

*[Insert participant's name]* do you have any questions so far?

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Okay let's get started! Are you comfortable and have a coffee or tea handy?

For the purpose of later transcription and analysis, we require the interview to be video and audio recorded. Therefore, do you consent to video and audio recording for the duration of this interview?

[Yes] Thank you, I will now hit the record button and repeat the question so that the consent is able to be transcribed. Then we will begin the interview.

[Insert participant's name] do you consent to video and audio recording for the duration of this interview?

Before we begin, I would like to make sure you are clear about the purpose of the study and what will happen during this interview. Could you describe your understanding of the study and what will happen in today's interview?

Do you consent to participating in this interview?

Please confirm that you meet the inclusion criteria by approving the following:

- 18 years of age or over
- Regularly provides AFOs and SMOs to children with CP
- Able to interview in English

Main questions	Additional questions	Clarifying questions
<b>Topic One: Participant demographics</b>		
“We will now begin with the demographical questions. We are collecting this information to help us understand who you are; our participants.”		
Please state your name.		
What is your age?		
Which gender do you identify as?		
Which state or territory are you based in?		

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Do you work in a public or private setting?			
Do you work in a metropolitan or regional facility?			
What is your primary clinical role?			
Which department do you work for at your facility?			
How many years of clinical experience do you have?			
What is your highest education level?			
How long have you been working with children with CP?			
How many children with CP do you see per week? This includes ax/cast, fitting, and review appointments.			
How many children with CP would you typically fit AFOs to in a week?			
How many children with CP would you typically fit SMOs to in a week?			
What is the process for how patients can be seen by an orthotist your facility?	What do potential patients need to do before seeing you?		
<b>Topic Two: Rationale for providing AFOs and SMOs to children with CP</b>			
<b>“We will now explore your views on why you provide AFOs and SMOs to children living with CP. What we mean by rationale is your clinical reasoning behind providing an orthotic intervention”. [Insert participant’s name] do you have any questions? Okay now I’ll ask the questions.....</b>			
Can you tell me about what factors or considerations influence what type of lower limb orthoses you provide to your paediatric patient with CP?		<ul style="list-style-type: none"> <li>• Can you expand a little on this?</li> <li>• Can you tell me why?</li> <li>• Can you tell me anything else about this?</li> </ul>	
Specifically, which factor/s mostly guide your prescription for lower limb orthoses and why?	<ul style="list-style-type: none"> <li>• Specifically, which factor/s mostly guide your prescription for AFOs and why?</li> </ul>		

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	<ul style="list-style-type: none"> <li>Does this change depend on the physical presentation of the child e.g., ambulant, and non-ambulant? Please explain why.</li> </ul>	<ul style="list-style-type: none"> <li>Can you give me some examples?</li> </ul>
	<ul style="list-style-type: none"> <li>Specifically, which factor/s mostly guide your prescription for SMOs and why?</li> <li>Does this change depend on the physical presentation of the child e.g., ambulant, and non-ambulant? Please explain why.</li> </ul>	
	<ul style="list-style-type: none"> <li>Are there any other clinical aspects that influence your decision?</li> </ul>	
In what situation would you not provide an AFO?		
In what situation would you not provide a SMO?		
Have you ever provided AFOs or SMOs that you did not believe would be effective? If so, why?		
Are there other people who influence whether you provide AFOs or SMOs?		
In your state, are there any system level influences? By system level we mean non-clinical influences such as funding, hospital administration, facility procedures and processes.		
Thinking back to one of your paediatric patients with CP, please discuss their clinical background, which lower limb orthoses to provided and why.		
<b>Topic Three: Outcome measures to evaluate effect</b>		
<p><b>“What we will explore next may seem far removed from the aim of this study, however exploring how clinicians evaluate the effectiveness of an orthotic intervention in the form of outcome measures, can provide us with indirect clues as to why they provide a particular device.</b></p>		
<p><b><i>[Insert participant’s name]</i> do you have any questions? Okay let’s move on to the questions.....</b></p>		
How do you evaluate the effectiveness of an AFO or SMO?		<ul style="list-style-type: none"> <li>Can you expand a little on this?</li> </ul>

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If you were to use outcome measures, which ones would you normally turn to?		<ul style="list-style-type: none"> <li>• Can you tell me why?</li> <li>• Can you tell me anything else about this?</li> </ul>
<p><b>Topic Four: Rationale statement reflections</b></p> <p><b>I will now share with you 8 rationale statements (via PowerPoint slides) about the provision of AFOs and SMOs that we found or have adopted from our recent literature review.</b></p> <p><b>I am then going to ask you to say whether you agree or disagree with each and explain why. Or how the statement reflects your current rationale for providing these orthotic interventions.</b></p> <p><b><i>[Insert participant's name]</i> does that make sense? Would you like me to clarify anything? Okay, let's move on to the rationale statements.....</b></p>		
<ol style="list-style-type: none"> <li>1. <i>"AFOs are a commonly prescribed medical device given to children with cerebral palsy (CP) in an attempt to improve their gait"</i></li> <li>2. <i>"The supramalleolar orthosis (SMO) is prescribed primarily to control hindfoot and midfoot varus/valgus"</i></li> <li>3. <i>"Rigid ventral Ankle-Foot Orthoses (vAFOs) are commonly prescribed in CP to .... lower the elevated energy cost of walking"</i></li> <li>4. <i>"Supramalleolar orthoses (SMOs) are commonly prescribed to improve crouch gait"</i></li> <li>5. <i>"Floor reaction ankle-foot orthoses (FRAFOs) with a ventral shell are commonly prescribed to improve crouch gait"</i></li> <li>6. <i>"Hinged ankle foot orthoses (HAFOs) are prescribed to reduce foot equinus during gait to improve ankle dorsiflexion in mid-stance and to prevent foot drop during swing phase"</i></li> <li>7. <i>"Ankle-foot orthoses (AFOs) are frequently prescribed to correct skeletal misalignments in</i></li> </ol>	Show each rationale statement, one-at-a-time, on a PowerPoint shared in Zoom.	<ul style="list-style-type: none"> <li>• Do you agree or disagree with this rationale statement?</li> <li>• Can you explain why?</li> <li>• Are there any reflections you would like to share about this rationale statement?</li> </ul>

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<i>spastic CP, and to provide a stable base of support which helps in improving the efficiency of gait training"</i> 8. "AFOs are designed to improve balance and stability"		
Lastly, what do you think motivates children and their families to get AFOs or SMOs?	What prompts families to see an orthotist in the first place?	
<b>Conclusion</b>		
Are there other key points you would like to add about your rationale for the provision of AFOs or SMOs, choice of outcome measures used or rationale statement reflections that we have not discussed? OR  Is there anything else you would like to add?		

## **SUMMARY**

In summary:

Your rationale for providing AFOs are.....

Your rationale for providing SMOs are.....

The outcome measures you use to evaluate effect are.....

## **CONCLUDE INTERVIEW**

This concludes the interview. Thank you for your time in participating in today's interview. We appreciate that there is no direct benefit to you in participating but giving your time to assist us is invaluable for the further development of orthotic services for children with cerebral palsy in Australia.

The next steps are that we will be analysing each participant's interview and drawing out common themes. We will send you a copy of the themes and quotes from your interview to ensure we have understood the detail of your interview. You will be able to provide feedback via email or phone call if required and then we can make adaptations. Thank you again.

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