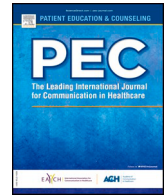




Contents lists available at ScienceDirect

Patient Education and Counseling

journal homepage: www.elsevier.com/locate/pec

Shared decision making in youth with brachial plexus birth injuries and their families: A qualitative study

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ARTICLE INFO

Article history:

Received 15 October 2020

Received in revised form 11 March 2021

Accepted 12 March 2021

Available online xxxx

Keywords:

In-depth interviews

Participant observation

Interpretive qualitative study

Shared decision making

Adolescents

Brachial plexus

ABSTRACT

Objective: The objective of this study is to elucidate the decision-making experiences of youth with brachial plexus birth injuries who face preference-sensitive decisions regarding treatment options for a persistent elbow contracture.

Methods: Transcripts, research-created drawings, and field notes from in-depth interviews with 5 young adults and 14 youth-parent dyads, and 15 participant observation sessions of families and clinicians in the clinic setting were deductively and inductively coded and thematically analyzed.

Results: Youth's shared decision making was influenced by relational processes with their clinicians and parents. Youth's trust in their clinicians' recommendations for pursuing treatment and pressure from their parents to pursue or continue rehabilitation treatment affected how their voices were expressed and heard. Parental emotional adjustment to the birth injury played a role in parental perceptions of what was deemed their youth's best interest in the shared decision.

Conclusions: The decision-making experiences of youth with brachial plexus birth injury illustrate the complexity of paediatric preference-sensitive decisions and the significance of social and emotional factors on these shared decisions.

Practice implications: Opportunity for youth to express their voice without external pressure during shared decision making is needed to make well-informed decisions based on their own values. Interventions such as decision coaching and decision support tools may help youth and parents to formally identify and discuss these relational processes.

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1. Introduction

Identifying and clarifying health preferences and values are especially important in preference-sensitive decisions where there are two or more medically reasonable care options available, but there is no indication that one option is superior [1] or the strength of the recommendation is weak [2]. Preference-sensitive decisions are commonly faced by youth with brachial plexus birth injury (BPBI) who have long-term unilateral upper limb motor and sensory

impairments that lead to orthopaedic sequelae that may require elective surgical or non-surgical (rehabilitation) interventions to optimize function and appearance [3]. A common sequela in youth with BPBI is a persistent elbow flexion contracture that restricts movement into elbow extension [3].

Rehabilitation and surgical interventions for such contractures can reduce the degree of contracture, but cannot restore full elbow joint function [4]. Further, a major challenge with rehabilitation treatment, namely serial casting and splinting, is that wearing a long-term nighttime elbow extension splint is required to maintain treatment gains [5]. Recurrence of contractures >30° has been reported in half of patients treated with serial casting [6]. Then again, surgical treatment is also challenging because surgical release often requires lengthening the biceps brachii muscle, a muscle already weakened by the initial

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<https://doi.org/10.1016/j.pec.2021.03.017>

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nerve injury to the brachial plexus [7]. Surgery may result in the loss in elbow flexion active range of motion (ROM) [4] which is critical for activities of daily living (e.g., hand to mouth function). Further, adherence to post-operative rehabilitation is also an important factor related to optimizing surgical benefits [8]. As such, most experts caution against surgical release of elbow flexion contractures unless it is severe (i.e., >60°) and there are significant functional concerns [4].

Consequently, treatment decisions for an elbow flexion contracture involve weighing the risks and benefits of rehabilitation and surgical interventions, while considering the functional and psychosocial impact of the elbow contracture on the youth and family [9]. To make such decisions, the family ideally participates in shared decision making with their clinicians to discuss treatment options, risks and benefits, preferences, and values [10]. In this approach, clinicians are the experts on the evidence, and the youth and their caregivers are the experts in what matters most to them [11]. The expertise of all parties come together to help to make the best decision for the youth.

In paediatrics, along with the clinicians' point of view, shared decisions involve both youth and their caregivers which represents more than one individual and/or collective viewpoints. The youth's desire to be involved in these shared decisions may vary according to their type of health condition, competence, developmental age, and the type of decision that needs to be made [12]. Family dynamics and different viewpoints within the family unit may affect the shared decision-making process and outcome. In BPBI, discrepancies between parental and youth perspectives regarding medical decisions have been identified. Squitieri et al. [13] interviewed adolescent-parent dyads regarding their decisions pertaining to elective surgical management. Their study found that youth focused on their individual treatment desires to improve function and aesthetics, while their parents prioritized knowledge acquisition and process of care (multidisciplinary care). The importance of adolescent autonomy was expressed by both youth and parents in relation to the youth's readiness to engage in shared decision making [13]. However, the lived experiences of these youth in making these decisions were not explored.

2. Method

An interpretivist qualitative study was conducted using in-depth interviews and participant observation methods to elucidate the decision-making experiences of youth with BPBI when choosing among treatment options for an elbow flexion contracture. This approach aims to generate knowledge and understanding through interpreting the meanings that youth and parents assign to their decision-making experiences [14,15]. This study was the initial step of developing a decision support tool for these youth to engage in shared decisions with their parents and clinicians.

Young adults (>19 years) were initially interviewed by a research assistant using a semi-structured interview guide (Appendix) that focused on the impact of the elbow contracture on daily function and appearance, and reflections on pursuing and undergoing treatment for an elbow flexion contracture during their child and adolescent years. These young adult interviews informed the content of the semi-structured interview guide used to explore youth (≤19 years) and parent decision-making regarding treatment decisions for an elbow contracture. These interviews were theoretical grounded in the Ottawa Decision Support Framework [16] and the World Health Organization International Classification of Functioning, Disability, and Health [17] (i.e., definitions of function, personal factors, and environmental factors). The first author (ESH) conducted in-depth, open ended interviews with the youth and parents. Concurrently, participant observation data were collected through active participation (e.g., interaction with participants), naturalistic observation, field-notes, and researcher-created drawings of the shared decision

making between youth, parents, and clinicians in the clinical setting [18,19].

In using an interpretivist qualitative approach, attention was given to specific dialogues and narratives that illuminated youth's and parents' experiences of having an elbow flexion contracture, choosing among treatment options, and participating in treatment [15]. To generate these insights, several iterations of deductive and inductive coding of the text-based data were conducted and thematically analyzed alongside the researcher-created drawings [19,20]. Participant sampling was discontinued when a redundancy of concepts occurred during the iterative process of going back and forth between data collection and analysis [21]. To ensure quality and credibility of the research [22], senior authors (JAP, FVW) reviewed the text-based coding process conducted by the first author (ESH) during the initial stage of data analysis. Following, two clinicians who participated in all the participant observation sessions provided input on the researcher-created drawings and reviewed the text-based codes. Each iteration of the data included discussion with the research team, youth with BPBI, and health care professionals working in this field.

Institutional ethics board approval was obtained at the Hospital for Sick Children, Toronto, Canada, as well as administrative approval at the University of Toronto, the affiliate academic institution.

3. Results

The characteristics of the purposive sample of five young adults (2 women, 3 men; 21–24 years) and 14 youth who were interviewed are shown in Table 1. The mean age at the time of the study was 17.6 ± 3.9 years (8.3–23.9 years), and the mean age at initial elbow treatment was 10.9 ± 4.1 (4.7–17.8 years). At the time of treatment decision, the mean degree of elbow contracture was $39.5^\circ \pm 13.9^\circ$ (5–60°). Nine mothers and four pairs of parents (i.e., mother and father together) were interviewed alongside their youth. One set of parents withdrew due to lack of English proficiency. Across the sample, the interviews lasted 35 min on average (range of 8–125 min).

Fifteen participant observation sessions were conducted with families of children (Age: 2–16 years) with BPBI alongside clinicians in the clinic setting. Nineteen health care professionals were observed: ten surgeons (i.e., orthopedic, plastic) and surgical trainees, six nursing and allied health professionals (i.e., physical therapists, occupational therapists, social workers) and three health care trainees.

Four interconnected themes emerged related to the decision-making of these youth: 1) Trust in the expertise of the clinician; 2) Youth's role in the shared decisions; 3) Parental perceived responsibility; and 4) Youth-Parent decision discord. To uphold the

Table 1
Interview participant characteristics (n = 19).

Characteristic	n	%
Type of BPBI		
Upper Plexus	9	47
Total Plexus	10	53
Sex		
Female	11	58
Male	8	42
Past Surgical Treatment		
Primary Nerve Surgery	12	63
Secondary Shoulder Procedure	9	47
Secondary Elbow Procedure	2	11
Secondary Wrist Procedure	3	16
Elbow Treatment Decision		
Stretching	2	11
Casting	8	42
Splinting	6	32
Elbow Release Surgery	1	5
Declined Casting/Splinting	2	11

confidentiality of the participants, all names have been changed to pseudonyms, and potentially identifying information excluded.

3.1. Trust in the expertise of the clinician

The long-standing relationships between the families and clinicians were identified as a positive influence on trust between the parties. The strength of this trust relationship had an important impact on decision-making and was experienced as either a facilitator or barrier in this process. Illustrated in the following account, is how trust both facilitated and hindered the decision to pursue surgical treatment for an elbow flexion contracture. Wesam had attended the clinic since birth and had two previous surgeries for her BPBI. At 16, she remembered asking her surgeons, *“Is there a possibility that there is something other than casting that can straighten my arm?”* At that time, she had already had several sessions of serial casting treatment, but her elbow contracture remained at $>60^\circ$. As a facilitator, trust led to the ease with which she initiated and disclosed her needs and wants to the clinicians in the clinic. She recollected being told about elbow release surgery and its benefits and risks. Wesam noted that pain relief in her shoulder and elbow were her key priorities, but she also recognized the potential of losing her ability to bend her elbow. Her mother also characterized this significant risk of surgery as a major concern: *“There were the big ones, like, what were you going to do if you lose that [mom bends her elbow up to reach her hand to her mouth].”* Wesam’s response indicated that she understood the risks of the procedure as she communicated confidence in her ability to adapt, even if function is lost: *“I adapted to things my entire life, if that happens, I [will] adapt.”* However, the influence of the trust relationship prevailed in her decision. She went on to say, *“So, I know that when something’s offered to me, or something is brought up, that you know 100% that it is the best thing for me. You have to be able to trust that in your health care professionals.”*

Although Wesam stated that the decision was, *“by far, the best decision that I ever made”* and she expressed satisfaction with the outcome, *“I can say that truthfully. I can do so much more, I do not have any pain whatsoever,”* her decision-making process illustrates the dangers of trust and longevity of relationship between patient and clinician. Despite weighing the pros and cons of surgery, Wesam’s decision was heavily dependent on her faith in her health care team. She made inferences about her surgeon’s recommendations and skills that may have been influenced by a prolonged pattern based on her past surgical recommendations, decisions and outcomes.

3.2. Youth’s role in the shared decision

The degree to which the youth’s voice was heard in these decisions was highly dependent on their parents’ perceptions of their developmental maturity. During the teenaged years, some parents spoke of their recognition that their children were ‘individuals’ with autonomy in the shared decision. Wesam’s mother stated: *“The best thing I could do for my daughter is let her decide, how she wants to live her life. It’s the best gift that I can give her. I can’t you know, make the decision for her, because it’s what I want, I’m not living her life.”*

Parents also described that the degree of autonomy they granted their children changed over time and with the nature of the decision. For example, Annabeth’s mother acknowledged that the shared decision regarding rehabilitation treatment for her teenaged daughter’s elbow flexion contracture was *“a family decision, but it was really up to [Annabeth].”* However, when Annabeth was seven years old, the shared decision regarding elective shoulder surgery differed: *“If she was dead set against not having it done, then, we probably would have backed off or tried to convince her.”* Annabeth’s mother felt that surgery was a good option, but recognized that her daughter’s dissent or assent was required to move forward with the decision. This

highlights the importance of a child’s dissent when an intervention proposed is elective or can be deferred without major risk [23].

Lastly, it was also evident that the discussion about the child’s developmental maturity to make decisions had the potential to become contentious between youth and parents with respect to the age of maturity. On a few occasions, once the child reached the pre-teen years (9–12 years), the youth felt ready for more responsibility than the parent allowed. While youth and parents would disagree about who was the primary decision maker, for the most part they agreed that there was no specific age at which the child becomes mature enough to make the decision. Most parent and youth expressed that this was dependent on the characteristics of the child.

3.3. Parental perceived responsibility

Among the parents interviewed, some expressed the need to do all that was possible for their child to address the impairments of a BPBI. Some felt it would have been irresponsible not to try rehabilitation treatment (i.e., casting, splinting) given that it had ‘minimal risks’ and reasonably assured benefits of improving ROM. This was also consistent with how clinicians communicated their recommendations regarding serial casting and splinting. A ‘why not?’ approach was observed in their framing of the treatment options which may have led parents to feel irresponsible if they did not pursue this rehabilitation treatment.

Declining rehabilitation treatment was also a source of potential parental regret. Ingrid’s mother shared, *“She didn’t want to do [serial casting]. But, I talked to her and I told her that it was something that we had to try ... would have regretted it if I didn’t do it, because, how do you know? It could have been the best thing since sliced bread.”* The potential for improvements in the affected limb was not something she was willing to forego. She further expressed concern that down the road, Ingrid would state, *“Mom, why mom, why didn’t you do it? I was only 15, I didn’t know any better.”* The influence of hope was also heard in this mother’s voice as she pondered whether serial casting was the next innovative treatment for BPBI.

Other parents shared this same hope for other new interventions and discoveries. Emma’s mother described her resistance to accept her daughter’s impairment, *“You know, that’s a hard pill to swallow as a parent because you are always looking for more for the next innovative treatment...There’s disappointment because you always want the best for your child, you want to see progress, you want to do what you can do. [Others] probably [would have] given up on the physio years ago, and I kept maintaining it so she would have the range of motion.”* A driving influence to maintain her daughter’s passive ROM was the hope *“that [when] medical science will advance,”* then Emma would have the greater underlying potential to restore movement in her limb.

3.4. Youth-parent decision discord

While parents often reported opting for rehabilitation treatment, their children did not always wish to pursue or continue treatment. Some youth did not perceive their contracture as a functional concern. Yanzie shared, *“My left arm with the brachial plexus injury is all I’ve ever known, so to me this is how my arm should function. It never really feels like I’m lacking function.”* The experience of having BPBI since birth may have contributed to the views of these youth, which in turn, was not always readily perceived or understood by their parents. That said, more often, youth-parent discord occurred after a trial period of serial casting or splinting when the youth no longer wanted to continue nighttime splinting. Conflict occurred when parents pressed for rehabilitation treatment despite opposition from their child. A typical banter between the adolescent and parent was as follows. Monica stated *“My mom is saying to wear it and she knows best.”* While her mother’s response was: *“If I tell her to wear it, she*

would wear it, but once my back is turned, she takes it off and she's in her room and stuff like that.”

While some youth-parent decision discord manifested as outward disagreements in the decision-making process, others remained hidden at the time of treatment. The following scenario is told from the perspective of Stephen, a young adult (22 years old) whose parents expressed a desire to pursue treatment; however, he remained silent about his own preferences and instead yielded to his parents' wishes. Stephen recounted a story that began when he was 12 years of age. His elbow contracture was $>50^\circ$:

“It was more my family thought it would be the best thing for me... I've never really cared about it...my elbow contracture never interfered with my daily activities...I never had an issue [with how it looked]. It's more my parents were worried about my range of motion, so that's why I chose to do it... I'll never forget, I didn't want to do it and we were actually waiting after the [appointment] and my mom cried. She was just bawling. And she's like 'I want you to do this because it's best for you,' and to be honest with you, as a young kid, my initial instinct was I just wanted my mom to stop crying, so that's why I did it.”

Stephen understood that his parents' desire to pursue treatment was meant to address his decreased ROM. He contrasted their views with his own stating that he had never felt that his ROM or elbow flexion contracture interfered with his daily activities. However, wanting to alleviate his mother's distress, Stephen underwent serial casting and nighttime splinting. Notably, he did not describe protesting this decision, nor did he describe conflict with his parents after the treatment was pursued. Stephen adhered to treatment throughout his childhood. However, he expressed grievances with the social consequences of undergoing treatment and how it made him feel about himself. He described that his contracture was “not slight” prior to this treatment, but his friends had not known of his diagnosis. However, his BPBI became visible to others when he underwent casting and this became the focus in his life.

“I've never had an issue with it [elbow contracture] or felt bad about it. It was just when I was going through casting, I felt like that was the main issue in my life. When you're going through serial casting and splinting... you're in the hospital every week, it's kind of hard to think about things other than your arm and what is wrong with you as opposed to what is right with you.”

Although the visibility of BPBI and its resultant social consequences are a known concern of youth with BPBI [9], what differed in Stephen's experience was that he felt that it was the *treatment* of casting and splinting that made his BPBI visible. This visibility and undergoing an intervention that included the act of visiting a hospital every week caused him to fixate on his BPBI and what was ‘wrong’ rather than what was right.

4. Discussion and conclusion

4.1. Discussion

Treatment decisions for an elbow flexion contracture are preference-sensitive as they are highly dependent on the youth and parents' values. This study illustrates the complexity of the relational processes that affect how the youth's values are expressed. The youth's trust in their clinicians' recommendations and/or parental influence to pursue or continue treatment affected how their voices were heard during the decision-making process. Greater support of the youth's voice during shared decisions to make a ‘good’ decision regarding treatment options for an elbow flexion contracture is needed. In this context, a ‘good’ decision refers to one that well-informed and based on the youth's values [1].

Firstly, clinicians need to be cognizant of both the youth's desired level of involvement in shared decisions and the family dynamics. Previous literature demonstrates that a youth's desire to participate in health decisions is situational and fluctuates under different circumstances and over time [12]. Most appreciate the opportunity to express their desired level of involvement. However, some youth prefer to have a passive role, some may not want to have a say, while others are ambivalent or unsure of how they wish to be involved [22–25]. Once their desired level of participation is established, clinicians may find the use of decision support tools or standardized care processes (e.g., decision coaching) helpful to formalize the youth's involvement in shared decisions [24].

Secondly, employing a strengths- and needs- based approach [25] to empower youth to identify their goals may help clinicians to prioritize youth's voices in shared decisions. Such an approach would place a priority on understanding the youth's abilities, values (e.g., satisfaction with level of function and appearance), and desire for treatment prior to recommending interventions. This involves strengths-focused communication that acknowledges that these youth, who have impairments since birth, may not perceive the elbow contracture as a problem. Employing a strengths- and needs- based approach is important because the very nature of recommending treatment to these youth indicates that there is something more to be attained or ‘normalized’ [26]. Stephen's story is a powerful message of how clinical interventions, although intended to ‘do good,’ may unintentionally ‘do harm.’ Although educating and offering families the available interventions is still a prudent course, decisions made by youth, especially those accompanied by a feeling of external pressure to make them comply, if not explicated, may result in negative social and psychological consequences for the youth.

Moving our attention from clinicians to parents, we found that most parents in this study expressed the strong desire to do everything necessary to improve their youth's health and to make decisions that were in their best interest [23]. However, what is deemed the youth's best interest was difficult to define in the context of this preference-sensitive decision. Some youth did not view their elbow impairment as a significant concern while some parents' decision-making was affected by their emotional adjustment to the birth injury. Regret and hope were two important emotions identified in parents of this study that influenced how they viewed their child's ‘best interest’. Parents reported wanting to avoid feeling regret from a missed opportunity, and were concerned about any future ramifications of this. Some hoped for new innovative treatments and continued improvements in their youth's condition, which might be currently unknown or unrecognized. The type of hope expressed was consistent with hope-as-want, an unhealthy hope from desiring outcomes that have a low likelihood [27]. At times, this compelled them to push their child to pursue or persevere with their rehabilitation regimen throughout their childhood. What typically ensued was youth-parent decision discord and regret related to the youth's response to external pressures and negative experiences with treatment adherence. Shared decision making might be optimized by helping parents identify and address how these emotions, as well as misplaced hope of restorative function, affect their motivations to pursue treatment.

In these cases of youth-parent decision discord, both parties expressed decision regret such that they had remorse or distress over the decision [28]. In studies of adults, decision regret has been associated with decision uncertainty, decreased satisfaction with the decision outcome, feeling unprepared to make a decision (e.g., inadequate or poor information), and greater anxiety levels [29]. Studies of regret on children and adolescents that focus on the impact of this negative emotion on their subsequent decision choices (e.g., gambling tasks) are reported [30]. However, studies specific decision regret related to health management in youth appears limited. Although decision regret is most commonly associated with

decisions that result in adverse health outcomes [29], in this study it was associated with disappointment in treatment results, difficulty with treatment adherence, and perception of being unprepared or not in control of the decision. Efforts should be made to manage decision regret by helping youth and parents form realistic expectations and goals for rehabilitation treatment and clarify their values before choosing and undergoing treatment.

The qualitative findings of this study reflect the decision-making practised at the single urban pediatric institution where the research was conducted. It is within the limitations of this context that these findings should be understood. Although the interpretivist findings generate new knowledge and insight on shared decision making in these youth, the application of these findings is best suited to other compatible tertiary care facilities in similarly-funded English speaking health care settings.

4.2. Conclusion

The findings of this research highlight the importance of relational processes that affect how a youth's voice is heard during shared decision making. Youth need guidance to recognize and work through the pressures from others (e.g., clinicians, parents) to make a 'good' decision. Providing youth with ongoing opportunities to explore and disclose their feelings about the decision without external pressure are important in the shared decision-making process.

4.3. Practice implications

The findings from this study informed the development of the content and format of a decision support tool for youth with BPBI faced with treatment decisions regarding an elbow flexion contracture (www.aboutkidshealth.ca/Article?contentid=3873&language=English). The use of decision support tools or decision coaching to assess decisional needs, facilitate understanding, clarify values, and improve deliberation skills in these youth may be helpful [24]. Feenstra et al., found that decision coaching improved the congruence between child and parent values, as well as the child's satisfaction with decision making [31,32]. Implementing and evaluating the impact of decision coaching with these families with a specific focus on illuminating the youth's voice, identifying and elucidating parents' emotions, and managing youth-parent discord during shared decisions is recommended. Decision coaching or decision support tools to formalize support given to youth during shared decisions would help to strengthen their voices and optimize shared decisions.

CRedit authorship contribution statement

Emily S. Ho: Conceptualization, Investigation, Methodology, Project administration, Resources, Writing - original draft, Writing - review & editing. **Janet A. Parsons:** Conceptualization, Investigation, Methodology, Supervision, Writing - review & editing. **Kristen M. Davidge:** Conceptualization, Investigation, Writing - review & editing. **Howard M. Clarke:** Conceptualization, Investigation, Writing - review & editing. **F. Virginia Wright:** Conceptualization, Investigation, Methodology, Resources, Supervision, Writing - review & editing.

Acknowledgements

The content of this manuscript, in part, has been used by the first author for personal use in a dissertation that will not be published commercially. This work was funded by the Sick Kids Perioperative Services Innovation Fund, Toronto, Canada. The authors have no perceived or actual conflict of interests to declare.

Appendix

Young adult interview guide

Impact of Elbow Contracture on Daily Activities.

1. Tell me about a time when the bend in your elbow interfered with your daily activities.
Prompts: How did it interfere? When did it start to interfere? (Age related or participation in a specific activity)

Appearance of Elbow Contracture

2. How do you feel about the look of your bent elbow?
Prompts: How does it bother you now? How did it bother you in the past?
When did it start to bother you (Age-related or participation in a specific activity)

Experience with Serial Casting or Splinting

3. You had stretching, serial casting or splinting to stretch your arm straight. Tell me about this experience
Prompts: What were the benefits of this experience?
What were the challenges of this experience?
Where the challenges worth the benefits?
What helped you through this process?
4. What advice would you give a child with a brachial plexus injury who has a bent elbow in regards to stretching, splinting and casting their elbow?
Prompts: Would you recommend this treatment?
What age to start the treatment?
How to persevere (stick with) the treatment?

Youth-parent dyad interview guide

Warm-up questions.

1. When did you first start coming to the Brachial Plexus clinic at SickKids? How old were you then?
2. Tell me a little about your family. Do you have siblings? What type of extracurricular activities does your family enjoy?
3. Tell me about your experience with pursuing treatment for an elbow contracture? What have you heard about, or done about your elbow in the past?

Elbow Flexion Contracture

The interviewer will first address the question to the teen, and then allow the parent to add.

Our team is making a Decision Aid. You may ask - what is a Decision Aid? Well, it's usually a booklet, webpage, online video, or App that has information about a medical condition, the treatment options and the things you need to think about to make a decision about treatment. The Decision Aid we are making is to help kids like you (interviewer looks at child) and your family (interviewer looks at the family) decide what to do when you have an elbow flexion contracture (stiff elbow - interviewer points to own bent elbow) from a brachial plexus injury.

Treatment Options

4. From your experience, what are the treatment options for a stiff elbow?
5. What is the best way to learn about these options?
(Probe: By who?)

6. What are the pros and cons of the different treatment options?
7. What are the expectations of treatment?
8. When is the best time to learn about these options?

Decision-Making

9. What is the most important decision that a family needs to make?
10. Who can help make this decision? (i.e., parents, family, friends, health professionals)
11. What information is needed to make this decision?
12. What are the reasons to pursue or not pursue treatment?
13. If treatment is chosen: What are the reasons for choosing splinting/casting or surgery?
14. What influences this decision?
 - Body Function and Structures – How does the way your arm functions impact this decision? (i.e., range of motion, degree of contracture)
 - Activity: How does the way you are able to do activities (i.e., putting on a hoodie, using a keyboard, texting) impact this decision?
 - Participation: How about the way you participate in sports or hobbies – How does this impact this decision?
 - Personal Factors: Are there any aspects about your personality or how you view/feel about your brachial plexus injury that would impact this decision?
 - Environmental Factors: How does the people around your family and the community you live in impact this decision?
15. What makes this decision easy or hard?
16. How do you think through what the best option is for you? (i.e., making a list, talking to someone, information)
17. How do you (finally) make the decision?

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