'Keep on Trying' - When Technology Evolves You Might Just Get There

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Summary

A case study: A client with MD and complex postural/respiratory presentation. Problem solving her wheelchair seating and bed positioning using custom made solutions. Sharing how new technologies were embraced. The role of the client and her perspective will be shared demonstrating collaborative working, to incorporate her ideas, achieving her goals.

Aims and Objectives

To share a case study which demonstrates an evolving process where the scope for intervention increased as technology developed.

To discuss challenges experienced and share design developments.

To consider the role of involving the client in the development process when they can and where it is appropriate.

To highlight the importance of positioning throughout the 24-hour period and to consider the impact of nighttime support on seating.

Clinical Detail

The client has been known to the service for 10 years and has had three sets of custom seating made during this time and more recently custom bed positioning equipment.

She has Congenital Muscular Dystrophy and has a very complex postural presentation. She is a full-time wheelchair user, using respiratory support for most of the time. She leads an active lifestyle working from home with an adapted workstation. She lives in an adapted flat with a live in carer and has a supportive family.

Historically she has always wanted greater support for her trunk to improve comfort, function and respiration. She has craved greater lift whilst also requiring an upright posture for active functional use and vision for driving. She has also always had pain in her hips and recently head and neck pain.

Due to the support needs for her spine, we have been challenged to provide the required lift without being able to offer anterior support because of the effect on her breathing. In addition, it has not been possible to counteract the adverse effects of gravity due to her need to be upright.

Due to her complexity, custom contour wheelchair seating has been the only viable solution but there have been significant limitations to achieve her goals. Prior to the most recent intervention numerous modifications, inserts, straps and adjustments were trialled and some worked for short periods of time and offered optimal support within what was available at that specific time.

At the PMG conference 3 years ago, the team became aware of a new product (Spex removable and swing away lateral support bracket) that the Rehab Engineer involved felt may be used to modify custom seating provision to offer the additional anterior lateral support without impacting her breathing. This breakout session will go through the detail of

this journey from the conceptualisation of an idea through to issue of her new seating and her feedback.

Positioning in bed was considered equally important to the client and therapists in terms of her long term postural and respiratory management. This presentation will also discuss the challenges around achieving very specific bed positioning support when standard equipment does not give enough support.

Discussion

This case study demonstrates what can be achieved when you are prepared to accept a challenge and re-visit when equipment solutions evolve. It will share a positive outcome and highlight the value of the client's involvement in problem solving with the clinical team.

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