

Valerie Cates- University of Calgary

Project: Development of a Patient Decision Aid for Adult Spinal Deformity; Using Visual Art to Draw a Better Understanding”

Background:



Back pain impacts people all ages and backgrounds, and is a leading cause of global disability.

Unfortunately, back pain can be particularly difficult to manage, especially for patients with an adult spinal deformity (ASD).

ASD is a complex condition where the spine changes alignment and abnormally curves with age. It is unclear why people develop this condition, but it can greatly impact

their quality of life through pain and disability. In fact, the literature suggests that patients with an ASD report poorer quality of life compared to other chronic health conditions, mentally commit to corrective surgery before meeting a surgeon, and have relatively high rates of decisional regret as a result. This indicates a need for decisional resources, like patient decision aids (PtDAs).

PtDAs are patient-centered tools that can help people learn more about their condition and treatment options, as well as provide opportunities for personal value clarifications. In orthopaedics, PtDAs can catalyze conversation by improving patient-physician trust and decreasing decisional conflict. However, many PtDAs

prioritize text-based presentation despite the known benefits of visuals.

This study aims to address the need for improved decision-making resources by developing a custom and visually engaging PtDA tailored for people with an ASD. We are conducting several multidisciplinary rounds of heuristic evaluations with those involved with ASD surgery, including pre-operative and post-operative patients, caregivers, clinicians, artists, and PtDA/shared decision-making researchers. We will use reflexive thematic analysis and system usability scales to refine the PtDA to fit the needs of patients and caregivers. The final PtDA will be used in our Calgary surgical practice and across Canada through the Canadian Spine Outcomes and Research Network (CSORN). We hope that our PtDA for ASD will not only improve patient health outcomes, but highlight how visuals and design can help clarify the bigger picture.

Bio

Valerie is a MSc student in Medical Sciences at the University of Calgary, supervised by Dr. Swamy and Dr. Hazlewood. Valerie completed her BSc at Mount Royal University and worked as a research assistant in a respiratory physiology lab. During that time, she became fascinated with science communication. As a scientist and artist, she is passionate about using art and visuals to convey the complex nature of health and research. Her illustrations have been featured in the McCaig Institute's Grateful Patient Brochure, the newly formed McCaig ARTS Gallery, the Anatomy Video and Imagery Diversity (AVID) Project, and various research publications. She has also co-founded a novel initiative at the University of Calgary, titled "Artistic Research Translation in the Arts" (ARTS) Society that encourages students to think about their research in a different light.