[18,19]. Additionally, when pertaining to surgical fusion, motion segment preservation or limiting the number of fused segments preserves growth potential and distributes the motion in the unfused regions across more segments. While there is some understanding of the effects of fusion on local and segmental motion, such as the effect of level choice on distal compensatory motion [20], there is limited data on the overall effect of fusion on gait kinematics, motion of the spine during functional tasks, and trunk mobility. Kinematic data collected through motion capture technology will enhance our understanding of quantitative spinal ROM, compensatory movement patterns and overall function.

Standardizing VAS acquisition could lead to generation of a large database of motion measurements. Researchers and clinicians together can then better understand how deformity affects function with large-scale analyses focused on outcomes. Clinicians can follow patients longitudinally, pre-intervention through post-intervention and throughout the course of disease, including remission, progression or exacerbation.

VAS is a specific type of motion capture technology that can enhance the clinician's appreciation of how deformity affects clinical function with objective data. This will ultimately promote well-informed decision-making, guide patient expectations, and optimize patient outcomes with less costly and invasive interventions


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