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Advancing the Science of Perceptual Accuracy in Pediatric Asthma and Diabetes

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Objectives To review research on perceptual accuracy in pediatric asthma and diabetes and to provide recommendations for future research efforts and clinical applications of the construct in these populations. **Methods** A literature search was conducted using Medline and PsychInfo databases as well as the bibliographies of relevant articles. **Results** Children and adolescents with asthma or diabetes evidence considerable variability in perceptual accuracy and frequently make clinically relevant errors that have the potential to affect self-management behavior. **Conclusions** Recommendations for future research include studying distinct types of perceptual errors, empirically supporting the relationship between perceptual accuracy and relevant outcomes, identifying factors related to perceptual inaccuracy, and conducting longitudinal research and intervention studies. Recommendations for applying the construct in clinical practice include adopting an individualized approach to symptoms to guide patient education and management, identifying patients prone to making clinically relevant errors, and developing and implementing interventions to improve accuracy.

Key words: adolescents; asthma; children; diabetes; estimation accuracy; perceptual accuracy; sympton perception.

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