



## Eating and Drinking Ability Classification System

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Dear Editor

The National Institute for Neurological Disorders and Stroke, and American Academy for Cerebral Palsy and Developmental Medicine recently published the Common Data Elements recommended for cerebral palsy [1]. This meets a recognised need to guide standardisation for data collection and outcome evaluation. The development of condition-specific Common Data Elements aims to accelerate research and uptake of evidence in clinical practice in order to deliver best quality care to individuals who require it.

The Common Data Elements for cerebral palsy includes the Eating and Drinking Ability Classification System (EDACS [2]). EDACS was categorised as “Supplemental—Highly Recommended” alongside 12 other measures including the Gross Motor Function Classification System (GMFCS—[3]), Manual Ability Classification System [4] and Communication Function Classification System [5]. No other measures of eating and drinking function were included.

EDACS was developed for people with cerebral palsy from age 3 years to classify limitations to eating and drinking ability in 1 of 5 levels, replacing frequently used terms “mild”, “moderate” and “severe” which lack shared definition. Key features of “safety” and “efficiency” are used to determine five distinct levels of ability: from *Level I Eats and drinks safely and efficiently* through to *Level V Unable to eat or drink safely—tube feeding may be considered to provide nutrition*. EDACS demonstrated strong content validity and excellent inter-observer reliability when used by speech and language therapists [2]. Subsequent studies have further extended the psychometric properties of EDACS including inter-rater and intra-rater reliability, concurrent and construct validity, meeting

international quality standards: Monbaliu et al. [6], Benfer et al. [7], Tschirren et al. [8] and Hulst et al. [9]. EDACS is free to download from [www.edacs.org](http://www.edacs.org) along with sixteen completed translations. Nine other language translations are currently in process.

Children with cerebral palsy by definition have lifelong limitations to movement and co-ordination. Movement limitations affect individuals to different degrees, impacting upon different aspects of function. It is challenging to characterise this population because of its heterogeneous nature. The relationship between limitations to gross motor function and eating and drinking for children with cerebral palsy has been explored [10–13]. However, studies have been hampered by lack of suitable measurement tools and definitions [11, 14]. The inclusion of EDACS alongside other functional classification systems in international cerebral palsy surveillance programmes will provide invaluable data. For example, there was only a moderate positive association between children’s GMFCS and EDACS levels for 128 children with CP [2], challenging assumptions that eating and drinking difficulties occur only for children with most limitations to gross motor function [15]. Because of the lack of suitable measurement tools, there are limited data from population studies to inform discussions of prognosis with parents concerning their children’s eating and drinking abilities.

By adopting EDACS as a convention to describe participant characteristics, and neuromotor skills and function, it will be possible to link laboratory-based research findings [16, 17], population studies [6] and qualitative studies of lived experiences [18] to clinical populations.

Questions remain about parents’ use of EDACS to describe their children’s eating and drinking abilities from the original study to develop EDACS. Direct comparisons of parents’ and speech and language therapists’ classifications using EDACS revealed more disagreements than between pairs of speech and language therapists, although these were consistent: parents either agreed with speech and language therapists or parents systematically rated their children as more able than speech and language therapists, by one level. There is uncertainty whether

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children experience adverse health outcomes because of these disagreements. EDACS provides a framework which makes explicit the extent of the disagreement between parents and professionals including implications for safety and efficiency of children's eating/drinking.

I am writing with the intention to invite clinical researchers and readers of *Dysphagia* to consider use of EDACS in their work for the benefit of children and adults with cerebral palsy, and their families. I would welcome your comments.

Yours faithfully

## Compliance with Ethical Standards

**Conflict of interest** As the author of this letter I confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

**Ethical Approval** All research activity conducted in the use and development of EDACS by the author has been approved by UK Health Research Authority and Research Ethics committees: original development of EDACS REC Reference 09/H1111/66; retrospective case note review REC Reference: 16/LO/0344.

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