# DCD Treatment Information Sheet



Advocacy Toolkit

# What is Developmental Coordination Disorder (DCD)?

Developmental Coordination Disorder (DCD) is a chronic motor skill disorder seen in children and youth, which significantly affects activities of daily living, school performance, and leisure activities.<sup>1,2</sup> In order to meet DCD diagnostic criteria, the motor deficits must not be the result of any other known neurological or medical condition (such as cerebral palsy or a neurodegenerative disorder).<sup>1</sup>

## Who should receive treatment?

Treatment should be provided for all children with DCD.<sup>1-6</sup> Current recommendations indicate a comprehensive treatment approach across the lifespan, from early intervention (<5 years) through schoolage, and during transitions to adolescence and adulthood.<sup>1,2,7,8</sup> Please see related information sheet: *Early Identification and Early Intervention for DCD* (http://bit.ly/2D8IDEY).

## What approach is most effective?

Best evidence indicates physiotherapy and/or occupational therapy are both better than no treatment.<sup>1,3-6</sup> Task-oriented approaches [e.g., Cognitive Orientation to Occupational Performance (CO-OP), Neuromotor Task Training (NTT)], have demonstrated the best effectiveness,<sup>5,9</sup> while process-oriented approaches (e.g., sensory integration, kinaesthetic training<sup>1,5</sup>), non-task-specific interventions (e.g., use of the Wii Fit), and psychological approaches (e.g., self-concept training)<sup>8</sup> produce variable or minimal effects. Small group intervention offers promise but may not be optimal for very young children and children with severe DCD.<sup>1,5,10,11</sup> Occupational therapy should include compensatory supports (e.g., modifying tasks and expectations to match abilities), and adapting materials and the environment.<sup>1,2,5,7</sup>

# Key principles of effective intervention include:

- Task-oriented approach focused on meaningful activities of daily living<sup>5,9</sup>
- Child-centred therapy process<sup>1,5</sup>
- Involvement of key stakeholders (e.g., parents, teachers)<sup>1,5</sup>
- Task practice outside of therapy session,<sup>1</sup> ideally 3-5 times per week <sup>3,12</sup>
- Education and coaching parents to support skill generalization and application to daily life.<sup>1,5,13</sup>

## How much treatment is required?

Optimal treatment frequency and duration have not been established, but current best evidence suggests treatment programs lasting longer than 10 weeks are generally more effective.<sup>5</sup>

#### How do I measure outcomes?

Measuring and monitoring outcomes over time is necessary. Treatment should start with collaborative, individualized goal setting led by the child and family. Goals should focus on meaningful functional activity and participation-level outcomes.<sup>1,14</sup> Tools that can assist with goal setting include the Perceived Efficacy and

Goal Setting (PEGS)<sup>15</sup> and Pediatric Activity Card Sort (PACS).<sup>16</sup> Recommended outcome measures include the Canadian Occupational Performance Measure (COPM)<sup>1,17</sup> and Goal Attainment Scaling (GAS)<sup>1,18</sup>. More information on how to facilitate collaborative goal setting using these tools can be found here: <u>http://www.childdevelopment.ca/CollaborativeGoalSettingCollaborativeGoalSettingEvidenceforPracticeSummary.aspx</u>

#### Where can I learn more?

- Evidence supporting DCD treatment and management [Evidence for Practice (E4P) Synthesis]: <u>http://www.childdevelopment.ca/DCDAdvocacyToolkit/DCDAdvocacyToolkitEvidenceforPracticeSummary.aspx</u>
- Collaborative Goal Setting with Children and Families in Rehabilitation (tools and resources): <u>http://www.childdevelopment.ca/CollaborativeGoalSetting</u>
- Best practices in DCD assessment (information sheet): <u>http://www.childdevelopment.ca/</u> DCDAdvocacyToolkit/DCDAdvocacyToolkitResources.aspx

This document was prepared in March 2018 and will be updated as new evidence emerges.

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