Protocol investigating the clinical utility of an objective measure of attention, impulsivity and activity (QbTest) for optimising medication management in children and young people with ADHD ‘QbTest Utility for Optimising Treatment in ADHD’ (QUOTA): a feasibility randomised controlled trial

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Abstract

Introduction
Attention-deficit hyperactivity disorder (ADHD) is characterised by symptoms of inattention, hyperactivity and impulsivity. To improve outcomes, the National Institute for Health and Care Excellence ADHD guidelines recommend regular monitoring of symptoms when children commence medication. However, research suggests that routine monitoring rarely happens, and clinicians often rely on subjective information such as reports from parents and teachers to ascertain improvement. These sources can be unreliable and difficult to obtain. The addition of an objective test of attention and activity (QbTest) may improve the objectivity, reliability and speed of clinical decision-making and so reduce the time to identify the optimal medication dose. This study aims to assess the feasibility and acceptability of a QbTest medication management protocol delivered in routine healthcare services for children with ADHD.

Method and analysis
This multisite feasibility randomised controlled trial (RCT) will recruit 60 young people (aged 6–17 years old), diagnosed with ADHD, and starting stimulant medication who are seen by Child and Adolescent Mental Health Services or Community Paediatric services. Participants will be randomised into one of two arms. In the experimental arm (QbTest protocol), the participant will complete a QbTest at baseline (prior to medication initiation), and two follow-up QbTests on medication (2–4 weeks and 8–10 weeks later). In the control arm, participants will receive treatment as usual, with at least two follow-up consultations. Measures of parent-, teacher- and clinician-rated symptoms and global functioning will be completed at each time point. Health economic measures will be completed. Clinicians will record treatment decision-making. Acceptability and feasibility of the protocol will be assessed alongside outcome measure completion rates. Qualitative interviews will be conducted.

Ethics and dissemination
The findings will be used to inform the development of a fully powered RCT. The results will be submitted for publication in peer-reviewed journals. The study has ethical approval.

Trial registration number: NCT03368573