

# Online remote behavioural intervention for tics in 9- to 17-year-olds: the ORBIT RCT with embedded process and economic evaluation

Chris Hollis,<sup>1,2,3,4\*</sup> Charlotte L Hall,<sup>1,2,3</sup> Kareem Khan,<sup>1,3</sup> Marie Le Novere,<sup>5</sup> Louise Marston,<sup>5</sup> Rebecca Jones,<sup>6†</sup> Rachael Hunter,<sup>5</sup> Beverley J Brown,<sup>1</sup> Charlotte Sanderson,<sup>7,8</sup> Per Andrén,<sup>9</sup> Sophie D Bennett,<sup>7,8</sup> Liam R Chamberlain,<sup>1</sup> E Bethan Davies,<sup>1,3</sup> Amber Evans,<sup>7,8</sup> Natalia Kouzoupi,<sup>7,8</sup> Caitlin McKenzie,<sup>1</sup> Isobel Heyman,<sup>7,8</sup> Joseph Kilgariff,<sup>4</sup> Cristine Glazebrook,<sup>1,3</sup> David Mataix-Cols,<sup>9</sup> Eva Serlachius,<sup>10</sup> Elizabeth Murray<sup>5†</sup> and Tara Murphy<sup>7,8</sup>

<sup>1</sup>NIHR MindTech MedTech Co-operative, Institute of Mental Health, School of Medicine, University of Nottingham, Nottingham, UK

<sup>2</sup>NIHR Nottingham Biomedical Research Centre, Institute of Mental Health, University of Nottingham, Nottingham, UK

<sup>3</sup>Mental Health and Clinical Neurosciences, School of Medicine, University of Nottingham, Queen's Medical Centre, Nottingham, UK

<sup>4</sup>Department of Child and Adolescent Psychiatry, Nottinghamshire Healthcare NHS Foundation Trust, South Block Level E, Queen's Medical Centre, Nottingham, UK

<sup>5</sup>Research Department of Primary Care and Population Health and Priment CTU, University College London, London, UK

<sup>6</sup>Division of Psychiatry and Priment CTU, University College London, London, UK

<sup>7</sup>UCL Great Ormond Street Institute of Child Health (ICH), London, UK/Great Ormond Street Hospital for Children NHS Trust, London, UK

<sup>8</sup>Psychological and Mental Health Services, Great Ormond Street Hospital for Children NHS Foundation Trust, London, UK

<sup>9</sup>Centre for Psychiatry Research, Department of Clinical Neuroscience, Karolinska Institutet, and Stockholm Health Care Services, Region Stockholm, Stockholm, Sweden

<sup>10</sup>Department of Clinical Sciences, Faculty of Medicine, Lund University, Lund, Sweden

\*Corresponding author [chris.hollis@nottingham.ac.uk](mailto:chris.hollis@nottingham.ac.uk)

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## Disclosure of interests

**Full disclosure of interests:** Completed ICMJE forms for all authors, including all related interests, are available in the toolkit on the NIHR Journals Library report publication page at <https://doi.org/10.3310/CPMS3211>.

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## Plain language summary

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## Plain language summary

It can be difficult for children and young people with tics to access therapy. This is because there are not enough trained tic therapists. Online remote behavioural intervention for tics was a clinical trial to see whether an online platform that delivered two different types of interventions could help tics. One intervention focused on techniques to control tics; this type of therapy is called exposure and response prevention. The other intervention was psychoeducation, where participants learned about the nature of tics but not how to control them. The online remote behavioural intervention for tics interventions also involved help from a therapist and support from a parent.

Participants were aged 9–17 years with Tourette syndrome/chronic tic disorder and were recruited from 16 clinics, two study sites (Nottingham and London) or via online self-referral. All individuals who were eligible for the online remote behavioural intervention for tics trial were randomised in a 50/50 split by researchers who were unaware of which treatment was being given. Participants received either 10 weeks of online exposure and response prevention or 10 weeks of online psychoeducation.

A total of 224 children and young people participated: 112 allocated to exposure and response prevention and 112 to psychoeducation. Tics decreased more in the exposure and response prevention group (16% reduction) than in the psychoeducation group (6% reduction) 3 months after treatment. This difference is considered a clinically important difference in tic reduction. The treatment continued to have a positive effect on tic symptoms at 6, 12 and 18 months, showing that the effects are durable. This was achieved with minimal therapist involvement. The cost of online exposure and response prevention to treat young people with tics within this study was less when compared to the cost of face-to-face therapy.

The results show that exposure and response prevention is an effective behavioural therapy for tics in this specific patient group. Delivering exposure and response prevention online with minimal therapist contact can be a successful and cost-effective treatment to improve access to behavioural therapy.



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