



Extended Research Article

Digital augmentation of aftercare for patients with anorexia nervosa: the TRIANGLE RCT and economic evaluation

Janet Treasure,^{1*} Katie Rowlands,¹ Valentina Cardi,^{1,2} Suman Ambwani,³
David McDaid,⁴ Jodie Lord,⁵ Danielle Clark Bryan,¹ Pamela Macdonald,¹
Eva Bonin,⁴ Ulrike Schmidt,¹ Jon Arcelus,^{6,7} Amy Harrison⁸ and Sabine Landau⁵

¹Department of Psychological Medicine, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK

²Department of Psychology, University of Padova, Padova, Italy

³DIS Study Abroad in Scandinavia, Copenhagen, Denmark

⁴Care Policy and Evaluation Centre, Department of Health Policy, London School of Economics and Political Science, London, UK

⁵Department of Biostatistics, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK

⁶Institute of Mental Health, University of Nottingham, Nottingham, UK

⁷Bellvitge Biomedical Research Institute (IDIBELL), Hospitalet del Llobregat, Barcelona, Spain

⁸Department of Psychology and Human Development, University College London, London, UK

*Corresponding author janet.treasure@kcl.ac.uk

Published July 2025
DOI: 10.3310/ADLS3672

Plain language summary

Digital augmentation of aftercare for patients with anorexia nervosa: the TRIANGLE RCT and economic evaluation

Health Technology Assessment 2025; Vol. 29: No. 31
DOI: 10.3310/ADLS3672

NIHR Journals Library www.journalslibrary.nihr.ac.uk

Plain language summary

Background

Transition Care In Anorexia Nervosa through Guidance Online from Peer and Carer Expertise aimed to examine whether offering a digital programme (ECHOMANTRA), containing information and online group support for patients with anorexia nervosa and their nominated supporters, could reduce patient distress and improve other outcomes in the 18-month period after leaving intensive treatment (inpatient or day care). The study also examined whether ECHOMANTRA is a good value for money to the National Health Service and the wider economy.

Method

Patients and a nominated supporter (371 pairs) were recruited and split into two groups at random: (1) usual treatment plus access to the ECHOMANTRA programme and (2) usual treatment alone.

Results

There were no differences between groups in the outcomes measured, which included patient distress, eating disorder symptoms, quality of life, social and work adjustment and carer distress and skills. ECHOMANTRA did not demonstrate good value for money. However, only 20% of participants allocated to ECHOMANTRA joined more than four online group sessions (the minimal recommended participation).

Participant feedback

Patients and their supporters reported inadequate planning and support following discharge from hospital. Patients reported low confidence in their ability to recover, and a need for more continuity in their care. Carers echoed the need for a supportive transition process. Several aspects of the ECHOMANTRA programme were welcomed, with the mixed patient/supporter online groups and online group facilitators experienced as particularly helpful. Participants were generally positive about the written and recovery tip videos. However, several suggested that more personalised content and access options were needed.

Conclusions

ECHOMANTRA failed to show a benefit overall, which may reflect the limited uptake of the online groups and the broader access to carer support outside of the study. Together with participant feedback, these findings suggest that a more personalised programme, with more integration with clinical teams, may lead to increased engagement with the virtual elements of support offered by ECHOMANTRA.

Health Technology Assessment

ISSN 2046-4924 (Online)

Impact factor: 4

A list of Journals Library editors can be found on the [NIHR Journals Library website](#)

Launched in 1997, *Health Technology Assessment* (HTA) has an impact factor of 4 and is ranked 30th (out of 174 titles) in the 'Health Care Sciences & Services' category of the Clarivate 2022 Journal Citation Reports (Science Edition). It is also indexed by MEDLINE, CINAHL (EBSCO Information Services, Ipswich, MA, USA), EMBASE (Elsevier, Amsterdam, the Netherlands), NCBI Bookshelf, DOAJ, Europe PMC, the Cochrane Library (John Wiley & Sons, Inc., Hoboken, NJ, USA), INAHTA, the British Nursing Index (ProQuest LLC, Ann Arbor, MI, USA), Ulrichsweb™ (ProQuest LLC, Ann Arbor, MI, USA) and the Science Citation Index Expanded™ (Clarivate™, Philadelphia, PA, USA).

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: journals.library@nhr.ac.uk

The full HTA archive is freely available to view online at www.journalslibrary.nhr.ac.uk/hta.

Criteria for inclusion in the *Health Technology Assessment* journal

Manuscripts are published in *Health Technology Assessment* (HTA) if (1) they have resulted from work for the HTA programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

Reviews in *Health Technology Assessment* are termed 'systematic' when the account of the search appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

HTA programme

Health Technology Assessment (HTA) research is undertaken where some evidence already exists to show that a technology can be effective and this needs to be compared to the current standard intervention to see which works best. Research can evaluate any intervention used in the treatment, prevention or diagnosis of disease, provided the study outcomes lead to findings that have the potential to be of direct benefit to NHS patients. Technologies in this context mean any method used to promote health; prevent and treat disease; and improve rehabilitation or long-term care. They are not confined to new drugs and include any intervention used in the treatment, prevention or diagnosis of disease.

The journal is indexed in NHS Evidence via its abstracts included in MEDLINE and its Technology Assessment Reports inform National Institute for Health and Care Excellence (NICE) guidance. HTA research is also an important source of evidence for National Screening Committee (NSC) policy decisions.

This article

The research reported in this issue of the journal was funded by the HTA programme as award number 14/68/09. The contractual start date was in November 2016. The draft manuscript began editorial review in May 2023 and was accepted for publication in August 2023. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' manuscript and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this article.

This article presents independent research funded by the National Institute for Health and Care Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, the HTA programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, the HTA programme or the Department of Health and Social Care.

This article was published based on current knowledge at the time and date of publication. NIHR is committed to being inclusive and will continually monitor best practice and guidance in relation to terminology and language to ensure that we remain relevant to our stakeholders.

Copyright © 2025 Treasure *et al.* This work was produced by Treasure *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This is an Open Access publication distributed under the terms of the Creative Commons Attribution CC BY 4.0 licence, which permits unrestricted use, distribution, reproduction and adaptation in any medium and for any purpose provided that it is properly attributed. See: <https://creativecommons.org/licenses/by/4.0/>. For attribution the title, original author(s), the publication source – NIHR Journals Library, and the DOI of the publication must be cited.

Published by the NIHR Journals Library (www.journalslibrary.nhr.ac.uk), produced by Newgen Digitalworks Pvt Ltd, Chennai, India (www.newgen.co).