

An algorithm can help select the best psychological treatment

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Clinical guidelines for the treatment of depression and anxiety problems recommend evidence-based psychological interventions organized in a stepped care model, where patients initially access low-intensity self-

help interventions guided by qualified practitioners and later have the option to access high-intensity psychological therapies if their symptoms persist. Even though stepped care services have been shown to be effective, about half of the patients who access treatment do not attain remission of symptoms. Patients accessing stepped care services differ on important characteristics such as age, employment, disability, functional impairment, symptom severity, and expectations about the benefits of therapy which influence with post-treatment remission.

Using the regression weights for each of these features, the authors developed the Leeds Risk Index (LRI), a simple tool that enables clinicians to profile patients into subgroups with low, moderate, or high risk of poor response to psychological treatment. Applying the LRI profiling tool in a retrospective analysis of data from 1,347 patients, the authors found that high-risk cases had better treatment outcomes in high-intensity therapies by comparison to low-intensity guided self-help. This study aimed to evaluate whether a stratified care approach matching high-risk cases directly to high-intensity therapies could be more cost-effective than stepped care.

A team of 12 qualified psychological therapists working in an English stepped care service co-designed a decision algorithm that would enable them to use the LRI tool for psychological treatment selection in a way that is compatible with clinical guidelines. They applied this decision algorithm to make treatment recommendations for 157 patients who they consecutively assessed during a 3-month period. The study sample was matched to a sample of 125 control cases from archival clinical records, who had similar baseline characteristics (LRI profiles) and who accessed routine stepped care.

Results showed significant differences in the treatment pathway of LRI cases versus controls providing evidence that including the LRI in treatment selection decisions approximately led to an 11% increase in

direct allocation to high-intensity treatments. Overall, LRI study cases had similar clinical outcomes attained within a shorter treatment episode, and this was unrelated to dropout.

These findings of this first prospective field-test of a data-driven and stratified approach to psychological treatment selection indicate that stratified treatment selection reduces the number of cases who have an unnecessary "double dose" of treatment (low plus high-intensity interventions). High-risk cases had a higher remission rate in the stratified care (vs. stepped care) condition, although this interaction effect was not statistically significant.

More information: Jaime Delgadillo et al. The Leeds Risk Index: Field-Test of a Stratified Psychological Treatment Selection Algorithm, *Psychotherapy and Psychosomatics* (2020). [DOI: 10.1159/000505193](https://doi.org/10.1159/000505193)

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