

Speaker: Jaime Delgadillo (University of Sheffield)

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Title: Stratified medicine and the use of AI for mental health care

Abstract:

Stratified medicine, also referred to as precision medicine, aims to offer “the right treatment, to the right patient, at the right time”. Stratified care involves delivering treatments in a personalised way, based on each patient’s individual characteristics and expected prognosis. In order to develop a stratified care pathway, several stages of development are necessary: [1] collect data from health services; [2] discover patterns in a training dataset; [3] evaluate if such patterns generalize to a test dataset; [3] develop a stratified care algorithm to prescribe treatments in a personalised way; [4] test the effectiveness of this algorithm in a clinical trial.

This seminar will discuss concepts and methods relevant to the development of stratified medicine, with a focus on mental health. Examples are provided of studies that traversed the above stages of development in order to develop and clinically validate a stratified care model for the treatment of depression. Some of the topics covered will include machine learning methods; the development of Artificial Intelligence technologies to aid clinical decision making; and the evaluation of AI-driven decisions in psychological treatment services.

Speaker:

Dr. Jaime Delgadillo is a senior lecturer in clinical psychology at the University of Sheffield and director of psychological therapies research at RDaSH NHS Trust. He has twenty years of clinical experience and has published over 90 scientific papers and book chapters in the field of mental health. He has been a principal investigator in clinical trials of psychotherapy and digital health interventions, supporting people with problems such as depression, anxiety, addictions, and occupational burnout. He is a member of the Society for Psychotherapy Research and an associate editor of the society’s journal, Psychotherapy Research.