Discussion: This analysis of real-world data found a sizable number of patients with dual diagnoses of schizophrenia and BD-I. Among all patients with either BD-I, schizophrenia, or both, about 2/3 as many met the criteria for both disorders as for schizophrenia alone. Fifteen percent of patients who met criteria for both did so on the same day, likely reflecting patients presenting to acute care exhibiting mixed features. A review of medical records would be useful to determine if dual diagnosis is more common than suspected, and claims data should be examined to determine if these patients differ sufficiently from those with a single diagnosis to warrant exclusion from single-disease cohorts.

O8.6. THE RELATIONSHIP BETWEEN COGNITION AND FUNCTIONAL IMPROVEMENT IN THE CONTEXT OF A PSYCHOSOCIAL INTERVENTION TARGETING SOCIAL DISABILITY IN FIRST EPISODE PSYCHOSIS

Sian Griffiths*[,1], Stephen Wood[2], Renate Reniers[1], Max Birchwood[3]
[1]University of Birmingham; [2]Orygen, the National Centre of Excellence in Youth Mental Health; [3]Warwick

Background: Whilst Early Intervention Services (EIS) are the 'gold standard' treatment for young people with psychosis, in a recent study of over 1000 First Episode Psychosis (FEP) cases, 66% of individuals were experiencing a high level of poor functioning, despite receiving care under EIS for a period of 12 months (Hodgekins et al., 2015). This highlights the need to develop new interventions to target functional impairments in FEP.
A specialised Social Recovery Cognitive Behavioural Therapy (SRCBT) has been developed which aims to address the underlying factors impeding social recovery, and has shown to be effective at improving structured activity in individuals with established illness and FEP (Fowler et al., 2013). Identifying the factors that contribute to functional change will ensure that targeted psychosocial therapies are being delivered appropriately. Impaired social cognition (SC) and neurocognition (NC) are closely related to poor functioning in psychosis. Exploration of SC and NC pre- and post-intervention will therefore be important to test underlying mechanisms of functional change, and identify individuals who are more likely to benefit from the specialized SRCBT.
Methods: This study ran alongside a multi-site proof of concept trial of SRCBT, for individuals with FEP experiencing social disability. Participants (M age = 25 years) had less than 30 hours a week of structured activity before entering the trial. At baseline, 123 participants completed a battery of SC and NC assessments. 59 participants were randomly allocated to the therapy group (SRCBT + EIS), and 64 were randomly allocated to the standard care group (care from an EIS alone). Participants completed a follow-up assessment at 9 months on the same cognitive battery, and a further assessment of their structured activity. The assessors were blind to group allocation. A small sub-sample of participants (N=6) allocated to the SRCBT group underwent functional magnetic resonance imaging (fMRI) scanning pre- and post- SRCBT, to explore any changes in the social brain regions following successful intervention.
Results: Regression analyses showed that SC was a significant predictor of treatment response (i.e. improved structured activity). Specifically, those who had better social knowledge at baseline were most likely to benefit from the SRCBT (Wald $\chi^2 = 4.073$; $p = .044$), accounting for 16% of the overall variance. To further illustrate this, individuals scoring in the top quartile for social knowledge achieved an additional 11 hours on average of structured activity post-intervention.
Furthermore, in the group that underwent fMRI scanning pre- and post - intervention, there were increased activations in the social brain regions, namely the temporo-parietal junction (TPJ), which became more refined and localized by follow-up. There was also a trend for increased signal intensity in the TPJ, with increased structured activity post-SRCBT. Although this was not significant ($r = .455$; $p = .365$), there was a moderate strength relationship
Discussion: No studies to-date have examined predictors of treatment response to a CBT intervention targeting functional impairment in FEP. These findings have implications for practice where remediation of SC may improve the efficacy of the SRCBT, particularly for individuals who have poorer social knowledge. This study is also the first to provide preliminary insights into a functional brain network associated with improved structured activity in psychosis; however, replication of these findings in a larger sample is needed.

O8.7. COGNITIVE SUBTYPES IN FIRST-EPISODE PSYCHOSIS AND ASSOCIATION TO TREATMENT RESPONSE

Manuela Russo*[,1], Simone Ciufolini[1], Olesya Ajnakina[1], Tiago Reis Marques[1], Avi Reichenberg[2], Anthony David[1], Marta Di Forti[1], Carmine Pariante[1], Robin Murray[1], Paola Dazzan[1]
[1]Institute of Psychiatry, Psychology and Neuroscience, King's College London; [2]Icahn School of Medicine at Mount Sinai

Background: Psychotic disorders are characterized by large heterogeneity in clinical presentation, response to treatment and cognitive functioning. Indeed, there is evidence of the presence of cognitive subgroups of patients across affective and non-affective psychosis. However, very little is known about these subgroups in first episode psychosis (FEP) and whether they can be informative about course of illness, particularly response to treatment. The aim of this study is to investigate the number and the pattern of cognitive clusters in FEP, their external validity and association with treatment response at 12-week and 1-year follow up.
Methods: The sample was composed by a total of 212 participants including 105 FEP patients from the South London and Maudsley Foundation Trust and 107 Healthy Controls (HC). All participants underwent a comprehensive clinical and neurocognitive battery. Z-score [mean=0, and standard deviation (SD)=1] were created for the whole sample based on the neurocognitive performance of the HCs. Treatment response at 12-week and 1-year follow-up was used to explore potential utility of subtypes in predicting response to treatment. Hierarchical cluster analysis was carried out to determine the number of cognitive clusters in FEP patients. A series of analyses of variance were carried out to determine if FEP clusters differed among each other in relation to demographic and clinical characteristics, level of functioning and from the HC sample in term of cognitive performance. Logistic regression was used to explore whether cognitive clustering was predictive of treatment response at 12-week and 1-year FU.
Results: Four cognitive clusters emerged: one with near normal cognition (42.9% of the FEP patients) with a general cognitive score of z=-0.20, one with selected cognitive deficits (14.3%) in the domains of verbal memory, processing speed and executive functions (general cognitive score of z=-0.55); and two severe deficit clusters consisting in one cluster with severe deficits (33.3%; general score of z=-1.48) and the other with a deeply compromised cognitive ability (9.55%; general cognitive score of z=-2.34). There were no significant differences between clusters in terms of clinical features at baseline (including diagnosis, positive and negative symptoms, medication), apart from the level of functioning that was significantly lower in the severely compromised cluster compared to the near normal cognition cluster.
It emerged that majority (about 68%) of the patients from the near normal cognition cluster were responsive to treatment, whilst the majority of the selective and severely impaired clusters did not respond to treatment at 12-week follow-up. There were no significant results with regard to treatment response at 1-year FU.
Discussion: Distinct patterns of cognitive impairments exist within FEP that might be characterized by different response to treatment. Clinical presentation at the onset of the illness is not useful in predicting response to