with the exception of bipolar mood disorders (similar risk) and brief psychotic episodes (higher risk). The ARMS designation accounted only for a small proportion of transitions to psychosis (n = 52 of 1001; 5.19% in the derivation data set), indicating the need for transdiagnostic prediction of psychosis in secondary mental health care. A prognostic risk stratification model based on preselected variables, including index diagnosis, age, sex, age by sex, and race/ethnicity, was developed and externally validated, showing good performance and potential clinical usefulness.

Discussion: This lecture will introduce a new online individualized risk calculator which can be of clinical usefulness for the transdiagnostic prediction of psychosis in secondary mental health care. The risk calculator can help to identify those patients at risk of developing psychosis who require an ARMS assessment and specialized care. The use of this calculator may eventually facilitate the implementation of an individualized provision of preventive focused interventions and improve outcomes of first episode psychosis.

34.3 IMPROVING THE DETECTION OF INDIVIDUALS AT RISK OF DEVELOPING PSYCHOSIS IN PRIMARY MENTAL HEALTH CARE

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Background: General practitioners are usually the first health professionals contacted by people with early signs of psychosis. It is unclear whether increasing the intensity of liaison between primary care and secondary care improves the clinical effectiveness and cost-effectiveness of detecting people with, or at clinical high-risk (CHR-P) of developing, a first-episode psychosis (FEP). This is important given political commitments to facilitate early intervention and decrease waiting times in mental health. We developed and tested a theory-based intervention to improve detection and referral of these mental states.

Methods: The LEGS study was a cluster randomised controlled trial (cRCT) involving primary care practices (clusters) in the county of Cambridgeshire and Peterborough, UK. Consenting practices were randomly allocated into two groups: (1) low-intensity liaison between primary care and secondary care, a postal campaign consisting of biannual guidelines to help in the identification and referral of individuals with early signs of psychosis and (2) the high-intensity intervention described in the previous section, which, in addition to the postal campaign, included a specialist mental health professional to liaise with each practice and support the theory-based educational package. Concealed randomisation involved a randomly permuted sequence in blocks, with 12 strata and 96 blocks. Practices that did not consent to be randomised constituted a practice-as-usual (PAU) group. The high- and low-intensity interventions were implemented over a period of 2 years for each practice during the study period April 2010 to October 2013.

The primary outcome was the number of CHR-P referrals to Early Intervention in Psychosis Services per practice site predicated on an assumption that the intensive intervention would double them. New referrals were assessed clinically and stratified into those who met criteria for CHR-P or FEP (together: psychosis true positives) and those who did not fulfil such criteria for psychosis (false positives). Referrals from PAU practices were also analysed.

An economic evaluation quantified the cost-effectiveness of the interventions and PAU, using decision-analytic modelling. Cost-effectiveness was expressed as the incremental cost per additional true positive identified.

Results: Of the 104 eligible practices, 54 consented to be randomised. Twenty-eight practices were randomised to low-intensity liaison and 26 practices were randomised to the high-intensity liaison. Two high-intensity practices withdrew. High-intensity practices referred more CHR-P (incidence rate ratio (IRR) 2.2, 95% CI 0.9 to 5.1; p = 0.08)), FEP (IRR 1.9, 95% CI 1.05 to 3.4; p = 0.04) and true positive (IRR 2.0, 95% CI 1.1 to 3.6; p = 0.02) cases. High-intensity practices also referred more false positives (IRR 2.6, 95% CI 1.3 to 5.0; p = 0.005); most (68%) of these were referred on to appropriate services.

The total costs per true positive referral in high-intensity practices were lower than those in low-intensity or PAU practices; the high-intensity intervention was the most cost-effective strategy.

Discussion: Increasing the resources aimed at managing the primary–secondary care interface provides clinical and economic value in this setting. Early detection of CHR-P in primary care is clinically and cost-effective This talk will also introduce the continuation of this work; a 5-year research programme that will focus on the treatment of individuals with psychotic experiences in primary care settings.

34.4 IMPROVING THE DETECTION OF INDIVIDUALS AT RISK OF PSYCHOSIS IN THE COMMUNITY: A NEURODEVELOPMENTAL PERSPECTIVE

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Background: Increasing our ability to identify youths at risk of psychosis in the general public is a key step towards an improved ability to prevent the disorder. Prospective evaluation of youths with early psychotic-like experiences can enrich our knowledge of clinical, biobehavioral and environmental risk and protective factors associated with the development of psychotic disorders.

Methods: By using a neurodevelopment prospective cohort study we aimed to investigate the predictors of psychosis spectrum features among US youth. This is the first large systematic study to evaluate subclinical symptoms in the community. From a Time 1 screen of 9,498 youth (age 8–21) from the Philadelphia Neurodevelopmental Cohort, a subsample of participants was enrolled based on presence or absence of psychosis spectrum symptoms to participate in an approximately 2-year (n=503, mean age=17) and/or 4-year (n=313; mean age=19) follow-up assessment. Participants were administered the Structured Interview for Prodromal Syndromes, conducted blind to initial screen status, along with the Schizotypal Personality Questionnaire and other clinical measures, computerized neurocognitive testing, and neuroimaging. Age normative references scores of baseline psychosis screening measures were applied to inform interpretation of psychosis symptom endorsements. Clinical and demographic predictors of symptom persistence were examined using logistic regression.

Results: At 4-year follow-up, psychosis spectrum features persisted or worsened in 58% of youths endorsing symptoms at baseline. Among youths assessed at all three time-points (n=197), 54% showed temporal stability in presence or absence of psychosis spectrum symptoms, while the remainder exhibited varying patterns of symptom emergence, remission and re-occurrence over time. Baseline depression and social/occupational dysfunction were significant predictors of the occurrence of psychosis spectrum symptoms at either follow-up. Preliminary data on neurocognition, and brain structure and function, will be also discussed with the ultimate aim of integrating them with clinical data, to provide early indices of symptom persistence and worsening in youths at risk for psychosis.

Discussion: Together, our findings indicate that varying trajectories of psychosis spectrum symptoms are evident early in US youth representative of the general community, supporting the importance of investigating psychosis risk as a dynamic developmental process.