[Protocol] **Psychotic experiences link to healthcare use and the impact of social inequality:** A register-based follow-up of the Lolland-Falster Health Study

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Abstract (250 words)

Background: Psychotic experiences (PEs), including hallucination and delusional beliefs among individuals without a diagnosed psychotic disorder[1–3], are increasingly recognized as transdiagnostic markers of psychiatric vulnerability[4,5]. Understanding PEs could be essential for the early identification of individuals at risk of increased healthcare needs. Prior research Lolland-Falster Health Study (LOFUS)[6] has found associations between PEs and poor mental health[7]as well as a dose-response for offspring of individuals with PEs[8]. Furthermore, it has been found that preadolescent with PEs have an significantly higher mental healthcare costs during adolescence [9]. These findings indicate that PEs may be useful markers for identifying individuals who have a greater need for mental health services. However, current evidence is largely limited to adolescence and early adulthood, and little is known about how PEs influence healthcare use and costs across diverse age groups.

Aim: The study will examine the relationship between PEs and healthcare use in different age groups ranging from mid-adolescence well into later adulthood. Furthermore, the study will also assess how sociodemographic factors influence and potentially moderate these associations, identifying subgroups at greater risk of higher service needs.

Methods: We will link LOFUS data to Danish national register data to examine healthcare use and costs among individuals in LOFUS reporting PEs compared with those reporting maybe or none, and a control group of individuals invited to LOFUS but who did not participate. We will compare baseline sociodemographic registry data between participants and invited non-participants to assess the selection bias [10] and apply an inverse probability weighting.

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