**CZH/4/1072 - Informing Complications Screening Policy in Diabetes in Scotland**

All patients with diabetes aged 12+ years get an annual retinal photograph as screening for retinopathy in Scotland. We have already shown, using multi-state models, that risk of transition to referable retinopathy is very low for many individuals suggesting that efficiencies might be gained by personalising the screening interval. Here we will build models for predicting individual transition to referable disease and will demonstrate the effect of using this prediction to set screening intervals. We will use an updated screening programme dataset linked to extensive clinical records (SCI-Diabetes) to build and then test the performance of predictive models combining past screening results with extensive clinical record data using both multistate models and survival analysis. We will then calculate effect of using varying risk threshold rules for setting screening intervals on the number of screenings required and delay in referral. This work is critical for informing retinopathy screening policy in Scotland.