This project aims to assess the relationship between referral to treatment waiting times and treatment outcomes for cancer patients. Analysis will focus specifically on those patients with suspected breast, lung, colorectal, prostate and pancreatic cancers. The project will, as a secondary aim, attempt to map patient journeys (in terms of waiting times for different stages) between GP referral and treatment for different conditions and referral types. Other effects on treatment outcomes, including severity of condition, will also be investigated. The proposed method involves the linking of data from medical and hospital records to mortality data for all GP referrals for suspected cancer (excluding patients in Residential Care or Nursing Homes) during the five-year period 1 January 2010 to 31 December 2014.

The data will be analysed using survival analysis and logistic regression techniques. The main focus of the analysis will be on cancer survival rates and the relationship between referral to treatment waiting times and treatment outcomes (as measured by re-admission and mortality data). Analyses will be carried out separately for different medical conditions and trust areas, and some attempt will be made to control for differences in severity of condition, age, gender, geographical area and socio-economic background (inferred from deprivation data). The effect on outcomes of decisions around referral types and decisions to treat will also be of interest.

Survival rates will be calculated for different groups for three months, six months, one year, two years and three years after treatment, and for the same time periods after GP referrals with comparisons between treated and untreated referrals.

Note: This application has yet to commence.