Supplementary Online Content


eMethods

This supplementary material has been provided by the authors to give readers additional information about their work.
Study population

The study was based in Nottingham University Hospitals NHS Trust. The potential study population consisted of all inpatients and outpatients who attended either Nottingham City Hospital (NCH) or Queen’s Medical Centre (QMC) as United Kingdom National Health Service patients during the study period. These are two large teaching hospitals and tertiary referral centres in the Midlands region of the United Kingdom.

Intervention

The intervention consisted of a simple message stating “Cost per test £1.00; total NUH spend on CRPs in 2010 was £200,914”, that was added to the paper and electronic report for all patients who had a blood C-reactive protein (CRP) requested by their clinician. This blood assay was chosen as it was considered from observation to be one that varied in frequency of use between clinicians and hence may be sensitive to the addition of cost information feedback. The intervention was introduced at the Nottingham City Hospital site for all inpatient and outpatient requests on the 15th March 2011. To permit evaluation of a new health service development, by providing a local control group for comparison, it was not introduced at the Queen’s Medical Centre, Nottingham.

Data collection

The total number of blood CRPs requested at the study centres were obtained from clinical chemistry for the 52 weeks before and the 52 weeks after the week of the intervention (the data for the week of the intervention was not used).

Data analysis

Weekly data were collected on the number of CRP assays stratified by both hospital and patient status (inpatient v outpatient). The weeks run from Sunday to Saturday. To simplify the data, week 53 was amalgamated with the following week 1 as these were both often less than seven days. The primary comparison used time series analysis of the difference in weekly frequency of the CRP assays in the 52 weeks before compared to the 52 weeks after the intervention was introduced at Nottingham City Hospital (intervention site) compared to QMC (control site). Secondary analysis used the same technique for all patients and subgroups of patient status (inpatient and outpatient) seen at Nottingham City Hospital. All statistical analysis used Stata Statistical Software (STATA, Atlanta, USA).