**Introduction-**It has long been known that patients who present late (within 90 days of needing dialysis) to medical services with end stage renal failure have a worse prognosis, suffering double the mortality and require a much longer hospital stay compared to those commencing dialysis post work-up by a nephrologist1. The ASSIST-CKD project is based on a community wide system that has been in operation in Birmingham (Heart of England Foundation Trust) for the past 10 years aimed at improving outcomes in patients with deteriorating CKD (Chronic Kidney Disease)2. Data from Birmingham suggested that whilst using the alert system, the number of new starters on dialysis, not known to a Nephrologist, per year has reduced by 16% compared to a national increase of 8%2. In addition by continuing to implement the programme they have maintained the lowest late presentation rate in the UK2.

ASSIST-CKD uses software to analyse the blood tests of patients with CKD, specifically their eGFR. This generates a report trending their eGFR over time. For patients who have persistently or rapidly worsening renal function, this report and graph generated is sent to the patient’s GP. They are then prompted that specialist advice or intervention is possibly needed. Thus improving identification of patients who may benefit from specialist care to hopefully slow and/or plan for progression. The system has proven popular with GPs with ¾ finding the tool helpful and 4/10 finding themselves changing practice as a result2. Our trust is one of 19 units to have been involved in a nationwide quality improvement project commissioned by Kidney Research UK, attempting to determine if the positive results of the Birmingham group could be replicated nationwide.

**Methods-**Data was collected from our local laboratory for individual patients triggering alerts, detailing patient, date of alert, DOB and location of GP. There were two databases - 65 and over, and under 65. We collected all of the details of patients who received an alert over a twelve month period - July 2015 to June 2016. For each patient, we looked at their electronic records determining further background medical history including diabetes etc, if they were referred to a speciality following the report being sent, and which speciality they were sent to. In addition to this we looked at overall average GP referral rates pre and post implementation taken from our own complied internal records.

**Results-** Overall referral rates to Nephrology have increased from an average of 37 referrals per month pre study to an average of 47 per month during the 12 months of the study. All groups analysed had a significant number of patients already known to either Nephrology or Urology (ranging from 3-7% of patients who triggered an alert). The percentage of patients referred following an alert was on average around 12% across all groups. Most of the referrals in all age and time specific groups were made to Nephrology (66%). Over half the patients who triggered an alert had their blood tests repeated and things had improved and therefore did not trigger a referral. Worryingly there were about 20% of cases in every group where no evidence of the alert being actioned could be found. In these cases, no bloods had been repeated and no referrals made. After looking through these patients’ notes, subsequent letters and results, over half on average were judged to have warranted a referral.

There are some positive statistics to suggest that the ASSIST-CKD is exerting a beneficial effect when implemented in our region and should be continued, however it is too soon to judge the effect on our late presenter rate and the number of patients commencing dialysis.

**References**

1. [Chan MR](https://www.ncbi.nlm.nih.gov/pubmed/?term=Chan%20MR%5BAuthor%5D&cauthor=true&cauthor_uid=18060927) et al, *Outcomes in patients with chronic kidney disease referred late to nephrologists: a meta-analysis*, [Am J Med.](https://www.ncbi.nlm.nih.gov/pubmed/18060927?dopt=Abstract) 2007 Dec;120(12):1063-70
2. https://www.kidneyresearchuk.org/research/assist-ckd