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P081 -Comprehensive CKD Detection and coordination with Primary Care leads to reduction in late presentation for dialysis.

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Introduction. A centre in the Midlands had previously demonstrated the efficacy of surveying all laboratory tests and then alerting primary care doctors about CKD patients with declining kidney function (CKD-Alerts). The CKD-Alert process has been effective in reducing late presenting patients in that centre. A locally designed system for CKD-Alerts was instituted in this centre in 2017.
Methods. Using local resources, the necessary computer software to screen and detect all laboratory blood tests and to link with the renal department's electronic patient record (EPR) was devised. This new computer interfaces and software readily identified all CKD patients who were not receiving nephrological care. Utilising the NICE CKD guidance advice and referral criteria, letters were generated following the review of patients with a sustained decline in kidney function. All CKD-Alert associated activities were recorded in the EPR. This project was supported by the local CCGs.
Results. Software development was achieved locally. A nominal sum of £500 was spent in refining the EPR's ability to automatically upload lists of CKD-Alert patients in to the renal system. No additional resources: as servers and software licenses were required. Past CKD-Alert systems involved set up investment of £10,000 per centre.
Since 2017, the newly developed informatics interface enabled the comprehensive detection of all CKD patients not under nephrological follow up (CKD-Community). 49981 patients were registered as new CKD-Community cases (mean age: 73.7 years), (median eGFR 54ml/min), (9% of the CCGs' population).
An average of 12,000 CKD eGFRs tests per month were reviewed. Interconnection with the Trust's Informatics Portal afforded targeted CKD-Alerts. Following surveillance, 772 CKD-Alerts for patients (1.5% of all cases) were issued. (Prior publications quoted 1600 letters per year being sent).
Following alert issuance, 211 patients have been referred by Primary Care and seen in clinics. Time taken to manage this process involved 4 hours/week of consultant time.
As a result of the CKD-Alert system, the proportion of late presenting patients (LP) changed from 25% in 2015 – 2016 to 10% in 2018 ($p<0.05$). Optimal dialysis access (PD or AVFs) at RRT initiation of known CKD patients had remained above 70% per annum from 2015 to 2018. 9 CKD-Alert patients (6% of RRT cases since 2017) have started RRT so far.
6 months survival of incident patients has changed from 85% (2015 to 2106 cohort) to 90% since the CKD-Alerts. The annualised mortality rates for prevalent HD/PD patients had fallen from 18 episodes per 100 patient years (2015 to 2017) to 14.5 by 2018.
Conclusions. CKD-Alerts has been quickly installed in a single centre, with minimal cost and maximal utilisation of the informatics resources of the hospital. With greater informatics connectivity, the number of CKD-Alerts required were significantly lower than previously published. CKD-Alerts have led to a significant and sustained reduction of LP cases within a year of installation, resulting in improved dialysis patient survival.
Implications. The CKD-Alert paradigm presented can be effectively applied in centres and will lead to significant improvements in CKD patient referral and survival.