Streamlining and Monitoring of Live Kidney Donor and Kidney Transplant Recipient workup Pathways

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Introduction
The South West Kidney Quality Improvement Partnership (KQuIP) is a multidisciplinary, regional quality improvement project and part of the ‘Think Kidneys’ Initiative led by NHS England with the UK Renal Registry. Based upon patient and staff feedback about prolonged waiting times and unnecessary delays, the regional KQuIP team agreed to focus its work on improving access to transplantation, under the tagline ‘More Transplants, faster, with the best experience’.

With this aim, our service planned to streamline workup pathways for both Living Kidney Donors (LKDs) and Kidney Transplant Recipients (KTRs). The target pathway length for both was 18 weeks. For LKDs this was taken from initial contact to final signoff and for KTRs from referral for transplant assessment to activation on the national deceased donor kidney waiting list.

Methods
A 3 visit LKD pathway was created: initial nurse-led triage; ‘medical day’ - one-visit measured GFR and CTRA and ‘Surgical day’ - independent assessment and pre-operative assessment. For the KTR pathway, an e-referral form was created and implemented at the transplanting centre. In order to monitor both pathways, existing local databases were modified to include dates of all referrals, visits and investigations. Analyses of LKD and KTR workup time were performed before and after the implementation of these changes.

Results
Before implementation of the new pathway, LKDs made a median of 9 visits over 300 days from initial contact to final signoff. Following the changes this reduced to a median of 8 visits over 184 days.

Before implementation of the above changes, KTRs waited median 119 days from referral to activation, reducing to 58 days after pathway changes were made. Introduction of the e-referral for KTRs reduced median time from referral to receipt in the office from 17 days to 0 days.

Discussion
The main outcome of this work has been the implementation of prospective, robust monitoring of LKD and KTR workup pathways by simply recording on a spreadsheet the dates of all visits and investigations. For LKDs, streamlining the pathway has led to a modest reduction in overall pathway length but the number of visits has remained unchanged; reasons for this include the requirement for additional assessments outside the standard pathway and regional referral centres not being able to follow the new pathway for logistical reasons. For KTRs, the introduction of an e-referral and monitoring of individual patients on the pathway appears to have halved workup time. Streamlining of workup pathways is challenging and requires buy-in from the whole multi-disciplinary team, as well as ongoing reinforcement of the importance of the changes for quality improvement. We would like to thank the KQuIP initiative for providing initiation, guidance, training and structure for our projects, and the whole transplantation team for contributing to this important work.