

# Renal access surgery during the COVID-19 pandemic and beyond.

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## INTRODUCTION

The COVID-19 pandemic caused major disruptions to surgical activity across the UK. According to the Federation of Surgical Specialty Association guidelines, vascular access (VA) surgery was classed as priority 3<sup>(1)</sup>, with a recommendation for the primary creation of AVF to be postponed. As the first wave of COVID-19 pandemic hit, elective surgery stopped on 13<sup>th</sup> March and it was not until August that elective activity was restored before stopping again for the second wave in December.

## AIM

This audit serves to provide an overview of the effect of COVID on vascular access activities. It aims to highlight key adaptations to service delivery in the renal access pathway during the pandemic, as well as potential areas of improvement to achieve the recent GIRFT recommendations for renal access.

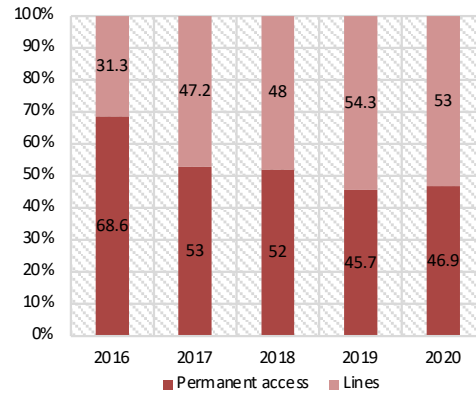
## MATERIALS AND METHODS

Data of vascular access activity in 2020 was collected using Electronic patient records (EPR) and Renal database (Renalware). Previous vascular access audits were used to provide comparative data. Service outcome measures were assessed against KDOQI<sup>(2)</sup> and GIRFT<sup>(3)</sup> guidelines.

## CONCLUSIONS

The COVID-19 pandemic revealed vulnerabilities in the delivery of healthcare to chronic kidney disease patients. This provides a valuable opportunity to re-evaluate and implement resilient pathways in the event of future pandemics or other healthcare crises. This requires the collaborative effort of a multi-disciplinary team, closer liaison with the vascular laboratory, day surgery unit and different hospital sites (including independent sector facilities).

INCIDENT DIALYSIS POPULATION



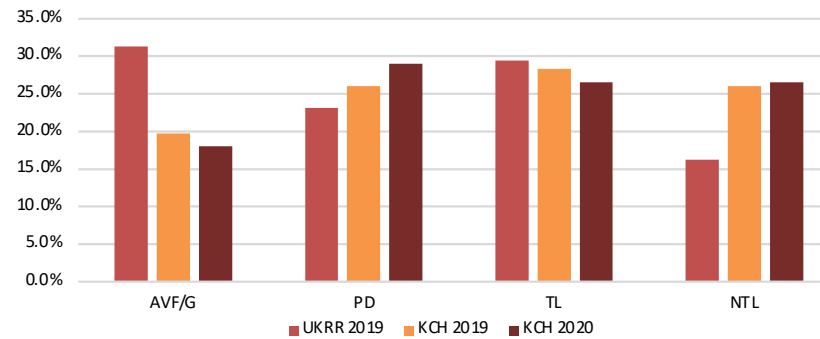
KING'S RENAL UNIT SURGICAL ACTIVITY OVER THE PAST 2 YEARS

Categories	Pre-COVID-19 Period 2019	COVID-19 Period 2020
Day surgery	51 (19%)	93 (43%)
Main theatre	221 (81%)	121 (57%)
TOTALS	272	214

## RESULTS

There was a coordinated effort to expand activity across hospital sites and Interventional radiology. In 2020, 214 vascular access procedures were performed, down 27% from 2019. Ad hoc day surgery unit theatres and independent sector were made available for urgent cases. This led to an increase in Day surgery numbers by over 50% from 2019. The percentage of incident dialysis population which started dialysis on a permanent access, was the same as in 2019. Face to face clinic were replaced by virtual clinics and outreach clinics in satellite units.

KING'S RENAL UNIT COMPARED TO NATIONAL AVERAGE (UK RENAL REGISTRY ANNUAL REPORT)



## POSITIVE COVID-19 QUALITY IMPROVEMENT INITIATIVES

1. Effort to increase day case surgery rate further in line with GIRFT recommendation 5d - minimum 70%<sup>(3)</sup>
2. Weekend operating list have commenced
3. Outreach surgical assessment clinics in satellite units have become a norm
4. One stop LCC Clinic with vascular lab technician in the clinic along with access surgical team and nephrologist

## REFERENCES:

- (1) The Federation of Surgical Specialty Associations. Clinical Guide to Surgical Prioritisation During the Coronavirus Pandemic. 2020; Available at: [https://fssa.org.uk/userfiles/pages/files/covid19/prioritisation\\_master\\_240820.pdf](https://fssa.org.uk/userfiles/pages/files/covid19/prioritisation_master_240820.pdf). Accessed 1st May, 2021.
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- (3) Getting It Right First Time (GIRFT). Renal Medicine GIRFT Programme National Specialty Report. 2021; Available at: <https://www.gettingitrightfirsttime.co.uk/wp-content/uploads/2021/03/Renal-Medicine-10-03-EMBARGOED.pdf>. Accessed 1st May, 2021.