South London Clinical Alliance (SLRCA)

North London Kidney Clinical Advisory Group (NLKCAG)



<u>COVID 19 Learning from London: practice patterns for patients requiring maintenance</u> <u>haemodialysis: A PAN London clinical experience</u>

May 2020

AIM:

This document describes the development of current practice relating to the management of patients requiring maintenance haemodialysis during the Covid 19 pandemic from the 7 renal centres in London. The document will be updated to reflect new evidence as it becomes available, will highlight key learning and inform current best practice. By sharing the London experience, this document will help inform dialysis services more broadly of strategies that may reduce/minimise risk to patients and staff.

This document has been developed under the auspices of the PAN London clinical team.

BACKGROUND:

UK Renal Registry (UKRR) cumulative data has demonstrated that maintenance haemodialysis patients are highly susceptible to Covid 19 infection and also to poor outcome¹. This significant risk is contributed to by a number of factors which include the age and multi-morbidity of the current haemodialysis population and also the fact that even though these patients are highly vulnerable they are unable to shield in a similar manner to other vulnerable groups because of their need to attend haemodialysis three times a week.

The risk of each haemodialysis patient acquiring Covid 19 infection will be complex, with individual health, and wider social and environmental factors contributing. Data from London units suggests that cases of Covid 19 infection in prevalent haemodialysis patients occurred in clusters around particular dialysis units and shifts suggesting that at least initially, cross infection was important. These clusters, and overall number of incident cases in haemodialysis patients has gradually reduced as changes have been made to practice within individual haemodialysis units in concert with the wider health care and community measures including lockdown, social distancing and more general adoption of community personal protective equipment (PPE)

¹ <u>https://renal.org/wp-content/uploads/2020/06/ALL_REGIONS_CENTRES_covid_report_03062020.pdf</u>

London renal centres have introduced a range of strategies to reduce transmission of Covid 19 and better manage individual patients with Covid 19 infection. Clinicians have written this collaborative document to describe the changes instituted at haemodialysis centre and unit levels from the 7 London renal centres. The report collates learning and highlights common approaches and principals which the teams found effective and provides recommendations based on that practice experience and the wider renal community to consider.

LEARNING NARRATIVE CONSTRUCTION:

This document currently covers 8 key practice areas:

- 1. Testing for COVID 19
- 2. Infection control methods including PPE for staff and patients
- 3. Capacity issues and cohorting of patients on haemodialysis units
- 4. De-isolation after COVID 19
- 5. Workforce
- 6. Transport
- 7. Admissions patterns
- 8. Psychological/Social/Dietetic/Physiotherapy

The document will identify practice that has been believed to be successful in relation to managing the outbreak, highlight key learning and identify challenges and key gaps for research/quality improvement focus.

This narrative has been informed by the collaborative approach between the London renal centres and we pay tribute to many representatives from each centre who contributed to this. The pressure on these individuals over this crisis should not be underestimated with significant clinical and administrative demands being made upon them and their contributions therefore must be recognised.

In producing this narrative, we have tried to encapsulate common messages and précis these as far as possible so as to ensure that the narrative is easy to read and lessons can be learnt. However, given the significant work undertaken by colleagues across London we have decided to include the original submissions together with examples of good practice that have been shared as separate appendices to this document.

1) TESTING for COVID 19

Across London the approach to testing has been guided by NHSE and PHE recommendations constrained by the availability of appropriate testing volume at each renal centre. For each of the renal centres the policy on testing evolved as central policy changed and availability of testing increased.

All renal centres initially had a policy of undertaking a triage process for haemodialysis patients as they arrived at individual dialysis units and one unit discussed pre-transport triaging at the patients home, and testing of any patients with symptoms suggestive of Covid 19. All centres cohorted symptomatic patients from unit entry away from the main body of haemodialysis patients and if a patient had a positive Covid 19 antigen test dialysis was provided in an isolated area (see section 3).

There has been concern that asymptomatic patients might be a source of spread of the virus and as the availability of Covid 19 antigen tests has increased, strategies are now being implemented across most units to move to a screening as well as a triage approach. Screening of asymptomatic patients has been undertaken across a number of dialysis units and the percentage of asymptomatic patients who test positively has varied from 0% percent at one King's College satellite dialysis units to 6% at a Royal Free satellite dialysis unit. It is important to note that asymptomatic screening commenced in some units after the peak of the pandemic, which may have influenced detection rates. The Royal Free (RFH) reported 3.4% overall asymptomatic carriage (total tested n=767).

The presentation of Covid 19 can be conventional but may present atypically in the haemodialysis population. Patients do not always present with fever: several patients simply reported being generally unwell without demonstrable fever or myalgia. Reports of gastrointestinal symptoms were common. The RFH reported clotting haemodialysis circuits unexpectedly was associated with PCR positive test results in otherwise asymptomatic patients. Because of this the RFH have added this clinical feature to inform a broader testing strategy.

A number of renal centres reported that haemodialysis patients who had recovered from Covid 19 re-presented in the subsequent 6 weeks, with a distinct medical problem such as chest pain or cellulitis. Despite having no "standard" Covid 19 symptoms on screening they remained PCR positive on repeat antigen testing. It remains unclear whether such individuals are infectious or are experiencing COVID pathology and the London units have managed cohorting these individuals using various approaches.

St. George's implemented a robust tracking program for patients who had tested positive and the role of such practice needs to be properly developed. There remains some degree of uncertainty of how to manage patients who remain PCR positive after recovering from a Covid 19 infection- a national piece of work has been commenced to develop guidance in this area. Antibody testing was not universally available across London. Imperial and BARTS health investigated a large number of maintenance haemodialysis patients. Initial findings suggest that there is a significant minority of haemodialysis patients who fail to sero-convert following documented Covid 19 infection.

The screening of staff needs to be considered as part of the emerging testing strategy as most renal centres currently report only testing staff who are symptomatic. There is recognition that hospital nosocomial cross infection between patients and staff may be a more significant issue than community spread, with examples of small pockets of groups of staff infection in ICU in London. Following PHE approval of a specific antibody test, mass staff testing is underway at most Trusts. At the RFH of 2000 staff tested 30% had a detectable antibody response.

Most renal units have now developed standard operating procedures for the management of Covid 19 in relation to testing, isolation, use of PPE and de-isolation.

KEY MESSAGES

- A number of key messages should be considered in developing a pandemic screening protocol in haemodialysis centres during novel pandemic infections, underpinned by the principal that the haemodialysis population has specific unique risks
- These include the highly vulnerable nature of the population, the shared often crowded waiting areas with a propensity for prolonged close contact throughout the hospital visit and the inability to significantly reduce hospital visits for dialysis
- A more specific screening and testing programme is required for this patient group with a combination of extended criteria triaging potentially at the patients door, mechanisms for waiting room isolation segregation and testing of symptomatic patients, testing patients with a low threshold/ high index of suspicion (e.g. clotted haemodialysis circuits) combined with asymptomatic screening
- The development of antigen testing with faster turnaround times (reductions from 48 hours to 6 hours) has been reported to have had a significant benefit on moving patients through the system Individual units highlighted that such a strategy needs to be utilised across all units in London and should not be determined by individual trust capacity issues

QUESTIONS WHICH WILL BE INFORMED BY THE PAN LONDON DATA COLLECTION GROUP

- It is hoped that the current Pan London Covid 19 data collection program will provide a much clearer understanding of how the Covid 19 virus spreads across haemodialysis units. There will be a retrospective analysis of the cases that occurred and review of how the infection pattern related to underlying policies (not just in relation to testing)
- Individual units highlighted that such a strategy needs to be utilised across all units in London and should not be determined by individual trust capacity issues

In addition, there is a requirement to obtain more data in the following areas:

- definition of the seroconversion rate of Covid 19 haemodialysis patients following infections
- the range of symptoms and clinical features present in haemodialysis patients and whether this differs from the symptoms in other patients
- quantification of the rate of asymptomatic infection in haemodialysis patients
- better understanding of how long a haemodialysis patient remains Covid 19 swab positive
- ideally in the long-term to determine whether seroconversion is protective against future infections
- Qualitative studies of barriers to effective non-pharmacological interventions

2) INFECTION CONTROL MEASURES INCLUDING PPE FOR STAFF AND PATIENTS

Policies and provision relating to PPE was an area of great concern and considerable confusion across all renal centres. Guidance relating to requirements for PPE changed at

various time points through the crisis and all renal centres would want this narrative to highlight that the national guidance was not fit for purpose for the environment in which maintenance haemodialysis is undertaken. Furthermore, some renal centres reported that their trusts did not appreciate the exceptional status of haemodialysis units and were inflexible in relation to adapting national guidelines.

These concerns have been driven by a justified desire to reduce infection in both patients and staff and needs to be better informed by data analysis on how different PPE approaches affected infection rates for both patients and staff.

The management of inpatient haemodialysis patients with Covid 19 generally conformed to national guidance with the provision of FFP3 masks, then surgical masks and visors with gowns or aprons dependent upon the unit.

The changing PHE guidance created confusion and the subsequent Renal Association guidance for outpatient haemodialysis patients to use facemasks was perceived as too late. The need for adoption of the use of face masks earlier in the course of the pandemic was highlighted.

The RFH reported that they went from the full HCID PPE donning and doffing training to the surgical mask, apron, visor and gloves in a short period of time. This damaged confidence and resulted in variation in local practice.

All units reported that there were issues in relation to supplies and training and whilst generally units achieved sufficient supplies there was little assurance of this supply. Renal centres reported day to day movement and redistribution was often undertaken manually in a hand to mouth fashion and required significant operational resources. A number of units resorted to clinical teams sourcing PPE through private routes.

St George's reported that their privately run units initially had challenges obtaining appropriate PPE for the unit although subsequently this was resolved.

There were differences in practice in relation to the numbers of masks provided to each patient per session and St Helier adopted provision of three masks for a patient for each dialysis session with change of the mask after a meal break.

Most renal centres have now moved to a policy in which all clinical staff wear fluid resistant surgical masks, plastic aprons, visors and gloves for all patient interactions. Gowns are used for procedures and resuscitation and 3 sets of full PPE kept in the arrest trolley in all areas.

Some dialysis units have had to use plexi glass screens between dialysis stations where a 2 metre separation between stations is not achievable.

An advantage of the Imperial Covid positive unit practice was that inpatient equivalent protection (gowns and FFP3) could be utilised and it is remarkable that on this unit dialysing

large numbers of only Covid 19 positive patients there were no staff infections reported. Comparing this with a large unit in the RFH where initially there was no staff testing, surgical masks were used with affected patients only in line with PHE policy and all patients began to wear masks only on the 28 March, the unit saw 80% loss of the nursing workforce at peak.

Units reported issues around patient acceptance and compliance with requests to use appropriate PPE in the form of facemasks. There were variations in practice in relation to allowing patients to access food during dialysis due to concerns relating to removal of facemasks and allowing individuals to accompany dialysis patients. A consensus has emerged that it is important to ensure that patients achieve appropriate nutrition. National guidance has been produced by the Renal Nutrition Group of the British Dietetic Association (RNG-BDA) with the support of the British Renal Society (BRS) and Kidney Care UK allowing temporary removal of masks while patients are eating

<u>https://www.bda.uk.com/resource/covid-19-renal-nutrition-group-guidance-on-</u> management-of-renal-nutrition-and-dietetic-services-during-the-covid-19-pandemic.html

There is also consensus between the renal centres on encouraging patients not to move around the unit and greet other patients as well as approaches to accompanying individuals.

There has been a significant requirement to work with all staff in relation to the importance of increased cleaning and in addition to cleaning of dialysis equipment and chairs this also involves cleaning of transport between each patients use, cleaning of both medical and nonmedical equipment (TV controls etc.) as well as cleaning of the waiting area.

KEY MESSAGES

- On the basis of data that will inform the final guidance it is recommended that there is a review of infection control policies relating to Covid 19 pandemic (and any future such pandemic) to define the most effective form of PPE to be utilised by staff and ideally there should be a single policy for all renal centres across London and nationally
- It is important that there is consistency across renal centres in relation to
 policies for patients in regard to PPE and how these are used but also in
 relation to behaviours and practice directly affecting patients. It is suggested a
 London wide, or indeed national, patient guidance document is produced

QUESTIONS WHICH WILL BE INFORMED BY PAN LONDON DATA COLLECTION GROUP

• There is a need to characterise dialysis unit PPE policies and relate these to patient and staff infection rates

3) CAPACITY ISSUES AND COHORTING OF PATIENTS IN HAEMODIALYSIS UNITS:

All renal centres recognised the basic principle of the need to isolate patients with known Covid 19 infection. There were a number of reasons why this was extremely challenging for almost all renal centres and these included

- a) the fact that almost all dialysis units run at very high capacity making it difficult to move patients around the system
- b) there was a general shortage of outpatient isolation facilities for patients on haemodialysis units

Each renal centre adopted a subtly different approach but there were some common features.

There was recognition of the need for significant logistics support which can be rapidly switched on in the event of a pandemic. This required a systematic approach to manage dialysis slots in the context of multiple potential risks eg patients carers timing/ dementia/ infection isolation requirements in addition to Covid/ appropriate transport/ communication with families.

Imperial allocated a specific group of staff to help coordinate the movement of haemodialysis patients who were Covid 19 positive, which was run through a newly designated email address.

There were different approaches to cohorting as all units reported that their outpatient isolation facilities very quickly (in a matter of days) became saturated. The approaches included allocating specific shifts in specific dialysis units for Covid 19 patients, to allocating entire dialysis units as Covid positive dialysis units.

Imperial College had a pre-emptive strategy which involved moving patients around the system in order to create a Covid 19 dialysis centre with clear escalation points designed to increase capacity as the number of patients increased. This proved successful in that all

patients who were Covid 19 positive were able to be transferred throughout the pandemic to a Covid 19 positive dialysis unit. This provided significant additional benefits in the ability to ensure that appropriate PPE was available in an efficient manner. This approach was emulated at GSTT; they initially developed a Covid 19 positive isolated shift and rapidly had to escalate and establish an entire Covid 19 positive satellite unit.

Where patients were cohorted, it was rapidly appreciated that medical staffing had to be augmented and Imperial, Epsom and St Helier and GSTT specifically reported ensuring that there was a consultant presence and indeed additional medical staff available on these sites at all times. In addition, some units introduced "runners" to support nursing staff and reduce the need for nurses to move between different areas of the dialysis unit whilst working with individual patients.

Where attempt was made to establish a new unit to dialyse Covid 19 positive patients rather than redistributing patients there were significantly greater staffing issues. Similar staffing issues were reported where renal centres redistributed dialysis patients and established new shifts at satellite units to create space.

At the RFH there was an initial policy of separating patients within individual dialysis units as they concluded that moving unit location or shift or days to create green and red cohorts was impractical and had associated risk because of disruption to regular transport processes. They reported that there was a tendency to create clean twilight cohorts as the lack of twilight Covid transport forced Covid positive patients to move from twilight to day slots. The incident rate in the now inadvertently clean twilight cohort did not differ from the day cohort.

Loss of regular nursing teams meant loss of institutional memory regarding routine management. For example specific requirements of bed vs chair, in what bed position, processes to locate kidney and dialysate to correct patient, uniting patients dialysis notes with the patient in the correct bed space for staff unknown to patient. Robust patient allocation processes are therefore required as large numbers of dialysis patients move through the system.

There was variability in the need to move patients from three times a week standard haemodialysis to twice weekly dialysis with most units reporting that this was not necessary while a significant number of patients were moved on to twice weekly dialysis at the St Helier centre. This appeared to occur particularly at Kingston and Croydon renal units where there was a need to move haemodialysis staff to support the haemodialysis undertaken at these sites intensive care units (ITU).

All renal centres highlighted the need for a multidisciplinary team approach to managing the crisis including the need to involve the technicians in order to ensure that appropriate

dialysis support was available in a changing environment with surges in patients in particular areas such as ITU.

One renal centre reported that their independent provider unit was not included as part of the overall Covid 19 strategy. However this experience was not replicated in other renal centres.

In order to reduce new starters during the period of the pandemic, some renal centres undertook strategies to delay the need for commencing dialysis wherever possible (including utilisation of potassium binders if potassium was the only indication to commence dialysis). A number of units reported a policy of encouraging patients to consider starting on peritoneal as opposed to haemodialysis in order to reduce the risk of contact and acquiring Covid 19 infection.

Many renal centres reported benefit from providing a supply of potassium/fluid balance sheets available for patients who are suspected of Covid 19 and who may have their haemodialysis delayed pending accessing an isolated slot. A number of units provided TTA packs of Lokelma in the satellites units where there are potential for dialysis sessions being delayed whilst awaiting an appropriate slot.

All units quickly appreciated the importance of ensuring that patients were segregated both in relation to their transport to and from dialysis centres and ensuring that the waiting areas were managed in order to reduce the risk of infection. Some introduced phasing of time of starts and all introduced some form of social distancing in the waiting area and designating areas which were Covid negative, Covid suspected and Covid positive.

There was an impact on inpatient work caused by Covid 19 with wards being designated for Covid 19 positive patients and ongoing nephrology work for Covid 19 negative patients generally undertaken in green areas. This did have impact on some trust policies including having to use mixed sex wards and bays and additional bed capacity in a number of centres.

- There is a need to review commissioning arrangements with independent providers of dialysis to ensure that where a pandemic occurs there is a strategic approach to managing patients including an agreement that during an emergency pandemic situation patients are able to move through the system to support the creation of designated Covid 19 dialysis units or shifts
- There is a need to review design of waiting areas to ensure that there is sufficient space to minimise risk of cross infection of patients waiting to come into dialysis
- Whilst many renal centres managed the reallocation of dialysis slots by instituting a central team to coordinate this, some units have highlighted the need to develop better IT support systems to manage this complex activity
- Many units have developed their own standard operating policies (SOPS) in relation to redistributing patients with Covid 19 infection and there may be some benefit in cross sharing of these SOPs
- Patients were generally supportive of the disruption however there needs to be considerable focus on ensuring appropriate communications with patients and messaging to provide a supportive environment in which to make these changes

QUESTIONS WHICH WILL BE INFORMED BY DATA COLLECTION GROUP

- There was significant variability in infection rates across different haemodialysis units even within the same renal centres and understanding the factors that contributed to this variability will be of importance
- It is recognised that it is difficult to tease out individual factors, but data is required to assess the infection rate in relation to a large number of independent factors
- These factors include but are no means limited to the manner by which cohorting was implemented, the design of the unit (space between dialysis chairs) and waiting room design and PPE use
- There is a need to determine how many patients commenced renal replacement therapy in a planned manner during the pandemic and of these how many commenced on peritoneal dialysis as opposed to haemodialysis and whether this provided patients protection against Covid 19 infection

4) DE-ISOLATION after COVID 19

Generally most units reported that their practice in relation to de-isolation was informed by national guidance with patients being de-isolated 14 days following diagnosis as long as they were asymptomatic (and apyrexial 48 hours). This is consistent with the policy for hospitalised patients and most renal centres consider this appropriate. The presence of cough did not influence decision on the isolation and most renal centres did not practice re-swabbing to ensure a negative swab.

It is notable however that guidance changed during the pandemic and this was the reason why there was initially some variation between renal centres in relation to policies on the isolation.

KEY MESSAGES

• Uncertainty over the natural history of Covid 19 infection caused initial discrepancy across the renal centres in relation to de-isolation policy but a standard agreed policy has now emerged

QUESTIONS WHICH WILL BE INFORMED BY DATA COLLECTION GROUP

• There needs to be clear understanding of the implications of patients who continue to screen PCR antigen positive following a resolved infection and whether this has any clinical implications for the patient or indeed infection risk

5) WORKFORCE:

All units reported major workforce challenges. Although formal statistics weren't available from all teams, all reported facing significant issues with high sickness rates. The Royal Free Hospital reported 80% of the nursing establishment at their largest haemodialysis unit as absent (combination of sickness, annual leave and vacancy) at the peak of the pandemic. All senior members of the nursing team were sick simultaneously risking effective team leadership and institutional memory at that time.

Teams also faced challenges as members of the team were redeployed to other clinical areas thus further reducing the resilience within teams to provide ongoing haemodialysis care.

To secure haemodialysis provision, units reported strategies including re-deploying nursing staff from other teams within renal departments for example transplantation, research or low clearance roles. Nurses from other specialties, research nurses, medical students, retired nurses were approached. A whole team approach with medical staff, technicians, histopathologists, surgeons, HCAs all worked together to help support this vital service.

Several teams also highlighted the additional pressure caused by needing to provide support to their ITUs with acute haemodialysis provision.

Some Trusts had "redeployment hubs" to which teams could go to request short term staff cover for example for runners or staff members. The RFH created a role descriptor and attributed discrete activities to a role so that volunteers could be effectively deployed rapidly while nursing leadership was overwhelmed

- Delivery of inpatient and outpatient haemodialysis faced a major challenge during the pandemic due to staffing/workforce issues
- Teams worked incredibly hard together to cross cover, train in new areas and ensure the secure delivery of the haemodialysis services
- Embedding increased resilience across our teams is an important contingency plan for future possible surges of Covid/infections
- Planning for rapid refresher courses for specialist renal nurses with previous experience, and planning to keep transplant nurses on monthly single shifts on HD to maintain experience and build resilience and improve communication over what were previously quite siloed groups

6) TRANSPORT

Patient transport in haemodialysis has been a longstanding area of concern for many patients and renal units which has been highlighted in previous PREM reviews pre Covid 19. Several units highlighted that prior to Covid 19 there were no plans in place to secure a patient transport system for haemodialysis patients in the setting of a pandemic.

Potentially critical issues arose with some renal units reported transport providers unable to carry symptomatic or Covid 19 positive patients early in the pandemic.

It was noted that St Helier reported considerably less concern over transport issues and that they ran their own transport.

Urgent resolution at pan London/ network level was needed working with transport providers to address concerns and provide a standardised approach to transport delivery.

PPE is now in use for both patients and transport staff currently.

• A pan London approach was effective in securing transport for Covid 19 positive and suspected patients to haemodialysis. A network approach to ensuring transport capacity is robustly planned in case of a second surge/future pandemic planning is needed

7) ADMISSION PATTERNS

For centres that provided data on admission rates in haemodialysis patients with Covid 19 it varied with a range of 30% to 50% across centres. There was a sense that atypical symptoms were common; reports of deterioration, sometimes quite acutely at approximately 5-7 days after the Covid positive test in patients was a theme.

Processes for triaging and admitting to dedicated Covid positive /suspected inpatient wards were standard practice. Units reflected on the crucial aspect of renal teams being an active part of a Trust wide response to the pandemic contributing to decisions on suitability for escalation.

Data on length of stay was not systematically provided, although teams did report that around 10 days was common.

Kings commented on the significant challenge of providing RRT support to patients with acute kidney failure on the ITU. International shortage of CVVH consumables led to an urgent need to direct resource for intermittent haemodialysis and also peritoneal dialysis in their centre to ITU. This not only placed additional stretch on nursing capacity regarding haemodialysis, but also involved significant infrastructure changes with temporary RO installation in 2 of their ITUs.

Some units highlighted the significant effect that restricting relatives had on patient care and the need to have diverted significant resource to keep in patients informed. For the inpatients this also impacted on nutritional status as patients were unable to receive the additional food that some relatives provide.

- A high proportion of haemodialysis patients who acquire Covid 19 need acute admission. Length of stay is often protracted. Atypical symptoms were common
- Renal units need to be part of the wider Trust/network responses to Covid and pandemic planning. This includes admission pathways for positive, suspected and negative patients but also with specific focus on ensuring effective delivery of haemodialysis for those with established renal failure and also acute RRT

QUESTIONS WHICH WILL BE INFORMED BY DATA COLLECTION GROUP

- Prevalence, length of stay and characteristics of inpatient admissions in haemodialysis patients with Covid 19
- The prevalence of atypical symptoms in haemodialysis patients with Covid 19

8) PSYCHOLOGICAL/ SOCIAL / DIETETICS/PHYSIOTHERAPY SUPPORT

Prior to the Covid 19 outbreak all the teams had access to specialist dietitians and counsellors were available in all units; access to renal based social worker or physiotherapy programme however was reported as more varied. During the pandemic, multidisciplinary teams have had to adjust their working patterns and continued their support to patients where-ever possible with virtual consultations.

Dietetic input was crucial; a major problem with malnourishment was a feature noted with the need for dietary supplements and dietary advice to increase calories and protein is needed in this patient group who are already vulnerable and potentially undernourished elderly group.

The Kings team fedback specifically regarding the physiotherapy team who were re deployed to inpatient work across various departments in the Trust. This helped with a

much higher inpatient physiotherapy input on the renal ward than is standard in non Covid times. Other aspects of care however including an outpatient exercise programme and support for our wider outpatient population was temporarily placed on hold. Members of the renal physiotherapy team were able to offer an innovation however, developing an app and online exercise programme for renal patients.

Where teams had access to renal counsellors and social workers, they reported a high level of concern from patients who were naturally very anxious regarding the disease, concerns regarding transport, accessibility to food and diet during dialysis, finances as a few examples were raised. Several units also commented that their counselling teams provided support for their staff during this stressful time.

Access to up to date IT is vital to enable all MDT members to conduct virtual reviews both in the acute setting of the pandemic and also as we re –set our clinical services after this initial acute phase.

KEY MESSAGES

- Pre Covid 19 access to specialist dietitians and counsellors were available in all units; access to renal based social worker or physiotherapy programme varied
- MDT input remains vital for comprehensive patient care; Staff were often re deployed for example physiotherapy staff to support acute inpatient services
- The haemodialysis population are particularly vulnerable from malnutrition in relation to Covid disease and dietetic input was crucial.

SUMMARY

The Covid 19 pandemic has thrown up significant challenges to the renal community and most particularly to the management and support of people on maintenance haemodialysis. At its peak, the disruption to the service was huge but it is remarkable how all the units managed to keep the provision of dialysis ongoing despite these very severe challenges. This is a testament to the commitment, resourcefulness and team working of all health care groups and managers, all of whom should be recognised and congratulated for this success.

It cannot be forgotten that a significant number of people on maintenance haemodialysis contracted Covid 19 with a very high mortality rate. Whilst most units felt they were able to

plan how they would manage this crisis it was clear that considerable confusion from Public Health England, transmitted in some cases through senior trust managers, made it difficult to provide patients and staff with appropriate resources to work safely.

There was important learning throughout this period and we hope that this paper will provide an insight into that journey and also indicate the key learning that London units have made in relation to management of haemodialysis patients in the midst of a substantial respiratory pandemic, as well as indicate areas where information and data is required to determine best practice going forward.

Version: June 2020

Review: July 2020 through PAN London clinical group