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## Commentary on the NICE COVID-19 rapid guideline: dialysis service delivery

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### **Conflicts of Interest Statement**

All authors made declarations of interest in line with the policy in the Renal Association Clinical Practice Guidelines Development Manual. Further details can be obtained on request from the Renal Association.

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## Introduction

The renal community welcomes the production of the [NICE COVID-19 rapid guideline: dialysis service delivery \[NG160\]](#) published on 20th March 2020.

This commentary has been produced with feedback from members of the Renal Association, British Renal Society, British Association of Paediatric Nephrologists and other colleagues.

We have stated the recommendations as given in the NICE guideline followed by comments in each section.

## Summary of recommendations

### 1. Communicating with patients

1.1 Communicate with patients and support their mental wellbeing to help alleviate any anxiety and fear they may have about COVID-19. Point them to resources such as [Kidney Care UK](#).

1.2 Tell patients to alert their dialysis unit if they are unwell. Ask them and their carers to report COVID-19 relevant symptoms before leaving home to attend the dialysis unit.

1.3 Minimise face-to-face contact by:

- offering telephone or video consultations
- cutting non-essential face-to-face follow up
- using home-delivery services for medicines
- using local services for blood tests.

1.4 Tell patients who still need to attend services to follow [UK government guidance on social distancing for everyone in the UK and protecting older people and vulnerable adults](#).

We support these recommendations and would additionally recommend signposting patients to their local Kidney Patient Associations, where available.

### 2. Patients not known to have COVID-19

2.1 Encourage patients, and their carers if needed, to use their own transport, and to travel alone to the dialysis unit when possible.

2.2 Minimise time in the waiting area by:

- careful scheduling
- encouraging patients not to arrive early
- texting patients when you are ready to see them, so that they can wait outside, for example, in their car.

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We support these recommendations with the following additional comment:

Children cannot travel alone. For children on dialysis, aim to support families to minimise sibling visits.

### 3. Patients known or suspected to have COVID-19

3.1 When patients with suspected COVID-19 have been identified, follow appropriate [UK government guidance on infection prevention and control](#). This includes recommendations on patient transfers and transport.

We support these recommendations with no additional comments.

### 4. Patients with symptoms of COVID-19 at presentation

4.1 If a patient not previously known or suspected to have COVID-19 shows symptoms at presentation, follow [UK government guidance on investigation and initial clinical management of possible cases. This includes information on](#) testing and isolating patients.

4.2 If COVID-19 is diagnosed in someone not isolated from admission or presentation, follow [UK government guidance on actions required when a case was not diagnosed on admission](#).

We support these recommendations with no additional comments.

### 5. Healthcare workers

All healthcare workers involved in receiving, assessing and caring for patients who have known or suspected or COVID-19 should follow [UK government guidance for infection prevention and control. This contains information on](#) using personal protective equipment (PPE), including visual and quick guides for putting on and taking off PPE.

We support these recommendations with no additional comments.

## 6. Patient transportation to and from dialysis units

- 6.1 Ensure that outpatient transport services get patients to their dialysis as scheduled to avoid their condition deteriorating. If outpatient transport services cannot be guaranteed, think about the risks and benefits of admitting the patient to hospital.
- 6.2 Work with transport providers to have arrangements in place to ensure continuity in patient care.
- 6.3 Collaborate with the transport provider to minimise cross-infection between patients with known COVID-19 and those suspected of having COVID-19.

We support these recommendations with no additional comments.

## 7. Case ascertainment and cohorting

- 7.1 Screen and triage all patients attending dialysis units to assess whether they are known or suspected to have COVID-19, or have been in contact with someone with confirmed COVID-19. If a patient is not thought to be at risk of COVID-19, no additional precautions are needed.
- 7.2 Set up and review facilities to minimise cross-infection so that patients can be dialysed in cohorts based on their COVID-19 status. Think about whether anyone accompanying a patient to the dialysis unit may have COVID-19, and cohort the patient appropriately.
- 7.3 If possible, have separate entrances for patients who do not have COVID-19 and for patients known or suspected to have COVID-19.
- 7.4 Ensure dialysis scheduling can properly accommodate the cleaning needs for any cohorted areas that have been established within the dialysis units.
- Before patients enter the unit for dialysis**
- 7.5 Screen and triage patients before they enter the dialysis unit (for example, at the reception waiting area).
- 7.6 If people are suspected to have COVID-19, where possible, do rapid turnaround testing before dialysis to establish COVID-19 status. Dialysis may be needed before the test results are available. If the cohort status of a patient changes based on the results, manage according to the relevant cohort status. For more information see the UK government guidance on sampling and for diagnostic laboratories.
- 7.7 In patients suspected of having COVID-19, as a minimum:
- swab for COVID-19
  - assess for alternative causes of symptoms
  - assess whether dialysis could be delayed until their COVID-19 status is known.
- 7.8 If a patient is COVID-19 negative and has symptoms, ensure that other explanations for the symptoms have been considered and treated. At subsequent assessment, retest the patient if there is still a clinical suspicion of COVID-19.

7.9 Patients known to have COVID-19 should remain in this cohort for 7 days from the start of symptoms, or until they have recovered if this is longer.

7.10 Patients should continue to be treated as close to home as possible. Inform them that they may need to be moved to other units to allow effective cohorting.

7.11 If there is limited service capacity because of COVID-19 and dialysis schedules need to be modified:

- make decisions as part of a multidisciplinary team and consider each patient on an individual basis
- ensure the reasoning behind each decision is recorded
- clearly communicate to patients, their families and carers what rescheduling involves, the reason for the decision, and the risks and benefits.

We support these recommendations with the following additional comments relating to patients suspected of having COVID 19 (7.6 -7.7):

Units should pre-emptively consider which patients are likely to be able to delay dialysis, pending swab results. Units will be aware which patients usually have concerns with fluid and potassium.

The use of the potassium binders (e.g. sodium zirconium cyclosilicate and patiomer calcium) should be considered as a holding measure to allow a delay in dialysis until swab results are known.

Cohorting of patients with suspected COVID-19 may lead to patients with and without COVID-19 receiving dialysis together. Where possible, patients with suspected COVID-19 should receive dialysis alone in a side room. If patients with suspected COVID-19 must receive dialysis together, all should wear PPE.

## 8. Leadership and network-level planning

8.1 Renal-service providers should:

- establish a multiprofessional operational team that has plans for contingency staffing, agreed pathways to ensure safe provision of dialysis, senior team oversight and clear links with provider COVID-19 planning
- work in partnership with commissioning teams within the region
- nominate an executive lead to support the service, assure planning, work within the regional network and review renal plans in line with national guidance on COVID-19
- discuss dialysis provision with contracted private provider partners to establish agreed working patterns during the COVID-19 pandemic, adapting them as needed
- develop regional networks to maintain links with other local or regional providers, and share limited resources and best practice.

8.2 Develop individualised plans for patients so that their dialysis schedule can be reduced safely if that becomes necessary. Local policies should address the use of fluid restriction and the prescription of potassium binders to allow the frequency of dialysis to be reduced. This will enable the ongoing

operational delivery of dialysis in the unit or at home if there are constraints because of widespread COVID-19.

8.3 Regional or national networks with commissioning support should prioritise:

- overseeing appropriate provision across the network, including assessing capacity, the supply chain and transport issues
- establishing a pathway to ensure patients on dialysis do not get admitted into a hospital without dialysis facilities and to enable rapid transfer if they do.

We support these recommendations with the following additional comments:

Paediatric units should be integral to regional networks and allow flexibility for teenagers to be managed in adult units.

Transfer of patients receiving dialysis from a hospital without dialysis facilities will should undergo a risk assessment when there is hyperkalaemia or fluid overload. Given the shortage of critical care beds, a higher risk than usual may be acceptable. The use of potassium binders (e.g. sodium zirconium cyclosilicate and patiromer calcium) should be considered to reduce risk and facilitate transfer.

New and incident haemodialysis patients with significant residual kidney function should be considered for individualised dialysis prescriptions of <12 hours/week where appropriate.

## 9. Staffing when workforce capacity is reduced

9.1 If healthcare professionals need to self-isolate but are well, ensure that they can continue to help by:

- enabling telephone or video consultations and attendance at multidisciplinary team meetings
- identifying patients who are suitable for remote monitoring and follow up and those who are vulnerable and need support
- entering data.

9.2 Support staff to keep in touch as much as possible, to support their mental wellbeing.

9.3 Prioritise safe staffing of dialysis services. Cross-cover from other staffing groups is difficult because of the specific skills and training needed. Regional networks should enable rapid transfer of staff from one organisation to another to maintain safe levels of care.

9.4 Identify all staff in the regional network who have experience in dialysis but are not currently working in the area. Provide them with training and support to allow them to be incorporated into the dialysis workforce if necessary.

9.5 Contact dialysis industry partners to discuss the potential for them to release any dialysis-trained staff they employ in non-patient facing roles to work in dialysis units.

9.6 Think about deploying staff without skills in dialysis to dialysis units to aid patient flow and provide support to trained staff in patient care and unit administration between hospital trusts.



9.7 Have written protocols in place for all processes critical to the provision of dialysis and ensure that cross-cover arrangements for staff are defined.

9.8 Provide tailored human resources advice to allow agile and safe staff deployment.

9.9 When dialysis for NHS patients is supported by the independent sector, ensure that measures are applied as they would be across the NHS, including for:

- COVID-19 testing
- staff in vital logistics roles such as home-delivery drivers
- renal technical staff and clinical staff.

9.10 Regularly review staffing levels and have plans to flexibly adjust nurse-to-patient ratios if needed.

9.11 Do a risk review of the frequency of all routine assessments and only do those that are deemed necessary.

9.12 Take account of the information on [the NHS Employers website about good](#) partnership working and issues to consider when developing local plans to combat COVID-19.

We support these recommendations and would reiterate the importance of ensuring adequate staff with the right skills are caring for the right patients wherever and whenever possible; the use of adapted acuity tools (e.g. the [Safer Nursing](#) care tool) may be of benefit.

## 10. Home dialysis provision

10.1 Continue and maintain current home dialysis provision (home haemodialysis and peritoneal dialysis), and maintain adequate supplies and staffing support. Assess the resilience of care reliant on paid or unpaid carers, family and friends.

10.2 Think about whether it is possible to increase home dialysis provision for new incident patients.

10.3 Test for COVID-19 in patients, carers and assistants (paid and unpaid) in the community using any form of home dialysis if they develop symptoms. Test paid assistants carrying out assisted automated peritoneal dialysis.

We support these recommendations. A specialist working group is developing additional guidance on the management of people on peritoneal dialysis during the COVID-19 pandemic. This will be published on the [Renal Association Clinical Guidelines](#) pages in due course.

## 11. Provision in dialysis units

11.1 Have agreed protocols in place:

- outlining restrictions to the dialysis unit to those staff and visitors essential to the delivery of the

service

- explaining when dialysis treatment might be safely delayed for new incident patients
- outlining risk assessments agreed with local infection control teams when considering using side rooms for patients known or suspected of having COVID-19, taking into account patients who may have other infectious diseases such as Carbapenam- producing Enterobacteriaceae
- encouraging uptake of home therapies.

11.2 Explain to patients about the importance of remaining with their regular dialysis unit during the COVID-19 outbreak unless they are told to do something different by their clinical team.

11.3 Encourage and support shared care with patients in dialysis units, and help them to carry out elements of their own care.

We support these recommendations with no additional comments.

## 12. Additional comments to the Guideline document

The following were not included in the NICE guidance but merit specific consideration:

### 12.1 Dialysis access creation and maintenance

Definitive access for dialysis is a key element of patient care. The creation of new arterio-venous fistulae and placement of peritoneal dialysis catheters and; radiological or surgical procedures to salvage or prolong the life of existing vascular access should continue if possible (we accept that redeployment of anaesthetic, surgical and medical staff may prohibit this as the pandemic evolves).

### 12.2 Advance care planning

Ensure that dialysis patients are given the opportunity to discuss future emergency care and a ReSPECT form (or equivalent) is completed to document their preferences.

Guidance on clinical decision making in the critical care setting can be found in the [COVID-19 rapid guideline: critical care NICE guideline \[NG159\]](#)

## Audit Measures

Learning from the COVID-19 pandemic will be key to building future resilience in the event of similar scenarios. We suggest that local and regional networks keep a record of their patients who become infected with COVID-19 to facilitate future data sharing.