

# COVID-19 rapid guideline: dialysis service delivery

NICE guideline

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[www.nice.org.uk/guidance/ng160](https://www.nice.org.uk/guidance/ng160)

## Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

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# Overview

The purpose of this guideline is to maximise the safety of patients on dialysis, while protecting staff from infection. It will also enable dialysis services to make the best use of NHS resources and match the capacity of dialysis services to patient needs if these become limited because of the COVID-19 pandemic.

NICE has also produced [COVID-19 rapid guidelines on acute kidney injury in hospital, chronic kidney disease and renal transplantation](#).

**On 11 September 2020** we clarified our guidance for organisations on planned procedures and emergency pathways for creating dialysis access sites for patients with advanced or end-stage kidney disease.

This guideline focuses on what you need to stop or start doing during the pandemic. Follow the usual professional guidelines, standards and laws (including those on equalities, safeguarding, communication and mental capacity), as described in [making decisions using NICE guidelines](#).

This guideline is for:

- health and care practitioners
- health and care staff involved in planning and delivering services
- commissioners.

The recommendations bring together:

- existing national and international guidance and policies
- advice from specialists working in the NHS from across the UK. These include people with expertise and experience of treating patients for the specific health conditions covered by the guidance during the current COVID-19 pandemic.

We developed this guideline using the [interim process and methods for developing rapid guidelines on COVID-19](#) in response to the rapidly evolving situation. We will review and update the recommendations as the knowledge base develops using the [interim process and methods for guidelines developed in response to health and social care emergencies](#).



# 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 Some patients will have received a letter telling them they are at high risk of severe illness from COVID-19. Tell them:
- to refer to the advice on shielding in [UK government guidance on shielding and protecting people defined on medical grounds as extremely vulnerable to COVID-19](#)
  - that their level of risk may change, as a result of advice from their primary care team, their specialists or changes in government guidance. [21 May 2020]
- 1.3 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.
- 1.4 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.
- 1.5 Tell patients who still need to attend services to follow relevant parts of government advice on social distancing (this differs across the UK). [amended 21 May 2020]

## 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.

## 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.



## 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 management of exposed healthcare workers and patients in hospital settings](#). [amended 28 April 2020].

## 5 Healthcare workers

- 5.1 All healthcare workers involved in receiving, assessing and caring for patients who have known or suspected 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.

## 6 Patient transport 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.

## 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 patients 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 10 days from the start of symptoms, or until they have recovered if this is longer. [amended 7 August 2020]
- 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.

## 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 plans to reduce demand on dialysis facilities during the COVID-19 pandemic by considering the feasibility of either delaying starting dialysis or reducing dialysis prescriptions or frequency.

- Individualise these plans for patients after assessing current residual renal function, volume control and biochemistry.
- Develop local policies on advising patients about diet and fluid intake, and reviewing current and additional medication, for example, loop diuretics and bicarbonate.
- Think about using potassium binders in line with the recommendations in NICE technology appraisal guidance on [patiromer](#) and [sodium zirconium cyclosilicate](#) to support delaying starting dialysis or to treat hyperkalaemia. [amended 28 April 2020]

### 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.

- 8.4 Regional or national networks with commissioning support should liaise with critical care networks to support the provision of renal replacement therapy for patients with COVID-19 and acute kidney injury. This should include:
- renal replacement therapy in the critical care setting, and
  - discharge planning for patients who still need renal replacement therapy after discharge from critical care. [21 May 2020]

## 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.

## 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.

# 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.

## 11.4 During the COVID-19 pandemic, organisations should maintain:

- procedure lists for creating access sites for patients with advanced chronic kidney disease who need to start vascular or peritoneal dialysis (see the [NICE COVID-19 rapid guideline on arranging planned care in hospitals and diagnostic services for recommendations on elective care](#))
- emergency pathways for vascular or peritoneal access for patients with end-stage kidney disease who need to start dialysis or are already on dialysis. [amended 11 September 2020]

## Update information

**11 September 2020:** In recommendation 11.4 on creating access sites we amended the population in the first bullet to patients with advanced chronic kidney disease because procedure lists are for patients who do not need urgent care. In the second bullet we clarified that emergency pathways are for patients who need to start dialysis or are already on dialysis. We also added a link to the planned care guideline.

**7 August 2020:** We updated recommendation 7.9 to say that patients who have COVID-19 should remain in the cohort of patients with COVID-19 for 10 days from the start of symptoms. This is to bring it into line with current UK government guidance for households with possible or confirmed coronavirus infection.

**21 May 2020:** We added new recommendations on:

- coordinating support for renal replacement therapy, including discharge planning, for patients with COVID-19 and acute kidney injury (recommendation 8.4)
- emergency pathways for maintaining access for patients with end-stage kidney disease who are already on dialysis (recommendation 11.4).

We also added recommendation 1.2 on shielding for extremely vulnerable patients, and updated our advice in recommendation 1.5 on social distancing to bring it in line with the latest government advice.

**28 April 2020:** We updated recommendation 8.2 to clarify how individual patient plans and local policies can support delaying starting dialysis or reducing the frequency. We also amended the cross-reference in recommendation 4.2 to link to new UK government guidance on managing exposure to COVID-19 in hospital settings. ISBN: 978-1-4731-3750-9