NICE National Institute for Health and Care Excellence

NICE guideline

COVID-19 rapid guideline: critical care in adults

NICE guideline

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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.

Contents

Overview

The purpose of this guideline is to maximise the safety of patients who need critical care during the COVID-19 pandemic, while protecting staff from infection. It will also enable services to make the best use of NHS resources.

On 31 March 2020, we amended the recommendations and algorithm to clarify when and how to use the Clinical Frailty Scale as part of a holistic assessment.

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.

NICE has developed these recommendations in direct response to the rapidly evolving situation and so could not follow the standard process for guidance development. The guideline has been developed using the interim process and methods for developing rapid guidelines on COVID-19. The recommendations are based on evidence and expert opinion and have been verified as far as possible. We will review and update the recommendations as the knowledge base and expert experience develops.

1 Admission to hospital

1.1 On admission to hospital, assess all adults for frailty, irrespective of COVID-19 status.

- Use the Clinical Frailty Scale (CFS), available from the NHS Specialised Clinical Frailty Network, as part of a holistic assessment where appropriate. Be aware of the limitations of using the CFS as the sole assessment of frailty.
- The CFS should not be used in younger people, people with stable long-term disabilities (for example, cerebral palsy), learning disabilities or autism. An individualised assessment is recommended in all cases where the CFS is not appropriate.
- Consider comorbidities and underlying health conditions in all cases.
- Record the frailty assessment in the patient's medical record.
[amended 31 March 2020]

1.2 When patients with possible COVID-19 have been identified, follow appropriate UK government guidance on infection prevention and control measures. This includes recommendations on:

- patient transfers and transport
- segregation and cohorting
- personal protective equipment
- aerosol-generating procedures.

1.3 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.

2 Admission to critical care

See the critical care referral algorithm.

2.1 Discuss the risks, benefits and possible likely outcomes of the different treatment options with patients, families and carers using decision support tools (where available) so that they can make informed decisions about their treatment wherever possible. See information to support decision making.

2.2 Involve critical care teams in discussions about admission to critical care for a patient where:

- the assessment suggests the person is less frail (for example, a CFS score of less than 5), they are likely to benefit from critical care organ support and they want critical care treatment or
- the assessment suggests the person is more frail (for example, a CFS score of 5 or more), there is uncertainty regarding the likely benefit of critical care organ support, and critical care advice is needed to help the decision about treatment.

  Take into account the impact of underlying pathologies, comorbidities and severity of acute illness on the likelihood of critical care treatment achieving the desired outcome. **[amended 25 March 2020]**

2.3 Support non-critical care healthcare professionals to discuss treatment plans with patients who would not benefit from critical care treatment or who do not wish to be admitted to critical care.

2.4 Sensitively discuss a possible 'do not attempt cardiopulmonary resuscitation' decision with all adults with capacity and an assessment suggestive of increased frailty (for example, a CFS score of 5 or more). Include in the discussion:

- the possible benefits of any critical care treatment options
- the possible risks of critical care treatment options

- the possible likely outcomes.

  Involve a member of the critical care team if the patient or team needs advice about critical care to make decisions about treatment. **[amended 25 March 2020]**

2.5 Ensure healthcare professionals have access to resources to support discussions about treatment plans (see for example decision-making for escalation of treatment and referring for critical care support, and an example decision support form).

2.6 Ensure that when treatment outside critical care is the agreed course of action, patients receive optimal care within the ward.

3 Starting, reviewing and stopping critical care treatment

3.1 Start critical care treatment with a clear plan of how the treatment will address the diagnosis and lead to agreed treatment goals (outcomes).

3.2 Review critical care treatment regularly and when the patient's clinical condition changes. Include in the review an assessment of whether the goals of treatment are clinically realistic.

3.3 Stop critical care treatment when it is no longer considered able to achieve the desired overall goals (outcomes). Record the decision and the discussion with family and carers, the patient (if possible) or an independent mental capacity advocate (if appropriate).

4 Clinical decision-making

4.1 Be aware that guidance on treating COVID-19 may change with emerging scientific data and knowledge and that this may require modifications to treatment.

4.2 Base decisions on admission of individual adults to critical care on the likelihood of their recovery, taking into account the likelihood that a person will recover from their critical care admission to an outcome that is acceptable to them.

4.3 Support all healthcare professionals to use their existing knowledge and experience when making clinical decisions.

4.4 Critical care staff should support healthcare professionals who do not routinely work in critical care but need to do so (see guidance from the Faculty of Intensive Care Medicine).

4.5 Decisions about the use of critical care resources should only be made by, or with the support of, healthcare professionals with expert knowledge and skills in critical care.

4.6 Use objective data from recognised national sources, for example, the Intensive Care National Audit Research Centre, to support consistency in decision-making.

4.7 Use a recognised tool to record the decision-making process (see an example decision support form).

5 Service organisation

Providing telephone advice

5.1 Trusts should review their 'management of the deteriorating patient' strategy and use of the track and trigger system (NEWS2 has been endorsed by NHS England/Improvement) to allow for telephone advice rather than face-to-face review from critical care when clinically appropriate. See the NICE guideline on acutely ill adults in hospital for recommendations on identifying patients whose clinical condition is deteriorating or is at risk of deterioration.

5.2 Document referral to and advice from critical care services in a standard format. Where telephone advice from critical care is appropriate this should still be documented in a standard format (see an example of a tool for documentation).

Coordinating best use of critical care resources

5.3 Hospitals should discuss the sharing of resources and the transfer of patients between units, including units in other hospitals, to ensure the best use of critical care within the NHS.

5.4 Data on the availability of critical care beds should be made available to the critical care decision makers and operational management team to facilitate sharing of resources (see table 1 for information on maximising critical care bed usage).

Table 1 Maximising critical care bed usage

Within critical care

Have all patients in critical care been reviewed with clear management plans established for the next 24 hours? Can any level 2 or level 3 capacity be established in other areas of the hospital? Can care suitable for particular patients be delivered in any other location - for example, can an enhanced care facility be created? Are you aware of any capacity in neighbouring units within the network or out of the network? Can any patients be transferred to other units to improve flow?
Outside critical care
Do you know what demand is occurring or is likely to occur in the rest of the hospital? Do you know the number of patients for whom escalation to critical care is planned (if required)?

5.5 Include operational delivery networks and equivalent in discussions of mutual aid to ensure patients have access to all available, relevant critical care resource.

Extracorporeal membrane oxygenation

5.6 Be aware that respiratory extracorporeal membrane oxygenation (ECMO) services can advise intensive care clinicians on managing severe acute respiratory failure.

5.7 Be aware that respiratory ECMO services can accept referrals for critically ill patients where:

- they have potentially reversible severe respiratory failure
- optimal conventional intensive care management has failed
- they meet the eligibility criteria for the respiratory ECMO service.

For more information see Management of surge and escalation in critical care services: standard operating procedure for adult respiratory extra corporeal membrane oxygenation.

Update information

31 March 2020: we further amended recommendation 1.1 and the algorithm to clarify use of the Clinical Frailty Scale.

25 March 2020: we amended recommendations 1.1, 2.2 and 2.4 to clarify that the Clinical Frailty Scale should be used as part of a holistic assessment, but should not be used for younger people, people with stable long-term disabilities, learning disabilities or autism. We also changed the title of the guideline to clarify that it only applies to adults.

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