Peer review comments – respiratory support

Managing COVID-19 rapid guideline (NG191)

Peer review organisations

For a list of stakeholders invited to comment on COVID-19 guidance as part of the targeted peer review, please see the targeted peer review stakeholder list on the NICE website.

For this topic, the following stakeholder organisations were also invited to comment:

- Association of Chartered Physiotherapists in Respiratory Care
- Association of Anaesthetics
- British Association of Critical Care Nurses
- British Thoracic Society
- Faculty of Intensive Care Medicine
- Royal College of Anaesthetists

Guideline section	Key comments	Response
General comments	1 reviewer wrote that this is an extremely important time to redraft these recommendations. 1 reviewer wrote that the recommendations contain sound clinical principles and should be followed.	No action needed. No action needed.
6.2.1 Deciding when to escalate treatment	1 reviewer suggested that this ICS guidance should be mentioned: Decision Making Under Pandemic Conditions (ics.ac.uk)	This guidance has now been signposted in the recommendations.

Document completed: 2nd September 2021

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	1 reviewer advised that when involving wider experts from a multidisciplinary team, we should include the team who look after the long-term medical issues – the “base” team.	No action taken. The recommendation has been written for healthcare professionals who have a duty of care for the person with COVID-19. This includes the “base” team and so they are included in this recommendation.
	1 reviewer wrote that the multidisciplinary team description should include allied health professionals.	The recommendation has been reworded to ensure that the definition of multidisciplinary team is broad.
	1 reviewer advised that we should mention Emergency Health Care Plans in the recommendation concerning uncertainty about treatment escalation decisions.	We have now included this advice as a remark under the recommendation.
	For the recommendation about uncertainty about treatment escalation decision, 1 reviewer wrote that the recommendation read as if treatment escalation should involve a range of clinical teams rather than a multidisciplinary team of different professions, and therefore made the escalation process seem like a medical process, which it is not.	The wording has now been amended.
	For the recommendation on documenting advice and referral, 1 reviewer suggested that this recommendation should be more patient-centred.	We have now provided an example of a tool for documentation that is more patient-centered.
6.2.2 Escalating and de-escalating treatment	No comments.	No action needed.
6.2.3 Delivering services in critical care and respiratory support units	For the recommendation on people who are deteriorating, 1 reviewer advised that the wording suggested that if a person is referred to critical care they did not need to be physically reviewed.	We have amended the wording of the recommendation.
	For the recommendation on people who are deteriorating, 1 reviewer advised that the wording was clumsy and should be rephrased.	We have amended the wording of the recommendation.

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	For the recommendation on people who are deteriorating, 1 reviewer advised that the term “clinically appropriate” is ambiguous.	We have amended the wording of the recommendation.
6.2.4 Non-invasive respiratory support	1 reviewer commented that overall, the recommendations for respiratory support seem reasonable given the preprint results of Recovery-RS trial although noting that the study has not been formally published/subject to peer review. They also noted that in the Recovery-RS study, CPAP was associated with more adverse events than other treatments and may be less well tolerated than HFNO so HFNO may still have a role in patients who can’t manage CPAP.	No action taken. We discussed the certainty of the evidence and the peer review status of the trial with the panel and they took that into account when developing recommendations. This detail has been captured in the evidence to decision section that will accompany the recommendations. The panel noted patient preferences in the recommendations and also acknowledged the need to have breaks from CPAP so included advice on when to do that.
	1 reviewer wrote that the recommendation on shared discussions was excellent.	No action needed.
	1 reviewer wondered how practical shared discussions with people with COVID-19 and their families was going to be with limited visiting.	No action taken. The panel were keen to emphasise a shared decision-making approach but the recommendation does not specify this being face-to-face. Therefore, Trusts can implement this recommendation as appropriate to their policies.
	1 reviewer wrote that they fully agreed with the recommendation on deciding when to escalate and de-escalate a person’s treatment.	No action needed.
	With regards to the recommendation on deciding when to escalate and de-escalate a person’s treatment, 1 reviewer drew our attention to the RCOG COVID-19 in pregnancy guidance.	We have now signposted this RCOG guideline.
	With regards to the recommendation on deciding when to escalate and de-escalate a person’s treatment, 1	

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	reviewer wrote that shared discussions should include appropriate escalation plans if non-invasive respiratory support fails.	No action taken. This issue is covered by recommendation 6.2.2.
	1 reviewer agreed with the following rationale saying this was important advice and communication is essential: “The panel agreed that recommendations on other treatment options for COVID-19 should be referred to in order to support care of people with COVID-19 receiving non-invasive respiratory support.”	The panel were keen to capture this. No action needed.
	With regards to the recommendation for assessing need for escalation of respiratory support, 1 reviewer wrote that it would be more explicit to describe prone positioning in the recommendations given a recent Lancet review.	No action taken. This was discussed by the expert advisory panel and the consensus was not to explicitly promote awake proning, but to refer to patient positioning in the recommendation.
	1 reviewer drew our attention to the RCOG COVID-19 in pregnancy guidance with regards to prone positioning.	We have now signposted this RCOG guideline.
	1 reviewer wondered if nutrition could be included in the rationale for assessing the need for escalation of respiratory support.	This was not discussed or mentioned by the panel, so it was not added.
	1 reviewer wrote that the Recovery-RS study was one of the largest ever RCTs in an intensive care setting and the authors should be congratulated on undertaking it so quickly and reporting the results.	No action needed.
	2 reviewers pointed out that the Fractional Inspired oxygen level of 0.4 (40%) is likely to be inaccurate. For example: “Whilst the flow rate of oxygen can be measured with accuracy the FiO2 cannot, and the estimates vary by as much as 50% depending on the O2 flow rate.”	The recommendation has been amended to say 40% or higher FiO2.

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	"However, in practice this is a relatively low FiO2 for hospitals to start CPAP with adequate flows and would in mean a high number of patients would require CPAP."	
	1 reviewer wrote that an FiO2 of 40% should be re-written as an FiO2 of 0.4	A clearer description has been added to the recommendation to clarify that an FiO2 of 0.4 is 40%.
	With regards to the following rationale: "The panel discussed the importance of ensuring that CPAP is used for an appropriate duration of time…", 1 reviewer wrote: "It is important to add that CPAP can carries risks of pneumomediastinum and circulatory instability and requires time off CPAP to eat to drink and to communicate especially if a Helmet is used to deliver it."	The panel recognised this and included a recommendation on taking a break from CPAP.
	With regards to the CPAP advice, 1 reviewer wrote: "Have we defined what treatment failure is?"	This was discussed with the panel but there was not a push to define this.
	With regards to the recommendation on regular senior medical review for CPAP, 1 reviewer wrote: "Some centres have advanced practitioners for NIV who have also completed senior review i.e. Physiotherapists, nurses etc. As in ICS/BTS RSU document could we refer to a senior decision maker?"	We have now amended this to state an appropriate senior clinician.
	With regards to the following rationale: "The panel agreed that review of response to CPAP after 48 hours would be an appropriate timepoint to ensure that treatment failure is recognised and responded to appropriately. The panel noted the importance of regular review prior to this formal review of the person's response to CPAP." 3 reviewers wrote that senior review should occur 12 hourly and therefore including a formal assessment at 48 hours was superfluous.	Based on peer review feedback and subsequent discussion with the expert advisory panel we have removed this recommendation.

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	With regards to the following rationale: “The panel indicated that prolonged treatment with CPAP may be harmful and the evidence considered by the panel showed a relatively short duration of CPAP before intubation in those who progressed to this.” 1 reviewer wrote that this was important and should detail the safety issues.	Based on peer review feedback and subsequent discussion with the expert advisory panel we have removed the recommendation that this rationale was linked to.
	With regards to this sentence in the rationale: “…and the evidence considered by the panel showed a relatively short duration of CPAP before intubation in those who progressed to this.” 2 reviewers wrote: “This is controversial and not what the guidance in the ICS/FICM says. An individualised approach is advocated. The debate amongst intensivists has not been acknowledged here.”	Based on peer review feedback and subsequent discussion with the expert advisory panel we have removed the recommendation that this rationale was linked to.
	With regards to the following rationale: “The panel recognised that prolonged use of CPAP can be uncomfortable for people receiving it. The panel discussed that HFNO would be an appropriate option for people with COVID-19 receiving CPAP to support breaks from CPAP for eating and in weaning from CPAP.” 3 reviewers wrote: “This is wise advise given that HFNO has been valued by repeated Cochrane reports with further work being encouraged.”	No action needed.
	1 reviewer suggested we add the following recommendation: “Consider use of HFNO therapy as a means to reduce symptoms of breathlessness in patients in respiratory distress for whom escalation to invasive mechanical ventilation is not appropriate. (This allows clinical teams the widest latitude to use HFNO in symptom control. The evidence looked at doesn’t address this directly so it would require consensus.)”	This was discussed by the panel but not taken forward as the points covered were not addressed by the evidence under review.

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Research recommendations	1 reviewer suggested the following research recommendation: “Is CPAP/HFNO effective in patients with DNI decisions (ward-based ceilings of care)?”	No action taken. This was not discussed by the panel as a research gap to flag in the guideline.
	1 reviewer advised that the timing of intubation is probably the most controversial topic and a key research question.	No action taken. This was not discussed by the panel as a research gap to flag in the guideline. However, this is a PICO in our surveillance of this section of the guideline so we will identify studies through that route.
	1 reviewer wrote that in the suggestions for further work and RTC it is very important to discourage the use of FiO2	No action needed.
	For the research recommendation: “Is HFNO clinically effective in reducing breathlessness…” 1 reviewer wrote: “Consideration needs to be taken into what the outcome here would be. The practicalities of getting patients home on HFNO, maintaining HFNO at home for patients who wish their EOL to occur at home.”	We have amended the outcomes.
	For the research recommendation: “Is HFNO clinically effective in reducing breathlessness…” 1 reviewer wrote that we should make it clear if this is for adults.	We have amended the population..
	For the research recommendation: “Is HFNO clinically effective in reducing breathlessness…” 1 reviewer wrote that HFNO has been shown in other causes of respiratory failure especially in palliation and so is not an urgent question. The people who require escalation will be offered other therapies, so this only applies to those not getting CPAP or invasive support. A better question may be using HFNO in patients requiring less than 40%	No action taken. This was not discussed by the panel as a research gap to flag in the guideline. However, this is a PICO in our surveillance of this section of the guideline so we will identify studies through that route.

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	oxygen to prevent deterioration in those not deemed suitable for escalation to other forms.	
	For the research recommendation: “Is HFNO clinically effective in reducing breathlessness…” 1 reviewer wrote that we should add the Borg rating of perceived exertion, and impact of breathlessness on activities of daily living. 1 reviewer wrote that we should add measuring/ascertaining whether the participants have a breathing pattern disorder.	These outcomes have now been added.
	For the research recommendation: “Does a multidisciplinary team agreed approach to weaning…” 1 reviewer inquired as to whether we have defined who would be in the MDT intervention.	No action taken because the key aspect of interest was the approach taken for weaning rather than who does it.
	For the research recommendation: “Does a multidisciplinary team agreed approach to weaning…” 1 reviewer wrote that they did not think this will be easily deliverable in a suitable timeframe.	No action taken. The suggestion has been noted but this was raised by the expert advisory panel as being a research gap.