

Response to “Reviewing Hyperbaric Oxygen Services: Consultation Guide”

1. Thank you for the opportunity to respond to this consultation. As you would expect, as the National Governing Body for sport of Scuba Diving in the UK, the British Sub-Aqua Club (BSAC) takes a keen interest in the provision of hyperbaric chambers.
2. Diving is a relatively safe sport, with relatively few incidents. However, like all sports, participants are sometimes injured accidentally. In diving, this can take the form of Decompression Illness (DCI) and as the Consultation recognises, hyperbaric oxygen therapy (HBOT) is the only treatment for divers with this condition. BSAC is obviously concerned that a reduction in the number of hyperbaric chambers could lead to a delay in treatment of DCI cases. This could increase the number of cases where patients’ symptoms are not fully resolved, resulting in permanent disability, or in the worst cases, an unnecessary fatality.
3. BSAC therefore welcomes the commitment to maintaining nationwide coverage for HBOT for cases of DCI, however we do have some concerns and questions about the proposal:
 - i. **Lack of current nationwide coverage – in particular Northern England.**

There are some notable gaps in coverage in Appendix 1. Presumably the gap in South Wales is covered by the chamber in Cardiff (we recognise this a devolved issue), but BSAC is concerned about the gap in coverage in Northern England. The Farnes Islands in particular are famous for their scenic diving and the opportunity to dive with seals, and coverage in this area appears to be far from ideal, as currently diving casualties in the Farnes are taken to Hull, which Appendix 1 acknowledges is more than two hours away. **BSAC strongly feels that NHS England should commission emergency HBOT services in Northern England to address this gap.**
 - ii. **What consideration has been given to the need to treat two incidents simultaneously?**

There is an implicit assumption in the Consultation Document that only one chamber needs to provide coverage for a particular part of the country. However, there are instances when a diver has been recompressed when a chamber is already occupied, either by a diving casualty or a patient undergoing routine treatment. While a second patient can be introduced into a multiplace chamber, treatment schedules may have to be compromised to the detriment of patients. This means that occupied chambers sometimes refer patients to another chamber, for example St. John’s Wood have referred patients to Whipps’ Cross and vice versa.

iii. **What consideration has been given to second-order benefits, such as maintaining a skilled workforce of chamber operators?**

The Consultation Document assumes that the only factor in determining the number of hyperbaric chambers is geographic coverage. BSAC is concerned that the loss of one or more chambers coupled with a restriction of the indications for hyperbaric oxygen therapy could lead to a rapid deskilling of highly trained chamber staff.

Hyperbaric chambers also provide other services such as medicals, training, and preventative services such as helping educate divers on risks and how to respond to incidents. What consideration has been given to this and other second-order benefits?

iv. **What assumptions underpin the map in Appendix 1?**

Presumably the two-hour figure is based on the recommendation in the HSE's diving ACOPS that a diver should be recompressed within two hours. However, in deriving the map in Appendix 1, what were the assumptions made about the time for a boat to reach shore before the patient is transferred to an ambulance? Similarly, what are the assumptions about diagnostic and transfer time at the receiving chamber?

v. **How do the conclusions change if the two-hour figure is reduced?**

While the HSE recommendation for treatment time is for two hours, the HSE also acknowledges that in practice this is not always achieved, stating that "the data show that the vast majority of divers do not receive treatment within the guideline time"¹. BSAC therefore has concerns about any measures that could exacerbate this situation.

vi. **What sensitivity analysis has been conducted?**

Given the above, (and HMG's recommendation that sensitivity analysis should be carried out on key variables when appraising options) BSAC is keen to know if there has been any sensitivity analysis on the travel time, and if not, what would it show? For example, what would Appendix 1 look like if the map was redrawn with a one-hour, or one-and-a-half hour travel time? Would these scenarios affect the hypothesis that the number of chambers can be reduced from ten to eight without adverse effects?

vii. **The timing of the review, given the ongoing review of non-DCI HBOT**

The Consultation Document states that the evidence for non-DCI HBOT is mixed, and that a clinic review is currently underway. BSAC feels that it does not make sense to make any decisions about closing HBOT chambers until the review is completed.

¹ Time to treat for decompression illness, HSE, 2007. www.hse.gov.uk/research/rrpdf/rr550.pdf
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4. Given these issues, the British Sub-Aqua Club is therefore **against** the proposal to reduce the number of chambers from ten to eight, and instead recommends that an additional chamber is provided in the North of England.
5. Thanks once again for the opportunity to comment on this Consultation. I look forward to your response to the issues above. If you have further questions, either myself a BSAC representative would be more than happy to discuss further either in person or over the phone.

Yours sincerely,

A handwritten signature in black ink that reads "Mary Tene". The signature is fluid and cursive, with a long horizontal stroke at the end.

BSAC Chief Executive