VERSION 1, 03 April 2020



Novel coronavirus (COVID-19) guidance and standard operating procedure

Management of proton beam therapy referrals in response to COVID-19

This guidance is correct at the time of publishing. However, as it is subject to updates, please use the hyperlinks to confirm the information you are disseminating to the public is accurate.

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Background

The ongoing COVID-19 outbreak poses a challenge to the NHS proton beam therapy (PBT) service as access to overseas PBT providers in the United States and Germany has stopped. The sole NHS PBT centre is at The Christie NHS Foundation Trust.

Under normal circumstances, the centre at The Christie does not have sufficient capacity to meet all NHS demand for PBT. This position has been exacerbated by the impact of COVID-19.

In addition, a significant proportion of paediatric patients need to be anaesthetised on a daily basis to receive PBT treatment. The demands of the COVID-19 outbreak on the NHS mean there is increased pressure on both the anaesthetists and ventilator equipment required to carry out this element of PBT treatment.

Reduced PBT capacity will impact significantly on conventional radiotherapy services as an alternative form of radiation treatment. This is expected to be particularly marked in paediatric and teenage and young people (TYA) radiotherapy.

As a result, a separate standard operating procedure (SOP) for PBT referrals is required for the period of the outbreak.

The SOP has been developed in partnership with The Christie NHS PBT Centre and the Children's Cancer and Leukaemia Group (CCLG). Further guidance for referring clinicians can be found on the Royal College of Radiologists¹ and the CCL G² websites.

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¹ https://www.rcr.ac.uk/college/coronavirus-covid-19-what-rcr-doing/coronavirus-covid-19resources/coronavirus-covid-19-1

² www.cclg.org.uk/

2. Purpose

This document sets out how referrals for PBT will be managed to ensure available PBT capacity is used in the most effective way.

In addition to their current responsibilities, the NHS England and NHS Improvement National Clinical Lead for PBT as chair of the National PBT Panel and the Clinical Director of The Christie PBT Centre will liaise closely to manage the flow of referrals in respect of the recommendations of the National PBT Panel and availability of capacity to prioritise otherwise eligible PBT referrals to maximise clinical benefit where capacity may be constrained.

3. Principles

The principles being followed by this SOP are to ensure that during the COVID-19 outbreak and resultant service constraints:

- patients who will able to gain the greatest clinical benefit from PBT are still able to access it
- all available PBT capacity is used in the most clinically effective way
- there is alignment of approach between PBT and conventional radiotherapy services so that every patient gets the best possible care in light of changing constraints.

4. Pathway

This SOP should be read in conjunction with the PBT COVID-19 framework, which provides advice for all referring clinicians.

Guidance about radiotherapy (proton and photon) has also been developed with the CCLG to provide support and advice to paediatric and clinical oncologists managing the care of children with cancer and teenage and young adults (TYA) with paediatric type tumours. It will assist paediatric and clinical oncologists to triage referrals appropriately by identifying patients who:

- may have a safe policy of active surveillance OR proceed to locally delivered conventional radiotherapy
- should proceed to locally delivered conventional radiotherapy to ensure there is no compromise to local control or survival
- can be prioritised to receive PBT if capacity allows and should be referred.

Both the PBT COVID-19 framework and the guidance developed by the CCLG will be available on the Royal College of Radiologists³ and the CCLG⁴ websites and will also be circulated to all referring children's cancer and TYA principle treatment centres. These documents will also be signposted on the Proton Referral Portal login page.

All applications for PBT must be made as normal using the web-based Proton Referral Portal. https://protons.protontherapyreferrals.nhs.uk

The process and requirements for submitting an application can be found in Section 4 of the existing Standard operating procedure: process for applying for proton beam therapy and subsequent treatment centre allocation for eligible patients:

³ https://www.rcr.ac.uk/college/coronavirus-covid-19-what-rcr-doing/coronavirus-covid-19resources/coronavirus-covid-19-1

⁴ www.cclg.org.uk/

https://www.england.nhs.uk/commissioning/wpcontent/uploads/sites/12/2019/03/Standard-Operating-Procedure Proton-Beam-Therapy-treatment-application-process-and-centre-allocation.pdf

Making an application for PBT under the current circumstances must be discussed with the patient and their family. Specifically:

- Travelling for PBT and staying in apartment accommodation away from home (for six to eight weeks) needs careful consideration. The challenges of this should be explicitly stated to patients and their families.
- Patients/families should also be aware that the current situation with COVID-19 is rapidly changing and interruptions/delays to treatment may occur as well as delayed access, or inaccessibility, to some services. In the event of proton service downtime, patients should also be counselled that any interruptions/delays may be longer than normal.

Once an application has been received, it will be reviewed by the NHS England National Clinical Lead for PBT (PBT National Clinical Panel Chair). Any applications for which 'active surveillance' is appropriate will be passed back to the referrer.

The National PBT Clinical Panel will review applications against the PBT COVID-19 prioritisation framework to aid managing flow into the PBT pathway and make a recommendation of:

- meets priority criteria refer on to PBT centre
- does not meet priority criteria pass back to referrer
- further active surveillance or conventional radiotherapy pass back to referrer.

For applications recommended to be referred to the NHS PBT Centre, the NHS England National Clinical Lead for PBT and NHS PBT Centre Clinical Director will discuss each case to confirm there is sufficient capacity available to accept the patient and complete treatment.

Capacity will be utilised based on order of referral to ensure effective utilisation of available resource.

Where there is sufficient capacity, the referral will be processed in the usual way and the patient will enter the normal assessment, planning and treatment pathway.

Where there is insufficient capacity available, the patient's application will be passed back to the referrer.

Proton beam therapy referral

