

**SPECIALISED COMMISSIONING - CLINICAL EVIDENCE EVALUATION  
CRITERIA FOR CLINICAL COMMISSIONING POLICY PROPOSITION**

URN: 1783

TITLE: Proton Beam Therapy for children, teenagers and young adults

CRG: Radiotherapy

NPOC: Cancer

Date: 16/01/19

This policy is being considered for:	For routine commissioning	X	Not for routine commissioning	
Is the population described in the policy similar to that in the evidence reviewed, including subgroups?	The population outlined in the policy proposition is children and young people with tumours. Panel recognised the evidence for this population was limited.			
Is the intervention described in the policy similar to the intervention for which evidence is presented in the evidence review?	Yes.			
Are the comparators in the evidence reviewed plausible clinical alternatives within the NHS and are they suitable for informing policy development?	Where comparators were available, this was conventional radiotherapy. Panel considered that a given dose of radiation delivered to tumour cells by proton beam therapy is likely to deliver an equivalent effect to a similar dose of radiation delivered to tumour cells by other forms of radiotherapy.			
Are the clinical benefits described in the evidence review likely to apply to the eligible population and/or subgroups in the policy?	Panel recognised the main theoretical benefit of Proton Beam Therapy (PBT) is the reduction of radiation delivered to normal tissue. This depends upon the location of the tumour(s) being irradiated and position of sensitive normal tissues in relation to the radiation beam and tumour. A major benefit of reducing the exposure of normal tissues to radiation is the anticipated avoidance of long term adverse effects caused by irradiating these tissues. This includes radiation induced cancer. These long term adverse effects are particularly important to avoid in young patients, often being treated with curative intent and likely to have many decades of life ahead. However, it was noted that the actual research evidence is limited as long term studies are not yet available. At present these long term adverse effects avoided can only be inferred.			
Are the clinical harms described in the evidence review likely to apply to the eligible and /or ineligible population and/or subgroups in the policy?	The benefits are avoidance of long term harms associated with the irradiation of normal tissues.			

The Panel should provide advice on matters relating to the evidence base and policy development and prioritisation. Advice may cover:

- Balance between benefits and harms
- Quality and uncertainty in the evidence base
- Challenges in the clinical interpretation and applicability of policy in clinical practice
- Challenges in ensuring policy is applied appropriately
- Likely changes in the pathway of care and therapeutic advances that may result in the need for policy review.

Panel noted that the policy proposition updates existing NHS England policies, published in 2015. The final governance step for this policy is through the Clinical Priorities Advisory Group. Funding is from the PBT programme and therefore not through relative prioritisation.

It was recognised that the evidence base for benefit for PBT for children, teenagers and young adults is limited and that a commissioning decision based on the equivalence of radiation effect on the targeted abnormal tissue and anticipated adverse effects avoided was appropriate. The expected improvement in long term outcomes because of adverse effects avoided is particularly important to this population of younger people with a long life expectancy.

Panel highlighted the importance of developing an outcome monitoring programme in relation to this policy to ensure that any adverse effects, including adverse effects that have not been anticipated, are identified as soon as possible. The policy would need to be revised should evidence regarding long term outcomes / adverse effects indicate that changes to the population eligible for treatment are needed.

Panel noted that a multidisciplinary team approach was particularly important for determining appropriate treatment options in this population of children and young people with cancer and non-malignant tumours. Panel strongly supported the use of a shared decision making tool because of the uncertainties about long term benefits, location of treatment and other factors that patients and their carers may need to consider in relation to the commissioned range of clinically appropriate therapy that they choose to access.

Panel advised that the title of the policy proposition should be changed to include '...in the treatment of malignant and non-malignant tumours'. Whilst the large majority of conditions suitable for treatment are 'cancer', indications include non-malignant conditions such as desmoid fibromatosis.

Panel supported the policy proposition to progress to stakeholder testing.

Overall conclusion	This is a proposition for routine commissioning and	Should proceed for routine commissioning	X
		Should be reversed and proceed as not for routine commissioning	
		Should proceed for	

	This is a proposition for not routine commissioning and	not routine commissioning	
		Should be reconsidered by the PWG	

Overall conclusions of the panel

Report approved by:  
David Black  
Clinical Panel Chair  
25/01/19

Post meeting note:

Following Clinical Panel, the title of the policy was amended. The policy proceeded to stakeholder testing in line with the standard Methods.