MANAGEMENT IN CONFIDENCE

CLINICAL PRIORITIES ADVISORY GROUP
07/08/2019

Agenda Item No	3.1
National Programme	Cancer
Clinical Reference Group	Radiotherapy
URN	1841

Title
Proton Beam Therapy for Craniospinal Irradiation in Adults

Actions Requested	1. Support the adoption of the policy proposition
	2. Recommend its approval as an IYSD

Proposition
This policy statement recommends that proton beam therapy (PBT), a form of radiotherapy, be routinely commissioned for craniospinal irradiation in adults. This is a new policy, expanding access to PBT services. The policy statement forms part of the ramp-up of the English PBT service with the first centre now open in Manchester. Development of the policy statement is supported by a review of the latest, available clinical evidence in line with NHS England's standard Methods.

Clinical Panel recommendation
The Clinical Panel recommended that the policy progress as a routine commissioning policy.

The committee is asked to receive the following assurance:	
1.	The Head of Clinical Effectiveness confirms the proposal has completed the appropriate sequence of governance steps and includes an: Evidence Review; Clinical Panel Report.
2.	The Head of Cancer Programme confirms the proposal is supported by an: Impact Assessment; Stakeholder Engagement Report; Consultation Report; Equality Impact and Assessment Report; Clinical Policy Proposition. The relevant National Programme of Care Board has approved these reports.

3.	The Director of Finance (Specialised Commissioning) confirms that the impact assessment has reasonably estimated a) the incremental cost and b) the budget impact of the proposal.
4.	The Clinical Programmes Director (Specialised Commissioning) confirms that the service and operational impacts have been completed.

The following documents are included (others available on request):	
1.	Clinical Policy Proposition
2.	Stakeholder Engagement Report
3.	Evidence Summary – 3 papers
4.	Clinical Panel Report
5.	Equality Impact and Assessment Report

1. The Benefits of the Proposition – Proton beam therapy (PBT) versus photon x-ray conventional radiotherapy (CRT) for craniospinal irradiation (CSI) in adults

No	*Outcome measures*	*Summary from evidence review*
1.	Survival	Overall survival is the proportion of participants alive at specific points in the study after the intervention has been given. All three studies reviewed indicates for patients with various tumours requiring craniospinal irradiation as part of the treatment, proton craniospinal irradiation for these indications is not inferior to photon craniospinal irradiation when considering its impact on overall survival of patients. The best estimate for overall survival is from the Brown et al (2013) study. This study reports the 2-year overall survival of protons was 94% compared to 90% for photons. The difference in rates was however not significant statistically. The results must be interpreted with caution as they are from a small retrospective study.
2.	Progression free survival	Progression free survival is the length of time a patient lives with the disease without it getting worse. All three studies reviewed indicates for patients with various tumours requiring craniospinal irradiation as part of the treatment, proton craniospinal irradiation for these indications is not inferior to photon craniospinal irradiation when considering the impact on progression free survival after treatment.

		The best estimate for progression free survival in adults is from the Brown et al (2013) study. In this study, patients were reported to have experienced a progression free survival of 94% two years after protons craniospinal irradiation compared to 85% two years after photons craniospinal irradiation. The results must be interpreted with caution as they are from a small retrospective study.
3.	Mobility	Not measured
4.	Self-care	Not measured
5.	Usual activities	Not measured
6.	Pain	Not measured
7.	Anxiety / Depression	Not measured
8.	Replacement of more toxic treatment	Toxicity is a measure of the presence or absence of harmful treatment related side effects. It is important because its presence can significantly impact the quality of life as well as adversely affect outcomes if they result in treatment breaks during radiotherapy. Both the Brown et al (2013) and the Barney et al (2013) studies reported decreased toxicity after proton craniospinal irradiation. The best assessment of toxicity is from the Brown et al (2013) study. They reported patients receiving proton craniospinal radiation experienced significantly lower rates of gastrointestinal and haematological toxicities. The indication of lower rates of acute toxicity with protons craniospinal irradiation as shown in the results above should be interpreted with some caution due to the small patient numbers and the retrospective nature of the study which would have allowed for the introduction of bias in the assessments.
9.	Dependency on care giver / supporting independence	Not measured
10.	Safety	Not measured
11.	Delivery of intervention	Not measured

Considerations from review by Rare Disease Advisory Group
Not applicable.

Pharmaceutical considerations
Not applicable.

Considerations from review by National Programme of Care
1) The proposal received the full support of the Cancer PoC Board on the 27th June 2019.