


Coversheet for Network Site Specific Group Agreed Documentation

Document Title	Clinical Management Protocol – Central Nervous System Tumours
Document Date	July 2010
Document Purpose	<p>This protocol has been produced to fulfil the requirements of Children’s Cancer Quality Measure 09-7A –117: to identify how children with central nervous system tumours are treated across a managed care network in the West Midlands.</p> <p>The document aims to inform both clinical practice and commissioning. It identifies;</p> <ul style="list-style-type: none"> ▪ Modalities of treatment or available multi-centre trial ▪ The roles of the Principal Treatment Centre (PTC) and Paediatric Oncology Shared Care Units (POSCU) and their linked services, e.g. Radiotherapy Centre, Community Teams. ▪ Indications for referral outside the catchment area where relevant. ▪ Identification of relevant MDTs
Authors	<p>Dr Martin English, Consultant Paediatric Oncologist & Neuro-Oncology MDT Lead, Birmingham Children’s Hospital NHS Foundation Trust</p> <p>Jeanette Hawkins, Lead Cancer Nurse, Birmingham Children’s Hospital NHS Foundation Trust</p>
References	<ol style="list-style-type: none"> 1. DH National Cancer Action Team (2008) National Cancer Peer Review Program Manual for Cancer Services 2008; Children’s Cancer Measures 2. National Institute for Health & Clinical Excellence (2005) Referral guidelines for suspected cancer: Section - Cancer in Children & Young People.
Consultation Process	Consultation was with the Neuro-Oncology MDT at Birmingham Children’s Hospital (BCH), Cancer Locality Group (BCH) and the West Midlands Paediatric Oncology Supra Network Group
Review Date (must be within three years)	July 2013
Approval Signatures: Network Site Specific Group Clinical Chair	

Version History

Version	Date	Summary of change/ process
Draft V1.1	23/03/2010	Draft developed Dr. English & Jeanette Hawkins for consultation with identified groups. Cover sheet for PBCN Documents added.
V1.2	25/05/2010	Network Map added. Abbreviations Key added.

Approval Date of Network Site Specific Group

Date: July 2010

Approval Date of the Governance Committee

Date: July 2010

Approval Signatures

Pan Birmingham Cancer Network Governance Committee Chair

Name: Doug Wulff



Signature:

Date: July 2010

Pan Birmingham Cancer Network Manager

Name: Karen Metcalf



Signature:

Date: July 2010

Network Site Specific Group Clinical Chair

Name: Deepak Kalra

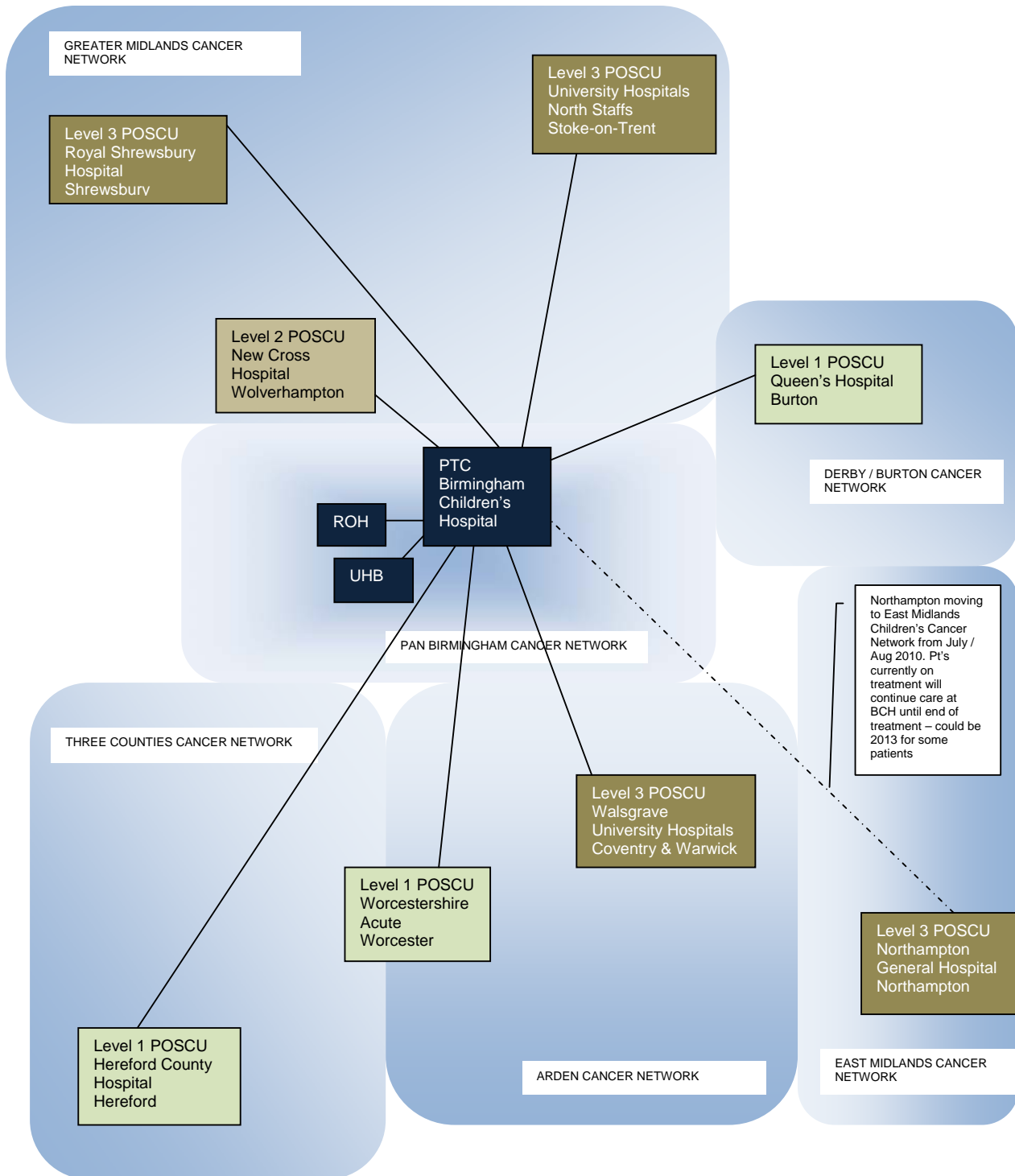


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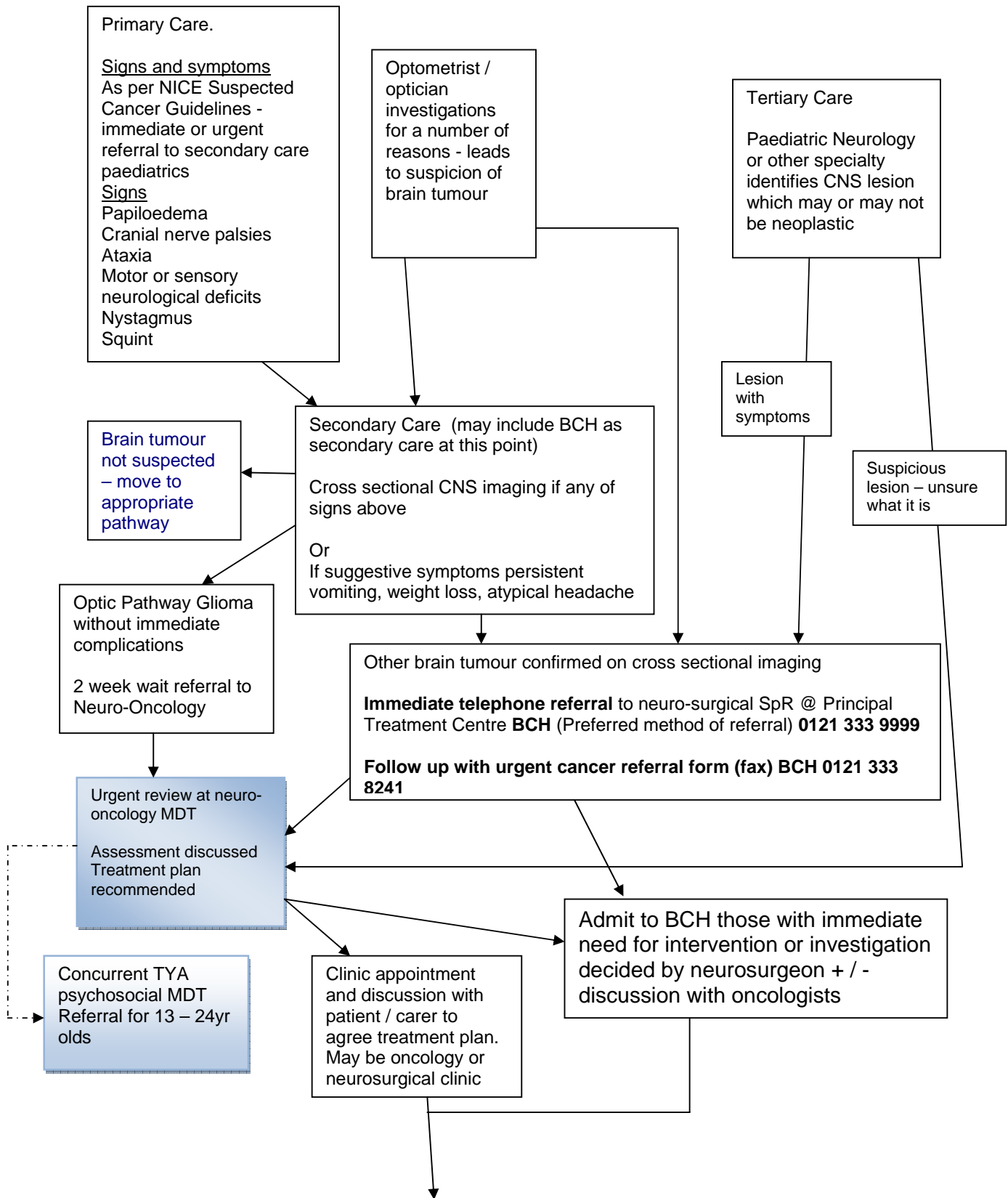
Date: July 2010

West Midlands Paediatric Oncology Supra Network

- PTC – Principal Treatment Centre
- POSCU – Paediatric Oncology Shared Care Unit
- Levels of shared care – Specified on pages 28 to 29 National Cancer Action Team Manual for Cancer Services 2008: Children's cancer Measures 2009
- University Hospitals Birmingham UHB - Radiotherapy and Young Adult Services
- Royal Orthopaedic Hospital ROH – Bone Tumour Service



Clinical Management Protocol – CNS Tumours



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Treatment or observation pathway agreed
At this point it may still not be defined by diagnosis

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There are many strategies for treatment of brain tumours in children. These depend on the histological diagnosis, the age of the child, the stage of the tumour, ability to tolerate radiotherapy without anaesthetic, and co-diagnoses, e.g. neurofibromatosis type 1. Treatment strategies are discussed and recorded by the neuro-oncology MDT and agreed with the family and patient.

Therapeutic management includes;
 Surgical intervention for hydrocephalus
 Biopsy, de-bulking or complete resection
 Active observation
 Chemotherapy strategies / Autologous Stem Cell Transplant
 Radiotherapy

The order of these strategies may vary and some may occur concurrently

Where SIOP / CCLG clinical trials are available treat according to protocol, if eligible and consent to trial given. If no trial available or no consent given to trial, treat according to standard national guidelines (usually available from CCLG interest groups or recommendations based on results of recently closed trials or published data). Trials & national guidelines will be approved by the MDT and the PBCN Children's Cancer Network Coordinating Group.

Chemotherapy Care & Supportive Care

Central line / portacath insertion under anaesthetic. Surgical day care admission at BCH or while still an in-patient on neuro-surgical ward. Timing dependant on disease, protocol requirements and individual patient access

Chemotherapy as per agreed protocol / national guideline or MDT approved individualised treatment plan

Bolus chemo in POSCU Level 2 or 3 (Stoke, Shrewsbury, Wolverhampton, Coventry, Worcester,) or at PTC BCH

Day Case Infusion chemo in POSCU Level 2 (Wolverhampton) or 3 (Stoke, Shrewsbury, Coventry,) or BCH

In-Patient Chemotherapy POSC Level 3 (Stoke, Shrewsbury, Coventry) or BCH

There may be some treatment episodes that require care at BCH on an individualised basis

Shared care for supportive therapy is a more limited option for patients with brain tumours. See –BCH “Haematology / Oncology Specialty Escalation Guidelines” for assisting clinical decisions in relation to emergency / urgent admissions & transfers” which states; *“Brain tumour diagnosis in the early phase. The responsible BCH Consultant may decide later in the treatment pathway that individual patients can be treated in a designated shared care unit for specified supportive care.”*

Febrile Neutropenia Admissions

Admit BCH or POSCU *as per statement above* L1, 2 or 3 (Stoke, Shrewsbury, Wolverhampton, Burton, Coventry, Worcester, Hereford) - dependent on diagnosis, post code, patient choice, severity / complications. May include transfer back to BCH from POSCU if patient develops complications & on rarer occasions requires PICU retrieval team.

Day case blood product support – Packed red cells and /or platelets at BCH, or POSCU Levels 1, 2 or 3 (Stoke, Shrewsbury, Wolverhampton, Burton, Coventry, Worcester, Hereford)

Patients on concurrent chemotherapy and radiotherapy must have febrile neutropenia admissions at BCH

Complications

Admit / transfer **BCH** Haem Onc or Neurosurgical Ward only
 PICU when necessary
 Urgent end-of-life care on treatment for minority

Relapse / refractory disease

Move to new pathway
 May include palliative care pathway

Paediatric Neurosurgery

Surgery

BCH Only – referral to specialist neurosurgical team - specialist paediatric neurosurgeon

Care on neurosurgical ward only at BCH

Radiotherapy

Decision for radiotherapy – as per protocol or guideline

Joint discussion with family by;

Paediatric oncologist

Clinical Oncologist at UHB with expertise in paediatric clinical oncology

UHB Macmillan paediatric radiographer (POONS back up if needed)

Things to consider;

Need for G.A.

Mould, scan & planning

Need for accommodation in Birmingham

Need for play specialist input

Arrangements for paediatric oncology review for concurrent chemotherapy put in place by paediatric neuro-oncologist

Patients on concurrent radiotherapy and chemotherapy must have febrile neutropenia admissions at BCH

Rehabilitation

Rehabilitation phase will be post surgical but may be concurrent with chemotherapy and / or radiotherapy and other supportive care.

Rehabilitation by MDT / AHPs

Principal Treatment Centre BCH Professionals involved may include:

Neuro-Psychology

Speech and language therapy

Physiotherapy

Occupational therapy

Dietetics

Paediatric Oncology Nurse Specialists

Paediatric Oncologists

Specialist advice is available from paediatric neurology and rehabilitation

Community Professionals involved may include:

Speech and language therapy

Physiotherapy

Occupational therapy

Dietetics

Children's Community Nurses

School Nurses

Community / General Paediatrician

Local Authority Education Professionals;

School Special Educational Needs Coordinator

Educational Psychologists

Appliances, Equipment & Adaptations

Requirement for these will be assessed by therapists

Provision of equipment – usually through Primary Care Trust

Adaptations – usually through local authority

End of Treatment Assessments at BCH

- Removal of central venous access device if fitted – surgical admission
- Follow-up plan shared with parents / carers, patient, POSCU & GP to include re-immunization programme and arrangements for surveillance imaging.

Key Worker

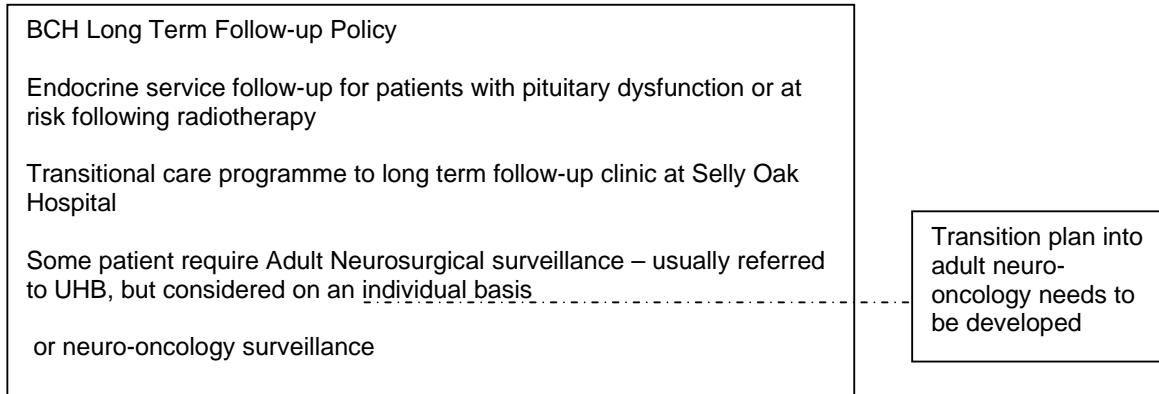
K.W. identified in neuro-oncology MDT by core nurse member. This may pre-date a final diagnosis.

K.W. allocated from neuro-onc POONS team: except for anticipated long stay complex patients during in-patient phase – where the Consultant Oncologist will be the K.W.

Rehabilitation & community phase – POONS K.W. continues or POSCU Nurse Specialists, after discussion with family

Survivorship / long term follow-up pathway

Survivorship for this group of patients may involve many years of support as per the rehabilitation details



Key	
BCH	Birmingham Children's Hospital
CCLG	Childhood Cancer & Leukaemia Group
LFTU	Long Term Follow-up
MDT	Multi-disciplinary team
PICU	Paediatric Intensive Care Unit
POONS	Paediatric Oncology Outreach Nurse Specialist
POSCU	Paediatric Oncology Shared Care Unit
SIOP	Société Internationale D'Oncologie Pédiatrique
TYA	Teenage & Young Adult
UHB	University Hospital's Birmingham