

**United Bristol Healthcare NHS Trust  
Division of Women & Children's Services**

**Independent Review of the Congenital Paediatric Cardiac Services Recommendations – Action Plan**

<b>Recommendations</b>	<b>Progress to Date</b>	<b>Actions</b>	<b>Leads (Overall lead in bold, others are key contributors)</b>	<b>Timescale</b>	<b>Completion Date</b>
<b>1. Bristol/Cardiff relationship:</b>  Re-assessment of present integration and unified working between the centres.	Telemedicine trials are set up to facilitate MDT discussions	To set up 6 monthly joint service away days.	<b>Dr Andrew Tometzki</b>	3 months	June 2008
	Joint appraisal meeting for fetal cardiology pathway	Encourage Cardiff representation at monthly Cardiac Business meetings.		This month	March 2008
	Attendance at annual audit of cardiac surgery/cardiology with HCW	Establish robust telemedicine links with Cardiff – trials using N3 scheduled		6 months	September 2008
		Commence discussion regarding renaming the service to recognise South Wales Partnership		6 months	September 2008
<b>2. Consultant Staffing:</b>  The appointment of an additional Consultant in Paediatric Cardiology. It should be addressed by management with urgency.	To address workload concerns a reduction in current Consultant PAs has been agreed to fund a 7 <sup>th</sup> post	To be presented to TEG for agreement and sign off March 2008	<b>Dr Jackie Cornish</b> Geraldine Johnston Dr Andrew Tometzki	This month	March 2008
	Job description and job plan completed.	Post to be advertised nationally and internationally		<b>Dr Andrew Tometzki</b> Geraldine Johnston	3 months

	<p>College approval confirmed</p> <p>Presented to DMB for agreement and sign off February 2008</p> <p>Working with advertising agency to develop advert</p>				
<p><b>3. Consultant Staffing:</b></p> <p>The needs of the GUCH service require separate consideration.</p>	<p>Due to pressures of GUCH work Dr Stuart removed from paediatric on call rota May 2007</p> <p>Locum GUCH Consultant appointed to meet 18 weeks RTT</p>	<p>Clear definition within the job plan in relation to paediatric and GUCH commitments within W&amp;C and Specialised Services Divisions</p> <p>Business case being developed for additional consultant in GUCH</p>	<p><b>Dr Jackie Cornish</b> Dr Peter Wilde</p> <p><b>Ian Barrington</b> Dr Mark Turner</p>	<p>3 months</p> <p>3 months</p>	<p>June 2008</p> <p>June 2008</p>
<p><b>4. Transitional Care/High Dependency Care, Ward 32 (BCH)</b></p> <p>Additional work is required to determine whether high dependency non-ventilated patients can be accepted from the PICU without compromising the admission of patients for cardiac catheterisation or preoperatively.</p>	<p>Patients on single inotropic support who would usually incur long stays on PICU are now treated on Ward 32, guidelines in place.</p>	<p>Review model of care</p> <p>Establish guidelines/SOPs</p> <p>Establish strong nursing leadership for Cardiology/Cardiac Surgery</p> <p>Review nursing establishment and skill mix</p> <p>Assess full utilisation of pre-admission clinic and use of pre</p>	<p><b>Dr Andrew Tometzki</b> Dr Peter Davis Mr Massimo Caputo Mr Andrew Parry William Booth Judith Armstrong</p>	<p>6 months</p>	<p>September 2008</p>

		<p>procedure hotel facilities to improve patient flow</p> <p>Assimilate with redevelopment plans for centralisation of Specialist Paediatric Services</p>			
<p><b>5. Cardiac Catheterisation (BCH):</b></p> <p>The provision of additional radiography staff and catheter sessions is required if the increasing clinical work load is not to result in excessive waiting times.</p>	<p>Review of catheterisation sessions has resulted in improved waiting times.</p> <p>Lead Doctor appointed to Division with remit to support delivery of 18 week referral to treatment time target (August 2007)</p>	<p>Quantify demand to determine capacity and workforce required</p> <p>Ensure recruitment to vacant Paediatric Cardiac Radiology post</p> <p>Assess out of hours radiology cover in view of 24/7 Acute Angioplasty Service</p>	<p><b>Dr Rob Martin</b> Dr Mark Callaway Peter Richardson Lee Furniss</p>	3 months	June 2008
<p><b>6. Pulmonary Hypertension:</b></p> <p>Higher recognition for the Bristol service may be accorded if Dr Tulloh developed the service jointly with adult cardiology or developed his working partnership with Hammersmith Hospital.</p>	<p>It is clear that we have the clinicians with the skills to take on a PHT service both in the adult and paediatric arena.</p> <p>Dr Tulloh invited to National Clinical &amp; Commissioning meeting on adult Pulmonary Hypertension (February 2008)</p>	<p>Divisions to understand financial implications and operational development of this service</p> <p>Dialogue with commissioners required for Adult PHT service</p> <p>Consider similar discussion for paediatric PHT</p>	<p><b>Dr Rob Tulloh</b> Dr Mark Turner Ian Barrington Geraldine Johnston</p>	6 months	September 2008
<p><b>7. Research Programme:</b></p> <p>Dr Tulloh or another identified individual should be</p>	<p>Bristol hosted the national British Congenital Cardiac Association</p>	<p>Explore opportunities for Research Co-ordinator role and Statistician</p>	<p><b>Mr Andrew Parry</b> Rob Tulloh</p>	6 months	September 2008

encouraged to develop a lead role in improving the academic profile of paediatric cardiology and consolidate the role of Research Co-ordinator particularly for junior staff.	meeting November 2006 to much acclaim.  There are a number of strong clinical researchers. Since November 2007 weekly congenital cardiology research meetings have been set up to focus this work.	from research income	Rob Martin Prof Andrew Wolf Mr Massimo Caputo		
<b>8. Echocardiography (BCH):</b>  Space constraints should be reviewed with the specialist paediatric transfer	Occupational health/ manual handling review conducted early 2007 which identified factors contributing to repetitive strain injury. Guidelines set for echocardiographic technicians	Review scheduling of echocardiography  Ensure echocardiography requirements are considered with development plans for centralisation of specialist paediatrics transfer.	<b>Sue Simpson</b> Dr Alison Hayes Lee Furniss	6 months  12 months	September 2008  March 2009
<b>9. Digital archiving:</b>  The purchase of a system such as Enconcert/Xcelara should be given a high priority.	Representation to the BHI development group has been made to highlight the need to have a seamless digital archiving of echocardiography images	Assess the additional costs to archive BCH echo data  Assess hardware requirements	<b>Dr Andrew Tomestzki</b> Sue Simpson Dr Alison Hayes	6 months	September 2008
<b>10. Echocardiography:</b>  Identification of protected Consultant time for transoesophageal echo time in Theatre required.  A transoesophageal probe	Proactive discussion of TOE requirement now takes place at cardiac conference therefore on-call Cardiologist is made aware of theatre needs	Ensure flexibility with job plans of Consultant Cardiologists to meet this recommendation  Paediatric TOE probe in Medical Equipment Capital Bids - March	<b>Dr Andrew Tometzki</b> Dr Alison Hayes	1 month	April 2008

<p>should be available in Theatre at all times. The purchase/provision of a small portable echo machine (with probe) such as the Vivid 1 would provide the best solution.</p>	<p>A dedicated theatre echo machine has been funded and ordered (Feb 2008)</p> <p>Adult TOE probe (for children &gt; 35kg) available for this platform</p> <p>3D &amp; left ventricular analysis package purchased February 2008</p>	2008			
<p><b>11. Cardiac Physiologists:</b></p> <p>Review of evidence and need for additional Physiology Technicians.</p>		Service needs to be assessed, quantify demand and capacity	<p><b>Sue Simpson</b> Dr Alison Hayes Lee Furniss</p>	3 months	June 2008
<p><b>12. Cardiac Physiologists:</b></p> <p>Greater focus and awareness of need for continuing professional development.</p>	<p>Well established training links for student clinical physiologists in place</p> <p>Divisional training budget is available for staff to make applications for funding</p>	<p>Training requirements and CPD of current staff to be agreed at annual IDPR</p> <p>Annual training plan to be devised</p>	<p><b>Sue Simpson</b> Lee Furniss</p>	3 months	June 2008
<p><b>13. MRI:</b></p> <p>If the future needs of paediatric and adult congenital cardiac patients are to be met, more MRI sessions will be required. If these cannot be met within the Bristol Children's Hospital consideration should be given to the provision of sessions at the Bristol Heart Institute.</p>	<p>Business case has been developed for provision of MR &amp; CT in BHI</p> <p>Initial discussions with Dr Tsai-Goodman re CPD aims.</p> <p>Preliminary meetings between Dr Tsai Goodman &amp; Dr Hamilton have taken place.</p>	<p>Define working partnership of paediatric cardiology &amp; adult cardiac radiology</p> <p>Define sessions available for congenital cardiac MRI and attendant SOPs</p>	<p><b>Dr Andrew Tomestzki</b> Dr Mark Hamilton Dr Beverly Tsai-Goodman</p>	6 months	September 2008

<p><b>14. MRI:</b></p> <p>Review of Dr Tsai-Goodman's sessions.</p>	<p>First phase Job planning completed</p>	<p>Complete job plan review</p>	<p><b>Dr Andrew Tometzki</b> Dr Beverly Tsai-Goodman Dr Mark Callaway</p>	<p>3 months</p>	<p>June 2008</p>
<p><b>15. Fetal Cardiology:</b></p> <p>This is an impressive service but to optimise its achievements an appointment of additional radiographer technician for straight forward cases, a dedicated rather than shared echo machine for urgent referrals and additional consultant time for counselling and training is required.</p>	<p>Service now attracting dedicated funding since April 2007</p> <p>Remote fetal diagnosis in place for Truro through charity funds. Programme has expanded to include Exeter and is attracting an appropriate/negotiated tariff</p>	<p>Assess demand to quantify additional workforce requirements</p> <p>Assess need for cardiac liaison support also required to support families</p> <p>Explore options to fund echo machine</p> <p>Further development of telemedicine service</p>	<p><b>Dr Andrew Tometzki</b> Mr Tim Overton Mr Pip Mills Julie Vass Lee Furniss</p>	<p>6 months</p>	<p>September 2008</p>
<p><b>16. Teenage Transition:</b></p> <p>Planning for the transition of patients between Bristol Children's and the new Bristol Heart Institute should accord a high priority to the needs of this group of patients including in-patient provision for adolescents and protected cardiac catheter sessions.</p>	<p>This has already been discussed with Specialised Services and met with unified agreement that this should happen</p>	<p>Scope demand for service</p> <p>Increase profile and knowledge base of congenital heart disease within the BHI</p>	<p><b>Dr Andrew Tometzki</b> Mark Turner Lee Furniss Fiona Jones</p>	<p>6 months</p>	<p>September 2008</p>
<p><b>17. Complex GUCH</b></p>					

<p><b>Surgery:</b></p> <p>For some complex congenital cardiac surgical lesions consideration should be given to operating on adult cases in Bristol Children's Hospital where greater clinical experience in management is available.</p> <p>This should be until such time as the GUCH service is fully facilitated, staffed and funded, and is large enough surgically to warrant in depth specialisation of the whole team in the Bristol Hearth Institute.</p>	<p>This recommendation has not found universal approval amongst the clinical team. There are a number of national framework documents that would not support adults being treated in a paediatric intensive care unit</p> <p>Consensus is that the clinical expertise needs to go to the patient.</p>	<p>Consider anaesthetic and intensive care skills required for complex adult congenial cardiac surgery</p> <p>Review SOPs for complex patients including daily assessment by trained clinical team members across both Divisions</p>	<p><b>Dr Mark Turner</b> Dr Rob Martin Ian Barrington</p>	<p>6 months</p>	<p>September 2008</p>
<p><b>18. Perfusion:</b></p> <p>That there be an increase in the numbers of perfusionists available for routine cases and that there is a separate on-call service for paediatric cardiac perfusion.</p>	<p>The report states 8.77wte funded perfusionists. This is incorrect, the funded establishment at the time of the review was and remains 10.8wte</p> <p>A recently appointed perfusionist will be able to provide on call from April 2008</p>	<p>Advertise for a student post to train over two years</p> <p>Cover services in interim with locum agency</p> <p>Review the feasibility of a separate on call service for paediatric cardiac perfusion</p>	<p><b>Richard Downes</b> Ian Barrington Geraldine Johnston</p>	<p>3 months</p> <p>6 months</p>	<p>June 2008</p> <p>September 2008</p>
<p><b>19. ECMO Service:</b></p> <p>Review of the provision of ECMO.</p>	<p>Perfusion protocols and procedures reviewed January 2008 and going to</p>	<p>Sign off perfusion protocols at CRAC</p>	<p><b>Richard Downes</b> Eamonn Nicholson</p>	<p>1 month</p>	<p>April 2008</p>

	<p>CRAC for sign off</p> <p>PICU ECMO information pack developed July 2007</p> <p>Documented on Divisional Risk Register</p> <p>Orpheus Perfusion Simulator purchased</p> <p>New ECMO equipment purchased for PICU (November 2006)</p>	<p>Review PICU ECMO information pack and roles and responsibilities of staff involved in ECMO</p>	<p>Ian Barrington Geraldine Johnston</p>	<p>3 months</p>	<p>June 2008</p>
<p><b>20. Perfusion:</b></p> <p>Development of clear policies which define roles and responsibilities of all staff within the cardiac theatre.</p>		<p>Define roles and responsibilities of the cardiac theatre team</p>	<p><b>Mr Andrew Parry</b> Prof Andy Wolf Richard Downes Hazel Moon</p>	<p>3 months</p>	<p>June 2008</p>
<p><b>21. Cardiac Surgery:</b></p> <p>Cardiac Surgery - clinical and managerial review of efficiency of current work practices.</p>	<p>The review alludes to cardiac theatre and theatres in general. A project looking at late starts is underway (H Moon)</p>	<p>'Lean' project to be established to look at the utilisation of BCH theatre and identity areas to improve efficiency</p>	<p><b>Hazel Moon</b> Dr Peter Stoddart Dr Philip Segar Prof Andrew Wolf Mr Andrew Parry</p>	<p>6 months</p>	<p>September 2008</p>
<p><b>22. Cardiac Surgery:</b></p> <p>Review of Consultant staffing.</p>	<p>Job description and job plan completed for replacement post</p> <p>Awaiting College approval</p>	<p>To be presented to TOG for agreement and sign off in March 2008</p> <p>Advertise nationally and</p>	<p><b>Mr Andrew Parry</b> Dr Andrew Tometzki Geraldine Johnston</p>	<p>This month</p> <p>3 months</p>	<p>March 2008</p> <p>June 2008</p>



	Presented to DMB for agreement and sign off February 2008  Working with advertising agency to develop advert	internationally			
<b>23. Cardiac Surgery:</b>					
Strategic review of the provision of congenital cardiac services over the next 5-10 years from a local, regional and national view. This should take account of the possibility of closure of units within the UK which may or may not include Bristol.	Wide ranging discussions have taken place over recent years with no consensus. This is now the subject of further debate by the British Congenital Cardiac Association	Engage in regional and national discussion  Include within Divisional Clinical Strategy	<b>Dr Jackie Cornish</b> Dr Andrew Tometzki Geraldine Johnston	12 months	March 2009
<b>24. Cardiac Anaesthesia:</b>					
Develop protocols for fast tracking and consider establishing a "Transitional" nursing team to facilitate the care of more high dependency patients in Ward 32 or elsewhere if an area can be identified.	Repeat of recommendation 4 See above  We have an Outreach Team to support high dependency patients on wards	See recommendation 4			
<b>25. Cardiac Surgery/Cardiology:</b>					
There is a need for clearer policies to ensure morbidity issues are discussed in a more timely fashion	This has been completed  Weekly discussion of all cardiac surgical cases	Completed	<b>Mr Andrew Parry</b> Dr James Fraser		Completed November 2007

	Clinical Governance framework in place for urgent child death/morbidity reviews				
<b>26. ECMO Policy:</b> Establish a policy for the management of ECMO.	Repeat of recommendation 19 See above	See recommendation 19			
<b>27. Work Practice:</b> Clinicians and management need urgently to review current work practices.		Define roles, responsibilities and expectations of team (link with recommendation 21)  Support leadership development for clinicians  Review patient pathways using 'lean' methodology	<b>Dr Jackie Cornish</b> Dr Andrew Tometzki Geraldine Johnston	6 months  6 months  6-12 months	September 2008  September 2008  March 2009

Responsibility for monitoring the implementation of the action plan – Dr J Cornish, Dr A Tometzki, G Johnston

AT/GJ 28 February 2008