



In Report Title	South Wales Cochlear Implant and BAHA Hearing Implant Device Service		Agenda Item	3.3	
Meeting Title	Management Group		Meeting Date	28/07/2022	
FOI Status	Open				
Author (Job title)	Specialised Planner for Neurosciences and LTC Assistant Director of Planning				
Executive Lead (Job title)	Director of Planning				
Purpose of the Report	The purpose of this report is to present the process and outcome of a recent review of tertiary auditory services in south Wales, present the preferred commissioning model arising from the process and the planned next steps for the engagement and consultation on the preferred model for the South Wales Cochlear Implant and BAHA Hearing Implant Device Service.				
Specific Action Required	RATIFY <input type="checkbox"/>	APPROVE <input type="checkbox"/>	SUPPORT <input checked="" type="checkbox"/>	ASSURE <input type="checkbox"/>	INFORM <input checked="" type="checkbox"/>
Recommendation(s):					
Members are asked to:					
<ul style="list-style-type: none"> • Note the report, • Note and receive assurance on the assessment process inclusive of a) clinical options appraisal, b) external review against standards and c) financial options appraisal, • Note the outcome of the clinical options appraisal for the south Wales centres, the external assessment of the options and the financial appraisal, • Support the preferred commissioning option as the basis of engagement/consultation; and • Note that based on the Management Group's recommendation the required engagement/consultation documentation will be submitted to the September meeting of the Joint Committee. 					

SOUTH WALES COCHLEAR IMPLANT AND BAHA HEARING IMPLANT DEVICE SERVICE

1.0 SITUATION

The purpose of this report is to present the process and outcome of a recent review of tertiary auditory services in south Wales, present the preferred commissioning model arising from the process and the planned next steps for the engagement and consultation on the preferred model for the South Wales Cochlear Implant and BAHA Hearing Implant Device Service.

2.0 BACKGROUND

Cochlear services are commissioned from two centres in South Wales, the University Hospital of Wales (UHW) in Cardiff and the Princess of Wales (POW) Hospital in Bridgend. The services are provided to the populations of the following Health Board (HB) areas:

- Cwm Taf Morgannwg
- Cardiff & Vale
- Aneurin Bevan
- South Powys
- Swansea Bay
- Hywel Dda

During 2019, an urgent temporary service change was made as a result of the service provided from Bridgend becoming unsustainable, with all patients being moved to Cardiff. The staff associated with the service were also temporarily moved in order to support the service. At that time, there were plans to implement a formal service change, however the emergence of the pandemic resulted in a delay to the conclusion of the preparatory work and subsequent progress into formal engagement and consultation. Staff who moved with the service, enabled by honorary contracts, remain in a temporary situation and there is a desire to formalise their arrangements.

BAHA services for the south Wales population are currently provided from three HB's: Swansea Bay, Cardiff and Vale and Aneurin Bevan. Across all three centres there are 16 to 20 BAHAs provided each year. This means that each centre delivers around 6 BAHAs per year.

Work commenced in September 2021 to develop the preferred commissioning model for the delivery of robust, high quality tertiary audiometry services that meet the required standards.

A summary of the process and outcomes, as well as a recommendation on a preferred future commissioning option for all specialist hearing services are outlined in the assessment section of this report, with the detailed write ups available at **Appendices 1, 2 & 3.**

Patients from North Wales and North Powys are not affected by the proposal.

3.0 ASSESSMENT

3.1 Clinical Options Appraisal

A Clinical options appraisal workshop took place on the 9 September 2021, with invitations extended to clinical and planning colleagues from HB's affected by any proposed change. Five options were considered and participants had the opportunity to consider and influence both criteria and weightings, before being asked to score each option against the weighted criteria.

The options were:

	OPTION	DESCRIPTION
A	Do nothing	2 Cochlear hubs for adults and children 3 BAHA hubs for adult and children
B	Central Cochlear Distributed BAHA	A Single hub (with outreach) for Cochlear 3 x BAHA hubs for both adults and children
C	Central Cochlear, Central Paeds BAHA, distributed Adult BAHA	1 x Cochlear hub with Cochlear outreach 1 x BAHA hub (paediatrics) 1 x BAHA hub (adult)
D	Single implantable device hub	1 x single centre for Cochlear and BAHA for both children and adults with an outreach support model
E	1 cochlear hub (Children and adults) 1 BAHA hub (Children and adults)	1 x single centre for BAHA (children and adults) 1 x single centre for Cochlear (Children and adults)

All participants were asked to consider the options against the following standards, which were shared and discussed at the session:

- Cochlear Implant Services for Children and Adults- Quality Standards 2018,
- NHSE Clinical Commissioning Policy: Bone conducting hearing implants for hearing loss (all ages)(2016); and
- NHSE Clinical Commissioning Policy: Bone anchored hearing aids (2013).

Following the application of the weighted criteria by each person present, the preferred option from the clinical options appraisal was **Option B**. A detailed write up of the process is presented at **Appendix 1.**

The outcome of the workshop was reported to the WHSSC Corporate Directors Group Board (CDGB) who requested assurance that the preferred option from the clinical option appraisal met all of the standards and did not increase the cost of the current model.

To gain this assurance the CDGB asked for an external assessment of all of the options against the standards and the Bristol Specialist Hearing Centre (BSHC) was commissioned to undertake this assessment

A letter was sent to all of those invited to the Clinical Option Appraisal Workshop copied to Directors of Planning on 17 November 2021 thanking them for their attendance and advising them of the next steps to include an external appraisal of the options and a financial appraisal. This letter is attached at **Appendix 2**.

3.2 External Assessment

In order to consider the options against the relevant service standards, an external assessment was undertaken by members of the BSHC. The same options and criteria as those used in the clinical options appraisal were used.

Through an external assessment of the options against the standards, the only option considered to meet all of the standards was option D. The detailed assessment is presented at **Appendix 3**.

3.3 Financial Assessment

The budget for the BAHA and Cochlear service is almost £5m, with the majority of investment going to Cardiff and Vale University Health Board (CVUHB). A financial assessment of each of the options was undertaken using contract values, costing returns and service proformas. It was identified that none of the options would cost more than the current contract value. As a result of the assessment which is outlined in **Appendix 4**, option D was deemed the most cost effective option. This option would potentially enable the release of resource back into the service for further developments including an out of hours service.

3.4 Arriving at a preferred option

The table below summarises the 5 options against the 3 processes.

Option	Title	Clinical Option Appraisal	External Assessment – application of standards	Financial Appraisal
Option A	Do nothing			
Option B	Central Cochlear /distributed BAHA	√		
Option C	Central Cochlear, Central Paediatrics BAHA Distributed adult BAHA			
Option D	Single implantable device hub for both paediatrics and adults with an outreach support model		√	√
Option E	1 Cochlear hub (Paediatric & adults) 1 BAHA hub (Paediatrics and adults)			

The Welsh Health Specialised Services as commissioner of the service, has responsibility to ensure the provision of high quality specialist services for the Welsh population and will commission these in line with agreed service standards.

Throughout discussion, it has been made clear that the future service must:

- Accept referrals based on agreed criteria e.g. The National Institute for Health and Care Excellence (NICE)/Commissioning Policy,
- Be able to provide full Audio logical care for patients across the pathway including assessment, surgery, and device programming,
- Be able to offer access to all types of commissioned hearing implants,
- Have a functioning Multi-Disciplinary Team (MDT) where all referrals are discussed and planned for,
- Facilitate timely access to surgery,
- Facilitate rapid access to a Clinical Scientist/Physiologist when device failure is suspected,
- Provide equitable and lifelong access,
- Have clear governance processes,
- Facilitate effective liaison with relevant local services; and
- Publish data on audit and outcomes.

Having paid due regard to all three assessments, and the service standards, the only option that meets these requirements is option D.

Therefore in specifying the service WHSSC would wish to commission onward is:

A single centre for both children and adults, for the provision and maintenance of both cochlear and BAHA, ensuring that the delivery model provides a safe and sustainable hearing implant device service, which meets national standards

for the south Wales region.

The preferred option will therefore require a central hub with an outreach service. This supports the establishment of a central MDT where all referrals are discussed and planned for and where patients will be able to be offered access to all types of commissioned implants.

The option will facilitate timely and equitable access to surgery and provide life management and care for these patients offering care closer to home with the establishment of outreach clinics across the region.

3.5 Sharing the thinking with the Clinical Teams

A third workshop was held in June 2022 to share the outcome of all three processes with the members of the clinical options appraisal workshop, as well as to advise on next steps. There were differing levels of support from the clinical community regarding the preferred option, with particular concern about a centralised BAHA service. There was less concern about the centralised BAHA service. The WHSSC team articulated the reasons for option D being the preferred model that WHSSC wanted to engage and consult upon. In particular;

- Option D will ensure that patients are seen by an MDT at a hearing implantable device 'hub' that has the expertise to consider all the available treatment options in coming to an agreement with the patient on the most appropriate option for them as an individual,
- A single hearing implantable device hub will also ensure that patients are treated by clinicians and health professionals who have an adequate throughput of patients to maintain their skills, and adopt new technologies when they become available,
- Option B still maintains the very low numbers of BAHAs being done in each centre; and
- A networked model will ensure that current skills and expertise are not lost, but are built upon, and will facilitate effective liaison with relevant local services (local audiology, Speech and Language Therapist (SLT) and Teacher of the Deaf (TOD)).

It was agreed that a clinical engagement group will continue to meet throughout the engagement process to resolve any issues of concern.

3.6 Discussion with Management Group and Joint Committee

A verbal update on the process and preferred commissioning model was given to Management Group at the June meeting by way of a presentation. It was not possible to bring a full paper to Management Group at this meeting given the close proximity to workshop 3 and the Management Group meeting dates. Management Group was informed that the preferred commission option and next steps on the engagement and consultation process would be presented to Joint Committee at their July meeting.

Joint Committee received a full description of the process and the outcome at their meeting on 12th July 2022. Prior to the Joint Committee meeting Swansea Bay UHB had expressed concerns about the process. Following discussion at Joint Committee it was agreed that the Joint Committee papers would be revised to provide clarity on the process and Management Group would be asked to consider and present a view with a recommendation on the preferred option for consultation and engagement for approval at Joint Committee at their September meeting. The recommended commissioning model will be incorporated into a consultation and engagement document which will be for approval at the September Joint Committee and engagement will commence after that meeting.

3.7 Chronological Timeline for the Cochlear Implant and BAHA Hearing Implant Device Service

To aid Management Group’s understanding of the process undertaken thus far the full chronology is provided below:

Name	Date	Outcome
Clinical Option Appraisal – Workshop 1	9 September 2021	Exploration of existing UK models and agreement of five options to consider at workshop 2.
Discussion at CDGB	28 September 2021	Discuss the issue raised by the clinical teams in relation to the fact that BAHA is not a technically challenging ‘intervention’, which therefore raised the question as to whether it should be WHSSC commissioned. The conclusion was that our aim in focusing on what is best for patients, and in line with the standards was a single implantable device hub that had the expertise to consider all the available options in coming to an agreement with the patient on the most appropriate option for them as an individual, and therefore BAHA should remain in scope as part of a ‘whole system’ approach. This was fed back to the clinical teams in workshop 2.
Follow up Clinical Option Appraisal - Workshop 2	30 September 2021	Stakeholders were requested to assess each delivery model against a collectively agreed set of weighted criteria using the service standards.

Name	Date	Outcome
		The outcome of the two workshops culminated in a decision that Option B scored the highest and was the preferred option.
Corporate Directors Group	8 November 2021	Received feedback from the Clinical Option Appraisal and wanted assurance that Option B met all of the standards. Agreed to commission an external assessment of all of the options to confirm which met the standards.
WHSSC letter Director of Planning to all Health Board Stakeholders and Directors of Planning	17 November 2021	Provided feedback from workshop 1 & 2. It described the next steps to undertake an external independent assessment and the application of a financial option appraisal.
Independent External Review	6 December 2021	The external assessment against the standards leads to option D being the preferred option.
Financial Appraisal	February – May 2022	All of the options could be delivered within the current allocation but the most cost efficient was Option D.
Workshop 3	16 June 2022	The workshop was held with the clinical group to share the outcome of all three aspects of the process and provide details of the timescale for delivering the engagement and consultation process. Workshop informed that the preferred commissioning model was option D as the only model that met the national standards and would therefore deliver a safe and sustainable service.
Management Group	23 June 2022	Presentation and Reported in the Managing Directors report indicating that all the necessary paperwork for sign off will be presented to Joint Committee on 12th July 2022.

Name	Date	Outcome
Corporate Directors Group Board	27 June 2022	Summarise the document for Joint Committee.
Joint Committee	12 July 2022	Management Group to review and approve the process pending sign off at JC in September 2022.

3.8 Next Steps

3.8.1 Preparation in readiness for consultation and engagement

Given that the current service remains in a status of 'temporary urgent change' an appropriate process needs to now take place to ensure the onward permanent service solution. This will be managed through the processes outlined within the '*guidance on changes to NHS services in Wales*' i.e. engagement and potential consultation.

As described above the necessary documentation and supporting timeline will be prepared in readiness for the September meeting of Joint Committee. HB Engagement leads and the Community Health Council (CHC) have been regularly updated on the Hearing Implant work programme and the completed documentation and associated process will be shared with them for review when in a state of readiness.

3.8.2 Continued discussions with clinical teams

In sharing the proposed preferred commissioning model, clinicians expressed interest in continuing to work closely with WHSSC and as such commitment has been given to establish a clinical reference group. This will be set up at the earliest convenience to ensure a continued dialogue and shared understanding.

4.0 RECOMMENDATIONS

Members are asked to:

- **Note** the report,
- **Note** and receive assurance on the assessment process inclusive of a) clinical options appraisal, b) external review against standards and c) financial options appraisal,
- **Note** the outcome of the clinical options appraisal for the south Wales centres, the external assessment of the options and the financial appraisal,
- **Support** the preferred commissioning option as the basis of engagement/consultation; and
- **Note** that based on the Management Group's recommendation the required engagement/consultation documentation will be submitted to the September meeting of the Joint Committee.

Governance and Assurance	
Link to Strategic Objectives	
Strategic Objective(s)	Development of the Plan Choose an item. Choose an item.
Link to Integrated Commissioning Plan	Yes
Health and Care Standards	Safe Care Effective Care Timely Care
Principles of Prudent Healthcare	Care for Those with the greatest health need first Reduce inappropriate variation Choose an item.
NHS Delivery Framework Quadruple Aim	People in Wales have improved health and well-being with better prevention and self-management Choose an item. Choose an item. Choose an item.
Organisational Implications	
Quality, Safety & Patient Experience	To ensure that the delivery model will provide a safe and sustainable hearing implant device service, which meets national standards for the south Wales region.
Finance/Resource Implications	The financial assessment describes the resource requirements and the possible efficiency savings. It also identifies a need to renegotiate a new contract.
Population Health	To ensure all users of the Hearing Implant Device centre have equal access to surgery and provide life management and care for patients offering care closer to home.
Legal Implications (including equality & diversity, socio economic duty etc)	There are no known legal, equality and diversity implications.
Long Term Implications (incl WCFG Act 2015)	Ensuring patients physical and mental well-being is maximised in which choices that will benefit future health
Report History (Meeting/Date/ Summary of Outcome)	27 June 2022 - Corporate Directors Group Board meeting – Supported for inclusion on MG agenda.

Appendices

Appendix 1 - South Wales Cochlear Implant and BAHA Hearing Implant Device Service Clinical Option Appraisal Outcome,

Appendix 2 – Letter sent to workshop participants and Directors of Planning,

Appendix 3 - South Wales Cochlear Implant and BAHA Hearing Implant Device Service – External assessment - Application of Standards; and

Appendix 4 - South Wales Cochlear Implant and BAHA Hearing Implant Device Service Financial Appraisal

APPENDIX 1

SOUTH WALES COCHLEAR IMPLANT AND BAHA HEARING IMPLANT DEVICE SERVICE CLINICAL OPTION APPRAISAL OUTCOME

SITUATION

The purpose of this report is to present the outcome of the clinical option appraisal for the South Wales Cochlear Implant and BAHA Hearing Implant Device service.

BACKGROUND

Cochlear services are commissioned from two centres in South Wales, University Hospital of Wales Cardiff and Princess of Wales hospital Bridgend. During 2019, an urgent temporary service change was made as a result of the service provided from Bridgend becoming unsustainable, with all patients being moved to Cardiff. The staff associated with the service were also temporarily moved in order to support the service. At this time, there were plans to implement a formal service change, however the emergence of the pandemic resulted in a delay to the conclusion of the preparatory work and subsequent progress into formal engagement and consultation.

Following the pandemic, work has been undertaken to:

- Develop an options appraisal on the most appropriate means of delivering high quality Cochlear and BAHA services.
- Invite external assessment of the options against the service standards
- Undertake a financial appraisal of the options

This paper outlines the process and outcome of the clinical option appraisal process.

ASSESSMENT

The Clinical option appraisal took place over 2 workshops.

Workshop 1 - Exploration of existing UK models and agreement of options to consider at future workshop

Workshop 1 was intended to recommence the work which had been stopped at the outset of the pandemic, as such, it sought to re-engage clinical teams in the conversation, share models that are in place across the UK, specifically Scotland and Bristol and begin to explore the potential future options of delivery as the basis for engagement and consultation on the service.

Specifically, the group were asked to consider *'how the Cochlear Implant and BAHA service could deliver a safe and sustainable hearing implant device service for the adult and paediatric population of south Wales that meets national standards'*.

- Cochlear Implant Services for Children and Adults- Quality Standards 2018
- NHSE Clinical Commissioning Policy: Bone conducting hearing implants for hearing loss (all ages)(2016)
- NHSE Clinical Commissioning Policy: Bone anchored hearing aids(2013)

A list of options from workshop 1 were put forward as the basis of a clinical options appraisal to be undertaken at workshop 2.

OPTION	DESCRIPTION
A Do Nothing	2 Cochlear hubs for adults and children, 3 BAHA hubs for adults and children
B Central Cochlear /distributed BAHA	Single Hub (with outreach) for Cochlear 3 BAHA hubs for both adults and children
C Central Cochlear Central Paeds BAHA Distributed adult BAHA	1 Cochlear hub with cochlear outreach 1 BAHA hub (Paediatrics) 3 BAHA hubs (adult)
D Single implantable device hub	1 single centre for Cochlear and BAHA for both children and adults with an outreach support model
E 1 Cochlear hub (Children & adults) 1 BAHA hub (Children and adults)	1 single centre for BAHA (children and adults) 1 single centre for Cochlear (children and adults)

Workshop 2: Clinical options appraisal

The purpose of the second workshop was to concentrate on undertaking a clinical options appraisal. The first half of the session, set about agreeing the process, the criteria and suggested weightings in order to gain consensus with the group

on the process prior to its application. The second half afforded small group discussion on each of the options and then individual scoring against each criteria.

The criteria and associated weighting agreed for the assessment was:

Criterion	Weightings
Quality and Patient Safety	15
Achievability (Staffing, sustainability, and training)	10
Accessibility	8
Clinical Effectiveness and Efficiency	10
Acceptability	7

The clinical considerations were captured via Microsoft Teams on the day, and initial feedback on the outcome of this stage of the assessment shared. The outcome from the clinical option appraisal was as follows:

Option	Title	Score
Option A	Do nothing	402
Option B	Central Cochlear /distributed BAHA	768
Option C	Central Cochlear, Central Paediatrics BAHA Distributed adult BAHA	521
Option D	Single implantable device hub for both children and adults with an outreach support model	564
Option E	1 Cochlear hub (Children & adults) 1 BAHA hub (Children and adults)	408

The clinical option appraisal resulted in option B receiving the highest score.

APPENDIX 2

Copy of letter sent to workshop participants and Directors of Planning (copy of the SBUHB letter sent for illustration)



Your ref/eich cyf:
Our ref/ein cyf:RMS/CH/KP/KW/07/ICP
Date/dyddiad: 17th November 2021
Tel/ffôn: 01443 443443 ext 78128
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Swansea Bay University Health Board
1 Talbot Gateway
Baglan Energy Park
Baglan
Port Talbot
SA12 7BR

Dear Colleague,

RE: Cochlear Implant and BAHA Hearing Implant Device Service

Thank you for attending the recent workshops regarding the South Wales Cochlear Implant and BAHA Hearing Device services. The aim of these workshops was to gain views from the clinical community on the best way of delivering a safe and sustainable hearing implant device service for the adult and paediatric population of South Wales, which meets national standards.

This letter offers some feedback from the two workshops and offers an overview of planned next steps:

Workshops

The first workshop was designed to provide an overview of the current position, consider opportunities for strengthening the patient pathway and consider

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potential options for the delivery of the service.

The second workshop focussed on undertaking a clinical options appraisal against a collectively agreed set of weighted criteria using the service standards, as the metrics for scoring the five identified options. Each participant had the opportunity to appraise and score each of the options outlined below:

	Option	Description
A	Do Nothing	2 Cochlear hubs for adults and children, 3 BAHA hubs for adults and children
B	Central Cochlear /distributed BAHA	Single Hub (with outreach) for Cochlear 3 BAHA hubs for both adults and children
C	Central Cochlear Central Paeds BAHA Distributed adult BAHA	1 Cochlear hub with cochlear outreach 1 BAHA hub (Paediatrics) 3 BAHA hubs (adult)
D	Single implantable device hub	1 single centre for Cochlear and BAHA for both children and adults with an outreach sup
E	1 Cochlear hub (Children & adults) 1 BAHA hub (Children and adults)	1 single centre for BAHA (children and adults) 1 single centre for Cochlear (children and

There was a clear preference from the clinical community on the future configuration of services.

Next Steps

Next steps include a) an independent assessment of all options against the clinical standards, and b) the application of a financial option appraisal. The output of all three processes will subsequently be presented to management group and joint committee, in order to seek a view on how they wish to proceed. It is anticipated that a period of engagement and consultation will follow this discussion.

We would like to thank all the Cochlear Implant and BAHA teams from each of the centres and Health Board Planning colleagues for their engagement and contribution to these two workshop, and look forward to working with you onward.

Yours sincerely



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Karen Preece
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Sian Harrop-Griffiths, Director of Strategy, Swansea Bay University Health Board

WHSSC

Claire Harding, Assistant Director of Planning, WHSSC

James Leaves, Assistant Director of Finance, WHSSC

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APPENDIX 3

SOUTH WALES COCHLEAR IMPLANT AND BAHA HEARING IMPLANT DEVICE SERVICE PROGRESS REPORT – EXTERNAL ASSESSMENT – APPLICATION OF STANDARDS

SITUATION

The purpose of this report is to present the outcome from the external assessment with the application of the clinical standards for the South Wales Cochlear Implant and BAHA Hearing Device service.

BACKGROUND

Cochlear services are commissioned from two centres in South Wales, University Hospital of Wales Cardiff and Princess of Wales hospital Bridgend. During 2019, an urgent temporary service change was made as a result of the service provided from Bridgend becoming unsustainable, with all patients being moved to Cardiff. The staff associated with the service were also temporarily moved in order to support the service. At this time, there were plans to implement a formal service change, however the emergence of the pandemic resulted in a delay to the conclusion of the preparatory work and subsequent progress into formal engagement and consultation.

Following the pandemic, work has been undertaken to:

- Develop an options appraisal on the most appropriate means of delivering high quality Cochlear and BAHA services.
- Invite external assessment of the options against the service standards
- Undertake a financial appraisal of the options

This paper outlines the process and outcome of the **external assessment against standards**.

ASSESSMENT

To ensure the options considered met all the clinical standards, an external assessment was undertaken by a specialist centre. The centre were asked to objectively evaluate the

same options as had been considered through the clinical option appraisal ensuring that the assessment was in line with relevant service standards as described in table 1:

The table below identifies the key standards that were considered both in the clinical option appraisal and the external assessment.

Table 1: Commissioning against standards

Accept referrals based on agreed criteria e.g. NICE/Commissioning Policy	Be able to provide full Audio logical care for patients across the pathway including assessment, surgery, and device programming
MDT where all referrals are discussed and planned for, and able to offer access to all types of commissioned hearing implants	Service has required recommended throughput required to maintain surgical (min 10 CI/surgeon/year) and clinical scientist/physiologist's skills.(centre undertakes min 15 BAHA/year)
Facilitate timely access to surgery	Facilitate rapid access to a Clinical Scientist/Physiologist when device failure is suspected(recommended that a centre should have a minimum of 3)
Provide equitable and lifelong access	Have clear governance processes
Facilitate effective liaison with relevant local services (local audiology, SLT and TOD)	Publish data on audit and outcomes

In undertaking this assessment, the external assessor arrived at the following ranking of the options:

Option	External hearing implant centre assessment
A	5
B	4
C	3
D	1
E	2

The external assessment against standards leads to option D being the preferred option.

SOUTH WALES COCHLEAR IMPLANT AND BAHA HEARING IMPLANT DEVICE SERVICE FINANCIAL APPRAISAL

SITUATION

The purpose of this report is present a financial appraisal for the South Wales Cochlear Implant and BAHA Hearing Implant Device service.

BACKGROUND

A benchmarking exercise was undertaken from three sources, the contracted value, costing returns and submitted responses from the service specification questionnaire. The different approaches produced slightly different costs for the service and these will be discussed in section 3.

This paper only addresses the current service costs but highlights the various costs of each option.

ASSESSMENT

The total budget allocated to Cochlear and BAHA service was nearly £5m, the majority of services being provided by Cardiff. (The BAHA service at Aneurin Bevan is not commissioned by Welsh Health Specialised Services) as shown in table 1.

Table 1: Table showing calculation of costs using each methodology

Provider	Service	21-22 Budget	Standard Costing	Capacity Costing (using WTE)
AB	BAHA		39,705	41,789
Cardiff	Cochlear	4,439,942	3,567,510	3,776,219
Cardiff	BAHA	486,761	461,167	596,576
SB	BAHA	63,240	45,511	63,713
	Total	4,989,943	4,113,892	4,478,297

The methods of re-costing the service give similar results but both return results below the budget. The standard costing approach uses the costing returns from each

provider to re-calculate the activity provided by the services to quantify the costs of the services. The capacity costs utilises the returns provided by each service to recalculate the pay costs based on the grade and WTE of staff employed.

The complexity of the maintenance service provision (for previous year implants) means that these have been calculated separately with a separate benchmarking exercise done.

Focusing in on the new inpatient activity for Cardiff high budget costs for new patients explain the variation between the budget and standard cost and also offer opportunities for releasing money when commissioning a preferred option. These savings could be estimated to be in the region of £250k to £500k. If these savings could be realised the funding could be used to commission the Middle Ear and the out of hours service.

The majority of activity is carried out by Cardiff, the low WTE in other centres, which would be expected reflects the lower levels of activity. In most centres, staff are not dedicated to the Cochlear and BAHA service but carry out other activity meaning any movement of services would release staff for other ENT services whilst movement of activity into a single centre would need additional funding required to cover the displaced ENT activity.

(An overhead cost of 15% has been added to parts of the standard cost methodology and the whole of the capacity cost to make the analysis comparable).

- **Theatres**

The questionnaire and the costing returns indicate that a single centre will require more than one dedicated session per week indicating that usage would be running at between 14 to 25% above a single theatre session per week.

- **Benchmarking unit costs**

Table 2 shows a comparison of unit costs obtained from the costing returns. The benchmarking indicates that a single centre, would provide a competitive service for admitted patient care.

When benchmarking the Cardiff service they incur the lowest costs for fixture of BAHAs, and Cochlear implants compared to the rest of Wales. Noting the fitting of BAHAs (figure 331) is skewed by the reference costs which is only reported as an outpatient and the cost of the implant vs. Betsi Cadwaladr is only marginally different).

There may be some further savings possible from the economies of scale and improved efficiency from greater throughput. The benchmarking of the unit costs therefore indicate the Cochlear costs at Cardiff compare favourably with the English reference costs and other Welsh providers.

Table 2: Table showing comparison of costs at each centre using reference cost data

Comparison of Admitted Patient Care (APC) Costs for each intervention					
	Fixture for Bone Anchored Hearing Aids	Fitting of Bone Anchored Hearing Aids	Unilateral Cochlear Implant	Bilateral Cochlear Implants	Cochlear Implant cost
ABUHB	✔ 2,977	! 2,329			
BCUHB	✘ 3,770	✘ 4,225	✔ 22,143		✔ 16,683
C&V	✔ 3,100	✘ 3,398	✔ 20,896	✔ 39,488	✘ 16,716
SBUHB	✘ 3,974	! 2,316			
Reference Costs	! 3,373	✔ 331	✘ 28,006	✘ 46,271	

Key:	✔	Low cost vs. peer group	!	Comparable cost to peer group	✘	Higher cost than peer group
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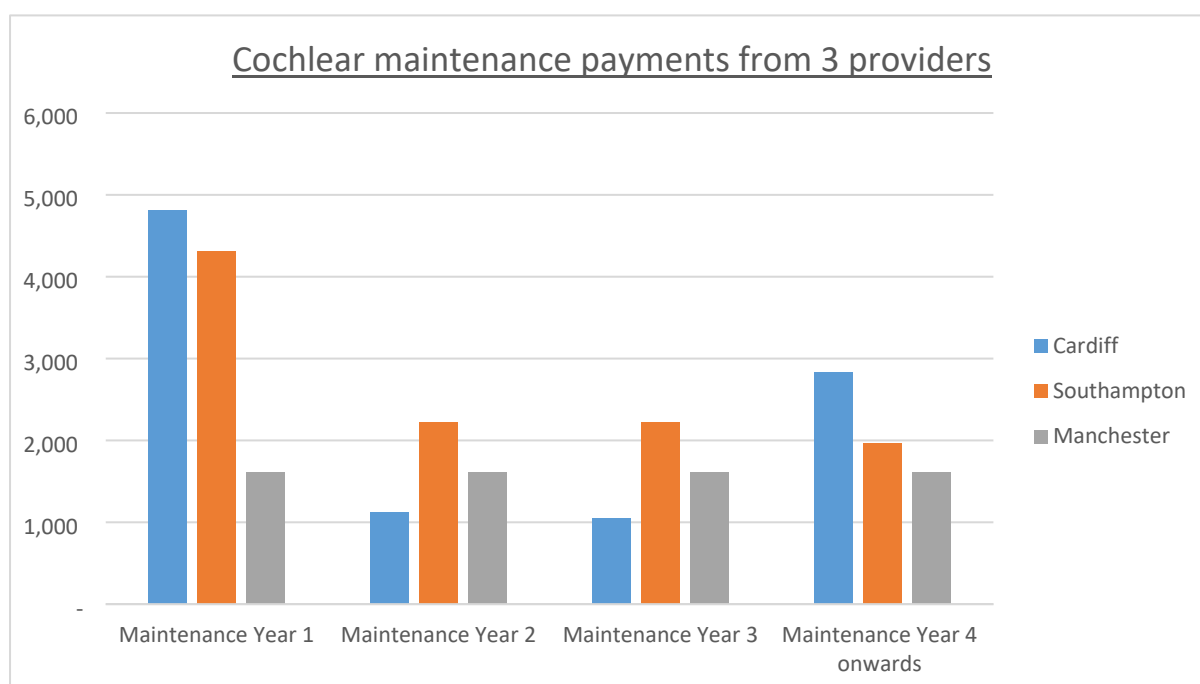
The unit cost for Cochlear Implant and BAHA in the Welsh Health Specialised Services contract are considerably higher than the Cardiff and Vale University Health Board costing returns and indicates that there are potential savings of £250k to £500k if the contract is re- negotiated.

- **Maintenance Costs**

Analysis of these costs has been carried out under a different exercise. Maintenance costs for Cochlear Implants represent over 40% of the budget for Cardiff and there is no benchmarking figures available from within Wales. Costs for maintenance have been obtained from North Wales’s contract with Central Manchester and by requesting costs from Southampton University. (Southampton commented that the current service may not be providing sufficient levels of activity to meet the needs of the population in south wales).

For year one to three shown in table 4, the Cardiff costs are comparable to the other providers. However, the year four plus costs for Cardiff is above their comparators. As most of the activity is within this category, this variance has a large impact on the total costs. Using the Southampton pricelist, which is the most comprehensive of the information obtained, there appears to be possible savings available for the year 4 plus area of the contract as indicated in Appendix A. This may be an area that needs further investigation but may offer savings of £185k.

Table 3: Comparison of maintenance costs across UK providers



- **Economies of scale**

A single centre will also offer economies of scale with increased volumes in the specialist area leading to specialist staff becoming more familiar with the specialist pathway, staff being able to use their specialist skills across a larger group of patients and the realisation of greater purchasing power reducing prosthetic costs. In addition, the transfer between BAHA and Cochlear will become smoother as some patients will already be known to the service and there will be small savings from training from existing outlying centres. Costs from **Table 1** are incorporated into **Table 4**, an additional estimate of the savings from a single centre (Option D) are also included as well as the potential savings from a review of maintenance contracts and a contract review. Option E also includes some elements of the single centre savings.

Table 4 – Financial Appraisal including potential savings

Financial Appraisal of the costed Options for the Cochlear Implant and BAHA Service										
Option	Option Description	Budget 21/22	Potential Saving Minimum	Potential Saving Maximum	Revised Budget Min.	Revised Budget Max.	Option meeting all the standards	Clinical Preferred option	Independent Peer Review preferred option	Financial preferred option
		£	£	£	£	£				
		000	000	000	000	000				
A	Do Nothing Option	4,989	0	0	4,989	4,989	X			
B	Central Cochlear/distributed BAHA	4,990	435	685	4,555	4,305	X	√		
C	Central Cochlear Central Paeds BAHA/distributed Adult	4,990	435	685	4,555	4,305	X			
D	Single Implantable device hub	4,990	535	835	4,455	4,155	√		√	√
E	1 Cochlear Hub -Paeds and Adults 1 BAHA hub Paeds and	4,990	460	710	4,530	4,280	X			

Table 4 indicates that the option meeting the Clinical standards and preferred by the Independent review: Option D; is also the most cost efficient.

Assumptions for the economies of scale:

- Centralised patient referral - reduction in appointments as some patient already known to service
- Prosthetics - continuing drop in prosthetic costs over time
- Theatres - reduction in wastage from centralisation and use of dedicated theatre
- Theatres - reduction in operation time as volume increases
- Outpatients - drop outpatient appointments and length of appointments through increased familiarity
- Staff - some specialist training limited to Centre
- Theatres - movement to day case procedures

Area	Savings
Centralised patient referral	Reduction in appointments as some patient already known
Prosthetics	Continueing drop in prosthetic costs over time
Theatres	Reduction in wastage from centraliation and use of dedicated theatre
Theatres	Reduction in operation time as volume increases
Outpatients	Drop outpatient appointments and length of appointments through increased familiarity
Staff	Some specialist training ltd. to Centre

As a result of the financial assessment **Option D** is the optimum option.