Report Title	**Cochlear Implant and Bone Conduction Hearing Implant Hearing Device Service – Engagement Process**	**Agenda Item**	3.5
Meeting Title	**Joint Committee**	**Meeting Date**	06/09/2022
FOI Status	Open		
Author (Job title)	Specialised Planner Neurosciences and LTC		
Executive Lead (Job title)	Director of Planning		

Purpose of the Report	This report has a dual purpose: • Initially it presents an update on management group discussions and asks Joint Committee to support the management group recommendation. • Secondly it presents the materials and process for a period of targeted engagement with regard the future configuration of the South Wales Cochlear Implant and Bone Conduction Hearing Implant Device Service.				
Specific Action Required	RATIFY ☐	APPROVE ☒	SUPPORT ☐	ASSURE ☒	INFORM ☒

Recommendation(s):

Members are asked to:

- **Support** management group recommendation,
- **Agree** the process to be followed (as advised by the Board of CHCs),
- **Agree** the content of the engagement materials as the basis of targeted engagement,
- **Advise** on processes for individual Health Boards; and
- **Note** the EQIA.

COCHLEAR IMPLANT AND BONE CONDUCTION HEARING IMPLANT DEVICE SERVICE – ENGAGEMENT PROCESS

1.0 SITUATION

This report has a dual purpose:

- Initially it presents an update on management group discussions and asks Joint Committee to support the management group recommendation.

- Secondly it presents the materials and process for a period of targeted engagement with regard the future configuration of the South Wales Cochlear Implant and Bone Conduction Hearing Implant Device Service.

2.0 BACKGROUND

Urgent temporary arrangements have been in place for the provision of Cochlear services from a single centre since 2019. Recent work has been undertaken to develop an options appraisal on the future commissioning of the service, with the scope of that consideration also including the provision of BAHA.

At the WHSSC Joint Committee (JC) meeting held on 12 July 2022, members received a report presenting the process and outcome of a recent review of tertiary auditory services and the planned next steps for the south Wales Cochlear Implant and BAHA Hearing Implant Device Service. The preferred commissioning options as the basis of engagement/consultation were noted and it was agreed that this option and the process to arrive at this option should be considered further through the Management Group (MG) meeting on the 28 July 2022. The outcome of this scrutiny could then be considered virtually or at a future extra-ordinary meeting of the JC if required.

A more detailed report describing the process to arrive at the preferred option was presented to the MG meeting 28 July 2022 and the outcome was that *members supported the preferred commissioning option of a single implantable device hub for Cochlear and BAHA for both children and adults with an outreach support model*. The report presented to the management group is attached at Appendix 1.

Advice has been sought from the Board of Community Health Councils, who advise a period of targeted engagement with patients, families and affected stakeholders. Engagement materials, and the approach will be considered through the Exec of each CHC prior to commencement. (Note dates run just

after Joint Committee). Engagement leads in affected Health Boards have also been kept informed.

2.0 ASSESSMENT

Process

The proposed process for the targeted engagement is:

- Letter to all patients/carers, including engagement materials, and outlining current position, case for change, options that have clinically been considered and a preferred option of future delivery

- Letter to all clinical teams including engagement materials, and outlining current position, case for change, options that have clinically been considered and a preferred option of future delivery

- Publication of the engagement process and materials on Health Board websites

- Cascade of documentation through Voluntary Councils for broader stakeholder view

Materials

In order to support the process, the following materials have been produced, and are attached for approval:

- Engagement document (Appendix 2)
- Draft Equality Impact Assessment (Appendix 3)

Further to approval of the core engagement document, an easy read version will be developed, as well as a questionnaire to aid response. Information gleaned through the engagement exercise will aid further completion of the EQIA.

Timeline

The following timeline for targeted engagement is proposed, noting that a period of consultation may be required following this stage:

Governance Process	Date	Action
Joint Committee Meeting	6th September 2022	Present core engagement documents for sign off as basis of engagement
Health Board Meetings	September 2022	Seek support from Boards on engagement with Health Board residents *(note report will include CHC view from the HB area)*
Community Health Council meeting	19th October 2022	Final update based on JC and HB views
Engagement Process	24th October 2022	6 week engagement
Engagement Finishes	5th December 2022	Consideration of comments and any associated mitigations
Health Board Meetings	January 2023 (tbc)	Outcome of the Engagement process
Community Health Council meeting	19th January 2023 (tbc)	Outcome of the Engagement process

Next Steps

Next steps include:

Welsh translation – Engagement documentation will be available in both Welsh and English, as well as in other languages upon request.

Clinical Reference Group – Throughout the work on the options appraisal, commitment was given to develop a Clinical Reference Group that would continue to evolve thinking throughout the engagement process. The first meeting of this group will take place late September/early October to allow for adequate notice for clinical colleagues.

Discussions with affected staff - discussion has remained ongoing with colleagues in Cwm Taf Morgannwg, regarding staff who moved with the service during 2019 under honorary contract agreement. Staff have been notified in advance that a targeted engagement process is to commence within the timescales shared within this paper.

Update EQIA – Through the targeted engagement, information will be gathered that will enable further development of the EQIA.

3.0 RECOMMENDATIONS

Members are asked to:

- **Support** management group recommendation,
- **Agree** the process to be followed (as advised by the Board of CHCs),
- **Agree** the content of the engagement materials as the basis of targeted engagement,
- **Advise** on processes for individual Health Boards; and
- **Note** the EQIA.

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	
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	There are no resource implications.
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 WBFG 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	Corporate Directors Group Board 18th August 2022
Appendices	• Management group report (Appendix 1)

	• Engagement document (Appendix 2) • Equality Impact Assessment (Appendix 3)

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 ☐	APPROVE ☐	SUPPORT ☒	ASSURE ☐	INFORM ☒

Recommendation(s):

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.

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 WBFG 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)

GIG CYMRU NHS WALES
Pwyllgor Gwasanaethau Iechyd Arbenigol Cymru (PGIAC)
Welsh Health Specialised Services Committee (WHSSC)

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
Fax/ffacs: 029 2080 7854
Email/ebost: karen.preece@wales.nhs.uk

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

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

Welsh Health Specialised Services Committee
Unit G1, Main Avenue
Treforest
Pontypridd
CF37 5YL

Pwyllgor Gwasanaethau Iechyd Arbenigol Cymru
Uned G1, Main Avenue,
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Chair/Cadeirydd: *Kate Eden*
Managing Director of Specialised and Tertiary Services Commissioning/Rheolwr Gyfarwyddwr Comisiynu Gwasanaethau Arbenigol a Thrydyddol: D*r Sian Lewis*

Karen Preece
Director of Planning
WHSSC

Cc
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
Kendal Smith, Finance Partner, WHSSC
Liz Kenward, Planning Manager, WHSSC
Rhian Meredith-Spurr, Assistant Planning Manager, WHSSC

APPENDIX 3

Pwyllgor Gwasanaethau Iechyd Arbenigol Cymru (PGIAC)
Welsh Health Specialised Services Committee (WHSSC)

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.

APPENDIX 4

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

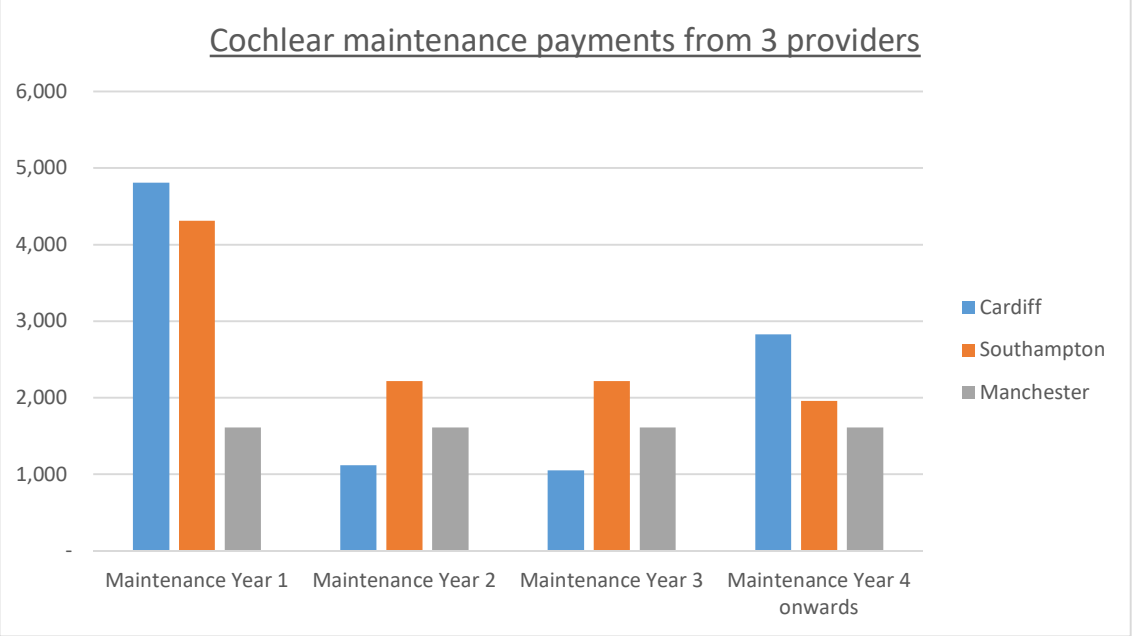
The unit cost for Cochlear Implant and BAHA in the Welsh Health Specialised Services contract are considerably higher than the Cardiff and Vale University Health Board costing returns and indicates that there are potential savings of £250k to £500k if the contract is re- negotiated.

- **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 Prefered option**	**Independent Peer Review prefered option**	**Financial prefered 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 Implanatable 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			

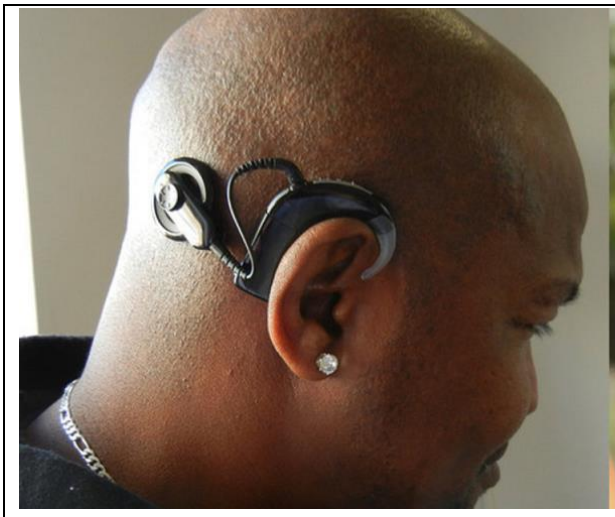
Table 4 indicates that the option meeting the Clinical standards and preferred by the Independent review: Option D; is also the most cost efficient.

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

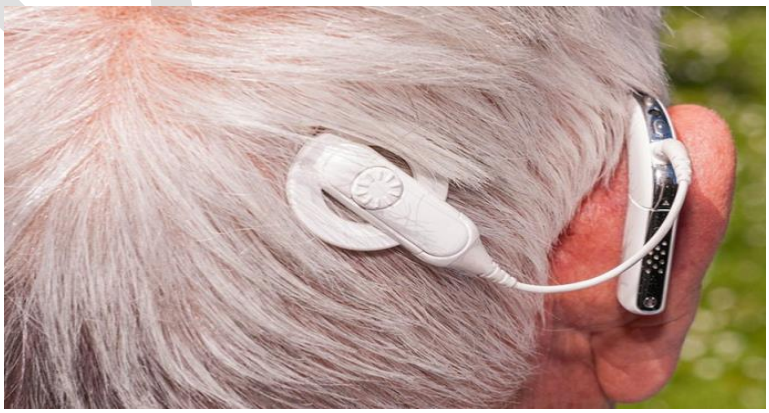
Area	**Savings**
Centralised patient referral	Reduction in appointments as some patient already known
Prosthetics	Continueing drop in prosthetic costs over time
Theatres	Reduction in wastage from centraliation and use of dedicated theatre
Theatres	Reduction in operation time as volume increases
Outpatients	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.




COCHLEAR IMPLANT AND BONE CONDUCTOR HEARING IMPLANT HEARING DEVICE SERVICES FOR CHILDREN & ADULTS IN SOUTH WALES AND SOUTH POWYS





1. INTRODUCTION

Many people in Wales experience hearing loss. Specialist hearing services for patients needing a Cochlear or a Bone Conductor Hearing Implantare provided from 2 Centres in South Wales, one in Cardiff and one in Bridgend. Health Boards in South Wales, South West Wales, South East Wales and South Powys have been working together to identify the best way of providing these services in the future, and would like to hear your views on these ideas. The reason we need to talk with you now is that there are temporary arrangements in place for these services, and we would like to get them to a more permanent position.

This discussion paper will answer the following questions:

- What are Cochlear implants and Bone Anchored Hearing Aids?
- Who needs a Cochlear implant or Bone Anchored Hearing Aid?
- How are services in South Wales currently organised?
- What challenges are facing the service?
- What options do we have to respond to the challenges?
- Do we have a preferred option?
- What are the advantages and disadvantages?

We would like to hear your views on the issues shared in the paper, and have developed a questionnaire that you can use to respond at Annex A. If you have feedback that you would like to comment on issues that the questionnaire does not cover, please use the commentary section at the end to share this.

We welcome views from all residents and stakeholders in South East Wales, South West Wales and South Powys who may be affected by the contents of this paper. An Equality Impact Assessment screening has been developed for this service, which the responses to this engagement will further inform. Both will be published as part of the outcome of the engagement process.

Due to the nature of the service, we recognise that this document will have some medical terms within it that may not be familiar to all. There is a description of these words in Annex 2.

2. WHAT ARE COCHLEAR IMPLANTS AND BONE CONDUCTOR HEARING IMPLANTS?

Hearing loss affects over 10 million people across the United Kingdom. It can lead to significant health and mental health issues[1]. It is a very common condition affecting around one in seven of the population. As we get older, the chance of us having hearing loss increases.

Many people with hearing loss wear a hearing aid which make sounds louder in the ear. Not everybody is able to wear a hearing aid because of the shape or size of their ear, or some other medical reason. Patients who are unable to wear a hearing aid may be considered for a cochlear implant or bone anchored hearing aid.

What is a Cochlear Implant?	**What is a Bone Conductor Hearing Implant?**
A cochlear implant stimulates the nerves in the inner ear. It is implanted in the ear	A Bone Conductor Hearing Implant(BCHI) is a hearing aid which uses bone conduction to help sound get to the inner ear.

Specialist services that support people needing cochlear and or BCHI aids aim to:

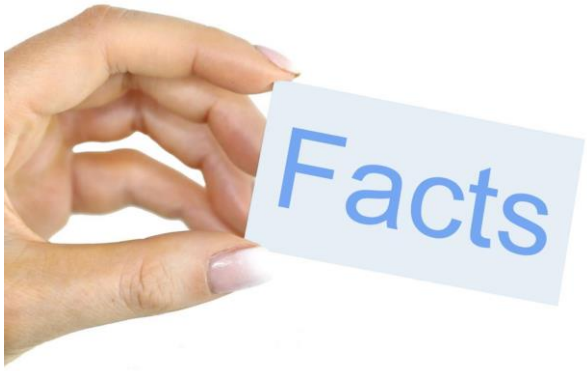
- Improve speech and quality of life.
- Promote normal development of hearing
- Provide a remediation service for paediatric rehabilitation – this could be through direct input or an advisory service.
- Provide a high quality, family focused cochlear implant and BCHI programme.

[1] Overview | Cochlear implants for children and adults with severe to profound deafness | Guidance | NICE

- Promote understanding and the use of spoken language in children
- Provide remote rehabilitation and care to ensure patients get the maximum benefit from their device.
- Use of auditory devices to restore hearing functions and enhance the listener’s quality of life to optimise the patients experience.

3. WHO NEEDS THESE SERVICES?

What do we know about hearing loss in Wales?



There are approximately ***613,000*** people over the age of 16 with severe/profound deafness in England and Wales.

Around ***370*** children in England and ***20*** children in Wales are born with permanent severe/profound deafness each year. Around ***90%*** of these children live with hearing parents. About 1 in every 1,000 children is severely or profoundly deaf at 3 years old. It is 2 in every 1'000 between the ages of 9 – 16.

There are more women than men with hearing loss, which is because women live longer than men. Some ethnic groups may also have higher rates of hearing loss.

Patients that doctors believe could be helped by a hearing implant, are sent to a specialist hearing centre to be seen by a team of clinical staff (a multi-disciplinary team) who will assess whether a patient should have a hearing implant. Not all patients will be suitable for a hearing implant.

It is really important that children who have hearing loss are identified and seen early so that they can learn to speak well, take part in school and learning, make friends and have good conversations.

Patients who receive a cochlear implant or BCHI hearing device may have:

- A chronic ear disease
- Deafness in one or both ears
- Ear canal problems
- Malformations of or absent ear structures

4. HOW ARE COCHLEAR IMPLANT AND BCHI SERVICES CURRENTLY ORGANISED IN SOUTH WALES?

National Context

The Welsh Health Specialised Services Committee is responsible for the commissioning (buying and monitoring) of Cochlear Implant and BCHI Hearing Implant Device services for Welsh residents.

There are two specialist centres for Cochlear services:

- one at the University Hospital of Wales, Cardiff and Vale University Health Board and;

- one at the Princess of Wales Hospital, Cwm Taf Morgannwg University Health Board

These centres work together and are recognised as the South Wales Cochlear Implant service for children and adults in South Wales and South Powys.

There are three centres delivering the Bone Conductor Hearing Implantservice and these are located at:

The Royal Gwent Hospital in Newport

Neath Port Talbot Hospital

Cardiff & Vale University Health Board

Services from Cardiff & Vale and Neath Port Talbot are bought and monitored (commissioned) by WHSSC. The service at Aneurin Bevan University Health Board is not

People from across South Wales and South Powys are referred to one of the two centres.

People living in the following areas are referred to (sent to and seen at) the Princess of Wales Hospital Bridgend within the Cwm Taf Morgannwg University Health Board area:

Carmarthenshire
Ceredigion
Pembrokeshire
Pembrokeshire
Neath
Bridgend
small number of south Powys patients

People living in the following areas are referred to (sent to and seen at) the University Hospital of Wales, Cardiff:

Cardiff and Vale
Gwent
Merthyr Tydfil

Rhondda Cynon Valley
Taff Ely
small number of south Powys patients

The North Wales Cochlear Implant Programme and BCHI service is delivered in Glan Clwyd Hospital, Betsi Cadwaladr University Health Board, with the children's cochlear implant service being in Central Manchester University Hospitals NHS Foundation Trust. Services for people living in North Wales and North Powys are not included in this engagement.

To deliver these services the Hearing Device Implant Centre must provide the following[2]:

- All patient areas should be appropriate to the needs of a hard hearing population and take into account the needs of families and young children.
- A specialist hearing implant device centre should include the full range of staff to deliver it in line with the standards. Guidance suggests the following roles:

    - Otorhinolaryngologist/ENT surgeon,
    - Audiological Scientists,
    - Hearing Therapist,
    - Speech & Language Therapist,
    - Clinical Psychologist

    In addition for children:

    - Paediatric Anaesthetist,
    - Teacher of the Deaf
    - Speech & Language Therapist,
    - Clinical Psychologists,
    - Specialist Radiologists
    - Specialist Nurses

[2] https://www.bcig.org.uk/wp-content/uploads/2021/03/QS-update-2018-WORD-final-v2.pdf

- The hearing implant team must be suitably qualified and registered with the appropriate professional bodies. All members must continue to maintain continual professional development, and all will have training in deaf awareness and knowledge of the full range of hearing implants.
- Hearing implant services must have access to appropriately calibrated and up to date equipment and facilities to enable appropriate assessments to take place.
- Audiological testing will need to be undertaken in sound treated rooms where the ambient noise levels are compliant with the BBS EN ISO 8253-1 1998 standard.
- Day case
- Operating Theatres
- Outreach clinics to provide care closer to the patients home
- Offer remote programming for cochlear implants

5. HOW DOES THE SERVICE PERFORM?

There are three pieces of information that are reported by the service, these are:

- Referrals – the number of adults and children who need the specialist service and are referred by their doctor

- Waiting times – length of time adults and children have to wait in weeks or days to be seen for treatment

- Activity – number of adults and children who receive treatment

Table 1 shows the number of adults and children who are referred to the Cochlear and Bone Conduction Hearing Implant (BCHI) service over the last four years. The BCHI information is shown as an average figure.

Table 1: Referrals

Cochlear Implants Referrals	**2017/18**	**2018/19**	**2019/20**	**2020/21**
Adults	56	57	82	31
Paediatrics	20	17	31	12
Average Number BCHI Referrals				
Adults	42	42	42	42
Paediatrics	2.5	2.5	2.5	2.5

The next table shows the how long adults and children are likely to wait to receive treatment for a cochlear or bone conduction hearing implant during 2019/20. The Cardiff and Vale University Health Board is the only centre in south wales that has a cochlear implant service.

Table 2: Waiting Times 2019/20

Cochlear Implants Waiting time	Cardiff and Vale University Health Board	Swansea Bay University Health Board	Aneurin Bevan University Health Board
New adult patients	8 weeks	Not applicable	Not applicable
New paediatrics patients	4 weeks	Not applicable	Not applicable
BCHI Waiting Time			
New BCHI patients	2-3 weeks	12 weeks	24 weeks

Table 3 shows the number of adults and children that were treated in the last four years.

The numbers were much lower in 2020/21 due to the covid 19 pandemic.

Activity

Cochlear Implant Activity	2017/18	2018/19	2019/20	2020/21
Adults	14	28	32	30
Paediatrics	16	15	17	16
BCHI Activity				
Adults	25	21	18	4
Paediatrics	0	0	0	0

Outcome Measures for Cochlear Implants

The service are required to take account of national standards to ensure that treatment is provided in the best possible way. Patients are asked to complete a number of questionnaires asking about their hearing loss, how it is affecting them and whether the hearing implant has improved their hearing and general quality of life. These are called Patient reported outcome measures (PROMS).

There are other tests that can be used to measure how well a person can hear words or words in sentences, without lip reading. These tests are used to see if the adult or child is suitable for a cochlear implant. This is known as a speech test measurement and is performed before surgery but again after surgery to measure the change and whether there has been an improvement in the quality of their hearing.

For those adults or children who have been assessed and may be suitable for a bone conduction hearing implant, speech tests are not usually used. The measure is more around reduction in pain, ear infections, ear mould allergies or how well the implant fits compared to a general acoustic hearing aid.

6. WHAT ARE THE CHALLENGES FACING COCHLEAR IMPLANT AND BCHI HEARING DEVICE SERVICES IN SOUTH WALES?

Services face a number of current challenges which are outlined here:

- **Workforce challenges**

During 2019, it was established that the service provided from the Princess of Wales hospital in Bridgend service was facing workforce challenges and became unsustainable due to the immediate withdrawal of the Principal Clinical Scientist from the service. The Bridgend service was without Audiology support and were not able to meet some of the quality indicators to achieve the minimum standards as recommended by the British Cochlear Implant Group due the staffing shortage.

In line with the guidance on '*Changes to NHS services in Wales',* arrangements were made for the temporary transfer of Cochlear surgery services from Cwm Taf Morgannwg to Cardiff and Vale University Health Board. The change means that patients who would have gone to Princess of Wales Hospital Bridgend for surgery and out-patient appointments would temporarily be seen at the University Hospital of Wales Cardiff. Staff from the Bridgend service were also temporarily transferred to support the provision of the service in Cardiff, enabling a level of continuity to patients previously being seen in the Princess of Wales hospital.

- **Meeting Quality Standards**

To deliver services, specialist hearing centres should meet the 'British Cochlear Implant Group Quality Standards'. The key standards are set out overleaf:

Accept referrals based on agreed criteria e.g. NICE/Commissioning Policy	Be able to provide full Audiological 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/yr) and clinical scientist/physiologist's skills.(centre undertakes min 15 BAHA/yr)
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 life long access	Have clear governance processes
Facilitate effective liaison with relevant local services (local audiology, SLT and TOD)	Publish data on audit and outcomes

The British Cochlear Implant standards recommends:

- that a Cochlear Implant Centre should have a minimum of two experienced ear surgeons with an annual surgical activity level of 10 per year per surgeon in order to maintain high levels of skill and experience.

Recommendations on standards for BCHI services comes from a consensus statement of experts , which states:

- that BCHI fitting should take place in a specialist centre performing at least 15 procedures per year.[3]

Not all units are able to achieve the quality standards that are set out in the British Cochlear Implant Group guidelines [4] and NHS England Clinical Commissioning Policy for Bone Anchored Hearing.[5]

- **Services spread across the South Wales region**

Services are widely spread across the region. Some of the centres have single handed specialist staff, which means that there is no cross

[3] https://www.england.nhs.uk/wp-content/uploads/2013/04/d09-p-a.pdf
[4] https://www.bcig.org.uk/bcig-constitution-quality-standard/
[5] https://www.england.nhs.uk/wp-content/uploads/2013/04/d09-p-a.pdf

cover when people are on leave. There is no arrangement in place for skilled staff to rotate into these posts and clinical staff are often also working in audiology and Ear Nose and Throat services. There are challenges in recruiting staff to roles and in some centres there has been a lack of opportunity for development due to the gaps in the workforce.

- **Waiting Times**

Waiting times across the region vary from centre to centre and there is no central Multi-Disciplinary Team provision, which means that not all patients have the opportunity to be considered for all types of hearing implant devices.

Impact of the challenges

All of the issues above have led to the suggestion of a centralised service in order to realise economies of scale and seek to address the challenges outlined.

7. WHAT OPTIONS HAVE WE CONSIDERED TO RESPOND TO THE CHALLENGES?

Our aim is to have a Cochlear Implant and BCHI Hearing Implant Device Service that:

- can deliver a safe and sustainable hearing implant device service for the adult and paediatric population of South Wales
- has equitable access
- meets national standards
- has staff in the right place with the right specialist skills
- facilitates timely access to surgery

To consider the best option, 3 pieces of work have been done:

a) a clinical option appraisal

b) an external assessment of the options and how they would deliver against relevant service standards

c) a financial option appraisal

Underpinning all 3 were the British Cochlear Implant Group guidelines[6] and the NHS England BCHI Commissioning document.

Below is a summary of the work:

- **Clinical Option Appraisal**

A series of workshops with clinical teams were held between September 2021 and June 2022 with the aim of discussing the best way of delivering a safe and sustainable hearing implant device service for the adult and paediatric population of South Wales that meets national standards.

The group considered 5 options for the delivery of specialist hearing services in the future and scored them against the following criteria:

- Quality and Patient Safety
- Achievability (Staffing, sustainability, and training)
- Accessibility
- Clinical Effectiveness and Efficiency
- Acceptability

[6] https://www.bcig.org.uk/

The options considered were:

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

The clinical team expressed a preference for Option B.

- **External Assessment**

To consider the options against the National standards, a specialist hearing centre from within NHS England was asked to objectively review the options.

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

- **Financial Appraisal**

Finally, each of the options was reviewed financially. It was concluded that none of the options would cost more than the money that is currently invested in the service, in fact that through consolidating the services that there was an opportunity to release money for investment in an out of hours service, and other service developments.

The outcome of the financial appraisal identified that Option D, a single implantable device hub for both children and adults with an outreach support model was the most cost efficient option.

In summary of the outcome of the 3 pieces of work:

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

8. DO WE HAVE A PREFERRED OPTION?

Welsh Health Specialised Services as commissioner of the service has the responsibility to consider the most appropriate means of commissioning the service onward.

There are a number of key messages taken from the national standards that the service must have.

A service must:

- Accept referrals based on agreed criteria e.g. NICE/Commissioning Policy,
- Be able to provide full Audiological 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 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 considered all three assessments against the national standards the only option that meets these requirements is **Option D, a single implantable device hub for both children and adults with an outreach support model. This is the model that WHSSC would like to commission onward.**

9. IMPACT OF THE CHANGE

The suggestion above will enable the safe and sustainable delivery of services for patients requiring an implantable device which will include assessment, surgery and device programming. It will also include the full range of staff required to support the service, and see sufficient numbers of patients for the clinical team to maintain a high level of skill.

The service would:

- support rapid access to a Clinical Scientist/Physiologist when device failure is suspected at all centres and provide equitable and lifelong access.
- ensure equity of access for all patients (i.e. all patients having the same options open to them, and considered for them).
- support a critical mass of patients required for the adoption of new technological advances.
- provide remote digital programming and outreach clinics in the local health boards to improve access to services.

What is the Impact?

- Some patients and families may need to travel further distance to receive the service.
- Patients would be treated at a centre carrying out higher numbers of the procedures, which is linked to improved outcomes
- There is the opportunity to use money more efficiently potential opportunity to reinvest in new developments for the service to have an improved service comparable to other regional hearing implant device centres

10. HOW CAN YOU CONTRIBUTE: ENGAGEMENT AND CONSULTATION

This is the start of our conversation with you about the Cochlear Implant and BCHI Hearing Implant Device service in South Wales and South Powys. We would like to you to share your views about what you have read.

Some of the things we would be interested to learn from you are whether:

- you have an understanding of the Cochlear Implant and BCHI Hearing Implant Device service as a result of reading this document
- you have a better awareness of how the services are currently provided as a result of reading this document
- the challenges facing the service and the options that have been considered for the future delivery of the services are clear
- your views on the preferred model

Next Steps

- When the engagement exercise has ended, all information received will be shared with the individual Health Boards and Board of Community Health Councils. We will also make available a report that outlines a summary of what has been received. We will consider all of your comments and decide take any necessary mitigating actions as a result. We will also update the Equalities Impact Assessment.

On discussing the outcome with Community Health Council, a further period of consultation may be needed If this is required we will once again invite your views.

A questionnaire is available at the end of this document to aid your response. It should be returned to:

Cochlear and BCHI engagement

Welsh Health Specialised Services Committee

Unit G1 Main Avenue

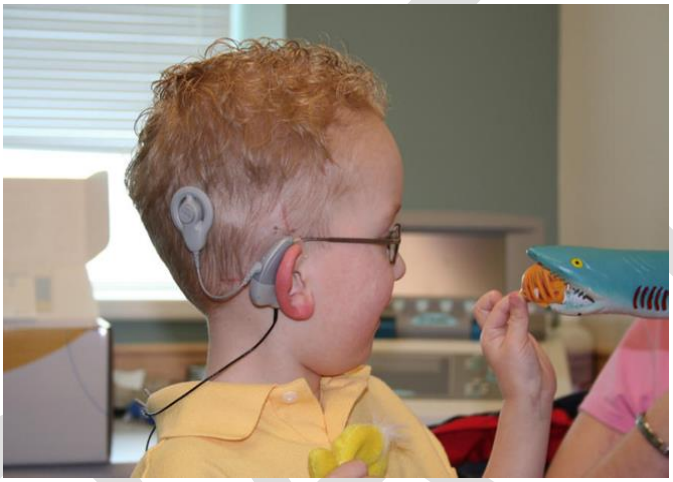
Treforest

Pontypridd

CF37 5YL

Or alternately (insert WHSSC generic e-mail)

We would welcome your feedback by date…….



APPENDIX 1– GLOSSARY OF TERMS

Audiology	The branch of science and medicine concerned with the sense of hearing.
Cochlear Implant System	A cochlear implant is an implanted electronic hearing device designed to produce useful hearing sensations to a person with severe to profound nerve deafness by electrically stimulating nerves inside the inner ear.
Congenital	Existing from Birth or before
Otorhinolaryngologist/ENT surg	A doctor who studies or treats diseases of the ear, nose, and throat.
Audiological scientists	A clinical scientist that specialises in the diagnosis, analysis and treatment of human auditory disorders such as hearing, tinnitus and audio balance deficiencies.
Hearing therapist	A Hearing Therapist offers counselling to help with hearing difficulties
Speech and Language Therapist	A Speech and language therapists provide life-changing treatment, support and care for children and adults who have difficulties with communication, eating, drinking and swallowing.
Clinical Psychologist for children	Clinical child psychologists work with children by assessing, diagnosing and treating children and adolescents with psychological or developmental disorders, and they conduct academic and scientific research
Paediatric Anaesthetist	Pediatric anaesthesiologists are responsible for the general anesthesia, sedation, and pain management needs of infants and children
Teacher of the Deaf (TOD)	Teachers of the Deaf (also known as ToDs or teachers of the hearing impaired) are qualified teachers who provide support to deaf children, their parents and family, and to other professionals who are involved with a child's education.
Specialist Radiologists	Specialised Radiologists are medical doctors that specialise in diagnosing and treating injuries and diseases using medical imaging (radiology) procedures (exams/tests) such as X-rays, computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine, positron emission tomography (PET) and ultrasound.

Specialist Nurses	Specialist nurses are dedicated to a particular area of nursing; caring for patients suffering from long-term conditions and diseases
NICE	National Institute of Clinical Excellence
MDT	Multi-disciplinary Team
SLT	Speech and language therapy

PROPOSED CHANGES TO THE SOUTH WALES COCHLEAR IMPLANT AND BONE CONDUCTION HEARING IMPLANT (BCHI) DEVICE SERVICE
EQUALITY IMPACT ASSESSMENT (EIA)

1. INTRODUCTION

In order to demonstrate that a public sector body has given due regard to the general duty, public sector bodies in Wales are required under the Welsh Public Sector Equality Duties to conduct an equality impact assessment (EIA) of their policies and service developments in order to assess the potential impact(s) upon people with protected characteristics.

This purpose of this document is to set out the narrative and findings of the equality impact assessment (EIA) of proposed changes to the Cochlear Implant and BCHI Hearing Implant Device Services in South Wales.

Equality is about making sure people are treated fairly. It is not about treating 'everyone the same', but recognising that everyone's needs are met in different ways. As part of this duty, public sector bodies in Wales are required to publish an assessment of impact in order to be transparent and accountable i.e. their consideration of the effects that their decisions, policies or services have on people on the basis of their gender, race, disability, sexual orientation, religion or belief, and age, to include gender re-assignment, pregnancy and maternity, marriage and civil partnership issues. These are classed as 'protected characteristics', it is relevant because people from within protected groups are more likely to experience it. Such high levels of deprivation in our local community mean that 36% of the Cwm Taf population live in areas which are among the most deprived 20% in Wales.

In addition we recognise that Wales is a country with two official languages: Welsh and English. The importance of bilingual healthcare for all patients in Wales is fundamental and is particularly important for four key groups - people with mental health problems; those with learning disabilities; older people and young children. Research has shown these groups cannot be treated effectively except in their first language. Our consideration of equality takes account of this.

Hearing loss affects over 10 million people across the United Kingdom which makes it the second most common disability in the UK. It can lead to significant health and mental health issues. It is a very common condition affecting approximately one in seven of the population, with a steeply increasing incidence with age.

Background

The intention to consolidate the cochlear implant service in South Wales has been discussed for some time. The reasons cited were the close proximity of the two providers, the disjointed delivery of activity and infrastructure.

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.

Whilst the urgent temporary change related to the provision of Cochlear Implant services, the original discussion related to both Cochlear and BCHI. The scope of the project was revised to include both Cochlear, BCHI, adult and children services.
The EIA will help with answering the following questions:

- Do different groups have different needs, experiences, issues and priorities in relation to the proposed service change?
- Will the proposed service change promote equality?
- Will the proposed service change affect different groups differently?
- Is there evidence of negative impact and what alternatives are available?

2. CURRENT SERVICE PROVISION

Cochlear Implant services are commissioned from two centres in South Wales:

- University Hospital of Wales Cardiff and Vale University Health Board
- Princess of Wales Hospital, Bridgend, Cwm Taf Morgannwg University Health Board

The BCHI Hearing Implant Services are located at three sites:

- Neath Port Talbot Hospital, Swansea Bay University Health Board
- University Hospital of Wales, Cardiff and Vale University Heath
- Royal Gwent Hospital, Aneurin Bevan University Health Board.

3. PROPOSED SERVICE PROVISION

Following the pandemic, work has been undertaken to:

- Develop an options appraisal on the future commissioning of the service, with the scope of that consideration also including the provision of BCHI Hearing Implant Devices.
- An external assessment of the options against the service standards
- A financial appraisal of the options

A Clinical option appraisal workshop took place in September 2021, with invites extended to clinical teams and planning colleagues from Health Boards affected by any proposed change. Five options were presented for consideration 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 BCHI hubs for adult and children
B	Central Cochlear Distributed BCHI	Single hub (with outreach) for Cochlear 3 x BCHI hubs for both adults and children
C	Central Cochlear, Central Paeds BCHI, distributed Adult BCHI	1 x Cochlear hub with Cochlear outreach 1 x BCHI hub (paediatrics) 1 x BCHI hub (adult)
D	Single implantable device hub	1 x single centre for Cochlear and BCHI for both children and adults with an outreach support model
E	1 cochlear hub (Children and adults) 1 BCHI hub (Children and adults)	1 x single centre for BCHI (children and adults) 1 x single centre for Cochlear (Children and adults)

Following application of weighted criteria by each person present, the preferred option from the clinical options appraisal was Option B.

Single hub (with outreach) for Cochlear 3 x BCHI hubs for both adults and children

In order to assess the options against relevant service standards, an external assessment was undertaken by members of the Bristol Specialist Hearing Centre. The same options and criteria as those used in the clinical option appraisal were used. The following standards were used as a framework for assessment:

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 BCHI/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, Speech and Language Therapist (SLT) and Teacher of the Deaf (TOD)	Publish data on audit and outcomes

Through external assessment of the options against the standards, the only option considered to meet all standards was option D.

4. FINANCIAL ASSESSMENT

The budget for the Cochlear and BCHI Hearing Implant service is almost £5m, with the majority of investment going to Cardiff and Vale University Health Board. 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.

5. ARRIVING AT A PREFERRED OPTION

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

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

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.

6. THE PREFERRED OPTION

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

A single implantable Hub with outreach model with a central Multi-Disciplinary Team provision

- A single centre for both children and adults, for the provision and maintenance of both cochlear and BCHI, 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.

As well as the perceived benefits outlined above, the other key implications of the proposed relocation that are likely to have an impact on patients and staff are:

How will it be delivered

Central Hub

A decision has yet to be made on where the single site will be located in south Wales but there are a number of considerations:

All patient areas should be able to meet the needs of a hard of hearing population and the needs of families and young children

There should be a full range of specialist staff to provide the service to meet the national standards

There is a need to have other services at the same site for example day case, operating theatres

The centre must provide a central multi-disciplinary team where all referrals are discussed and planned for

Outreach Services

The location of outreach services has not been agreed but here are some suggested centres:

- Neath Port Talbot, Swansea Bay University Health Board
- A location in north Cwm Taf Morgannwg University Health Board
- A location in Aneurin Bevan University Health Board
- University Hospital of Wales, Cardiff and Vale University Health Board

Patient parking

This is available at all sites. There are no car parking charges within Wales's hospital sites.

Staff parking

This is available at all sites. Members of staff who wish to park on site may need to apply for a permit. A permit does not guarantee them a parking space on site. Staff must park in designated staff car parks.

Healthcare Travel Costs Scheme

Under this scheme, patients on low incomes or receiving specific qualifying benefits or allowances are reimbursed in full or in part for costs incurred in travelling to receive NHS services provided in a hospital. This includes:

- Income support benefit
- Income based job seekers allowance

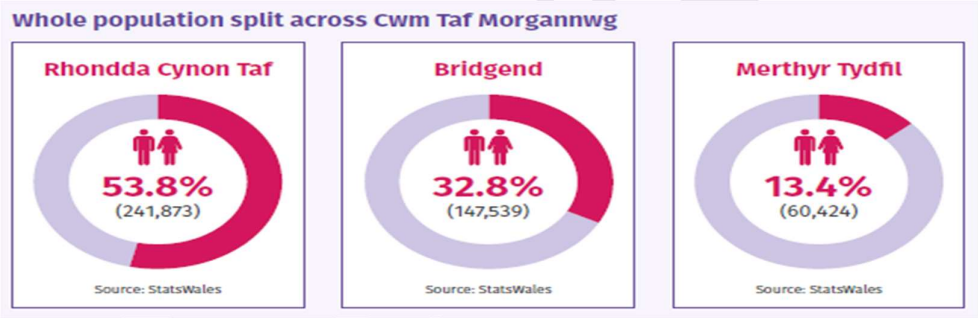
- Working tax credit or child tax credit
- Or hold a HC2 or HC3

7. THE DEMOGRAPHIC PROFILE

The Wales average life expectancy is 78.3 years for men, 82.3 for women with healthy life expectancy 65.3 years for men, 66.7 for women. For Cwm Taf Morgannwg, the life expectancy and healthy life expectancy for both men and women is lower than the Wales average. The gap in life expectancy and healthy life expectancy in Cwm Taf is lower than Wales and there are great inequalities in outcomes for the poorest compared to the most affluent.

Cwm Taf overall had statistically highlighted higher levels of mental illness, respiratory illness, hypertension, arthritis and diabetes mellitus in the combined 2012-2013 Welsh Health Survey compared with other areas in Wales.

According to Action on Hearing Loss in Wales, there are around 575,500 deaf and hard of hearing people in Wales. Cwm Taf Morgannwg is made up of three local authority areas: Merthyr Tydfil, Rhondda Cynon Taf and Bridgend. There are 449,836 people living in Cwm Taf Morgannwg. [1]



Cwm Taf has an ageing population, recognised health inequality (Inverse Care Law) and high levels of deprivation. There is an associated lower life expectancy (8 less years for males and 6 less years for females between the poorest and most affluent areas within the Cwm Taf community), shorter good health (the lowest in Wales) and high incidence of multiple morbidities. The population is growing and there is low employment and low levels of academic achievement.

Taff Ely is an area of significant contrast, with pockets of both affluence and high deprivation. Compared to the rest of the Cwm Taf UHB area, Taff Ely appears relatively affluent with 26.8% of its population living in the least

[1] https://www.ctmregionalpartnershipboard.co.uk/wp-content/uploads/2022/05/CTM-Regional-Partnership-Board-Population-Needs-Assessment-Summary_e5.pdf

deprived areas of Wales. However, 38.8% of its population live in the most deprived or next most deprived areas. Particularly relevant is the identification of Tylorstown (Rhondda), Caerau (Bridgend), Penrhiwceiber (Rhondda Cynon Taf) and Penydarran (Merthyr Tydfil) as areas of greatest deprivation in Wales (ranked 4th, 5th, 6th and 7th respectively).[2] This level of deprivation in the area brings with it associated high rates of mental health issues, long term disability/morbidity, and chronic illness from the legacy of heavy industry particularly mining, and benefits uptake.

8. UNDERSTANDING THE IMPACT ON PROTECTED CHARACTERISTICS

The proposal to locate a single implantable device hub for both paediatrics and adults with an outreach support model will therefore affect patients living in the local health board regions of Cwm Taf Morgannwg, Aneurin Bevan, Cardiff and Vale, Hywel Dda, Swansea Bay and parts of Powys.

Gender/Sex

In the Cwm Taf area as a whole there are a very slightly higher proportion of female residents than male, and this is broadly consistent with the rest of Wales.

The gender split for the area affected by service change mirrors very closely the gender split for Wales as a whole; approximately a 50:50 split with slightly more females (51%) than males (49%).

Region	Males	Females	Total (%)	Total
Aneurin Bevan UHB	49.0%	51.0%	100.0%	576,754
Caerphilly	*49.0%*	*51.0%*	*100.0%*	*178,806*
Blaenau Gwent	*49.2%*	*50.8%*	*100.0%*	*69,814*
Torfaen	*48.7%*	*51.3%*	*100.0%*	*91,075*
Monmouthshire	*49.2%*	*50.8%*	*100.0%*	*91,323*
Newport	*49.0%*	*51.0%*	*100.0%*	*145,736*
Cardiff and Vale UHB	49.%	51.0%	100.0%	472,426
Vale of Glamorgan	*48.7%*	*51.3%*	*100.0%*	*126,336*
Cardiff	*49.1%*	*50.9%*	*100.0%*	*346,090*
Cwm Taf UHB	48.9%	51.1%	100.0%	293,212
Rhondda Cynon Taf	*48.9%*	*51.1%*	*100.0%*	*234,410*
Merthyr Tydfil	*49.0%*	*51.0%*	*100.0%*	*58,802*
Powys THB	49.4%	50.6%	100.0%	132,976
*South Powys**	*49.4%*	*50.6%*	*100.0%*	*66,488*
Area affected*	**49.0%**	**51.0%**	**100.0%**	**1,408,880**

[2] https://gov.wales/sites/default/files/statistics-and-research/2020-06/welsh-index-multiple-deprivation-2019-results-report.pdf

Wales	49.1%	50.9%	100.0%	3,063,456

Car travel is the most common means of transport for both men and women from all age groups, including children. However, children make more walking trips than adults. For all age groups, men drive further than women on average. According to the Department of Transport's Road Use Statistics 2016, nationally men are more likely than women to be car drivers, with 80% of men compared to 67% of women holding a driving licence in 2014.

It is therefore assumed that older female patients are most likely to be impacted by the change of location to the University Hospital of Wales due to their likely reliance on public transport. The evidence of a gender difference in access to transport is a relevant consideration in relation to this service change since a single centre would mean some patients and families travelling further than they would otherwise need to, however some patients will be travelling less, based on the current available evidence, no impact is anticipated on this protected characteristic group but may need further detail following the engagement process.

Age

Approximately 370 children in England and 20 children in Wales are born with permanent severe to profound deafness each year. About 1 in every 1000 children is severely or profoundly deaf at 3 years old. This rises to 2 in every 1000 children aged 9 to 16 years. About half the incidence of childhood deafness is attributed to genetic causes, although approximately 90% of deaf children come from families with no direct experience of deafness. Causes of severe to profound hearing loss in children also include conditions such as meningitis and viral infection of the inner ear (for example, rubella or measles), as well as premature birth and congenital infections. [3]

Hearing loss is a very common condition affecting approximately one in seven of the population, with a steeply increasing incidence with age. There are approximately 613,000 people older than 16 years with severe to profound deafness in England and Wales. In the UK around 3% of people older than 50 and 8% of those older than 70 years have severe to profound hearing loss. There are more females than males with hearing loss although this is associated with females living longer rather than gender differences in causes of deafness.

The ageing population means that demand for both hearing assessment and associated interventions is set to rise over the coming years. The vast majority of the ageing population with poor hearing can benefit from a

[3] 2 Clinical need and practice | Cochlear implants for children and adults with severe to profound deafness | Guidance | NICE

direct primary care referral to adult hearing services, often based in the community, and do not require referral to an Ear, Nose and Throat (ENT) out-patient appointment prior to audiological assessment. This facilitates timely diagnosis and access to support for adults with poor hearing.

Older People are also less likely to have access to a car with the over 70 year age group with only 50% of women holding driving licences compared to 73% of men. Women, particularly older women, are therefore likely to be more dependent on public transport and would benefit from community/locality based services and those easily accessible by bus or train.[4]

Older people are therefore likely to be impacted more by the move to a central single implantable device hub as they tend to be high users of the service, some patients who are reliant on public transport may benefit from the outreach service that will be available.

Disability

Disabled people are ten times more likely to report ill health and also approximately half are likely to experience mental ill health. The Cwm Taf Morgannwg population report the poorest mental health status of all Health Boards in Wales. The proportion of people identifying themselves as disabled[5] in the area affected is very similar to the proportion in Wales as a whole, 22.2% compared to 22.7%. There is a great deal of variation in disability among the health boards in the area affected. Cardiff and Vale UHB has the lowest proportion of its population reporting disability at 18.6%, while Cwm Taf at 26.1% has the highest proportion of its population reporting disability. At a local authority level Cardiff (18.0%), Monmouthshire (20.1%), the Vale of Glamorgan (20.3%) and Newport (20.8%) stand out with the lowest population proportions reporting a disability.

People who have a disability are twice as likely as people without a disability to have no access to a car (Office for Disability Issues 2009). Disabled people are also less confident in using public transport because of physical access issues but also because of staff attitudes (Framework for Action on Independent Living 2012).

Patients are eligible for non-emergency patient transport if the medical condition of the patient is such that they require the skills of ambulance staff or appropriately skilled personnel on or for the journey; and/or if the

[4] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/514912/road-use-statistics.pdf

[5] Disabled is defined as individuals whose day-to-day activities are either limited a lot, or limited a little

medical condition of the patient is such that it would be detrimental to the patient's condition or recovery if they were to travel by any other means.

Some people undergoing hearing loss surgery may be classed as disabled. To classify as disabled under the Equality Act 2010, you must have a physical or mental impairment that has a 'substantial' and 'long-term' negative effect on your ability to do normal daily activities.

The service will be able to provide and meet the needs of patients with any level of disability and be able to make reasonable adjustment to meet the person needs if required. However, based on the currently available evidence, no impact is anticipated on this protected characteristic group but may need further detail following the engagement process.

Sensory Loss

20% of people have impaired hearing and up to 70% of people aged over 70 have sensory loss. This can impact significantly on their ability to understand what they are being told and to interact effectively in a healthcare situation. In 2017 Cwm Taf UHB won an Action on Hearing Loss award for supplying hearing equipment to all secondary care wards and departments which help people to communicate effectively with health professionals thus ensuring dignity and confidentiality. This has been accompanied by staff training on use of the equipment and how to communicate with people who have difficulty hearing.

British Sign Language (BSL) is the preferred language of over 87,000 Deaf people in the UK for whom English may be a second or third language (A total of 151,000 individuals in the UK who can use BSL - this figure does not include professional BSL users, Interpreters, Translators, etc. unless they use BSL at home).

Sign languages are fully functional and expressive languages; at the same time they differ profoundly from spoken languages. BSL is a visual-gestural language with a distinctive grammar using handshapes, facial expressions, gestures and body language to convey meaning.

Contrary to popular belief, Sign Language is not international. Sign languages evolve wherever there are Deaf people, and they show all the variation you would expect from different spoken languages.

There are not derived from the spoken language of a country. Thus, although in Great Britain, Ireland and the United States the main spoken language is English, all three have entirely separate sign languages. As with spoken languages, a sign language can evolve from a parent sign language and therefore show affinities. For instance, due to historical and political links, Australian Sign Language and modern BSL share a common ancestor, and there are similarities between the two. American Sign Language (ASL)

bears a resemblance to French Sign Language (LSF) because Laurent Clerc introduced the "methodical sign system" developed by the Abbe de I'Epee in eighteenth century France into American Deaf education. There are also the regional dialects and "accents" which are present in every language.

Deaf people can choose from a number of communication methods. An individual's choice will have been determined by many factors to do with their experience and the nature and degree of their deafness. The range includes:

- Sign Language
- Lip-reading
- Fingerspelling
- Deafblind fingerspelling
- Written communication

There are also signing systems that attempts to encode English into sign or to illustrate spoken English.

It can be difficult for a hearing person meeting a Deaf person for the first time, not knowing what communication methods they prefer, but the barriers are usually broken down once communication via the right method is established.

People with sight loss can also be affected by a changed location particularly if they are reliant on guide dogs. Others with low vision will benefit from clear signage, maps etc. It will be essential to take account the needs of people with sensory loss. This is also relevant to people with dementia.

There are already processes in place to support persons with disabilities, for example

- Easy read patient information leaflets
- Wheelchair access at places of safety facilities
- Translation services for those with Sensory issues

The proposed relocation to a central single implantable device hub is not considered to have any significant likely impact on patients based on their disability.

Ethnicity/Race

Cwm Taf Morgannwg have lower representation from ethnic groups other than white than Wales as a whole. However there are significant number of Polish, Portuguese and Czech people living in the Cwm Taf Morgannwg community and their access issues will need to be considered.

Overall the area affected is slightly more ethnically diverse than Wales as a whole, with 5.5% black and minority ethnic (BME)[6] population compared to 4.4% BME population nationally. The area affected contains two of the four Welsh asylum seekers dispersal areas (Cardiff and Newport), and this is reflected in the higher BME populations in these areas compared to the other local authorities. Cardiff has the highest BME population at 15.3% with Newport having the second highest BME population at 10.1%. BME populations outside these local authorities in the area affected are in the range of 1.5% to 2%.

Some minority ethnic groups may have higher rates of hearing loss due to increased genetic risk associated with consanguinity and increased risk of childhood infections. Approximately 40% of children who are deaf and 45% of people younger than 60 years who are deaf have additional difficulties, such as other physical or sensory disabilities[7].

Overall, language can represent a barrier across a number of areas, for example in accessing public transport and also in terms of finding and accessing health or social services.

Cultural differences may also be a factor in how people engage with health services. It can also limit understanding during diagnosis, treatment and during recovery. The use of translation services may be appropriate.

The language needs of patients from non-white ethnic groups will be taken into account when communicating information about the relocation of services.

Certain ethnic groups are less likely to access many of our services e.g. gypsies and travellers, and it will be important to take account of strategies which address this e.g. 'Travelling to A Better Future', Welsh Government. This has been a particular consideration in the development of the Health Board's Homeless and Vulnerable Groups Health Action Plan.

The proposed relocation to a central single implantable device hub is not considered to have any significant likely impact on patients based on their ethnicity. Approved translation services will be contacted at the earliest instance if it is suspected that one will be required.

Marriage and Civil Partnership

The number of people who are married or in a same-sex civil partnership living in Cwm Taf Morgannwg is the same as for Wales as a whole.

[6] Black and minority population is classed here as any ethnicity not included under the white categories

[7] Overview | Cochlear implants for children and adults with severe to profound deafness | Guidance | NICE

The proposed relocation to a central single implantable device hub is not considered to have any significant likely impact on patients based on their marriage status.

Pregnancy and Maternity

The proposed relocation to a central single implantable device hub is not considered to have any significant likely impact on patients based on pregnancy and maternity.

Religion

Research indicates that patients and families rely on spirituality and religion to help them deal with serious physical illnesses, expressing a desire to have specific spiritual and religious needs and concerns acknowledged or addressed by medical staff.

It is important that services take cultural needs into account. Some BME groups have a strong reliance on spiritual belief and practice; this has important implications for the way that they want to be cared for.

The proposed relocation to a central single implantable device hub is not considered to have any significant likely impact on patients based on their religion.

Sexuality Orientation

The proposed relocation to a central single implantable device hub is not considered to have any significant likely impact on sexuality. Patients of all sexualities would be given appropriate support when required.

Gender Reassignment

Information is not available on this group within the local community. However, recent research looking at the mental health and emotional wellbeing of transgender people has found rates of current and previously diagnosed mental ill health are high among this group. It is also recognised that this group find it particularly difficult to access services and their dignity and respect must be protected in both hospital and community settings.

Welsh Language

Public services have a responsibility to comply with the Welsh Language (Wales) Measure. This has created standards which establish the right for Welsh language speakers to receive services in Welsh.

In the Cwm Taf area, 11% of the population are able to speak Welsh according to the UK Census 2011. This compares with the Welsh average of 19%. 11% of Males and 14% of Females are able to speak Welsh compared with the Welsh average of 18% of Males and 20% of Females.

Service users who may prefer or need to communicate in the medium of Welsh may be required to access services at sites which do not have sufficient Welsh speaking staff. This could affect the service user's ability to communicate with service providers in their preferred language. Meeting the information and communication needs of Welsh speakers will need to be taken into account. Reading materials will also be made available upon request.

It will be essential to comply with the Welsh Language Act 1993 and all supporting strategies particularly the Bilingual Skills Strategy and the 'active offer' when planning for service change. In addition to this, the Welsh Language Commissioner has applied a new set of Standards throughout the Health Service in Wales which were issued in November 2018 and many must be met by May 2019. They cover staff and patients and we have a legal duty to meet them.

There are no identified impacts on the Welsh Language Measure of the potential change. If staff are not Welsh speakers approved translation services will be contacted at the earliest instance if it is suspected that one will be required.

Socioeconomic status

While socioeconomic status is not a protected characteristic under the Equality Act 2010, it is particularly relevant in relation to the protected characteristics. There is a strong correlation between the protected characteristics and low socioeconomic status

Approximately a quarter of households (25.2%) in the area affected has no access to a car, which is slightly higher than the proportion across the whole of Wales (22.9%).

Comparing the health boards in the area affected, Powys has the lowest proportion of households with no car or van at 15.0%, while Cwm Taf at 27.6% has the highest proportion with no car or van.

In terms of local authorities, Merthyr Tydfil (29.7%), Blaenau Gwent (29.0%), and Cardiff (29.0%) have the highest proportion of households with no car or van. Powys (15.0%) and Monmouthshire (15.2%) have the lowest proportion of households with no car or van.

Human Rights

At its most basic, care and support offers protection of people's right to life under Article 2 of the European Convention and the aim of this service is to preserve life through advanced treatment delivery. Reference has also been made to dignity and respect which is relevant to freedom from inhuman and degrading treatment (under Article 3 of the Convention) and the right to respect for private and family life (under Article 8).

Right to Life (taking reasonable steps to protect life) it is anticipated that having a single implantable hub with outreach model with a central Multi-disciplinary team provision will provide a safe and sustainable specialist auditory implant device service that meets national standards, will improve clinical outcomes and will have a positive impact on individuals right to have their life protected.

Summary Conclusion

What will the changes mean for the service?

- Quality standards are met
- Services are no longer spread too thinly across South Wales
- A more safe and sustainable service
- Single implantable Hub with outreach model with a central Multi Disciplinary Team provision
- Equity of access
- Improved outcomes for patients
- Support the majority of patients

Next Steps

Welsh Health Specialised Services will enter a period of targeted engagement, noting that a period of consultation may be required following this stage.

A commitment was made throughout the clinical option appraisal that Welsh Health Specialised Services would develop a Clinical Reference Group that would continue to evolve thinking throughout the engagement process. The first meeting will take place early October.

Discussions will remain ongoing with colleagues in Cwm Taf Morgannwg University Health Board regarding the staff affected by the temporary arrangements and who have moved with the service during 2019. Staff have been notified in advance that a targeted engagement process is due to commence.

Through the targeted engagement information will be gathered that will enable further development of the EIA.