Southampton

# Auditory Implant Service

ANNUAL REVIEW 2016/7



# OUR SERVICE

USAIS are commissioned by NHS England Specialised Services. This report is for the year 2016/7 starting on 1st April 2016 and ending 31st March 2017 for NHS England patients only.

USAIS follow the service specifications for Cochlear Implants (Do9/S/A) and for Implantable Hearing aids for Microtia, Bone anchored Hearing Aids and Middle Ear Implants (Do9/S/B). They also adhere to the new Commissioning Policy for Bone Conduction Hearing Implants (BCHIs) 16041/P.

USAIS receive referrals for assessment for consideration of cochlear implants, bone anchored hearing aids, bone conduction and middle ear implants from Audiology and ENT specialists.

The services offered by USAIS are multidisciplinary and involve a variety of clinical and medical staff. USAIS are in a unique position based within a university setting which is beneficial as it facilitates research driven clinical practice.

USAIS is an all age service and we have auditory implant users in all sections of the age spectrum.

0-9	******	168 18
10–19	*****	204 11
20-29	*****	141 4
30-39	*****	73 7
40-49	*****	130 6
50-59	<u>+++++++++++++++++++++++++++++++++++++</u>	119 16
60-69	******	134 21
70-79	*****	133 11
80-89	*****	86 3
90-99	<b>i</b> İİ	13 0

Current patient age in completed years

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# USAIS IN THE NEWS

During the period 2016/7 USAIS have increased their reach and impact through ongoing media and publicity. This is part of their wider agenda of raising awareness about hearing loss and cochlear implants.



One of our patients was the UK winner for the Cochlear Graeme Clark Scholarship, a national award set up to help individuals further themselves by undertaking university studies.



USAIS supported the MED-EL Life on Mute roadshow and one of our Audiologists conducted hearing tests on the public to raise awareness of hearing loss, which was picked up by local newspapers and radio.



USAIS made local and national news with a feature story about a couple implanted and 'switched on' at the service at the same time. The story was picked up by BBC South Today, BBC Radio Wiltshire, the Daily Echo as well as the Daily Express, Daily Mail, The Mirror, The Sun and the Metro.



A service user and one of our Audiologists were featured in a BBC Four documentary on Using Sound. The documentary featured an initial tuning session conducted at USAIS.

### CLINICAL OUTCOMES —COCHLEAR IMPLANTS

#### Referrals

100% of referrals for Cochlear Implant Assessment were acknowledged within five working days and 100% of patients were offered an appointment within six weeks.

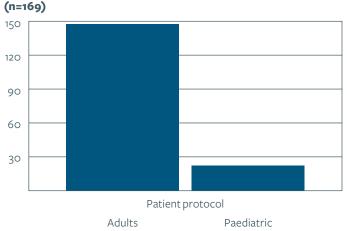
#### Discharges

During the period 2016/7, 72 patients referred for cochlear implant assessment were discharged prior to cochlear implantation. 20 were discharged before they came for assessment. The reasons for discharge were: 29 of the patients were audiologically not within NICE TAG 166; 8 patients had additional difficulties or medical needs, and 35 patients decided not to proceed for personal reasons including investigating alternative treatment, family issues and concerns regarding surgery.

#### **Contralateral implants**

Two children that had already been implanted previously had contralateral implants to enable hearing in both ears.

#### **Cochlear Implant Referrals**



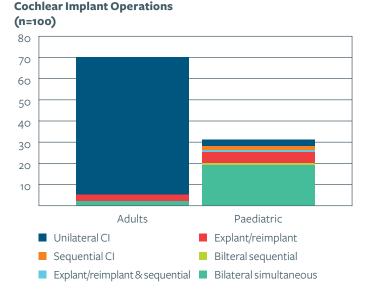
#### **Transferred patients**

During 2016/7, 16 patients were transferred into USAIS who had already been implanted with a cochlear implant prior to referral; 10 of these were adults and five were paediatric patients. 20 patients were transferred out from USAIS (16 adults, 4 paediatric) and 17 patients deceased.

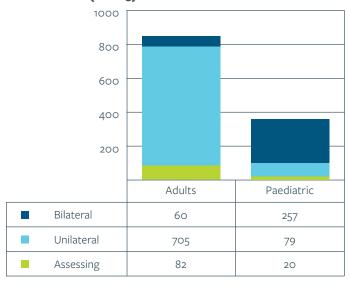
#### Failures, Re-implantations and Non-Users

In the year 2016/7 eight patients had their cochlear implants removed due to device problems and were subsequently re-implanted in the same ear. One user had a device failure but chose not to have the explant surgery. Of the eight patients who had an explant, one was for medical reasons, five had a device failure and two had performance decrement.

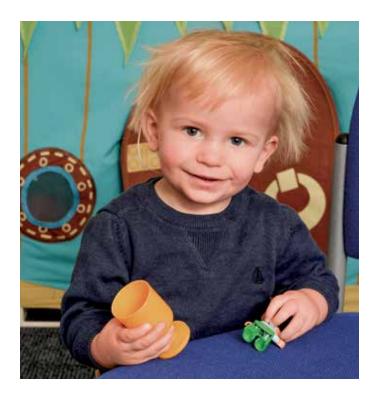
There are 23 patients who are no longer able to make use of their cochlear implants who have not had their implants removed and have thus become non-users. A further four patients are known to us but have now become lost to follow up.



#### Cochlear Implant Patients on Programme - Maintenance (n=1203)



### "First class service every time."



#### Age at Implant—CI Patients

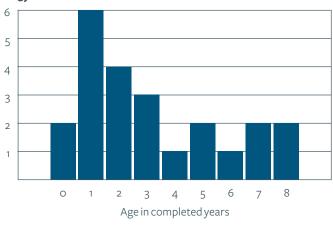
USAIS treat patients of all ages. During the year 2016/7, the most common age for children to be implanted is between the age of one and two years old and adults were most often implanted between 70 and 79 years of age. USAIS are trying to reduce the age of implantation in children in order to improve their potential.

#### **Patients on programme**

Patients with cochlear implants need access to a maintenance programme. Patients have regular reviews to ensure that their device is continuing to function optimally. USAIS currently have 1203 cochlear implant patients on programme who are either implanted or under assessment.

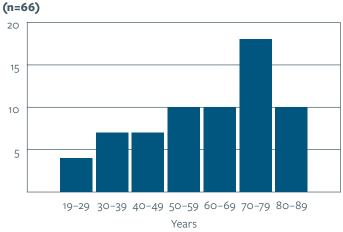


Age at first Cochlear Implant (Paediatric) (n=23)





#### Age at Implant (Adult)



#### **Key Service Outcomes**

The outcomes of Cochlear Implant patients are measured at their 12 month review. The following graphs represent the outcomes. One adult has not been reported on as they choose not to attend their appointment.

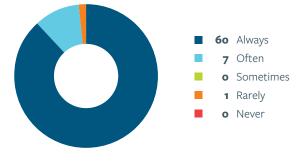
#### **User Satisfaction and Benefit**

For this Key Service Outcome the standard is >90% of adults using their cochlear implant consistently and reliably. As can be seen below USAIS met this target with 98% of adults and 94% of children wearing their implant often or always.

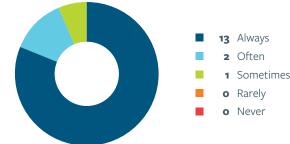
Similarly, >90% of adults and children felt that they were benefitting a lot or a great deal from their cochlear implant after 12 months, as seen below.

#### Adults (n=68) How often do

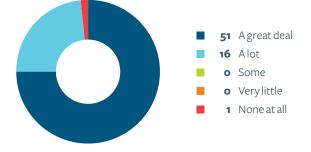
they wear their implant(s)?



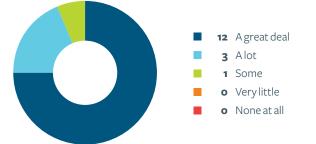
Children (n=16) How often do they wear their implant(s)?







Children (n=16) How much benefit do they feel they get from their cochlear implant(s)?



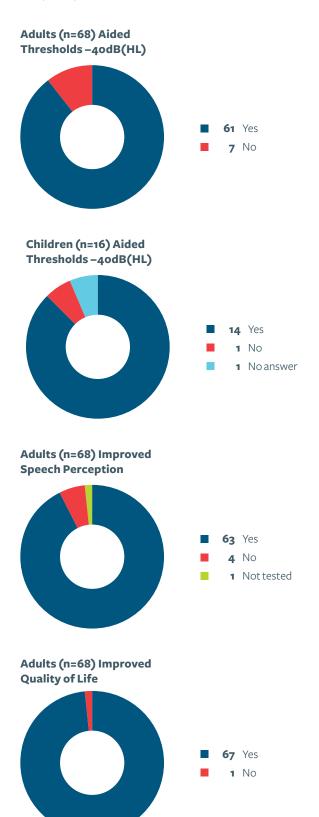
#### Listening

Our key service outcome is to have 80% of all patients with thresholds of 40 dB HL or better in implanted ears. Using the data of patients who have had their 12 month review within the period 2016/7, USAIS met this target in both adults and children.

#### Improvement in Speech Perception and Quality of Life

USAIS has reviewed all the data of all patients that had their 12 month review within the period 2016/7. There was an improvement in speech perception scores and quality of life for adults., demonstrated below.

All of the children within the review period (n=16) had improved outcomes in auditory performance and/or speech perception compared with pre-implant.





# STOCK AND EQUIPMENT

#### Equipment

All audiological equipment has been calibrated to British Standards and daily checks have been carried out and recorded.

#### Repairs

The target for all replacement processor requests to be dealt with within 3 working days in the Service Specification is more than 80%. During the period 2016/7 USAIS dealt with 100% of the cochlear implant requests within three working days. 99% of bone conduction hearing implants requests were also carried out within three working days.

#### Upgrades

USAIS have an upgrade policy where patients are eligible for an upgrade if they have had their processor(s) for more than five years and there is a newer processor suitable for their implant. Baha processors are replaced every four years.

Over the past year USAIS has been able to upgrade 235 cochlear implant patients with the latest technology available for their implant. An additional nine bone conduction hearing implant patients received an upgrade during the same period.

### CLINICAL OUTCOMES —BONE CONDUCTION HEARING IMPLANTS

Bone Conduction Hearing Implants (BCHI) includes Bone Anchored Hearing Aids (Baha), Middle Ear Implants (MEI) and Bone Conduction Hearing Implants (BCHD).

USAIS support the Cochlear Baha and Carina devices and the MED-EL Bonebridge and Vibrant Soundbridge devices.

#### Referrals

100% of referrals for BCHI Assessment were acknowledged within five working days. 100% of patients referred were offered an appointment within six weeks.

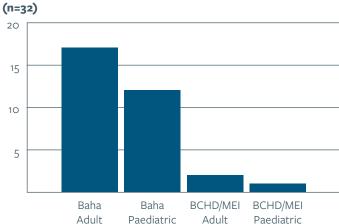
#### Discharges

Nine patients referred for bone conduction hearing implant assessment were discharged prior to implantation in 2016/7. One patient was discharged for audiological reasons, one was transferred to the cochlear implant programme and seven were discharged due to their own decision.

#### **Transferred patients**

During the year 2016/7, two adult patients were transferred into USAIS from another service with an existing bone conduction hearing implant prior to referral. Two adult patients transferred from our service.

#### **Bone Conduction Hearing Implant Referrals**



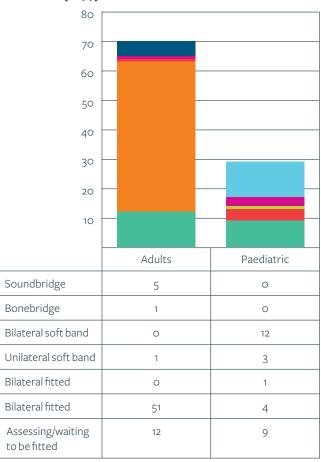
#### Operations

Eight adult BCHI patients were implanted in the period 2016/7, all with a Baha Connect device. In addition to this six people were fitted with a Baha device on a softband. Four children were fitted bilaterally and one adult and one child were fitted with a unilateral device.

#### **Patients on programme**

Patients with bone conduction hearing implants need access to a maintenance programme. Patients have regular reviews to ensure that their device is continuing to function optimally. The graph below shows all of our current patients on programme.





#### Successful Surgery—BCHI

Adults (n=7) How often do

Successful surgery for Baha is measured in terms of abutment loss and skin graft. The service specification is for 5% or less patients requiring revision of local skin graft within 1 year of surgery. No BCHI patients underwent skin graft surgery in this period.

The percentage of patients reporting abutment loss during the past 5 years should be 5% or less for adults and 7% or less for children. None of the patients who had surgery at USAIS reported abutment loss. One BCHI paediatric patient who transferred in to our service had loss of an abutment but is wearing the device again now.

Bilateral Baha surgery for one child did not proceed as the skull thickness was not sufficient to insert the fixture.

#### **Key Service Outcomes**

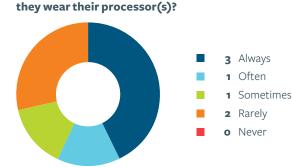
The outcomes of Cochlear Implant patients are measured at their 12 month review. The following graphs represent the outcomes. One adult has not been reported on as they choose not to attend their appointment.

#### **User Satisfaction and Benefit**

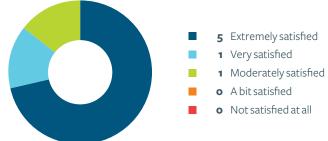
For this Key Service Outcome the standard is >90% of adults using their cochlear implant consistently and reliably. As can be seen below USAIS met this target with 98% of adults and 94% of children wearing their implant often or always.

#### Improvement in Quality of Life

USAIS has reviewed all the data of all patients that had their 12 month review within the period 2016/7.100% of adults and children who have been fitted with a BCHI said they felt it had improved their quality of life.



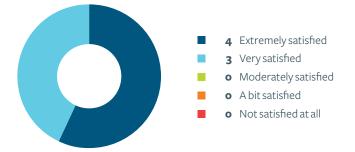
#### Adults (n=7) How satisfied are they with their auditory implant(s)?



Child (n=7) How often do they wear their processor(s)?



Children (n=7) How satisfied are they with their auditory implant(s)?



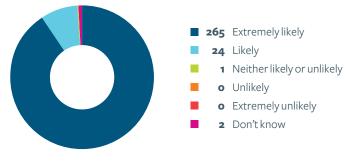


### SERVICE USERS FEEDBACK

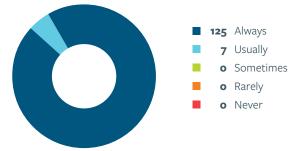
#### Audits—Patient Survey

Patients attending a review at USAIS are asked to complete a patient survey to enable USAIS to review the quality of the service provided. The NHS Friends and Family Test has been used and the results are shown below. 99% of the patients attending for review who completed the questionnaire (n=292) would be extremely likely to recommend USAIS to their family and friends should they require similar treatment.

### How likely are you to recommend AIS to a family or friend? (n=292)



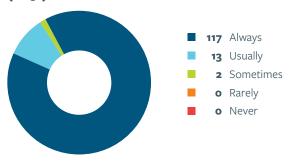
### Do the Auditory Implant Staff treat you with Dignity and Respect? (n=132)



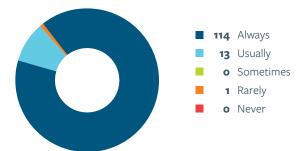
#### **Additional Questions**

Some additional questions were asked giving USAIS further feedback about the service provided.

#### Do the Auditory Implant Staff work well together? (n=132)



### Are you involved in decisions about your care/your child's care? (n=128)





"Staff are always brilliant, always make you feel welcome. It feels like a second home, you can talk about everything and anything. My son really likes going there."

Contact us: www.southampton.ac.uk/ais

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