



## Autologous Ear Reconstruction



## Annual Report

**1<sup>st</sup> April 2009 – 31<sup>st</sup> March 2010**

## 1. Introduction

This is the annual report (year 2) which summarises the activity in relation to the National Service for Autologous Ear Reconstruction. This report relates to the period 1<sup>st</sup> April 2009 to 31<sup>st</sup> March 2010.

## 2. Activity - actual against planned from 1<sup>st</sup> April 2009 to 31<sup>st</sup> March 2010

	Actual	Annual Agreed
<b>Admissions to Waiting list:</b>		
<b>New Out Patients</b>		
Paediatric	58	
Adult	30	
<b>Out Patient Follow Up</b>		
Paediatric	91	
Adult	91	
<b>Surgery:</b>		
<b>Paediatric</b>		
1 <sup>st</sup> Stage	5	10
2 <sup>nd</sup> Stage	6	10
3 <sup>rd</sup> Stage	3	
Revisions	4	
<b>Additional Procedures:</b>		
Correction of cryptotia	1	
Sinuses related to microtia:	2	
Otoplasty for microtia:	3	
<b>Adult</b>		
1 <sup>st</sup> Stage	7	10
2 <sup>nd</sup> Stage	6	10
3 <sup>rd</sup> Stage	1	
Revisions	5	
One stage Procedures	5	

All procedures were carried out within Lothian.

### Out Patients

#### Paediatrics

Our Multidisciplinary Paediatric Microtia Clinics are now well established in both Edinburgh and Glasgow. The Edinburgh Clinic is being undertaken as a combined clinic with Mr. Stewart, Plastic Surgeon, Mr Alok Sharma, ENT Surgeon, Dr Ruth Henderson,

Paediatrician with an interest in paediatric audiology and Kerr Clapperton, Specialist Nurse. In Glasgow our clinic is run as a combined clinic between plastic surgery and Dr Andy Clement, ENT Surgeon, as well as our Specialist Nurse. Dr Clement's presence in the clinic is soon to be replaced by Dr Haytham Kubba and we welcome him on board.

We are also very pleased to undertake our first Multidisciplinary Ear Reconstruction Clinic in Inverness this year with the plastic surgery and specialist nurse visiting Inverness and undertaking a combined clinic with Mr McKerrow, the local ENT Surgeon. The patients seemed to be very pleased to have such expertise on their doorstep and three patients from that clinic have indicated a wish to proceed to surgery.

### **Adult**

Monthly adult out patient clinics are held at St. John's Hospital.

Adult reconstruction clinics take place bi-monthly at the Canniesburn Wing of Glasgow Royal Infirmary to provide local access to clinics for patients residing in the West of Scotland. This clinic is undertaken on the same day as the paediatric clinic at Yorkhill Hospital.

### **In Patient**

Nothing significant to report.

### **NHS Board of Residence**

The table below details the NHS Board of Residence for all in-patient procedures undertaken from April 2009 to March 2010.

#### **Paediatric**

<b>Health Board</b>	<b>2009/2010</b>
Lothian	1
Greater Glasgow & Clyde	13
Grampian	2
Tayside	2
Lanarkshire	3
Highland	0
Fife	1
Forth Valley	1
Ayrshire	1
<b>Belfast</b>	3
<b>South Shields</b>	1
<b>Wakefield</b>	1
<b>Total</b>	<b>29</b>

## **Adult**

<b>Health Board</b>	<b>2009/2010</b>
Lothian	6
Greater Glasgow & Clyde	13
Highland	1
Fife	1
Forth Valley	0
Lanarkshire	2
Grampain	1
<b>South Shields</b>	1
<b>North Shields</b>	1
<b>Total</b>	<b>26</b>

### **Out of Area Referrals**

A total of 15 out of area referrals have been received during the past year. These referrals indicate the growing reputation of the National Autologous Ear Reconstruction Service. For patients referred who reside outwith Scotland, arrangements are made with the appropriate Primary Care Trust to secure funding for these cases prior to consultation and treatment.

The breakdown of out of area referrals is detailed below :

### **Paediatric Out of Area Referrals April 2009 to March 2010**

<b>Area</b>	<b>Number of Referrals</b>
England	7
Northern Ireland	2

### **Adult Out of Area Referrals April 2009 to March 2010**

<b>Area</b>	<b>Number of Referrals</b>
England	4
Northern Ireland	3

### **Length of stay (ward, ITU, HDU)**

Average length of stay following a 1<sup>st</sup> stage ear reconstruction procedure is 5 days.  
Average length of stay following a 2<sup>nd</sup> stage ear reconstruction procedure is 2 days.  
There is no requirement for ITU/ HDU care following ear reconstruction surgery.

### **3. Mortality Data:**

There have been no deaths associated with the service from 1<sup>st</sup> April 2009 to 31<sup>st</sup> March 2010.

## 4. Waiting times

### New Out Patients – Adults and Paediatrics

At March 2010, NHS Lothian was achieving a 12 week wait for new outpatient appointments.

### In-Patients

At March 2010, NHS Lothian was achieving a 9 week wait for in-patient procedures from date of placement on the waiting list.

### Paediatric Procedures

1<sup>st</sup> stage paediatric reconstructions are indicated by the age of the child with 2<sup>nd</sup> stage procedures normally indicated 6 months following 1<sup>st</sup> stage reconstruction.

## 5. Quality of Care

There have been no formal complaints relating to the service during the year.

## 6. Clinical audit and outcomes

### Specific issues:

No patients have suffered from hospital acquired infections or significant wound infection. There were no admissions to ITU / HDU for ear reconstruction patients. There have been no complications or critical incidents recorded this year.

- **Ear Reconstruction Aesthetics Audit**

A snapshot audit of patients attending clinics has given us positive feedback regarding the patients' perception of the service which has been delivered.

The audit was designed that would allow us to view a trend in the aesthetic outcomes of completed ear reconstructions, carried out by Mr Ken Stewart between 2004 and 2009. A total of 51 reconstructed ears were scored using a set of 17 questions that looked at every physical aspect of the ears appearance. Each question produced a number ranging from 1 to 5, with 1= very dissatisfied and 5= very satisfied. **(See Appendix 1)**

The audit was carried out by Mr Ken Stewart and Mr Kerr Clapperton, Nurse Specialist for the Ear Reconstruction Service. An average was calculated for each reconstruction and entered into the month that the surgery was carried out. Once the results were plotted on a chart, a trend was clearly visible. **(See Appendix 2)**

This has gratifyingly demonstrated a continued improvement in the results with all our patients in the last year ultimately achieving satisfactory aesthetic results. We propose to present these results to other colleagues in the UK and in particular to ask for their opinions in the methodology we have utilised in conducting this audit. Hopefully with time we can develop this model further so that comparisons can be made on a regular basis between UK centres. In that regard, we have been supportive of the collective bid for a number of our units south of the border to obtain ENSAG funding for their own Ear

Reconstruction Services. It is gratifying that Scotland has led the field in terms of establishing a National Centre of Excellence.

The good reputation of our service continues to grow. In addition to referrals from Scotland, regular referrals are also received from the north of England and the north of Ireland.

## **7. Teaching and Research Activities**

The other exciting development which we look forward to in 2010 is the link-up we have made with Professor Mark Bradley's team at the University of Edinburgh Chemistry Department. Professor Bradley is a Polymer Research Scientist with a programme of research which allows polymer cultured cell interactions to be studied in detail. We think that by harmonising the expertise of both teams, we will quickly be able to establish a tissue engineering research programme in Edinburgh with a long-term view to creating human ears invitro and ultimately avoiding the necessity for costal cartilage harvest.

Our Trainee, Dr West, applied to the Chief Scientist Office (CSO) to fund this research. The application was placed third out of eighteen. Normally the CSO programme would fund six postgraduate students per year but on this occasion it only had funding for two. The CSO however remained keen on funding the project and discussions are ongoing about the potential for partial funding. We have, however, been successful in obtaining a revenue stream to fund Dr West to undertake this research. He has been appointed a Clinical Research Fellow at the University of Edinburgh which provides a small salary in return for a 1/6 on call commitment as the resident Medical Officer at the Spire Murrayfield Hospital.

The nature of Dr West's research is such that he will be attending all the Ear Reconstruction lists and clinics. We would therefore propose to draw-down the three training sessions which NSD have offered to fund in order that Mr West can contribute part of his out of programme experience clinically in the Ear Reconstruction Service. Some of the initial research costs will be borne by a grant from soft funding within the Plastic Surgery Department and further grant applications are pending to fund the ongoing work. We will be submitting an application for ethical approval of this research in the near future. We do not anticipate any difficulties in that regard in that similar work on culture cells is being undertaken by the Clinical Genetics Department within the University of Edinburgh with appropriate ethical approval.

### **International Networking**

We continue to interact internationally with the ear reconstruction community at large. Dr Francoise Firmin from Paris visited early in 2009 and undertook a combined seconded stage procedure with Mr Stewart. This was completion of a first stage procedure she had undertaken in 2007. I look forward to welcoming Dr Burt Brent who is an internationally renowned Plastic Surgeon, famous for pioneering ear reconstruction. He is visiting St. John's Hospital, Livingston in May and lecturing to our Trainees.

### **Visit to China**

We were also delighted to visit the Ear Reconstruction Unit which is part of the People's Hospital for Plastic Surgery in Beijing, China, in September 2009. This week long visit allowed a great deal of exchange of information between Mr Stewart and the local team.

Lectures were delivered by Mr Stewart and he had the opportunity to visit the team in their operating theatre and clinics. Some of the techniques they are using are interesting, if not surprising, in particular watching a rib cartilage being harvested under local anaesthetic was not something we felt was likely to translate to a Western population! Nevertheless, the Chinese routine use of tissue expansion is of great interest and we think will influence our practice over the coming years.

## **8. Financial report**

The financial report for the period April 2009 to March 2010 is detailed in Appendix 3.

## **9. Service Developments**

The service is moving to develop additional clinics on an ongoing basis in Glasgow for both adults and children.

### **Clinical Psychologist**

We were delighted to appoint Emily Taylor, Clinical Psychologist to our team doing two sessions a week. We have had a number of patients, particularly teenagers and some young adults, with some psychological issues and we feel that the addition of a Clinical Psychologist to the team will be an enormous benefit. We anticipate Emily attending all the Ear Reconstruction Clinics that we undertake.

Now that we have Emily Taylor on board, we hope to be able to undertake routine psychometric testing of patients in order to obtain further feedback with regard to psychological outcomes since achieving happy, confident patients is in essence the bottom line of what we do. It is likely that we will introduce the Derriford Appearance Score – the scoring mechanism for adult patients, and Emily is currently actively reviewing the literature with regard to choosing an appropriate paediatric scoring system.

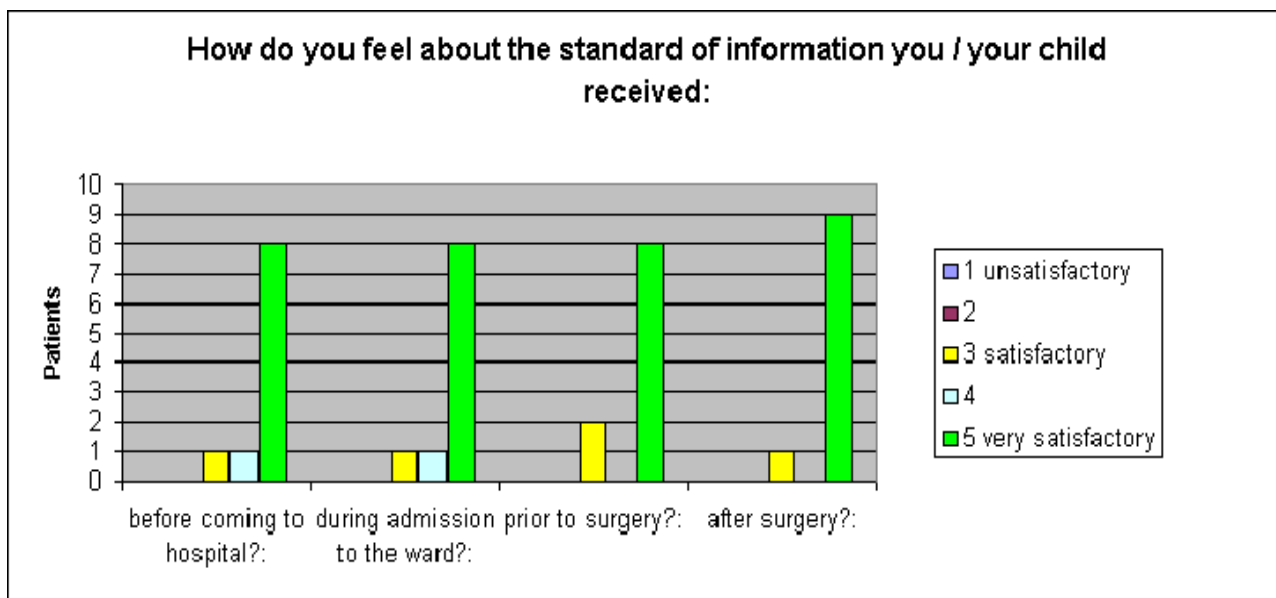
## **10. Summary and Conclusions**

Overall, the service is pleased with the progress it has made this year. Maintaining access guarantees will continue to be a challenge in the coming year as we move to an 18-week referral to treatment pathway, but the excellent relationship the services builds with its patients will undoubtedly continue, as will the delivery of psychologically-crucial services to its patients.

## APPENDIX 1 AESTHETIC AUDIT QUESTIONNAIRE

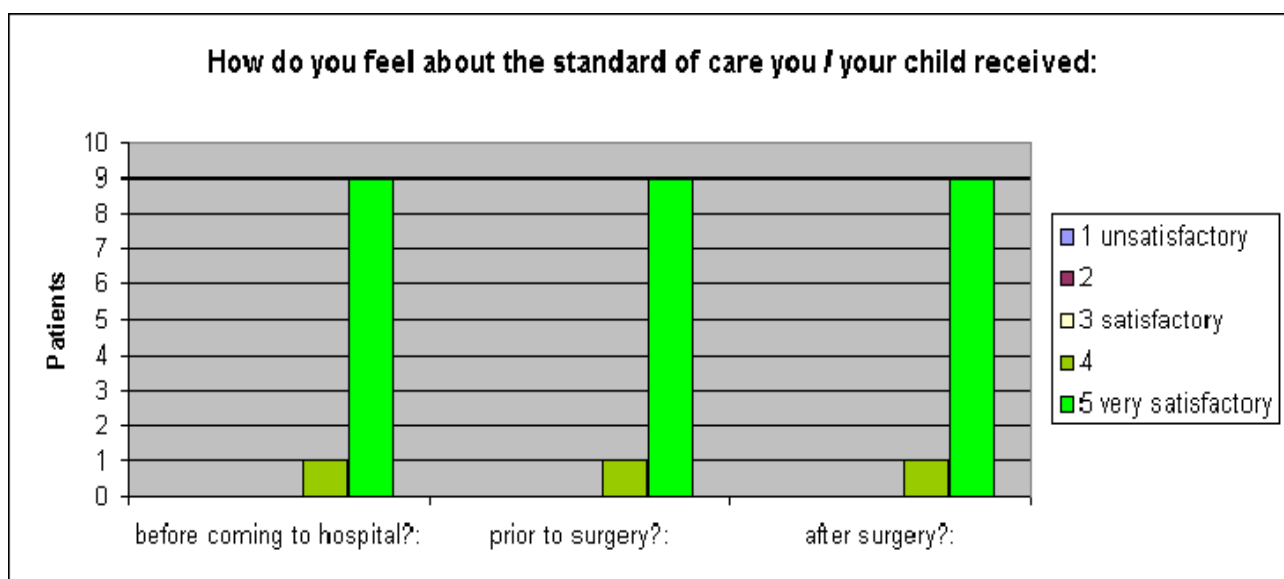
1. How do you feel about the standard of information you / your child received:

	1	2	3	4	5
	unsatisfactory		satisfactory		very satisfactory
before coming to hospital?:	0	0	1	1	8
during admission to the ward?:	0	0	1	1	8
prior to surgery?:	0	0	2	0	8
after surgery?:	0	0	1	0	9



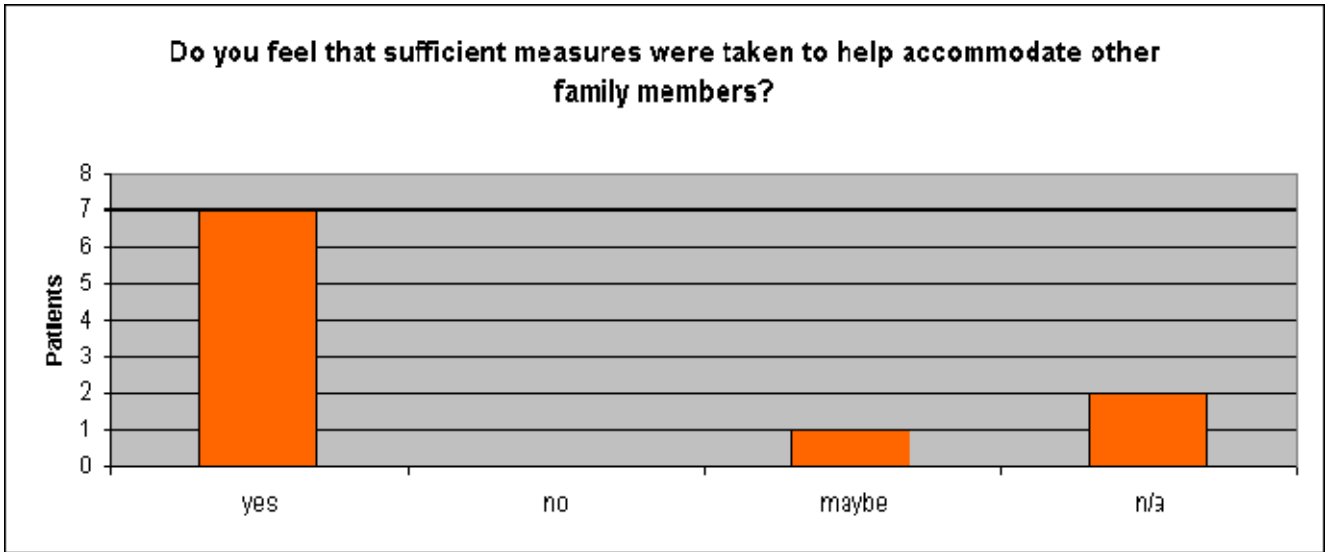
2. How do you feel about the standard of care you / your child received:

	1	2	3	4	5
	unsatisfactory		satisfactory		very satisfactory
before coming to hospital?:	0	0	0	1	9
prior to surgery?:	0	0	0	1	9
after surgery?:	0	0	0	1	9



3. Do you feel that sufficient measures were taken to help accommodate other family members?

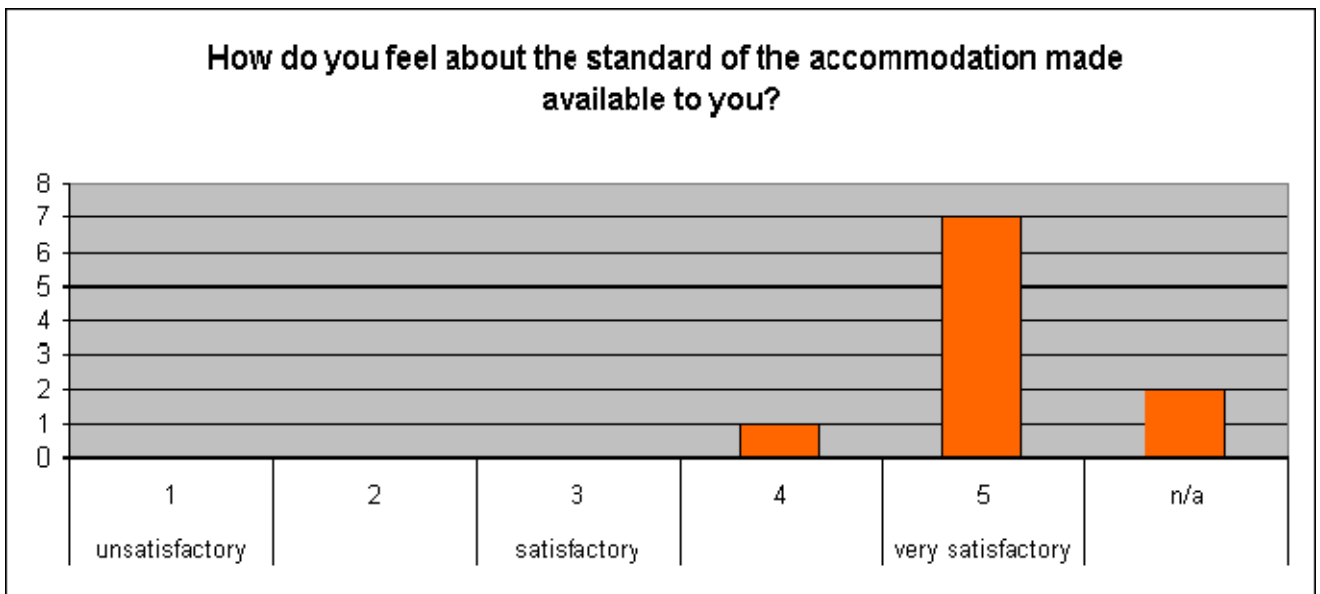
yes	no	maybe	n/a
7	0	1	2



**(b) How do you feel about the standard of the accommodation made available to you?**

unsatisfactory	satisfactory	very satisfactory	n/a
1	2	3	4
0	0	0	1
			7
	10		
			2

**Responses:**



**Selected patient feedback:**

" Before, during and after surgery, the standard of care my child, myself and my family received was excellent."

"I would like to thank Mr Stewart and all his colleagues for the good job, and for the support I had from Mr Clapperton. I think everything was perfect for us. Thanks so much again."

" My daughter and I were very well cared for by all staff. They were friendly and professional which put us at ease."

" The accommodation was very good and the staff were fantastic."

## Appendix 2 AESTHETICS AUDIT CHART

