

Forth Valley Audiology Services Annual Review

2010

As part of the Scottish Quality Standards for Adult and Rehabilitation services and Paediatric Audiology Services, the department has produced our second annual services review.

Executive Summary

The Forth Valley Audiology Department has clinics in Falkirk Community Hospital, Stirling Royal Infirmary, the Forth Valley Sensory Centre in Camelon and a service is now provided in the new Clackmannanshire Community Hospital in Alloa. We also provide an audiometry service for Ear, Nose and Throat clinics in the new Forth Valley Royal Hospital in Larbert. We now work across 5 sites in Forth Valley and have eight Audiologists (whole time equivalent) one Clinical Scientist, three Assistant Technical Officers, one trainee associate audiologist and a clerical officer. We strive for excellence through innovation, creative thinking and education and we are dedicated to improving the lives of those affected by hearing related difficulties. 2008/2009 was a very successful year with a national award and many successful educational events; 2009/10 however was a particularly difficult one with a catastrophic Information Technology failure in March/April 2010 that left the department with severe difficulties. We are indebted to many people within associated health departments who assisted us in our recovery. This recovery was only possible through the dedicated work of the staff within the department. Their 'achievement' cannot be underestimated and I consider it to be as good as any of our other successes.

We also had our first peer review visit to compare us with the new Scottish Audiology Standards. The results are shown later on in the review however, when compared with other departments in Scotland, we scored highest for our paediatric service and came fourth for our adults. We will be reviewed again in February of next year and these results will be made public by the Scottish Government.

Following our first patient satisfaction questionnaire last year, we introduced the Volunteer service at Falkirk repairs to reduce the wait for people and this has been hugely successful. We hope to expand this service to other areas. We also produced the first and second editions of our patient newsletter 'Sound Advice' which aims to give information about our service to those attending our clinics or accessing our website.

As we attempt to meet government waiting times targets in an environment of increasing referrals, rising costs of hearing aid technology and significant changes across NHS Forth Valley, we are assured that 2010/2011 will be a very challenging year.

Dr Donald MacAskill

Audiological Services Manager

Forth Valley Statistics and Demographics

Adult statistics

The Royal National Institute for the Deaf (RNID) estimate that there are over 758,000 deaf individuals in Scotland. (See Table one for details)

Table 1. Estimated number of deaf and hard of hearing people in Scotland, broken down by age group.

Level of deafness	16 to 60 years old	Over 60 years old	Total
Mild/moderate deafness	203,000	498,000	701,000
Severe/profound deafness	9,000	48,000	57,000
All degrees of deafness	212,000	546,000	758,000

Table 2 Estimated Forth Valley population by sex, five year age group: 30 June 2008

Age Group	Total	Male	Female
0 - 4	16,623	8,486	8,137
5 - 9	16,136	8,288	7,848
10 - 14	17,606	8,995	8,611
15 - 19	19,724	10,099	9,625
20 - 24	18,463	9,499	8,964
25 - 29	16,199	7,949	8,250
30 - 34	16,153	7,628	8,525
35 - 39	21,147	9,914	11,233
40 - 44	23,639	11,394	12,245
45 - 49	21,993	10,754	11,239
50 - 54	19,053	9,247	9,806
55 - 59	18,621	9,071	9,550
60 - 64	17,988	8,762	9,226
65 - 69	14,200	6,650	7,550
70 - 74	11,982	5,539	6,443
75 - 79	9,202	3,878	5,324
80 - 84	6,241	2,381	3,860
85 - 89	3,621	1,140	2,481
90+	1,456	369	1,087
TOTAL	290,047	140,043	150,004

Source: General Registrar's Office:

It is noted that these statistics suggest that Forth Valley (+0.8 per cent) had the third largest percentage population increase in Scotland.

The demographics of the region are shown in Table 3.

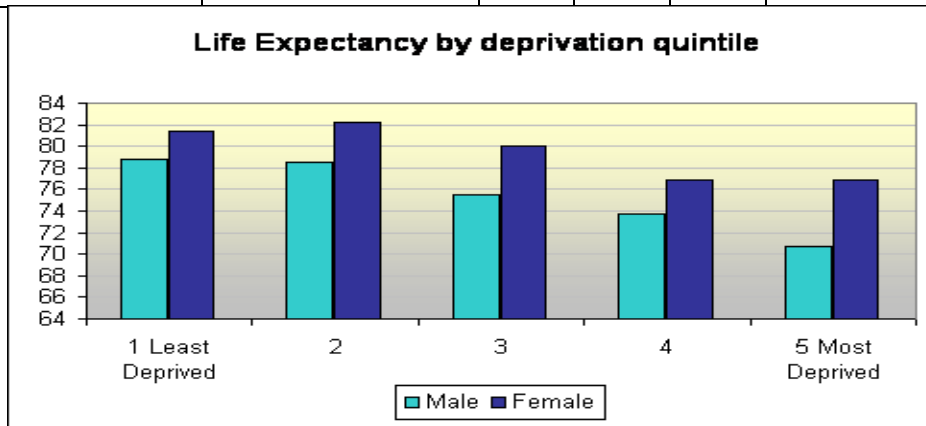
Table 3 Demographics, Ethnic Group and Language

		White Scottish	Other White British	White Irish	Other White	Indian	Pakistani	Bangladeshi
Scotland	5,062,011	88.09	7.38	0.98	1.54	0.3	0.63	0.04
Forth Valley	279,480	90.37	6.55	0.74	1.21	0.12	0.4	0.01

Other South Asian	Chinese	Caribbean	African	Black Scottish or other Black	Any Mixed Background	Other ethnic group
0.12	0.32	0.04	0.1	0.02	0.25	0.19
0.05	0.16	0.03	0.05	0.01	0.18	0.12

Table 4 Forth Valley Life Expectancy by deprivation quintile

Deprivation	1 Least Deprived	2	3	4	5 Most Deprived
Male	78.86	78.56	75.56	73.7	70.75
Female	81.4	82.24	80.01	76.83	76.81



Source: 18th Annual Report of the Director of Public Health - Chapter 3 Inequalities in Health

Notes: 60% of female population can expect to live over 80 years

Males in deprivation quintile 5 have a lower life expectancy of around eight years

Using the RNID figures, (not including children) we can estimate that in total there are over 57 201 individuals in Forth Valley with hearing loss, broken down further; there are 42,685 over 50 years of age with hearing loss and 23,109 individuals over 70 with hearing loss. RNID estimate that 1/3rd of patients who need a hearing aid actually have one. This would equate to 7625 hearing aid users over age 70 and 14228 users over age 50 and 18, 876 hearing aid users within Forth Valley. If we saw each person for full reassessment every 3 years as per quality standards, we would expect to see 6292 people annually.

***As a result of our information technology difficulties, all statistics are from last year only.**

Adult Statistics

From September 2008 to August 2009, Forth Valley fitted 2293 hearing aids to first time users

From the people we saw for reassessment appointments, we replaced 1479 hearing aids

The total number of hearing aids distributed by Forth valley was 4977. This compares to 2896 in the year 2005 to 2006 and 4335 2006 to 2007, when we reduced waiting times significantly.

Paediatric Statistics

Employing the figures quoted in the quality standards document, the number of children expected to have a hearing loss greater than 40dbHL in the better ear in Forth Valley is estimated to be **43** for those aged 0 - 9years and **75** for those aged 9-19 years. The total number of children with a hearing loss of 40dbHL or poorer in the better ear is estimated by the RNID to be **118** children.

In Forth Valley we have **141** children presently wearing hearing aids, We have **64** Aided children aged between 0-9 years and **77** aided children aged 9 years and above. There are a further **25** children with varying degrees of unaided hearing loss and **13** children use Cochlear Implant(s).

The total number of children in Forth Valley with known hearing problems is **178** (this includes all degrees of hearing loss).

The National Deaf Children's Society believes that statistics of childhood hearing loss are underestimated and are piloting schemes in Lothian and Tayside to try and obtain a clearer understanding of this.

Those with hearing aids are further broken down in table 5

Table 5 Aided Children

Age	Bilateral conductive			Bilateral sensorineural			Unilateral conductive		Unilateral sensorineural		
	Mild	Mod	Severe	Mild	Mod	Severe	Mild	Mod	Mild	mod	severe
0-5	3			7	7	6		1		3	
5-9	12	3		8	4	2	3	2		2	
9+	11	6	2	14	9	15	6	5	4	4	2

Departmental information

An adult Audiology service is provided at Stirling Royal Infirmary (SRI), Falkirk Community Hospital (FRI) and Clackmannan Community Hospital (CCH)

Our Paediatric service is provided from CCH, SRI and the Forth Valley Sensory Centre although difficulties remain regarding room temperature and IT connection to our main server in Stirling; these issues have been ongoing for over 5 years and risk assessments with high scores have been submitted.

Open repairs are available five afternoons a week from SRI and 3 afternoons from FRI. Volunteers now run alongside repair clinics at Falkirk to reduce waits.

Clinical Governance

As a department we believe in innovation and quality. We are willing to try new devices, equipment, or ways of working if we believe it will benefit the department or the patients.

- The process of assessing every member of staff's competency levels continues, following guidelines from Wrexham and QS standards. We will achieve 100% by Dec 2010.
- The department organised and ran 3 study days in 2009/10 with over 450 people attending.
- We started taking students from Queen Margaret University
- We obtained funding to allow our Clerical officer to train to become an Associate Audiologist
- The tinnitus rehabilitation group for patients at the Forth Valley Sensory Centre continues to be well attended and a recent tinnitus study day resulted in a national group forming.
- We have representation on the commodity advisory panel and quality standards peer group
- A 5th Paediatric family support day was run with over 170 individuals attending continuing the growing success of this day. The Listening Bus from the National Deaf Children's Society was in attendance as well as Speech and Language Therapy, Education, voluntary bodies and manufacturers.
- We have implemented lean methods within most of our audiology rooms
- Study day lectures were placed on department websites and made available worldwide by Phonak Ltd
- Following accreditation for British Academy of Audiology Higher Certificate to Practice modules in paediatrics and adults, we had our first student on secondment from Addenbrooke's Hospital in Cambridge.
- We continue to use the new bone conduction hearing aids.
- We were involved in the evaluation of two pieces of Audiology equipment.
- We continue to use Soundrecover technology

- We were asked to be involved in the development of three pieces of equipment including the new freefit visible speech mapping system from Otometrics. This allows us to fit hearing aids to people using real life sounds to evaluate their effectiveness.
- We provided three open days of information during national tinnitus week. This was subsequently reported in the British Tinnitus Association newsletter.
- All but one member of staff (personal choice) are either state registered (Clinical Scientist) or voluntarily registered.

Evidence of audit, guidelines or protocols developed

- All paediatric pathways were reviewed
- We have begun a specific assessment and management clinic for adults with learning difficulties
- Adult hearing aid protocols have been reviewed
- All relevant protocols required by the Scottish Quality Standards are in place and kept on the departmental shared computer drive ensuring access for all relevant staff
- All BSA/BAA standards are also placed on the departmental shared computer drive ensuring access for all relevant staff.
- Individual Management plans in place for all patients reviewed to be in line with QS requirements and department requirements.
- We have created a protocol for the 'substitution' method fitting of open fitting hearing aids.
- Following an adult "1st appointment" leaflet to allow people to understand what they were coming for and what to expect at the appointment, we created a paediatric one.
- We published the 3rd paediatric newsletter 'the listening post'. This is an information and update newsletter, which is sent to all members of the Children's Hearing Services Working Group as well as the family homes of those children with hearing loss.
- We published the 1st and 2nd editions of 'sound advice'. This is an information and update newsletter for our adult service available in our department waiting areas and on our website
- The Adult Service carried out the first satisfaction questionnaire and our volunteers service was the result.

How change has been communicated to the team

- Monthly staff meetings as well as email contacts, personal meetings and a newsletter disseminated to all staff every month to six weeks.

Other related new/changed clinical governance activity worthy of note

- Following her successful completion of a post graduate qualification in leadership/management, one staff member was awarded the newly created post of health care scientist development lead.

- We attended an ethnic minorities information day where we carried out basic hearing screening and gave information about our services.

Personal Development

All staff Personal Development Plans carried out and in place

As well as the department run study days that all staff were invited to (department closed), the following educational inputs were made:

- Two staff went on Tinnitus update study days
- One staff member completed a post graduate diploma in management,
- staff member went to the AAA
- Five staff members went to the BAA conference in Edinburgh
- One staff members completed year one of the hearing aid diploma
- One staff member completed year one of a Masters Degree in Advanced Audiology this year.
- One staff member attended a three day course on leadership/management
- One staff member became a supervisor for Queen Margaret University and a quality standards peer reviewer
- Two staff involved in the development of new equipment that will help improve future NHS products as well as giving Forth Valley patients access to the newest technology
- One staff member attended the Phonak Audiology reception course in Warrington over three days.
- Two staff attended a counselling course at Queen Margaret University
- Three staff attended the Oticon information day in Stirling
- Two staff attended a rehabilitation day in Stirling
- Staff attended mandatory training (ongoing)
- Sandy Gardiner and Donald MacAskill gave a talk on non organic hearing loss in children at the British Association of Paediatricians in Audiology in November 2009.

HAI

All rooms at SRI now have alcohol gel dispensers in them or next to them and bottles are available elsewhere across the department.

Risk Management

Ongoing problems with connections to the Forth Valley Sensory Service have resulted in unobtainable data on three occasions. This is a red risk at the highest level.

Following a catastrophic information technology incident, new contingency plans were created and a full review was carried out with recommendations made.

Developments

An adults with learning difficulties clinic was created and takes place monthly. The Clackmannanshire Community Hospital is now used more frequently for adults and children

Waiting Time Targets

The Scottish Government's target from GP or self referral to hearing aid fitting is 18 weeks by December 2011. Although we reached this target by April 2008 (compared to 78 weeks at Falkirk and 52 weeks at Stirling in 2005). As a result of capacity/demand issues, It is clear that meeting these targets will be a significant challenge and a business case has been put together to try and address these issues.

Staff Sickness

Departmental staff sickness rates remain below 2%

Staff Changes

We have welcomed Jennifer Foley (Audiologist) into the department presently as a bank member of staff

We have also welcomed Linda Taylor 22 hours a week technical work and administration.

Stephanie Doody obtained a seconded post as healthcare scientist development worker for Lanarkshire/Forth Valley

One staff member returned part time following maternity leave.

Future Developments

We will look to our business case to address the increase in referrals as well as the expected increase in hearing aid costs.

We will look to create an adults services user group and get as many people and groups involved as we look at the future design of the Audiology Service in Forth Valley, including RNID, NDCS and others.

Following the national audit results, we have created changes and will continue to address areas where we could improve.

Summary

The Forth Valley Audiology Department consists of a team of fine Audiology professionals. We aim through innovation and creativity to improve our services. 2009/10 has been a very traumatic year for all in the department. The department has recovered as a result of team working but many of our plans have been delayed. We continue to strive to become a centre of excellence with a worldwide reputation for our work.

Appendix

Adult Standards	Peer Assessed Scores (%)
1. Accessing the Service	70.00%
2. Information Provision & Communication with Individual	75.00%
3. Assessment	86.67%
4. Developing an Individual Management Plan	93.33%
5. Implementing an Individual Management Plan	82.86%
6. Outcome	80.00%
7. Professional Competence	70.00%
8. Multi-Agency Working	40.00%
9. Service Effectiveness & Improvement	73.33%
Overall Average for Standards	74.58%

Date: 01/10/2009

Paediatric Standards	Peer Assessed Scores (%)
1. Accessing the Service	80.00%
2. Assessment	73.33%
3. Developing an Audiology	80.00%
4. Implementing an Individual	80.00%
5. Outcome	70.00%
6. Professional Competence	100.00%
7. Information Provision and	80.00%
8. Multi-Agency Working	64.62%
9. Service Effectiveness &	93.33%
Overall Average for Standards	80.14%

Date:01/10/2009

Forth Valley Paediatric Audiology Service Satisfaction Questionnaire, 2010

Of 146 sent out, 30 were completed and returned. (21%)

	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Question does not apply to my child	Is there anything we could do to improve?	t o t a l
Accessibility							
Your experience contacting the Paediatric Audiology Team	18	8	2	2			30
Your child's appointments arranged when you expected them to be?	14	12	3	1			30
The time you waited at your appointments?	17	11	1	1			30
The location of your appointments? (How accessible from your home)	15	12	1	2			30

Surroundings							
The signage directing you to the Audiology department within the clinic building?	14	11		1		No tally 4	30
The child-friendliness of the waiting room?	8	14	3	1		No tally 4	30
The child-friendliness of the clinic rooms?	14	9	3	1		No tally 3	30
The comfort of the clinic rooms?	13	9	4	1		No tally 3	30
Information							
The information you received with or on the appointment letter(s)?	16	10		1		No tally 3	30
Verbal information you received at the appointment(s)?	18	8		1		No tally 3	30

The written information you received following the appointment(s)?	17	6	2	1	1	No tally 3	30
Relevance of information available in the waiting room?	12	8	3	1	2	No tally 4	30
Staff							
The professionalism of the audiologist?	25	4		1			30
Care & Treatment							
The opportunities to discuss any problems or difficulties and how any difficulties were dealt with?	24	3	1	1	1		30

The assessment and management of your child's hearing needs?	25	3		1		1 no tally	30
The involvement of other services which we have referred your child to?	13	6	5		4	2 no tally	30
Overall							
The audiology service you received?	23	5		1		1 no tally	30

Any Further Comments?

Good all round

(room) can get a bit warm

State how long the appointment may take

Contacting you seems to be a problem. As yet 3 emails and 2 telephone messages still unanswered. Also contacted you regarding further testing to determine hearing loss cause and am still awaiting feedback. Am now having to make a doctor's appt to get her to contact audiology in the hope I might actually get a response. Feel it's very unfair on my son.

My only issue is with going to Sauchie from Falkirk when we always attended Camelon. Also the room was very bare compared to the Camelon one.

Always had full explanations and when questions asked, staff are excellent in talking to my daughter and informing her and not just talking to me (mum).

Staff are marvellous. Thank you very very much. My son and I greatly appreciate your knowledge, experience, kindness and help. Thank you.

Concerns of next audiology hearing test going to be in Clacks. Quite a journey if you have no transport, and are relying on public transport as I live in Grangemouth.

(location of appt satisfactory) only because I have a car.

Involvement of Windsor Park could be better.

Whilst we often have to wait we don't mind it. Looking forward to the service at the new Alloa Health Service (batteries , faults etc?)

Rarely answer phone.

(re location of appts) Camelon easy, Sauchie hard

(re written information) takes ages to receive.

(Dissatisfied with involvement of) ENT

Child's appointments arranged when expected to be - ?difficult when computer system goes down.

(re signage) Sauchie site is confusing.

(re child friendliness of waiting room) fab at Sauchie.

(re comfort of clinic rooms) rooms are very hot.

(re info in waiting room) Don't think there is anything on audiology up at Sauchie.

(re involvement of other services) I feel TOD input been patchy and too many staff changes.