



## **Strategic Plan 2013 - 2016**

### **Statistical Appendix**

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## 1. Children and Young People in Hospital

Mid 2011 statistics show that there were over 1.1 million children and young people aged up to 18 years of age in Scotland. They make up over a fifth (20.9%) of the total population of 5,254,800 million– the highest ever total. Although the numbers of children have fallen over the past few decades as a result of a falling birth rate, this trend has changed markedly in the more recent past. The General Fertility Rate has risen by 14% in the last 5 years and the number of births per annum (58,592 in 2011) is the fourth highest since 1997.

The 1.1 million children and young people under 18 years of age fall into the following age groups:

- Children aged <1-5 years: 354,187
- Children aged 6-11 years: 324,851
- Children aged 12-16 years: 294,716
- Young people aged 17-18: 128,487
- All children and young people aged <1-18 years: 1,102,241
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### **Summary Table of Population Age by Area Health Board Area: 2011**

	Ages	<1 to 5	6 to 11	12 to 16	17 to 18	<1 to 18
ALL AREA BOARDS	5254800	354187	324851	294716	128487	1102241
Ayrshire & Arran	366890	23618	22878	20956	9110	76562
Borders	113150	7227	7372	6543	2574	23716
Dumfries & Galloway	148060	9092	8532	8450	3444	29518
Fife	367292	25364	23150	20849	9347	78710
Forth Valley	295541	20385	19360	17777	8086	65608
Grampian	555280	38347	33957	30729	13477	116510
Greater Glasgow & Clyde	1210254	82564	73901	65765	29098	251328
Highland	311960	19464	18952	18374	7015	63805
Lanarkshire	563185	39846	38076	34277	14023	126222
Lothian	848727	57933	49733	44327	20485	1172478
Orkney	20160	1267	1156	1230	465	4118
Shetland	22500	1604	1541	1405	550	5100
Tayside	405721	25947	24650	22491	10239	83327
Western Isles	26080	1529	1593	1543	574	5239

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- Mid-year population estimates:

<http://www.gro-scotland.gov.uk/statistics/theme/population/estimates/mid-year/time-series.html>

## 1.1 Hospital Admissions

In 2011/12 there were around 100,000 hospital discharge episodes for children aged 14 years and under out of a total number of 1,430,000. Over the last five years total discharges have decreased by 4.7% from 105,000 in 2007-08. There were

55,000 emergency inpatient admissions (55%)  
11,000 elective inpatient admissions (11%)  
27,000 day case admissions (27%)

*(this excludes obstetric and adolescent psychiatry admissions)*

35,000 of the 55,000 emergency admissions (episodes) were for children aged 0 to 4 years.

The most common specialties that children are admitted to are medical paediatrics, surgical paediatrics, dental/oral surgery, ENT (ear, nose and throat), and orthopaedics.

<http://www.isdscotland.org/Health-Topics/Child-Health/Other-Information-on-Child-Health/>

### **Types of Admissions**

Children may be admitted to an acute hospital for a number of reasons including: specialist diagnostic procedures; emergency treatment following accidents; and routine, complex and life saving surgery. In some instances the admission will be planned (known as an elective admission) and in some cases unplanned (an emergency admission). Children may be admitted to hospital as a planned day case (they do not remain overnight) or as an inpatient (they stay overnight).

The rates of admission, most common diagnoses and procedures / operations carried out in each of the three year periods 2009-10, 2010-11 and 2011-12 are broadly similar.

The following information relates to children under 14 years of age who have been discharged from an acute hospital during these financial years. *(Note that 'acute' hospital care excludes obstetric and psychiatric services).*

In children under 14 years of age, emergency admissions are more common than planned admissions (the reverse is true for adults).

The total number of hospital admissions for children aged 14 years and under was around 100,000 in 2011-12, a 4.7% decrease over the last five years from 105,000 in 2007-08.

In 2011-12 the emergency admission rate for children under 14 years was 55,000 a reduction of 402 on the previous year: 64.4 per 1,000 population 0-14 years. The elective admission rate was 38,000 a reduction from the previous year (39,398): 44.5 per 1,000 population 0-14 years

Children under four years of age have the highest admission rate, 54,000 in 2011-12: (181.4 per 1,000 population 0-4 years) representing 54% of total child admissions. This is largely due to emergency admissions.

## 1.2 Diagnoses

### Elective admissions

For children under the age of 14 years, the three most common specific main diagnosis groupings for planned admissions in 2011/12 were:

- Disorders of digestive system (26%) – of which dental caries are the predominant diagnosis
- Factors influencing health status and contact with health services (includes admissions for examination, observation, immunisation, stoma care, respite care) (13%)
- Congenital malformations, deformations and chromosomal anomalies (10%)

### Emergency admissions

17% of emergency admissions in 2011/12 for children under 14 years of age were for 'Symptoms and signs not elsewhere classified'. This includes non-specific symptoms such as abdominal pain, coughs, wheezing and fever.

'Respiratory disorders' were also common in children under 14 years of age, accounting for nearly a quarter of all emergency admissions in 2011/12 (24%)

There was an 8% reduction in 'Injuries and poisonings and certain other consequences of external causes' over the last five years with head injuries reducing by 13%.

## 1.3 Procedures

### Elective admissions

In 2011/12, around 34,000 planned procedures / operations were carried out for children aged under 14 years.

Procedures to the mouth were the most commonly performed for elective inpatients and day cases amounting to 31% of all procedures. Within this 'extraction of tooth' and 'excision of tonsil' accounted for the majority.

From 1st April 2001, any tooth extractions performed under general anaesthetic in children had to be carried out in a hospital setting. These figures do not however include any tooth extractions in children that were performed under sedation by general dental practitioners or within the community dental services.

From 1st April 2008, it was no longer mandatory to record interventions/procedures (such as imaging, injections, infusions, x-rays etc) on inpatient and day case records unless the patient is specifically admitted for this purpose.

*Source of admissions and procedures data:*

*ISD <http://showcc.nhsscotland.com/isd//4644.html>*

## 2. Support Needs Services

### Support Needs System (SNS) Annual Summary Statistics (as at August 2010)

The Support Needs System (SNS) is a sophisticated electronic system that records information about children (and young people) with additional support needs. Its aim is to monitor their progress and ensure they have access to services or support they require.

Although SNS is primarily a highly valued clinical tool, data from the system has been analysed locally since implementation and figures for all participating NHS Boards have been published since December 2005. These represent a "snap-shot" of information held on the system at the time the data was extracted.

SNS has not been implemented in all NHS Boards across Scotland and the level of implementation and utilisation of the system varies in those Boards that do use SNS. Also, a child's details will only be held on SNS with the explicit permission of his / her parents or carers. For these reasons, SNS figures cannot be used as direct indications of the prevalence of particular conditions in the wider population and should not be used to compare NHS Boards.

Currently, eleven NHS Boards use SNS (data for the two Boards - Fife and Dumfries & Galloway - with very small numbers of children on the system and data for those children registered under more than one NHS Board are excluded from the summary statistics below which are based on mid-August 2010 data.

#### Summary Table

NHS Board	Number of children being assessed in SNS
Argyll & Clyde	3,029
Ayrshire & Arran	1,176
Borders	199
Dumfries and Galloway	----
Fife	----
Forth Valley	139
Grampian	4,434
Lanarkshire	1,795
Lothian	2,776
Shetland	32
Tayside	825
<b>ALL SNS Boards **</b>	<b>14,445</b>

A minimum of around two percent of the total child population would be expected to be eligible for registration on SNS.

The different rates of capture shown for each NHS Board are a reflection of differing implementation and utilisation of the system in each NHS Board. In some areas, e.g. in NHS Lanarkshire, children with more complicated or severe problems are targeted for assessment in SNS. In other areas e.g. NHS Grampian, children with a wider range of problems are being assessed on the system.

<http://www.isdscotlandarchive.scot.nhs.uk/isd/3397.html>

### **3. Provision of Dental Services in Scotland**

Dental services in Scotland are provided in various settings and include the General Dental Service (High Street dentists), the Community Dental Service and the NHS Hospital Dental Service (secondary care). This secondary care service accepts patients on referral from medical and dental practitioners. Consultants in other areas/specialties, including Emergency Dental Services, also make referrals.

#### **3.1 General Dental Services (GDS)**

The majority of General Dental Practitioners (GDPs) in Scotland are independent contractors who treat children under a hybrid system: paid for each patient that they have on their list to treat under NHS arrangements, and also paid per item of NHS treatment that they carry out.

GDS constitute the main provision for family dental services for people in Scotland. The majority undertake a mixture of private and NHS treatment. There has been an increasing move towards private provision during recent years.

The average cost to the NHS GDS of treating a child during 2011/12 increased from £62 to £63. (The average cost of treating an adult during 2011-12 increased from £44 to £46).

'Childsmile', the national oral health demonstration programmes, was introduced in 2006/07. It is designed to improve the oral health of children in Scotland and reduce inequalities both in dental health and access to dental services. Mainstream nurseries and schools participating in fluoride varnish and P1 and P2 toothbrushing are targeted as areas of greatest need. They are selected on the basis of the proportion of children attending the establishment who live in areas of relative disadvantage.

#### **3.2 Hospital Dental Services (HDS)**

Hospital dental services accept patient referrals from both dental and medical practitioners and from other hospital services. The main specialist areas are oral and maxillofacial surgery, oral medicine, orthodontics, restorative dentistry and paediatric dentistry.

Through the Hospital Dental Service, patients can be treated in either an outpatient clinic, or depending on what treatment they require, can be admitted as either an inpatient or a day case.

Hospital dental service activity occurs not only in the 2 dental hospitals (Glasgow and Dundee), and the 1 dental institute (Edinburgh), but also in many general hospitals across Scotland. There are no in-patient beds in the dental hospitals/institute and therefore all inpatient activity occurs in the general hospitals.

#### **3.3 Community Dental Services (CDS)**

Community Dental Service mainly targets populations (including children) who are disadvantaged groups and those with special needs, learning difficulties and the elderly in residential care.

They also provide a 'safety net' for those who are unable to access GDS and play a significant part in service delivery in remote areas. Their services are provided across Scotland, in fixed or mobile clinics.

#### **4. Oral Health in Children and Young People**

The Scottish Executive produced its Action Plan for Improving Oral Health and Modernising HS Dental Services in 2005 setting out their policy and plans for dentistry and dental public health over the next three years against a background of poorer oral health in Scotland compared to many other European countries including England and Wales. The Action Plan was continued with the Scottish Government with annual targets set locally and nationally.

In the last six months of 2010

Eight out of 11 NHS boards met the target of 60% of Primary 1 children free by decay – the target was met nationally

Seven out of 11 NHS Boards met the target of 60% of Primary 7 children free by decay- the target was met nationally. *Source: The NHS Board Monitoring Report published April 2011*

During 2010-11 62,542 child patients had teeth extracted of those:

620 children aged 0 – 4 and 54,349 children aged 5 to 18 had teeth extracted in the NHS *General Dental Service* *Source: MIDAS (Management Information and Dental Accounting System).*

1,810 children aged 0 – 4 and 5,763 children aged 5 – 18 had teeth extracted in a hospital dental service setting. Tooth extraction remains the largest single reason for children receiving general anaesthesia in hospital. *Source: Information Sources Division SMR01.*

The 2009-10 National Dental Inspection Programme (NDIP) Report of the oral health of five year olds in Scotland shows that 36% of children at age 5 years had some dental decay. It showed that 53.5% of children in the most deprived communities have some degree of decay at age 5 years compared with 21.3% of children in the least deprived areas.

##### **4.1 Registrations with Dentists**

*The following information has been sourced from ISD Scotland National Dental Statistics (published on May 2012).*

87.5 % of Scottish children were registered with an NHS GDS dentist as at 31st March 2012, an increase from 84.2% at 31st March 2011. Children are defined as those aged up to 17 years.

The 6-12 age group had the highest percentage of population registered (99.1%) with a GDS dentist. The 0 – 2 age group had the lowest level of registration at 43.9%.

Among mainland NHS boards, NHS Greater Glasgow & Clyde had the highest level of children registered (88.2%) followed by Dumfries & Galloway at 88.1% and NHS Ayrshire & Arran at 87.5%.



Nationally, the rate of participation (contact with a patient for treatment or registration etc over a two year period) in NHS General Dental Services among registered patients over the last 2 years was 87.4% for children. Participation rates for children were highest in NHS Borders (92.4%) and lowest in NHS Western Isles (79.5%).

**Number of Children Registered by NHS Board and Age Group: Qtr end Sept 2011**

NHS Board	Age groups				All Children
	0-2	3-5	6-12	13-17	
<b>Scotland</b>	<b>75,220</b>	<b>150,518</b>	<b>375,558</b>	<b>292,267</b>	<b>893,563</b>
Ayrshire and Arran	5,587	10,328	26,016	21,233	63,164
Borders	1,512	2,983	7,776	6,143	18,414
Dumfries and Galloway	1,917	3,901	9,932	8,437	24,187
Fife	4,875	10,216	24,325	18,630	58,046
Forth Valley	4,159	8,729	21,786	17,023	51,697
Grampian	5,459	13,277	33,634	26,536	78,906
Greater Glasgow and Clyde	19,041	34,332	85,560	66,363	205,296
Highland	3,646	8,004	21,727	17,682	51,059
Lanarkshire	9,202	16,534	41,805	32,073	99,614
Lothian	10,817	23,063	54,350	40,892	129,122
Orkney	429	590	1,346	1,190	3,555
Shetland	521	751	1,795	1,437	4,504
Tayside	4,646	10,416	27,141	21,690	63,893
Western Isles	141	461	1,453	1,134	3,189
Unknown NHS Board	3,268	6,933	16,912	11,804	38,917

**% of Children Registered by NHS Board and Age Group: Qtr end Sept 2011**

NHS Board	Age groups				All Children
	0-2	3-5	6-12	13-17	
<b>Scotland</b>	<b>41.9</b>	<b>88.6</b>	<b>97.9</b>	<b>95.8</b>	<b>86.1</b>
Ayrshire and Arran	47.4	88.7	96.2	95.3	86.8
Borders	41.8	82.3	90.7	90.5	81.5
Dumfries and Galloway	42.6	85.5	96.5	95.9	85.9
Fife	38.0	84.4	89.3	86.4	78.7
Forth Valley	40.0	87.3	94.7	93.0	83.8
Grampian	28.1	73.6	84.1	83.5	72.3
Greater Glasgow and Clyde	45.3	87.2	98.8	96.7	86.8
Highland	37.2	84.6	94.6	94.6	83.8
Lanarkshire	45.9	83.9	92.8	92.0	83.2
Lothian	36.6	86.3	92.7	89.7	80.5
Orkney	68.0	94.9	96.1	91.4	89.9
Shetland	65.8	96.2	97.6	98.0	92.3
Tayside	34.9	83.5	93.9	92.4	81.7
Western Isles	19.1	59.1	74.3	70.7	62.8
Unknown NHS Board	1.8	4.1	4.4	3.9	3.7

Notes:

1. Source: ISD Scotland, MIDAS (Management Information & Dental Accounting System).
2. Mid-year population estimates are used to calculate the percentage registered and are sourced from the General Register's Office.
3. ISD recommends extreme caution in interpreting dental registration data other than at national level

## 5. General Dental, Community & Hospital Dentists by region and NHS Board

	Scotland	East Region	NHS Borders	NHS Fife	NHS Lothian	North Region	NHS Highland	NHS Grampian	NHS Orkney	NHS Tayside	Western Isles	NHS Shetland	West Region	NHS Ayrshire & Arran	NHS Greater Glasgow & Clyde	NHS Lanarkshire	NHS Forth Valley	Ummies & Galloway
<b>All Dentists (note 1)</b>	3,466	900	69	237	605	955	221	341	15	359	20	10	1,654	226	883	344	177	94
<b>All HCHS dentists</b>	<b>892</b>	<b>206</b>	<b>25</b>	<b>65</b>	<b>116</b>	<b>364</b>	<b>94</b>	<b>105</b>	<b>11</b>	<b>136</b>	<b>18</b>	<b>7</b>	<b>321</b>	<b>41</b>	<b>174</b>	<b>54</b>	<b>26</b>	<b>26</b>
<b>Salaried-/Community dentists<sup>2</sup></b>	<b>545</b>	<b>142</b>	<b>25</b>	<b>50</b>	<b>67</b>	<b>238</b>	<b>84</b>	<b>79</b>	<b>11</b>	<b>40</b>	<b>18</b>	<b>7</b>	<b>167</b>	<b>26</b>	<b>68</b>	<b>38</b>	<b>16</b>	<b>19</b>
<b>Non-salaried GDS dentists</b>	<b>2,674</b>	<b>708</b>	<b>44</b>	<b>176</b>	<b>496</b>	<b>624</b>	<b>133</b>	<b>245</b>	<b>4</b>	<b>237</b>	<b>5</b>	<b>3</b>	<b>1,371</b>	<b>188</b>	<b>725</b>	<b>299</b>	<b>150</b>	<b>70</b>
Principals	2,437	644	40	162	450	547	117	219	3	207	2	1	1,272	173	682	278	136	62
Assistants	57	7	1	1	5	18	-	15	-	3	-	-	33	5	16	6	5	2
Vocational Dental Practitioners	200	57	3	13	41	66	16	17	1	27	3	2	77	11	33	17	10	6
<b>Salaried dentists<sup>2,3</sup></b>	407	110	22	46	42	195	76	56	10	34	12	7	104	20	48	10	9	17
<b>Hospital dentists<sup>4,5</sup></b>	415	74	-	15	59	144	18	31	-	99	-	1	192	15	132	21	11	13
<b>Community dentists<sup>2,5</sup></b>	489	132	25	50	57	228	81	75	11	38	18	6	129	26	42	33	15	13

### Source NHS Scotland Workforce Statistics September 2011

1. Data for previous years have been revised. Double counting between the three different services and within the General Dental Service (GDS) has now been eliminated.
2. HCHS refers to the Hospital, Community and Public Health Services of the NHS.
3. Both salaried dentists and community dentists work in the salaried primary care dental sector and are employed by NHS boards. Reporting arrangements vary between boards in the way these dentists are classified.
4. Due to improvements in the collection of information on GDS salaried dentists, figures from September 2005 include some GDS salaried dentists not previously recorded.
5. Specialists in oral and maxillofacial surgery are no longer present in tables showing hospital dentists.

## 6. ASCS Representation

Association of Paediatric Anaesthetists of Great Britain & Ireland  
for Scotland's Disabled Children - *Coalition Group; Transition Task Group;  
Education Task Group*  
Community Child Health for the 21st Century Steering Group  
Health Rights Information Scotland and Scottish Government *Development of the  
Charter of Patient Rights and Responsibilities - focus group on user testing of  
information for adults and stakeholder group for development of information for  
children*  
International Taskforce for Health Promotion with Children and Adolescents  
National Association of Hospital Play Staff  
National Services Division - Short life Working Group: Reimbursement Travel for  
Specialist Services  
NHS Greater Glasgow and Clyde - *New Sick Children's Hospital Stakeholder  
Reference Group; Better Together Quality & Monitoring Steering Group;  
Community Engagement Team - Youth Panel and Family Panel, Community  
Engagement Advisory Panel (CEAP); Patients' Panel; Partners in Advocacy*  
NHS Lothian - *Royal Hospital for Sick Children Edinburgh Hospital Patient Focus  
Public Involvement Task Group (formerly Children, Young People & Families  
Advisory Board)*  
NHS Tayside - *Family Nurse Partnership Operational Group; Sexual Health  
Strategy Group; Ninewells Hospital Leaflet Group*  
Paediatric Scottish Patient Safety Programme Steering Group  
Royal Hospital for Sick Children Glasgow - *FILES Committee; The Rights of the  
Child Group; Family Support Service, Chaplaincy team;  
Play Service Re-design Group*  
Scottish Children and Young People's Palliative Care Network  
National Managed Clinical Network for Children with Exceptional Healthcare  
Needs (CEN)  
Scottish Healthy Care Network  
Scottish Government Children and Young People's Health Support Group  
Scottish Government, Modernising Nursing in the Community - Complex Care  
Subgroup  
Scottish Government Guidance on Education of Children Absent from School due  
to Ill Health Review Group  
Scottish Government Specialist Services for Children and Young People  
Monitoring Group  
Scottish Paediatric Anaesthetists Network (SPAN)  
UK Committee for Children and Young People's Nursing

Action for Sick Children Scotland  
22 Laurie Street  
Edinburgh  
EH6 7AB

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