



*Promoting the Healthcare Rights and Needs of  
Children and Young People*

**Strategic Plan 2016-19**

**Statistical Appendix**

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## 1. Children and Young People in Hospital

Mid 2014 statistics show that there were over 1.03 million children and young people aged up to 18 years of age in Scotland. They make up almost a fifth (19.3%) of the total population of 5,347,600 million – the highest ever total. The General Fertility Rate remained fairly constant between 2009-12 but fell in 2013 (56,014 births per annum 2013: 59,046 in 2009.)

The 1,033,183 children and young people fall into the following age groups:

- o Children aged <1-4 years: 292,230
- o Children aged 5-9 years: 288,585
- o Children aged 10-14 years: 271,862
- o Young people aged 15-18: 180,506

o **Summary Table of Population Age by Area Health Board Area: 2014**

	ALL Ages	<1 to 4	5 to 9	10 - 14	15 to 18	<1 to 18
ALL AREA BOARDS	5,347,600	292230	288585	271862	180506	1033184
Ayrshire & Arran	371,110	19,123	19,778	19,323	13055	71279
Borders	114,030	5,821	6,017	6,003	3,816	21,657
Dumfries & Galloway	149,940	7,141	7,790	7,391	5,013	27,335
Fife	367,260	20,521	20,460	18,954	12,614	72,549
Forth Valley	300,410	16,179	16863	16322	10904	60268
Grampian	584,240	32,725	31536	28477	18647	111385
Greater Glasgow & Clyde	1,142,580	64,168	59445	56425	37815	217853
Highland	320,760	15871	17185	16859	11194	61109
Lanarkshire	653,310	36,617	37863	36118	23638	134235
Lothian	858,090	49,127	46601	41131	26913	163772
Orkney	21,590	1,033	1170	1053	755	4011
Shetland	23,230	1,349	1340	1335	852	4876
Tayside	413,800	21,289	21103	21056	14372	77820
Western Isles	27,250	1,267	1434	1415	919	5035

- o Mid-year population estimates:

<http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/mid-2014>

## 1.1 Hospital Admissions

In 2013/14 there were 133,842 hospital discharge episodes (excluding obstetric and adolescent psychiatry admissions) for children under 18 years out of a total number of 1,514,130 discharge episodes. These were:

71,750 emergency inpatient admissions (54%)  
14,873 elective inpatient admissions (11%)  
36,500 day case admissions (27%)  
10,719 transfers (8%)

39,445 of the 71,750 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. (note: up to four procedures may be recorded per hospital episode).

<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 2009-10, 2010-11 and 2011-12 and 2013-14 are broadly similar.

The following information relates to children under 18 years of age who have been discharged from an acute hospital. (*'acute' hospital care excludes obstetric and psychiatric services*).

In 2013-14 Emergency admissions were more common than planned admissions for children under 18 years but this varies between the age groups. For children:

0-4 years	72% of all admissions are emergency admissions.
16-18 years	51% of all admissions are emergency admissions
5-9 years	56% of all admissions are planned admissions
10-15 years	53% of all admissions are planned admissions.

This pattern was similar over the years 2011-12 and 2012-13.

The total number of hospital admissions for children under 18 years was around 123,000 in 2013-14. There had been a gradual decrease each year in admissions between 2010 to 2013, with an increase in 2013-14 to around the 2009-10 level. This is mainly accounted for by an increased rate of emergency admissions in children under four years.

## 1.2 Diagnoses

### Elective admissions

For children under 18 years, the three most common specific main diagnosis groupings for planned admissions in 2013/14 were:

- Disorders of digestive system (21%) – 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, disrupted family/home circumstances, awaiting fostering) (12%)
- Neoplasms (lymphomas and leukaemias) (9%)

### Emergency admissions

For children under 18 years, the three most common specific main diagnosis groupings for emergency admissions in 2013/14 were as follows:

- 21% were respiratory disorders.
- 18% related to 'Symptoms and signs not elsewhere classified'. This includes non-specific symptoms such as abdominal pain, coughs, wheezing and fever.
- 17% related to 'Injuries and poisonings and certain other consequences of external causes'

However in the 0 – 4 year age group, 'injury and poisoning' was replaced by 'certain infections and parasitic disease (which includes chicken pox and measles) as one of the top three diagnosis groupings.

## 1.3 Procedures

### Elective admissions

In 2013/14, around 44,000 planned procedures / operations were carried out for children aged under 18 years. 58% were on children up to 9 years of age.

Procedures to the mouth were the most commonly performed for elective inpatients and day cases amounting to 26% of all procedures. Within this 'extraction of tooth' and 'excision of tonsil' accounted for the majority.

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.

The next most common procedures at 16% were miscellaneous operations, the majority of which included injections, infusions and blood transfusions.

*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**

The aim of the Support Needs System (SNS) is to enable early identification, assessment and monitoring of children with additional support needs. A child will be

registered on the SNS if a health visitor, doctor or therapist involved with their care considers it appropriate and following discussion with the family. It is a sophisticated clinical tool, established in 1993, which provides the facility to record detailed child-specific clinical information for Scottish children and young people with a wide range of disabilities.

A minimum of around 2% of the child population (circa 20,000) would be expected to be eligible for registration on SNS with 15,541 registered in 2011 (see below).

### Summary Table

<b>NHS Board</b>	<b>Number of children being assessed in SNS at August 2011</b>	<b>% of Child Population on SNS <sup>note 2</sup></b>
Ayrshire & Arran	1,117	1.36
Borders	51	0.20
Forth Valley	142	0.20
Grampian	3,526	2.86
Greater Glasgow & Clyde	4,995	1.86
Highland (Argyll & Bute only) <sup>note 3</sup>	479	2.57
Lanarkshire	1,762	1.31
Lothian	2,668	1.46
Shetland	25	0.46
Tayside	776	0.87
<b>All SNS Boards <sup>note 4</sup></b>	<b>15,541</b>	<b>1.55</b>

1. SNS relates to children and young people under 20 years of age. However, there is a small number of children aged 20 and over still registered on SNS (22 in total across all SNS Boards).

2. Based on GRO population estimate of children aged 0-19 years as at 30th June 2010.

3. SNS is implemented in the Argyll & Bute council area of NHS Highland only.

4. All SNS Boards: NHS Fife and NHS Dumfries & Galloway have very small, unrepresentative numbers of children registered on SNS. Data for these children, and those registered under more than one NHS Board, are excluded from these summary statistics.

Implementation and utilisation of the system varies across the NHS Boards; currently 12 Boards use the system. SNS figures cannot therefore be used as direct indications of the prevalence of particular conditions or factors in the wider population and should not be used to make comparisons between NHS Boards. Summary statistics for all participating Boards were first published in December 2005 but given the varying implementation and use of the system and the fact that the data can't be used to provide direct indications of the number of children with specific conditions, the annual publication has not been produced since 2011. However the NSS Public Health and Intelligence Unit (previously ISD) continues to provide support to the Support Needs System National User Group and the National Managed Clinical Network for Children with Exceptional Healthcare Needs. Local analysis of data is carried out in SNS User Boards in each area for monitoring and planning purposes.

### Children with Exceptional Health Needs

The National Managed Clinical Network for Children with Exceptional Healthcare Needs (CEN) reported in October 2014 that:

There are around 30 children (under 20 years) with exceptional healthcare needs per 100,000 child population in Scotland (around 310 on current population figures). This

is likely to be an underestimate of true prevalence due to under-ascertaining the youngest children with exceptional healthcare needs.

The number of children with exceptional healthcare needs on the SNS has increased to just under 300 in 2013 rising from under 100 in 2009.

CEN children recorded on SNS are more likely to live in more deprived areas (24.8% of all CEN children live in the most deprived quintile).

Hospital admission rates for CEN children are similar across all NHS Boards. Emergency and planned admissions are broadly similar across CEN and non CEN children although within planned admissions CEN have more elective and fewer day case admissions.

Length of stay for CEN children in hospitals is around 4 overnight stays for planned admissions and five for emergency admissions. This is higher than for the general child population (2.3 for planned admissions and 1.7 for emergency admissions)

Emergency admission rates are highest in the youngest age groups of CEN but there is no trend in admission rates by deprivation. This differs from the general child populations where there is a clear gradient of increasing emergency admission rates with increasing deprivation.

<http://www.isdscotland.org/Health-Topics/Child-Health/Children-with-Support-and-Care-Coordination-Needs/>

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

Dental services in Scotland are provided in various settings and include the General Dental Service (High Street dentist; The Public 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 NHS General Dental Service (GDS) is usually the first point of contact for NHS dental treatment. The majority of GDS is provided by independent dentists 'High Street dentists' who have arrangements with NHS boards to provide GDS. Children can be registered with an independent dentist in order to receive the full range of NHS treatment available under GDS. The dentists are 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.

Up until December 2013, there were a number of salaried dentists who also provided GDS. They were directly employed by NHS Boards, and provided an alternative service to independent dentists when this was considered the best solution to meet local needs. People could also register with salaried dentists.

There was also a Community Dental Service (CDS) which provided a 'safety net' dental service for people who were unable to obtain care through the GDS. From 1 January 2014 the salaried dental service merged with the CDS to become the Public Dental Service (PDS).

### **3.2: Public Dental Services (PDS)**

PDS dentists provide a general dental service for people who cannot access care from an independent dentist. These may include people (including children) who are in disadvantaged groups and those with special care needs or learning difficulties and the elderly in residential care, or those living in areas where there were few NHS dentists providing GDS. People previously registered with a salaried dentist will remain registered under the PDS. People who were seen by the CDS will now be able to register with PDS dentists.

The average cost to the NHS GDS of treating a child during 2012/13 reduced from £64 to £63. (The average cost of treating an adult increased from £46 to £47).

### **3.3 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.

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

The Scottish Executive produced its Action Plan for Improving Oral Health and Modernising NHS 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 and annual targets set locally and nationally.

The oral health of children has improved significantly since 'Childsmile', the national oral health demonstration programme, 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 participate in fluoride varnish and P1 and P2 toothbrushing. Schools are targeted in areas of greatest need and are selected on the basis of the proportion of children attending the establishment who live in areas of relative disadvantage.

**Despite the improvements made over recent years in children's oral health, tooth extraction still remains the largest single reason for children receiving general anaesthesia in hospital.**

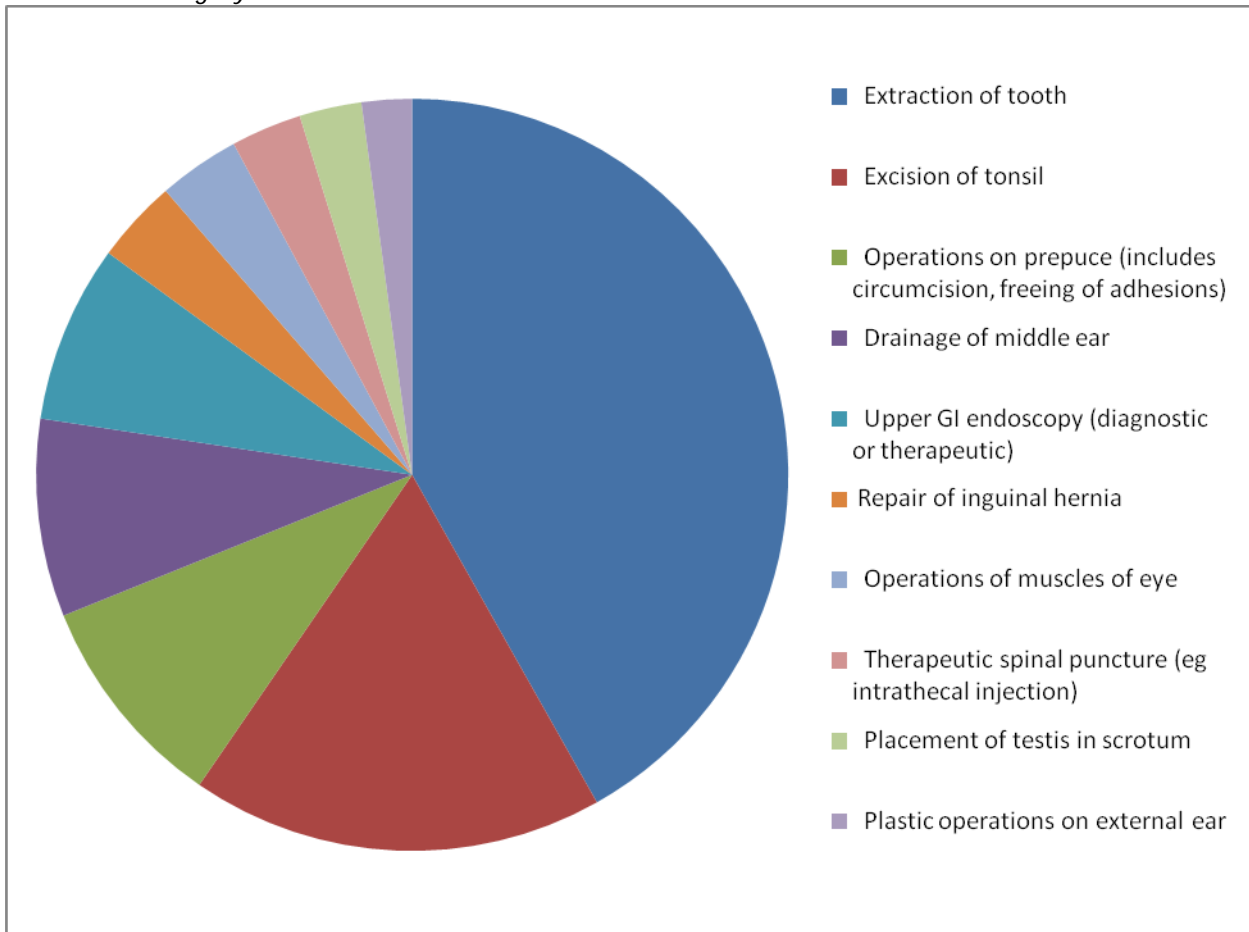
During 2013-14, 49,525 children had at least one tooth extracted in the general dental service - a reduction of 2.11% on the previous year. An additional 7,245



children had teeth extracted in a hospital dental service setting, a reduction from 7,702 in 2012-13. (From 1st April 2001, any tooth extractions performed under general anaesthetic in children had to be carried out in a hospital setting.)

Source: Information Sources Division SMR01.

The chart below illustrates the ten most common reasons in 2012-13 for admission to day case surgery



The 2014 National Dental Inspection Programme (NDIP) Report of the oral health of 29% of the primary 1 population in Scotland shows that:

- All 14 NHS boards met the target of 60% of Primary 1 children free of decay.
- 32% of children at age 5 years had some dental decay – reduced from 36% in 2012 and a more significant reduction from 55% in 2003.

Socio-economic inequalities in the oral health of P1 children remain with 47% of children in the most deprived communities having some degree of decay at age 5 years compared with 17% of children in the least deprived areas. The difference in inequality has remained at around 30% in the four inspections since 2008. The national target of 60% of children to have no obvious decay experience has still to be met in the most deprived quintile.

The 2013 National Dental Inspection Programme (NDIP) Report of the oral health of 20.6% of the primary 7 population in Scotland shows that 27.2% of children had

some decay in their teeth – a 19.9% improvement from 2005. The target of 60% with no obvious decay was met across all quintiles.

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

*The following information has been sourced from ISD Scotland National Dental Statistics (published on September 2014).* Children are defined as those aged up to 17 years.

92% of Scottish children were registered with an NHS GDS dentist as at 30th September 2014, an increase from 67% at 31st March 2007. Registration increased with age, 48% of children aged 0-2 years and 100% for children aged 13-17. Rates increased from 2012 (44% of 0-2 years and 99.1% for the 13-17 group).

Child Registration rates by NHS Boards have risen in recent years varying between 84% and 93%. Four Boards, NHS Greater Glasgow & Clyde, Lanarkshire, Orkney and Shetland had more than 90% registered. NHS Western Isles had the lowest registration rate at 84%.

In 2000 child registration in the most deprived SIMD quintile was 52% compared to 70% in the least deprived quintile. In September 2014 there were similar registration rates across the SIMD quintiles for the first time.

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 child patients fell from 100% in 2006 to 86% in 2014. This shows that despite an increase in child registration of 36% in that period there has only been a 17% increase in participation.

The participation rate amongst children decreased with age 98% for 0-2 years, 90% for the 3-5 years falling to 82% in the 13-17 age group.

Participation rates for children were highest in NHS Borders (93%) and lowest in NHS Shetland (83%). Participation rates in NHS Western Isles went against trend increasing from 79% in 2010 to 88% in 2014.

#### **Participation rates by deprivation**

Children living in the most deprived areas are least likely to see their dentist within two years; (83% compared to 91% in the least deprived areas). This is an increase in the inequality gap since 2008 when there was only a 3% gap; 95% in the most deprived quintile participated and 98% in the least deprived.

### **5. SWOT Analysis**

A SWOT Analysis tool was used as a simple means of focusing attention on internal strengths and weaknesses; and external opportunities and threats which face the organisations.

### **CHS Representation**

Association of Paediatric Anaesthetists  
Border District General Hospital – New Children & Young People's Centre  
Project Team  
Centre for Excellence for Looked After Children in Scotland (CELCIS) –  
Health and Social Care Alliance, GIRFEC project Advisory Group  
Healthcare Improvement Scotland: Scottish Paediatric Patient Safety  
Programme, Clinical Reference Group  
Health Information Services at NHS 24 (formerly Health Rights Information  
Scotland)  
Enquire Scotland  
NMC – Nursing and Midwifery Council  
Mental Health Foundation, Mental Health of Young People with Long Term  
Conditions Steering Group  
National Association of Health Play Staff  
NHS Forth Valley Child & Young People's Health Strategy Group  
NHS Greater Glasgow and Clyde - *Community Engagement Team - Youth  
Panel and Family Panel, Stakeholder Group for Transition for Children and  
Young People with cerebral palsy*; Patient Panel Health Improvement Team  
Paediatric Subgroup of the National Chronic Pain Steering Group (since June,  
2014)  
Palliative and End of Life Care for Children and Young People in Scotland  
Royal Hospital for Sick Children Glasgow - *FILES Committee; The Rights of the  
Child Group; Family Support Service*  
Scottish Children and Young People's Palliative Care Network  
National Managed Clinical Network for Children with Exceptional Healthcare  
Needs (CEN) – Steering Group and Education and Service Users Group  
Royal College of Paediatrics and Child Health  
Scottish Commissioner for Children and Young People (SCCYP)  
Scottish Government Children and Young People's Health Support Group  
Scottish Government Guidance on Education of Children Absent from School  
due to Ill Health Review Group  
Scottish Government Administration of Medicines and Healthcare Procedures in  
Schools  
Scottish Government Guidance on Food in Hospital Review Group  
Scottish Health Play Specialist Network Group  
Scottish Transition Forum, ARC – transition standards for young people  
Scottish Epilepsy Centre  
Strategic Litigation Steering Group  
Strategic Paediatric Educationalists and Nurses in Scotland (SPENS)  
The Fostering Network  
UK Committee for Children and Young People's Nursing

In addition we have worked closely with Fife, Dumfries and Galloway, East Lothian  
and Perth and Kinross Social Work Departments; Glasgow City Council  
Education Department; South Lanarkshire Education Department; North  
Lanarkshire Education Department; NHS Greater Glasgow and Clyde Oral Health  
Directorate; NHS Lanarkshire Dental Services.

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