Where do the data come from?
When a person is in contact with the health service (eg visits hospital) in Scotland, details about their health and healthcare are recorded. This information is needed to care for the person properly. Such information is also valuable for improving healthcare for everybody; eg it helps NHS Scotland check that services are run efficiently, and to plan services for the future.

Personal health information is kept in the individual's medical case record folder; on a computer. When a person visits hospital, some of this information is recorded in a national database - and this is a key source of information used to produce the indicators.

How is personal information protected?
The confidentiality and security of all personal information is regarded with utmost importance by NHS Scotland. A number of measures are taken to protect patient confidentiality, eg all staff working in the NHS are bound by a strict code of confidentiality. In addition the Data Protection Act gives a person important rights about how their personal information is used.

Further details - including a guide for patients on these rights and how NHS Scotland uses personal health information - can be found at the following website:
www.show.scot.nhs.uk/confidentiality

NHS Quality Improvement Scotland is a Special Health Board, established on 1 January 2003. Its purpose is to help improve the quality of healthcare in Scotland.
It does this by setting standards and monitoring performance, and by providing NHS Scotland with advice, guidance and support on effective clinical practice and service improvements.

Edinburgh Office:  Edinburgh Office:  Elliott House
7-10 Hillside Crescent  Delta House
Edinburgh  50 West Nile Street
EH7 5LA  G1 2NP
Tel 0131 623 4300  Tel 0141 225 6999
Fax 0131 623 4299  Fax 0141 248 5776

www.nhsscotland.org

Further information
The Clinical Outcomes Group oversees the publication of indicators. The Chairman of this group is Dr Dorothy Moir (Director of Public Health, NHS Lanarkshire).

For further information about the 2003 Clinical Outcome Indicators Report please contact:
Dr Donald Morrison
Clinical Effectiveness Co-ordinator
Tel 0131 623 4277
email donald.morrison@nhsscotland.org

Key findings

Background

Key findings

Where the data come from?

How is personal information protected?

What are clinical outcome indicators?

Purpose of this guide
Understanding the

Purpose of this guide
This is a short guide to the 2003 Clinical Outcome Indicators Report. It summarises - for both the public and health service staff - the key points from the full report.

What are clinical outcome indicators?
A clinical outcome indicator is a measure that provides information about a specific aspect of health care at a particular time.

For example, an indicator in last year’s report was survival rate following emergency admission to hospital with a heart attack.

What are indicators published?
When used carefully and correctly, indicators provide information that can help the health service in Scotland improve the quality of care it provides for patients.

It is expected that NHSScotland will use these indicators to examine its performance and will, where necessary, take appropriate action. Detailed information about how indicators should/should not be used is included in the full report.

Indicators are also published as one means of contributing to public accountability in the NHS.

Scotland-wide indicators have now been published for ten years.

What topics are covered in the report?
Each year, the indicators report covers a wide range of health topics. The general topics included in the 2003 report are:

• smoking and pregnancy
• breastfeeding
• obesity in children
• emergency admission to hospital for diabetes, asthma and epilepsy
• kidney disease
• ovarian cancer
• emergency readmission to hospital following surgery

This guide contains a summary for each topic, including the key national findings. More detailed information, including that for individual NHSScotland organisations and regions of the country, is included in the full report. The report also includes a discussion of the completeness of the data used to produce indicators.

The indicator reports - together with specific measures that are updated regularly - are available from the website of the Clinical Indicators Support Team:

www.show.scot.nhs.uk/indicators

Key findings
For 2001-2002, it is estimated that 27.4% of Scottish women smoked at the start of pregnancy.

Smoking during pregnancy was more common among women from socially disadvantaged backgrounds. The rate for least disadvantaged mothers was 14.8%, and this rose to 37.8% for the most disadvantaged.
Health and Social Care

Further information

Access to health/healthcare at a particular time.

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Smoking and pregnancy

Background

Encouraging women to stop smoking during pregnancy is important because tobacco smoke is harmful to both mother and baby. Pregnancy is also a key factor in helping women quit smoking. While many start again after giving birth, pregnancy does have a long-term effect in helping women stop.

The national target is that the proportion of women who smoke during pregnancy should reduce from 29% in 1995 to 25% by 2005, and to 20% by 2010. This target is based on the number of women who say they smoke at the time of their first antenatal appointment.

Key findings

For 2001-2002, it is estimated that 27.4% of Scottish women smoked at the start of pregnancy. Smoking during pregnancy was more common among women from socially disadvantaged backgrounds. The rate for least disadvantaged mothers was 14.8%, and this rose to 37.8% for the most disadvantaged.

Where do the data come from?

Purpose of this guide

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Key findings

For 2001-2002, it is estimated that 27.4% of Scottish women smoked at the start of pregnancy.

Smoking during pregnancy was more common among women from socially disadvantaged backgrounds. The rate for least disadvantaged mothers was 14.8%, and this rose to 37.8% for the most disadvantaged.

Breastfeeding

**Background**

Breastfeeding is the healthier option for both mother and baby. Breastfed babies have a lower risk of stomach upsets, ear and chest infections, childhood diabetes, and asthma. There is evidence that mothers who breastfeed have less risk of pre-menopausal breast cancer and ovarian cancer. While a range of factors influence breastfeeding rates, the health service has a key role to play in encouraging mothers to breastfeed their babies.

Scotland has one of the lowest breastfeeding rates in Europe. A national target was therefore set in 1994 - by 2005 more than 50% of women should still be breastfeeding their babies at six weeks.

**Key findings**

- 36.5% of babies born in Scotland in 2002 were breastfed at six to eight weeks of life. While this rate was below the target of 50% for 2005, overall rates of breastfeeding are increasing year on year.
- Breastfeeding rates were lowest in areas of social disadvantage. The rate for least disadvantaged mothers (56.0%) was more than double that for the most disadvantaged (25%).

Obesity in Children

**Background**

There is growing concern over the levels of obesity in the Scottish population, particularly among children. Obesity is a health concern in itself, and also increases the risk of high blood pressure, diabetes, and psychological distress.

**Key findings**

- Among Scottish children born in 1998, 23.3% were overweight by the time they reached 5 years of age, 88% were obese, and 45% were severely obese.
- For the 2001-2002 school year, older children had higher levels of obesity. By the time Scottish children were 12 years old, 3% were overweight, 38% obese and 10% severely obese.
- At all ages, the percentage of Scottish children who are estimated to be overweight, obese, and severely obese was higher than expected.

Kidney Disease

**Background**

Anaemia is a condition in which there is a reduction in the level of haemoglobin - the red component of blood which carries oxygen around the body. This is a common problem in patients with renal (kidney) failure.

Achieving and maintaining a satisfactory haemoglobin level for patients on haemodialysis (a treatment for renal failure) is a marker of good overall health care.

The *Clinical Standards for Adult Renal Services*, available from NHS Quality Improvement Scotland, give guidance on providing clinical services in hospital settings for people with renal failure.

These standards include the national target for treating anaemia: For a minimum of 85% of patients, the haemoglobin concentration is no less than 10 g/dL after three months on haemodialysis.

**Key findings**

- In the last five years, there has been an increase of about 15% in the proportion of Scottish patients with a haemoglobin concentration of no less than 10 g/dL.

In September 2002, 70% of Scottish patients on haemodialysis for three months or more achieved a haemoglobin concentration of no less than 10 g/dL.

Ovarian Cancer

**Background**

Ovarian cancer is the fourth most common cancer among women in Scotland. In 1999, almost 600 women were newly diagnosed with ovarian cancer.

**Key findings**

- The incidence rate of ovarian cancer in Scotland is among the highest in Europe. It has increased steadily over the last 30 years and is expected to continue to do so. The mortality rate from ovarian cancer in Scotland is also among the highest in Europe.

Emergency Admission to Hospital for Diabetes, Asthma and Epilepsy

**Background**

Diabetes, asthma and epilepsy are all conditions for which a high quality of care can be provided in the community. Emergency admissions to hospital are potentially avoidable.

**Key findings**

- For diabetes, the national rate for emergency admission to hospital has remained fairly constant in recent years. In 1999-2000, 56 people per 100,000 population were admitted to hospital for diabetes, compared with 54 in 2001-2002.

- The rate for emergency admission for asthma across Scotland dropped, from 104 people per 100,000 population in 1999-2000 to 86 in 2001-2002. This decrease is, in part, due to a particularly high number of admissions in the winter of 1999-2000.

- The national emergency admission rate for epilepsy dropped slightly from 59 people per 100,000 population in 1999-2000 to 55 in 2001-2002.

Emergency Readmission to Hospital following Surgery

**Background**

Rates of emergency readmission to hospital within a given period after discharge can provide a partial guide to the success of the original treatment or care.

**Key findings**

- Previous clinical indicators reports have included data on emergency readmission rates following discharge from both medical and surgical specialties, and also after individual surgical procedures.

- Trends in emergency readmission rates within 28 days of discharge following selected abdominal and pelvic surgery, and following lower limb arthroplasties (joint replacements) are presented in this year’s report.

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Breastfeeding

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Breastfeeding is the healthier option for both mother and baby. Breastfed babies have a lower risk of stomach upsets, ear and chest infections, childhood diabetes, and asthma. There is evidence that mothers who breastfeed have less risk of pre-menopausal breast cancer and ovarian cancer. While a range of factors influence breastfeeding rates, the health service has a key role to play in encouraging mothers to breastfeed their babies.

Scotland has one of the lowest breastfeeding rates in Europe. A national target was therefore set in 1994 - by 2005 more than 50% of women should still be breastfeeding their babies at six weeks.

Key Findings
- 36.5% of babies born in Scotland in 2002 were breastfed at six to eight weeks of age. This rate was below the target of 50% for 2005, overall rates of breastfeeding are increasing year on year.
- Breastfeeding rates were lowest in areas of social disadvantage. The rate for least disadvantaged mothers (56.0%) was more than double that for the most disadvantaged (22.5%).

Obesity in Children

Background
There is growing concern over the levels of obesity in the Scottish population, particularly among children. Obesity is a health concern in itself, and also increases the risk of high blood pressure, diabetes, and psychological distress.

The Scottish Intercollegiate Guidelines Network recently published a guideline to be used to manage obesity in children and young people (www.sign.ac.uk).

Using the 1990 UK reference standards it is expected that 15% of children would be overweight, 5% obese, and 2% severely obese. These figures apply to children of any age and in any part of the UK, including Scotland.

Key Findings
- Among Scottish children born in 1998, 23.3% were overweight by the time they reached 3 years of age, 8.8% were obese, and 4.5% were severely obese.
- For the 2001-2002 school year, older children had higher levels of obesity. By the time Scottish children were 12 years old, 33% were overweight, 28% obese and 10-11% severely obese.
- At all ages, the percentage of Scottish children who are estimated to be overweight, obese, and severely obese is higher than expected.

Kidney Disease

Background
Anaemia is a condition in which there is a reduction in the level of haemoglobin - the red component of blood which carries oxygen around the body. This is a common problem in patients with renal (kidney) failure.

Achieving and maintaining a satisfactory haemoglobin level for patients on haemodialysis (a treatment for renal failure) is a marker of good overall health care.

The Clinical Standards for Adult Renal Services, available from NHS Quality Improvement Scotland, give guidance on providing clinical services in hospital settings for people with renal failure.

These standards include the national target for treating anaemia: For a minimum of 85% of patients, the haemoglobin concentration is no less than 10 g/dL. Patients with a haemoglobin concentration of no less than 10 g/dL are less likely to become anaemic and are more likely to derive benefit from other treatments.

Key Findings
- In the last five years, there has been an increase of about 15% in the proportion of Scottish patients with a haemoglobin concentration of no less than 10 g/dL.
- In September 2002, 70% of Scottish patients on haemodialysis for three months or more achieved a haemoglobin concentration of no less than 10 g/dL.

Ovarian Cancer

Background
Ovarian cancer is the fourth most common cancer among women in Scotland. In 1999, almost 600 women were newly diagnosed with ovarian cancer.

The incidence rate of ovarian cancer in Scotland is among the highest in Europe. It has increased steadily over the last 30 years and is expected to continue to do so. The mortality rate from ovarian cancer in Scotland is also among the highest in Europe.

The Clinical Standards for Gynaecological (Ovarian) Cancer, available from NHS Quality Improvement Scotland, give guidance on providing clinical services in hospital and community settings.

Key Findings
- The full report includes a number of indicators in relation to women diagnosed with ovarian cancer between 1997 and 1999.
- For example, 83.5% of Scottish women received some form of active treatment within 6 months of diagnosis (it is not expected that all women should receive active treatment). 72.5% of women received surgery and 51.6% received chemotherapy. The median waiting time from first attendance at hospital to treatment was 11 days.
- Throughout Scotland, 12.2% of women diagnosed with ovarian cancer were recruited to participate in clinical trials.

Emergency Admission to Hospital for Diabetes, Asthma and Epilepsy

Background
Diabetes, asthma and epilepsy are all conditions for which a high quality of care can be provided in the community. Emergency admissions to hospital are potentially avoidable.

Guidance and advice for NHS Scotland on providing care for people with these conditions has been provided by NHS Scotland and the Scottish Intercollegiate Guidelines Network.

For the first time, the full report presents rates of emergency admissions to hospital for these conditions at the very detailed level of each local health care co-operative (a grouping of general practices).

Key Findings
- For diabetes, the national rate for emergency admission to hospital has remained fairly constant in recent years. In 1999-2000, 56 people per 100,000 population were admitted to hospital for diabetes, compared with 54 in 2001-2002.
- The rate for emergency admission for asthma across Scotland dropped, from 104 people per 100,000 population in 1999-2000 to 86 in 2001-2002. This decrease is, in part, due to a particularly high number of admissions in the winter of 1999-2000.
- The national emergency admission rate for epilepsy dropped slightly from 59 people per 100,000 population in 1999-2000 to 55 in 2001-2002.

Emergency Readmission to Hospital following Surgery

Background
Rates of emergency readmission to hospital within a given period after discharge can provide a partial guide to the success of the original treatment or care.

Previous clinical indicators reports have included data on emergency readmission rates following discharge from both medical and surgical specialties, and also after individual surgical procedures.

Trends in emergency readmission rates within 28 days of discharge following selected abdominal and pelvic surgery, and following lower limb arthroplasties (joint replacements) are presented in this year's report.

Key Findings
- For abdominal and pelvic surgery, the Scotland-wide emergency readmission rate rose slightly, from 5.2% in 1997-1998 to 5.7% in 2001-2002.
- For lower limb arthroplasties, the national emergency readmission rate was fairly constant, at around 7%, over this five year period.
Breastfeeding

**Background**

Breastfeeding is the healthier option for both mother and baby. Breastfed babies have a lower risk of stomach upsets, ear and chest infections, childhood diabetes, and asthma. There is evidence that mothers who breastfeed have less risk of premenopausal breast cancer and ovarian cancer.

While a range of factors influence breastfeeding rates, the health service has a key role to play in encouraging mothers to breastfeed their babies.

Scotland has one of the lowest breastfeeding rates in Europe. A national target was therefore set in 1994 - by 2005 more than 50% of women should still be breastfeeding their babies at six weeks.

**Key findings**

- 36.5% of babies born in Scotland in 2002 were breastfed at six to eight weeks of life. While this rate was below the target of 50% for 2005, overall rates of breastfeeding are increasing year on year.

Breastfeeding rates were lowest in areas of social disadvantage. The rate for least disadvantaged mothers (56.0%) was more than double that for the most disadvantaged (22.5%).

**Obesity in Children**

**Background**

There is growing concern over the levels of obesity in the Scottish population, particularly among children. Obesity is a health concern in itself, and also increases the risk of high blood pressure, diabetes, and psychological distress.

The Scottish Intercollegiate Guidelines Network recently published a guideline to be used to manage obesity in children and young people (www.sign.ac.uk).

Using the 1990 UK reference standards it is expected that 15% of children would be overweight, 5% obese, and 2% severely obese. These figures apply to children of any age and in any part of the UK, including Scotland.

**Key findings**

- Among Scottish children born in 1998, 21.3% were overweight by the time they reached 3 years of age, 88% were obese, and 45% were severely obese.

- For the 2001-2002 school year, older children had higher levels of obesity. By the time Scottish children were 12 years old, 31% were overweight, 18% obese and 10-11% severely obese.

- At all ages, the percentage of Scottish children who are estimated to be overweight, obese, and severely obese was higher than expected.

**Kidney Disease**

**Background**

Anaemia is a condition in which there is a reduction in the level of haemoglobin - the red component of blood which carries oxygen around the body. This is a common problem in patients with renal (kidney) failure.

Achieving and maintaining a satisfactory haemoglobin level for patients on haemodialysis (a treatment for renal failure) is a marker of good overall health care.

The Clinical Standards for Adult Renal Services, available from NHS Quality Improvement Scotland, give guidance on providing clinical services in hospital settings for people with renal failure.

These standards include the national target for treating anaemia: For a minimum of 85% of patients, the haemoglobin concentration is no less than 10 g/dL after three months on haemodialysis.

**Key findings**

- In the last five years, there has been an increase of about 15% in the proportion of Scottish patients with a haemoglobin concentration of no less than 10 g/dL.

- In September 2002, 70% of Scottish patients on haemodialysis for three months or more achieved a haemoglobin concentration of no less than 10 g/dL.

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Ovarian cancer is the fourth most common cancer among women in Scotland. In 1999, almost 600 women were newly diagnosed with ovarian cancer.

The incidence rate of ovarian cancer in Scotland is among the highest in Europe. It has increased steadily over the last 30 years and is expected to continue to do so. The mortality rate from ovarian cancer in Scotland is also among the highest in Europe.

The Clinical Standards for Gynaecological (Ovarian) Cancer, available from NHS Quality Improvement Scotland, give guidance on providing clinical services in hospital and community settings.

**Key findings**

The full report includes a number of indicators in relation to women diagnosed with ovarian cancer between 1997 and 1999.

For example, 85% of Scottish women received some form of active treatment within 6 months of diagnosis (it is not expected that all women should receive active treatment). 72% of women received surgery and 51% received chemotherapy. The median waiting time from first attendance at hospital to treatment was 11 days.

Throughout Scotland, 122% of women diagnosed with ovarian cancer were recruited to participate in clinical trials.

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Diabetes, asthma and epilepsy are all conditions for which a high quality of care can be provided in the community. Emergency admissions to hospital are potentially avoidable.

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For the first time, the full report presents rates of emergency admissions to hospital for these conditions at the very detailed level of each local health care co-operative (a grouping of general practices).

**Key findings**

- For diabetes, the national rate for emergency admission to hospital has remained fairly constant in recent years. In 1999-2000, 56 people per 100,000 population were admitted to hospital for diabetes, compared with 51 in 2001-2002.

- The rate for emergency admission for asthma across Scotland dropped, from 104 people per 100,000 population in 1999-2000 to 86 in 2001-2002. This decrease is, in part, due to a particularly high number of admissions in the winter of 1999-2000.

- The national emergency admission rate for epilepsy dropped slightly from 59 people per 100,000 population in 1999-2000 to 55 in 2001-2002.

**Emergency Readmission to Hospital following Surgery**

**Background**

Rates of emergency readmission to hospital within a given period after discharge can provide a partial guide to the success of the original treatment or care.

Previous clinical indicators reports have included data on emergency readmission rates following discharge from both medical and surgical specialties, and also after individual surgical procedures.

Trends in emergency readmission rates within 28 days of discharge following selected abdominal and pelvic surgery, and following lower limb arthroplasties (joint replacements) are presented in this year’s report.

**Key findings**

For abdominal and pelvic surgery, the Scotland-wide emergency readmission rate rose slightly, from 5.2% in 1997-1998 to 5.7% in 2001-2002.

For lower limb arthroplasties, the national emergency readmission rate was fairly constant, at around 7%, over this five year period.
Breastfeeding

Background

Breastfeeding is the healthier option for both mother and baby. Breastfed babies have a lower risk of stomach upsets, ear and chest infections, childhood diabetes, and asthma. There is evidence that mothers who breastfeed have less risk of pre-menopausal breast cancer and ovarian cancer.

While a range of factors influence breastfeeding rates, the health service has a key role to play in encouraging mothers to breastfeed their babies.

Scotland has one of the lowest breastfeeding rates in Europe. A national target was therefore set in 1994 - by 2005 more than 50% of women should still be breastfeeding their babies at six weeks.

Key findings

35.5% of babies born in Scotland in 2006 were breastfed at six to eight weeks of life. While this rate was below the target of 50% for 2005, overall rates of breastfeeding are increasing year on year.

Breastfeeding rates were lowest in areas of social disadvantage. The rate for least disadvantaged mothers (56.0%) was more than double that for the most disadvantaged (25%).

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Throughout Scotland, 12.2% of women diagnosed with ovarian cancer were recruited to participate in clinical trials.

Obesity in Children

Background

Obesity is a condition in which there is a reduction of 10 grams per decilitre (g/dL) after three months on haemodialysis. For a minimum of 85% of patients, the haemoglobin concentration is no less than 10 g/dL.

The Scottish Intercollegiate Guidelines Network recently published a guideline to be used to manage anaemia in children and young people (www.sign.ac.uk).

Using the 1990 UK reference standards it is expected that 15% of children would be overweight, 5% obese, and 2% severely obese. These figures apply to children of any age and in any part of the UK, including Scotland.

Key findings

Among Scottish children born in 1998, 23.3% were overweight by the time they reached 5 years of age, 83% were obese, and 45% were severely obese.

For the 2001-2002 school year, older children had higher levels of obesity. By the time Scottish children were 12 years old, 39% were overweight, 18% obese and 14-11 severely obese.

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Kidney Disease

Background

Anaemia is a condition in which there is a reduction in the level of haemoglobin - the red component of blood which carries oxygen around the body. This is a common problem in patients with renal (kidney) failure.

Achieving and maintaining a satisfactory haemoglobin level for patients on haemodialysis (a treatment for renal failure) is a marker of good overall health care.

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Key findings

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Key findings
In the last five years, there has been an increase of about 15% in the proportion of Scottish patients with a haemoglobin concentration of no less than 10 g/dL. In September 2002, 70% of Scottish patients on haemodialysis for three months or more achieved a haemoglobin concentration of no less than 10 g/dL.

Obesity in Children

Background
There is growing concern over the levels of obesity in the Scottish population, particularly among children. Obesity is a health concern in itself, and also increases the risk of high blood pressure, diabetes, and psychological distress.

The Scottish Intercollegiate Guidelines Network recently published a guideline to be used to manage obesity in children and young people (www.sign.ac.uk).

Using the 1990 UK reference standards it is expected that 15% of children would be overweight, 5% obese, and 2% severely obese. These figures apply to children of any age and in any part of the UK, including Scotland.

Key findings
Among Scottish children born in 1998, 23.3% were overweight by the time they reached 35 years of age, 8.8% were obese, and 4.5% were severely obese.

For the 2001-2002 school year, older children had higher levels of obesity. By the time Scottish children were 12 years old, 13% were overweight, 18% obese and 10-11% severely obese.

At all ages, the percentage of Scottish children who are estimated to be overweight, obese, and severely obese was higher than expected.

Ovarian Cancer

Background
Ovarian cancer is the fourth most common cancer among women in Scotland. In 1999, almost 600 women were newly diagnosed with ovarian cancer.

The incidence rate of ovarian cancer in Scotland is among the highest in Europe. It has increased steadily over the last 30 years and is expected to continue to do so. The mortality rate from ovarian cancer in Scotland is also among the highest in Europe.

The Clinical Standards for Gynaecological (Ovarian) Cancer, available from NHS Quality Improvement Scotland, give guidance on providing clinical services in hospital and community settings.

Key findings
The full report includes a number of indicators in relation to women diagnosed with ovarian cancer between 1997 and 1999.

For example, 83.5% of Scottish women received some form of active treatment within 6 months of diagnosis (it is not expected that all women should receive active treatment). 72.5% of women received surgery and 51.6% received chemotherapy. The median waiting time from first attendance at hospital to treatment was 11 days.

Throughout Scotland, 12.2% of women diagnosed with ovarian cancer were recruited to participate in clinical trials.

Emergency Admission to Hospital for Diabetes, Asthma and Epilepsy

Background
Diabetes, asthma and epilepsy are all conditions for which a high quality of care can be provided in the community. Emergency admissions to hospital are potentially avoidable.

Guidance and advice for NHS Scotland on providing care for people with these conditions has been provided by NHS Quality Improvement Scotland and the Scottish Intercollegiate Guidelines Network.

For the first time, the full report presents rates of emergency admissions to hospital for these conditions at the very detailed level of each local health care co-operative (a grouping of general practices).

Key findings
For diabetes, the national rate for emergency admission to hospital has remained fairly constant in recent years. In 1999-2000, 56 people per 10,000 population were admitted to hospital for diabetes, compared with 51 in 2001-2002.

The rate for emergency admission for asthma across Scotland dropped, from 104 people per 100,000 population in 1999-2000 to 86 in 2001-2002. This decrease is, in part, due to a particularly high number of admissions in the winter of 1999-2000.

The national emergency admission rate for epilepsy dropped slightly from 59 people per 100,000 population in 1999-2000 to 55 in 2001-2002.

Emergency Readmission to Hospital following Surgery

Background
Rates of emergency readmission to hospital within a given period after discharge can provide a partial guide to the success of the original treatment or care.

Previous clinical indicators reports have included data on emergency readmission rates following discharge from both medical and surgical specialties, and also after individual surgical procedures.

Trends in emergency readmission rates within 28 days of discharge following selected abdominal and pelvic surgery, and following lower limb arthroplasties (joint replacements) are presented in this year’s report.

Key findings
For abdominal and pelvic surgery, the Scotland-wide emergency readmission rate rose slightly, from 5.2% in 1997-1998 to 5.7% in 2001-2002.

For lower limb arthroplasties, the national emergency readmission rate was fairly constant, at around 7%, over this five year period.
Breastfeeding

**Background**
Breastfeeding is the healthier option for both mother and baby. Breastfed babies have a lower risk of stomach upsets, ear and chest infections, childhood diabetes, and asthma. There is evidence that mothers who breastfeed have less risk of premenopausal breast cancer and ovarian cancer.

While a range of factors influence breastfeeding rates, the health service has a key role to play in encouraging mothers to breastfeed their babies.

Scotland has one of the lowest breastfeeding rates in Europe. A national target was therefore set in 1994 - by 2005 more than 50% of women should still be breastfeeding their babies at six weeks.

**Key findings**
- 36.5% of babies born in Scotland in 2002 were breastfed at six to eight weeks of life. While this rate was below the target of 50% for 2005, overall rates of breastfeeding are increasing year on year.
- Breastfeeding rates were lowest in areas of social disadvantage. The rate for least disadvantaged mothers (56.0%) was more than double that for the most disadvantaged (23.5%).

Obesity in Children

**Background**
There is growing concern over the levels of obesity in the Scottish population, particularly among children. Obesity is a health concern in itself, and also increases the risk of high blood pressure, diabetes, and psychological distress.

The Scottish Intercollegiate Guidelines Network recently published a guideline to be used to manage obesity in children and young people (www.sign.ac.uk).

Using the 1990 UK reference standards it is expected that 15% of children would be overweight, 5% obese, and 2% severely obese. These figures apply to children of any age and in any part of the UK, including Scotland.

**Key findings**
- Among Scottish children born in 1998, 23% were overweight by the time they reached 3 years of age, 88% were obese, and 45% were severely obese.
- For the 2001-2002 school year, older children had higher levels of obesity. By the time Scottish children were 12 years old, 3% were overweight, 18% obese and 10-11% severely obese.
- At all ages, the percentage of Scottish children who are estimated to be overweight, obese, and severely obese was higher than expected.

Emergency Admission to Hospital for Diabetes, Asthma and Epilepsy

**Background**
Diabetes, asthma and epilepsy are all conditions for which a high quality of care can be provided in the community. Emergency admissions to hospital are potentially avoidable.

Guidance and advice for NHSScotland on providing care for people with these conditions has been provided by NHS Quality Improvement Scotland and the Scottish Intercollegiate Guidelines Network.

For the first time, the full report presents rates of emergency admissions to hospital for these conditions at the very detailed level of each local health care co-operative (a grouping of general practices).

**Key findings**
- For diabetes, the national rate for emergency admission to hospital has remained fairly constant in recent years. In 1999-2000, 56 people per 100,000 population were admitted to hospital for diabetes, compared with 51 in 2001-2002.
- The rate for emergency admission for asthma across Scotland dropped, from 104 people per 100,000 population in 1999-2000 to 86 in 2001-2002. This decrease is, in part, due to a particularly high number of admissions in the winter of 1999-2000.
- The national emergency admission rate for epilepsy dropped slightly from 59 people per 100,000 population in 1999-2000 to 55 in 2001-2002.

Kidney Disease

**Background**
Anaemia is a condition in which there is a reduction in the level of haemoglobin - the red component of blood which carries oxygen around the body. This is a common problem in patients with renal (kidney) failure.

Achieving and maintaining a satisfactory haemoglobin level for patients on haemodialysis (a treatment for renal failure) is a marker of good overall health care.

The Clinical Standards for Adult Renal Services, available from NHS Quality Improvement Scotland, give guidance on providing clinical services in hospital settings for people with renal failure.

These standards include the national target for treating anaemia: For a minimum of 85% of patients, the haemoglobin concentration is no less than 10 g/dL. For the last five years, there has been an increase of about 15% in the proportion of Scottish patients with a haemoglobin concentration of no less than 10 g/dL.

**Key findings**
- In September 2002, 70% of Scottish patients on haemodialysis for three months or more achieved a haemoglobin concentration of no less than 10 g/dL.

Ovarian Cancer

**Background**
Ovarian cancer is the fourth most common cancer among women in Scotland. In 1999, almost 600 women were newly diagnosed with ovarian cancer.

The incidence rate of ovarian cancer in Scotland is among the highest in Europe. It has increased steadily over the last 30 years and is expected to continue to do so. The mortality rate from ovarian cancer in Scotland is also among the highest in Europe.

The Clinical Standards for Gynaecological (Ovarian) Cancer, available from NHS Quality Improvement Scotland, give guidance on providing clinical services in hospital and community settings.

**Key findings**
- The full report includes a number of indicators in relation to women diagnosed with ovarian cancer between 1997 and 1999.
- For example, 83% of Scottish women received some form of active treatment within 6 months of diagnosis (it is not expected that all women should receive active treatment). 72% of women received surgery and 51% received chemotherapy. The median waiting time from first attendance at hospital to treatment was 11 days.
- Throughout Scotland, 122% of women diagnosed with ovarian cancer were recruited to participate in clinical trials.
The confidentiality and security of all personal information is regarded with utmost importance by NHS Scotland. A number of measures are taken to protect patient confidentiality, eg all staff working in the NHS are bound by a strict code of confidentiality. In addition the Data Protection Act gives a person important rights about how their personal information is used.

Further details - including a guide for patients on these rights and how NHS Scotland uses personal health information - can be found at the following website:

www.show.scot.nhs.uk/confidentiality
Key findings

Smoking

Where do the data come from?

When a person is in contact with the health service (eg visits hospital) in Scotland, details about their health and healthcare are recorded. This information is needed to care for the person properly. Such information is also valuable for improving healthcare for everybody, eg it helps NHS Scotland check that services are run efficiently, and to plan services for the future.

Personal health information is kept in the individual’s medical case record folder, or on computer. When a person visits hospital, some of this information is recorded in a national database, and this is a key source of information used to produce the indicators.

What topics are covered in the report?

\[ \text{www.show.scot.nhs.uk/indicators} \]

Further information

The Clinical Outcomes Group oversees the publication of indicators. The Chairman of this group is Dr Dorothy Moir (Director of Public Health, NHS Lanarkshire).

For further information about the 2003 Clinical Outcome Indicators Report please contact:

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NHS Quality Improvement Scotland is a Special Health Board, established on 1 January 2003. Its purpose is to help improve the quality of healthcare in Scotland.

It does this by setting standards and monitoring performance, and by providing NHS Scotland with advice, guidance and support on effective clinical practice and service improvements.

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www.nhshealthquality.org

Purpose of this guide

Understanding the 2003 Clinical Outcome
Indicators Report


Further information

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