



Long Acting Reversible Methods of Contraception in Scotland

Year ending 31 March 2016

Publication date – 20 September 2016

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Introduction

This publication reports on the proportion of women of reproductive age using long acting reversible methods of contraception in each NHS board. In typical use, the 'long acting' or 'lasting' methods of contraception have a lower failure rate than alternative reversible methods (for example, the contraceptive pill or condoms).

'Respect and Responsibility: Strategy and Action Plan for Improving Sexual Health', published in 2005, states that the full range of contraceptive methods should be available to all patients.

In August 2011, the [Sexual Health and Blood Borne Virus Framework 2011-2015](#) was launched, followed in 2015 by the [Sexual Health and Blood Borne Virus Framework 2015-2020 Update](#). Both of these support the use of long acting reversible contraception and the 2015-2020 update states that work has been carried out to improve access to long acting reversible contraception.

This report focuses on very long acting methods of contraception; namely the contraceptive implant, intrauterine device and intrauterine system. As four Depo-Provera injections are required per year; it is difficult with the current information to determine person level data. As such, while rates are displayed to allow for comparison between boards with varying populations, caution should be taken interpreting these rates.

Further information on long acting reversible methods and other forms of contraception is available on the [NHS Choices](#) website.

Data collection

Long acting contraceptives can be prescribed in a variety of settings throughout Scotland. The data in this report have been collected from the following sources:

- i) 'Community Prescribing' (primary care) – information is supplied by Practitioner Services Division (PSD) on NHS prescriptions dispensed through primary care.
- ii) National Sexual Health System (NaSH). NaSH provides information on items prescribed from specialist sexual health services. For further information see Appendix A1.

Calculation of rates

Long acting reversible contraception rates are calculated for NHS board of treatment using population figures for board of residence. Therefore, rates do not account for patients travelling across boundaries for treatment (e.g. Lanarkshire residents travelling to NHS Greater Glasgow & Clyde for contraception services). This should be taken into consideration when comparing rates between different NHS boards. We welcome any feedback from NHS boards as to the extent of cross border flow of patients. Please email nss.isdmaternity@nhs.net.

Proposed changes to long acting reversible contraceptives publication

The Information Services Division is committed to producing information that best meets the needs of our customers. We are currently seeking your views on our proposal to make changes to the format of our long acting reversible contraceptives publication. Currently we release a one-page summary of main points, a publication report and workbooks containing the data. We are proposing that future publications will consist of summary and revised workbooks only. We welcome any comments on these proposals or suggestions for improvements to the information provided. If you wish to be involved please email nss.isdmaternity@nhs.net by 31 December 2016.

Main points

In primary care and sexual health settings:

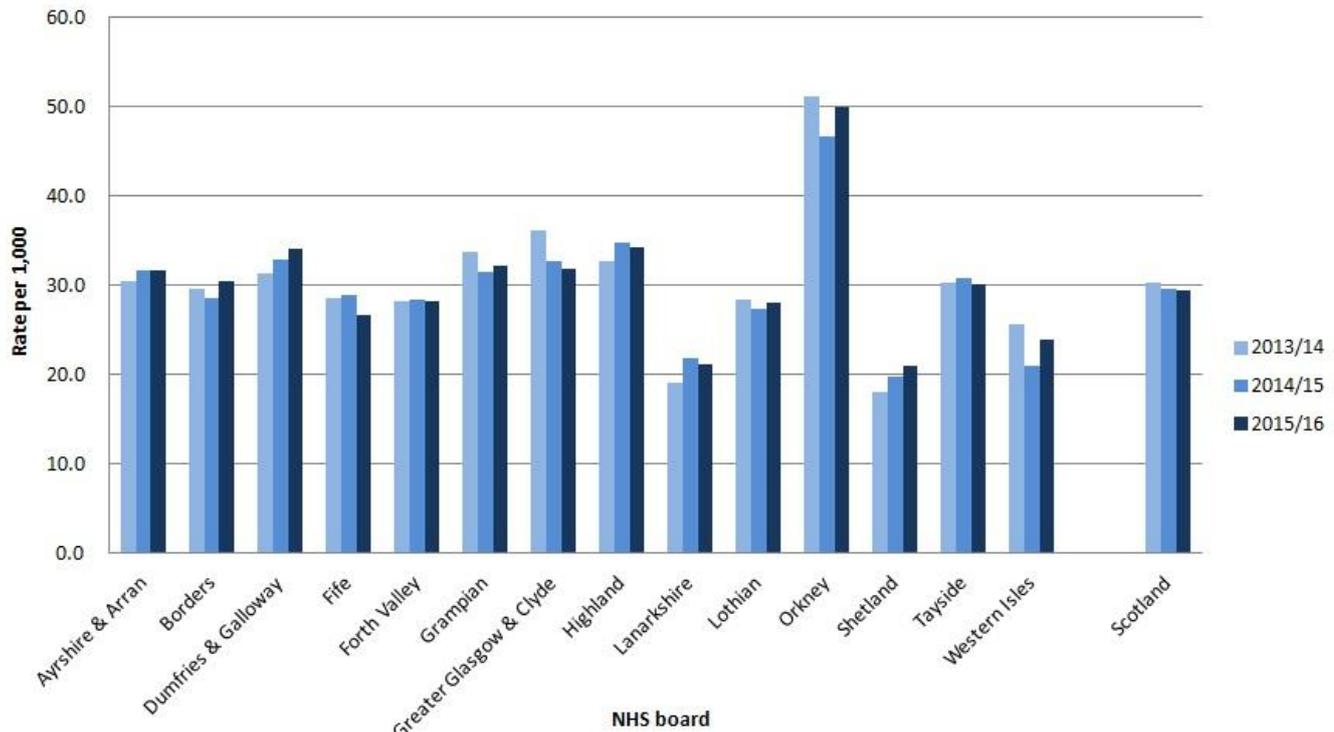
- The prescribing rate of very long acting methods of contraception (the contraceptive implant, intrauterine device and intrauterine system) in Scotland decreased slightly from 53.1 per 1,000 women aged 15-49 in 2014/15 to 52.1 in 2015/16.
- The prescribing rate of the contraceptive implant in Scotland in 2015/16 was 29.4 per 1,000 women aged 15-49, similar to the previous year's rate of 29.5.
- The intrauterine device prescribing rate in Scotland decreased slightly from 5.8 in 2014/15 to 5.4 per 1,000 women aged 15-49 in 2015/16.
- The intrauterine system prescribing rate in Scotland decreased slightly from 17.8 in 2014/15 to 17.4 per 1,000 women aged 15-49 in 2015/16.
- In 2015/16 the contraceptive implant was the most common type of long acting reversible contraception prescribed in the under 20 age group at 45.0 per 1,000 women with rates falling in each successive age group. Intrauterine system prescriptions were most common in the 45+ age group at 21.5 per 1,000 women and the prescribing rate decreased with each younger age group.

Results and Commentary

Contraceptive implant

The implant is a progestogen only method of contraception and consists of a single rod which is inserted in the arm, under the skin. The implant releases etonogestrel providing protection from pregnancy for up to 3 years.

Figure 1: Contraceptive implant prescribing rate per 1,000 women^{1,2}



Source: Practitioner Services Division (PSD) & NaSH.

1. Rate per 1,000 women aged 15-49.
2. Prescriptions for primary care and sexual health settings.

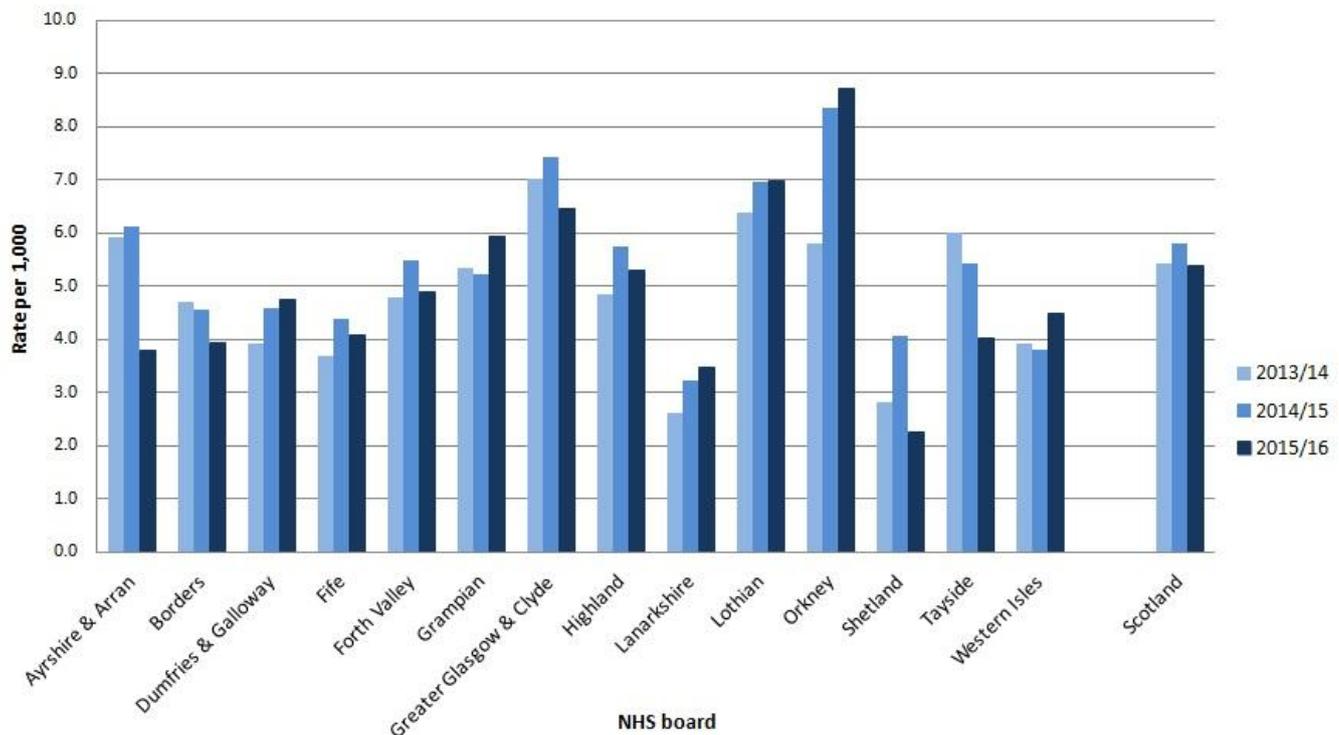
- The prescribing rate of the contraceptive implant in primary care and sexual health settings in Scotland fell slightly between 2013/14 and 2014/15, from 30.2 to 29.5 per 1,000 women aged 15-49, then remained at a similar level in 2015/16, at 29.4 per 1,000.
- In the mainland NHS boards, Highland had the highest rate of contraceptive implant prescribing in 2015/16 with 34.2 per 1,000 women aged 15-49 while Lanarkshire had the lowest rate of 21.1 per 1,000.
- In 2015/16 the contraceptive implant prescribing rate in primary care was higher than in sexual health settings at 18.1 and 11.2 per 1,000 women aged 15-49 respectively.
- In 2015/16, Borders, Greater Glasgow & Clyde and Lanarkshire were the only mainland NHS boards that had higher prescribing rates for the contraceptive implant in sexual health settings compared to primary care settings.

For further information on numbers and rates from each source see [Table 1](#).

Intrauterine device

Intrauterine devices prevent pregnancy from the time of insertion. An intrauterine device can be used for up to 10 years, sometimes longer. They can also be used as emergency contraception when fitted up to 5 days after unprotected intercourse.

Figure 2: Intrauterine device prescribing rate per 1,000 women^{1,2}



Source: Practitioner Services Division (PSD) & NaSH.

1. Rate per 1,000 women aged 15-49.
2. Prescriptions for primary care and sexual health settings.

- The intrauterine device prescribing rate in primary care and sexual health settings in Scotland decreased slightly from 5.8 in 2014/15 to 5.4 per 1,000 women aged 15-49 in 2015/16.
- In the mainland NHS boards, Lothian had the highest rate of intrauterine device prescribing in 2015/16 with 7.0 while Lanarkshire had the lowest rate of 3.5 per 1,000 women aged 15-49.
- For each of the reported years the overall rate of intrauterine device prescribing in Scotland was lower in primary care than sexual health settings. There is variation between boards however, with some having higher prescribing rates in primary care and others in sexual health settings.

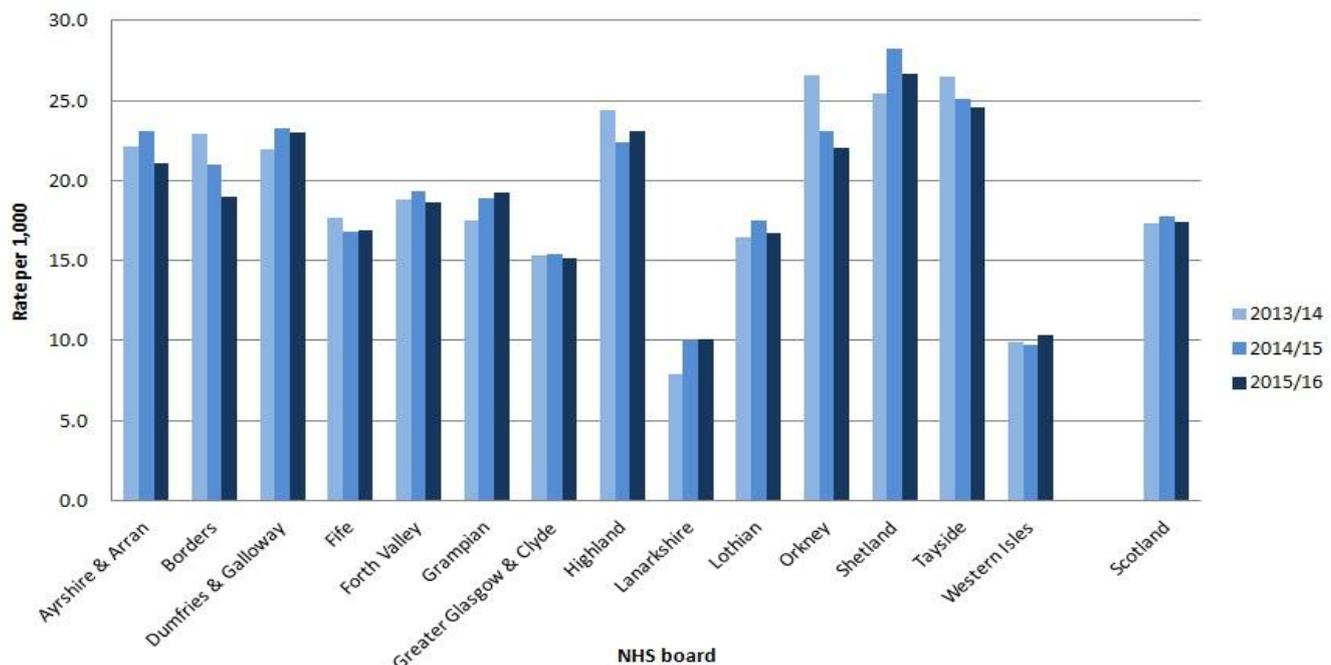
For further information on numbers and rates from each source see [Table 2](#).

Intrauterine system

Mirena® and Jaydess® are contraceptive devices but unlike intrauterine devices, contain levonorgestrel, a synthetic form of progesterone. Known as intrauterine systems they gradually release levonorgestrel into the uterus, preventing pregnancy. The duration of protection offered by Mirena® and Jaydess® are up to 5 and 3 years respectively.

As well as use as a contraceptive, the intrauterine system can also be used to treat menorrhagia (heavy periods) though it is not possible to determine the reason for use and thus separate the data.

Figure 3: Intrauterine system prescribing rate per 1,000 women^{1,2}



Source: Practitioner Services Division (PSD) & NaSH.

1. Rate per 1,000 women aged 15-49.
2. Prescriptions for primary care and sexual health settings.

- The intrauterine system prescribing rate in primary care and sexual health settings in Scotland decreased slightly from 17.8 in 2014/15 to 17.4 per 1,000 women aged 15-49 in 2015/16.
- In the mainland NHS boards, Tayside had the highest rate of intrauterine system prescribing in 2015/16 with 24.6 while Lanarkshire had the lowest rate of 10.0 per 1,000 women aged 15-49.
- In the mainland NHS boards, Grampian have had an increase in intrauterine system prescribing rates each year since 2013/14 while in contrast, Borders and Tayside have both had year on year decreases.
- For each of the reported years the overall rate of intrauterine system prescribing in Scotland was higher in primary care than sexual health settings however Greater Glasgow & Clyde and Lanarkshire health board both have much higher prescribing rates in sexual health settings.

For further information on numbers and rates from each source see [Table 3](#).

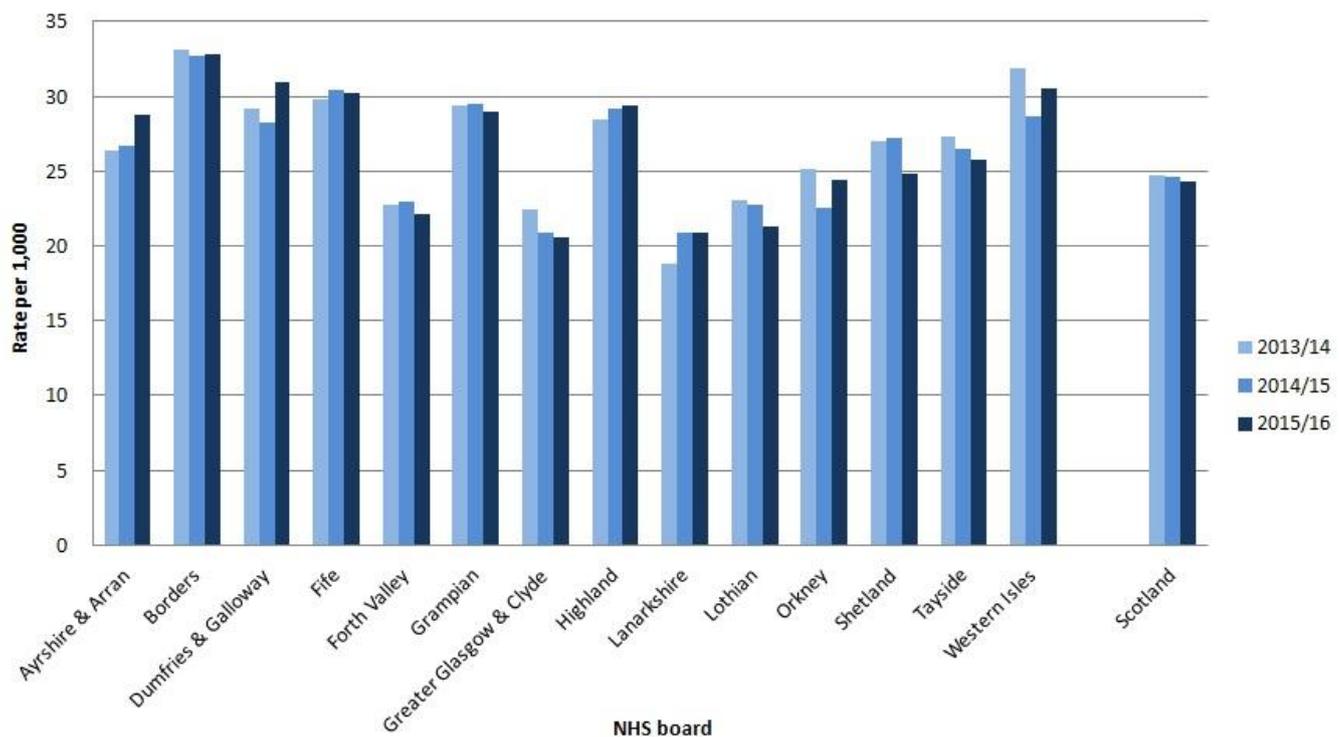
Depo-Provera® contraceptive injections

The contraceptive effect of Depo-Provera® last for around 12 weeks, so protection from pregnancy for a year would require four injections. The data collected from primary care and sexual health settings are for prescriptions for single injections.

In order to estimate the extent of Depo-Provera usage the number of women years of protection has been calculated. This is done by dividing the total number of prescriptions for injections in a year by four. That figure is then expressed as a rate per 1,000 women of reproductive age. For example, if 12 women in one NHS board have 3 Depo-Provera injections each during the year 2015/16 the women years protected for that year would be calculated as $(12 \times 3) \div 4 = 9$ women years. This is then divided by the number of women of reproductive age in that NHS board and multiplied by 1,000 to give a rate of women years of protection.

The provision of rates in addition to the numbers of prescriptions for Depo-Provera injections allows us to make rough comparisons between NHS boards with different sized resident populations. However, comparison of rates of prescriptions for Depo-Provera injections with rates of other contraceptive methods should not be made.

Figure 4: Number of women years of protection using Depo-Provera per 1,000^{1,2}



Source: Practitioner Services Division (PSD) & NaSH.

1. Rate per 1,000 prescriptions, divided by four.
2. Prescriptions for primary care and sexual health settings.

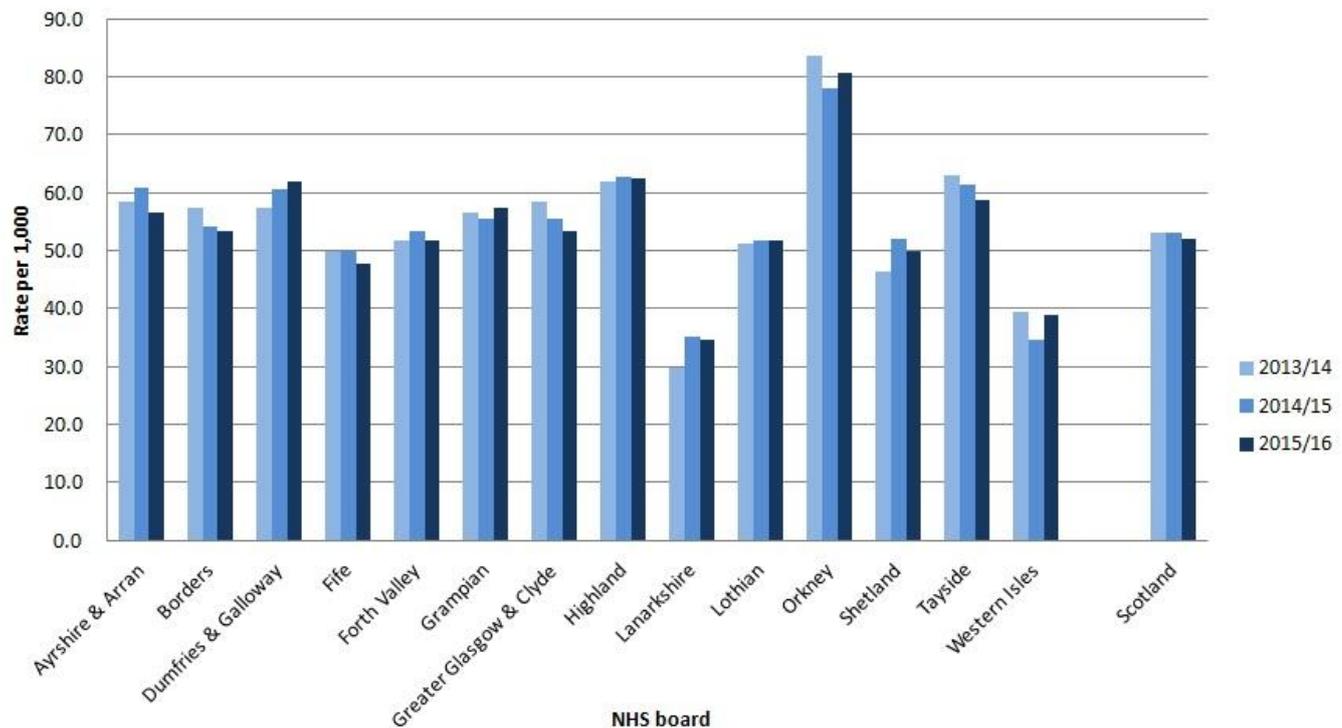
- In Scotland, the total number of prescriptions and the rate per 1,000 of Depo-Provera® decreased between 2014/15 and 2015/16.

For further information on numbers and rates from each source see [Table 4](#).

Very long acting reversible methods of contraception

By grouping together those products defined as very long acting (contraceptive implant, intrauterine device and intrauterine system) it is possible to look at the overall prescribing rate of very long acting reversible methods of contraception.

Figure 5: All long acting reversible contraception (implant, intrauterine device & intrauterine system) prescribing rate per 1,000 women^{1,2}



Source: Practitioner Services Division (PSD) & NaSH.

1. Rate per 1,000 women aged 15-49.
2. Prescriptions for primary care and sexual health settings.

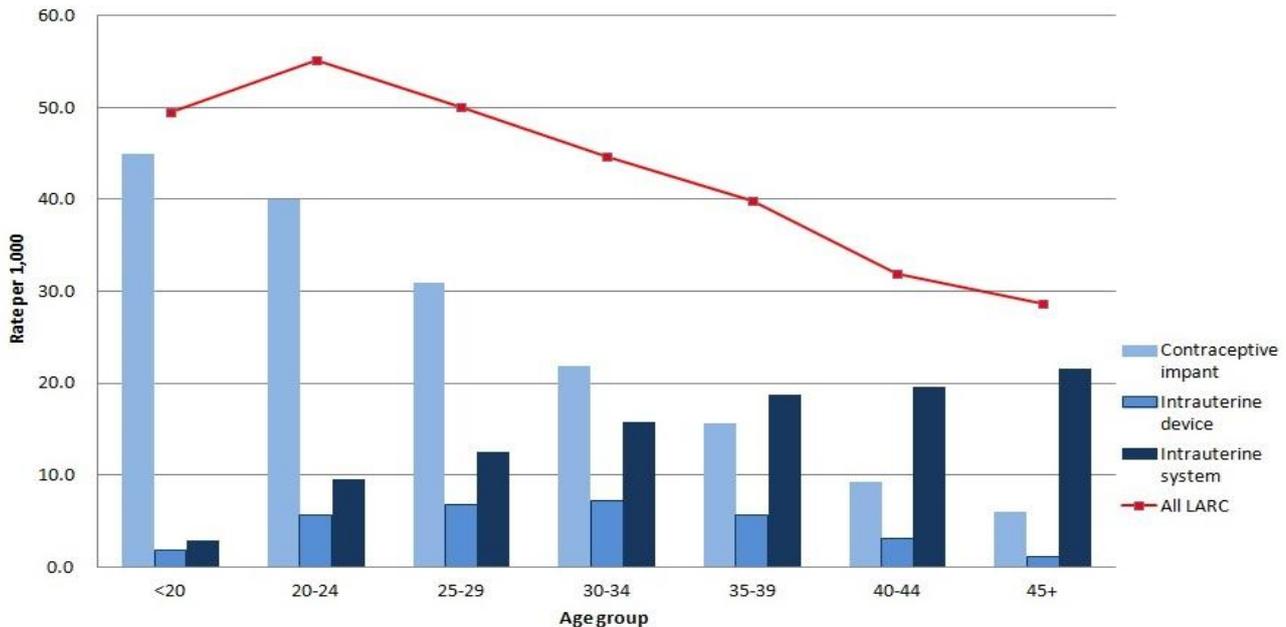
- The rate per 1,000 women of reproductive age in Scotland that have been prescribed very long acting methods of contraception decreased slightly from 53.1 in 2014/15 to 52.1 in 2015/16.
- Of the mainland NHS boards, Borders, Greater Glasgow & Clyde and Tayside all had a reduction in long acting reversible contraception prescribing rates each year from 2013/14 to 2015/16. Meanwhile Dumfries & Galloway were the only NHS board to have an increase in prescribing rates each year during this period.

For further information on numbers and rates from each source see [Table 5](#).

Very long acting reversible methods of contraception by age group

For the first time in this publication we look at prescriptions by age group. For data sourced from primary care settings, a patient’s CHI number is required in order to derive an age, therefore this table only includes prescriptions that have a valid CHI attached. As such, the total number of prescriptions in this table ([Table 6](#)) won’t match the total number of prescriptions presented in previous tables.

Figure 6: All long acting reversible contraception (implant, intrauterine device & intrauterine system) prescribing rate per 1,000 women^{1,2} by age group, 2015/16



Source: Practitioner Services Division (PSD) & NaSH.

1. Rate per 1,000 women in age group.
2. Prescriptions for primary care and sexual health settings.

- In 2015/16, the uptake of all very long acting methods of contraception (the contraceptive implant, intrauterine device and intrauterine system) was most common in the 20-24 age group at 55.2 per 1,000 women. Each successively older age group had lower rates.
- In 2015/16, the contraceptive implant was the most common type of long acting reversible contraception in the under 20 age group at 45.0 per 1,000 women and rates fell with each successive age group.
- Intrauterine system prescriptions were most common in the 45+ age group at 21.5 per 1,000 women and prescribing rates decrease with each younger age group.
- Intrauterine devices are the least utilised method of long acting contraception across all age groups.

For further information on numbers and rates from each source see [Table 6](#).

Glossary

Contraceptive implant	The contraceptive implant steadily releases the hormone progestogen into the bloodstream in order to prevent pregnancy.
Intrauterine device	The intrauterine device releases copper into the womb in order to prevent pregnancy.
Intrauterine system	The intrauterine system releases a progestogen hormone into the womb in order to prevent pregnancy.
Depo-Provera	Depo-Provera is a contraceptive injection containing progestogen which provides around 12 weeks protection from pregnancy.
NaSH	National Sexual Health System
Mainland NHS boards	All NHS boards excluding the three Island health boards (Orkney, Shetland & Western Isles).

List of Tables

Table No.	Name	Time period	File & size
1	Contraceptive implant <ul style="list-style-type: none"> Scotland NHS board 	Year ending 31 March 2014 - 2016	Excel [23kb]
2	Intrauterine device <ul style="list-style-type: none"> Scotland NHS board 	Year ending 31 March 2014 - 2016	Excel [21kb]
3	Intrauterine system <ul style="list-style-type: none"> Scotland NHS board 	Year ending 31 March 2014 - 2016	Excel [25kb]
4	Depo-Provera <ul style="list-style-type: none"> Scotland NHS board 	Year ending 31 March 2014 - 2016	Excel [21kb]
5	Very long lasting methods of contraception <ul style="list-style-type: none"> Scotland NHS board 	Year ending 31 March 2014 - 2016	Excel [23kb]
6	Very long lasting methods of contraception by age group <ul style="list-style-type: none"> Scotland 	Year ending 31 March 2014 - 2016	Excel [31kb]

Contact

Stuart Wigglesworth

Information Analyst

nss.isdmaternity@nhs.net

0131 275 7128

Celina Davis

Principal Information Analyst

nss.isdmaternity@nhs.net

0131 275 6199

Further Information

Further information can be found on the [ISD website](#)

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Appendices

A1 – Background Information

Long acting reversible contraception rates are calculated for NHS board of treatment using population figures for board of residence. Therefore, rates do not account for patients travelling across boundaries for treatment (e.g. Lanarkshire residents travelling to NHS Greater Glasgow & Clyde for contraception services). This should be taken into consideration when comparing rates between different NHS boards. We welcome any feedback from NHS boards as to the extent of cross border flow of patients. Please email nss.isdmaternity@nhs.net.

The majority of women will be in the age range 15-49 years (to reflect reproductive age) however it is worth noting that there may be females aged less than 15 or over 49 who are choosing to use long acting reversible contraception.

Data collection

Long acting contraceptive methods are prescribed in a variety of settings throughout Scotland. Data are collected on contraception provision in all these settings but are not currently collated and reported nationally.

The data in this report have been collected from the following sources:

1) Community Prescribing (primary care)

ISD's prescribing team maintains a detailed database of all NHS prescriptions dispensed in the community in Scotland. The information is supplied to ISD by Practitioner Services Division (PSD).

2) NaSH

The National Sexual Health System (NaSH) has been rolled out to NHS boards across Scotland. The system is an electronic patient record for specialist sexual health services in Scotland and as a secondary function provides aggregate national information on clinical activity.

NaSH provides information on items prescribed from sexual health and family planning clinics, however, it does not cover the acute sector (obstetrics, gynaecology and post termination services).

Publications prior to November 2015 reported data from the following sources:

1) Community Prescribing (primary care)

As above.

2) Central Pharmacies

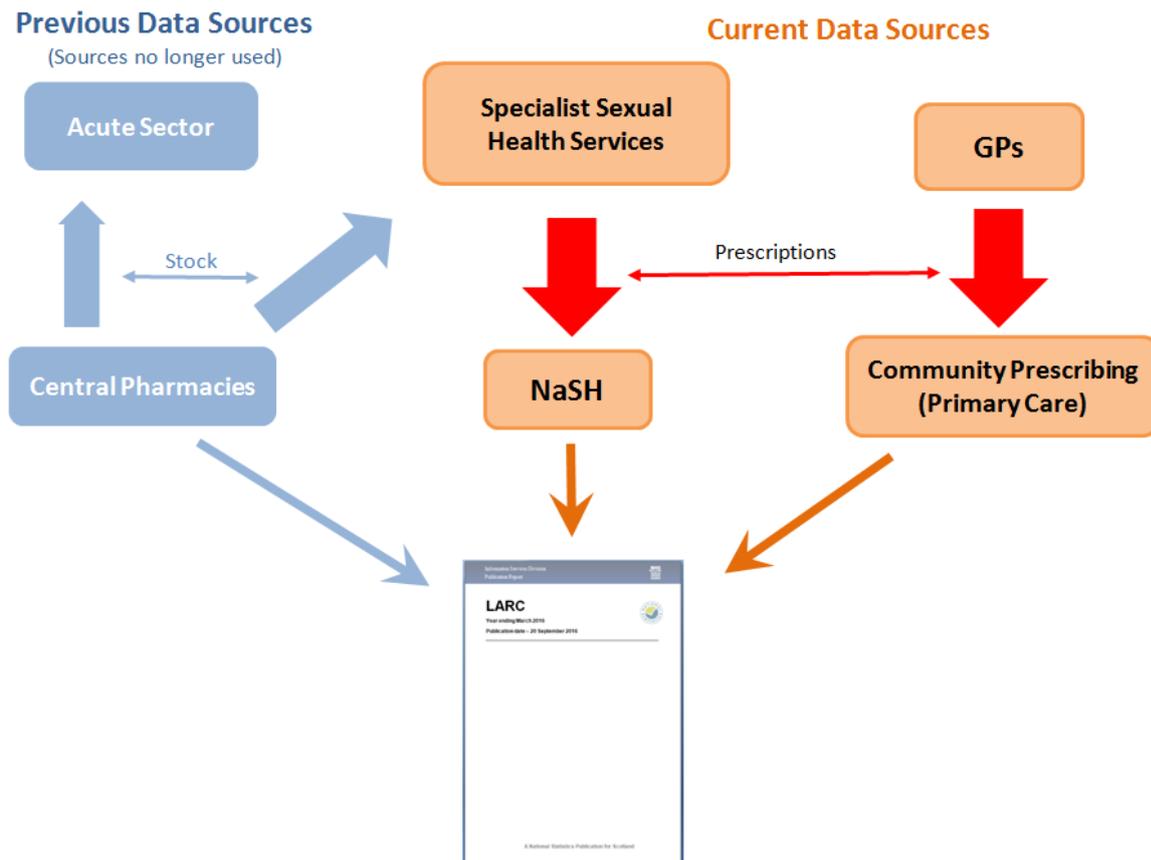
Central pharmacies provide data on stock dispensed to the acute sector and specialist community clinics, such as sexual health and family planning clinics.

Prior to NaSH, data collection data from central pharmacies was the best source of information as data on prescribed items was not available centrally. The central pharmacy data showed the distribution and supply of long acting reversible contraception products from the pharmacies to the acute sector (including obstetrics, gynaecology and post termination services etc) and to specialist community clinics (including integrated sexual health, sexual and reproductive health and genitourinary medicine services).

It was difficult to equate this directly with usage as there were issues such as stock retention to consider. However, the assumption was that clinics, in general, would order as many products as they expected to use and therefore the data would equate roughly to long acting reversible contraception uptake. Now that prescription information from specialist sexual health services is available on NaSH it has replaced the data previously collected from central pharmacies for publications since November 2015.

Information on prescribing in the acute sector is not available.

Figure 7: Previous and current data sources



Primary care revised methodology

In previous long acting reversible contraception publications, data for 2013/14 had been shown based upon measures from the prescribing dataset that are classed as relating to dispensed items. However, a review of this data has shown that this includes prescriptions that were not dispensed (generally because the patient did not require a particular item on a prescription) or that were not collected by the patient. Normally such prescriptions would not result in a cost to NHSScotland. Such items are recorded as an artefact of the payment process but may not represent all instances where a prescription was written but not dispensed or not collected and so the information provides no reliably meaningful information beyond what is available from paid measures of activity and cost. Paid items are now used rather than dispensed items. This is because paid item information best reflects the activity and costs associated with prescribing and the supply of medicines to patients in NHSScotland. As such, 2013/14 data has been revised in this publication.

Continuation rates

The continuation rate of a method of contraception is one (indirect) indicator of the acceptability of that method. It is not possible to calculate the continuation rates from these data, which only reflects uptake of the method. In any one year women will be at various stages in their contraceptive use: newly prescribed; mid cycle, or due for renewal. For the purposes of this report we are reporting the numbers as new uptake which seems reasonable for the very long acting methods.

A2 – Publication Metadata (including revisions details)

Metadata Indicator	Description
Publication title	Long acting reversible methods of contraception in Scotland.
Description	Annual update on the proportion of women of reproductive age using long acting reversible methods of contraception in each NHS board.
Theme	Health and Social Care.
Topic	Sexual Health services.
Format	PDF document and excel tables.
Data source(s)	Primary care prescribing data – PRISMS. Sexual health settings data – NaSH.
Date that data are acquired	Data requested from PRISMS – July 2016. Data extracted from NaSH – July 2016.
Release date	20/09/2016.
Frequency	Annual.
Timeframe of data and timeliness	Financial years 2013/14-2015/16. Generally no delays.
Continuity of data	Data are reported from 2013/14.
Revisions statement	Any incomplete data due to shortfalls in submissions from NHS boards are revised at the next publication.
Revisions relevant to this publication	Population figures for health board 2014 boundaries are used for the first time in this publication.
Concepts and definitions	See Appendix .
Relevance and key uses of the statistics	Making information publicly available for planning, provision of services, assessing impact of policies/initiatives and monitoring progress against QIS (now Healthcare Improvement Scotland) sexual health standards.
Accuracy	Data from PRISMS are requested internally from ISD as an Information Request and are therefore subject to internal checking procedures.
Completeness	Considered complete for health boards that have been included.
Comparability	http://digital.nhs.uk/catalogue/PUB18597 Some information on use of various types of contraception in England is available at the above link.
Accessibility	It is the policy of ISD Scotland to make its web sites and products accessible according to published guidelines .
Coherence and clarity	The report on long acting reversible contraception is accessible via the ISD website: http://www.isdscotland.org/Health-Topics/Sexual-Health/Publications/2016-09-20/2016-09-20-LARC-

	Report.pdf .
Value type and unit of measurement	Number of items prescribed and rate per 1,000 women (aged 15-49) are presented.
Disclosure	The ISD protocol on Statistical Disclosure is followed.
Official Statistics designation	National Statistics.
UK Statistics Authority Assessment	June 2011.
Last published	03/11/2015.
Next published	20/09/2017(proposed in a revised format).
Date of first publication	February 2007 (which reports on data from 2004/05).
Help email	nss.isdmaternity@nhs.net
Date form completed	12/08/2016.

A3 – Early Access details (including Pre-Release Access)

Pre-Release Access

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD are obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

Standard Pre-Release Access:

- Scottish Government Health Department
- NHS Board Chief Executives
- NHS Board Communication leads

A4 – ISD and Official Statistics

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

Purpose: To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

Mission: Better Information, Better Decisions, Better Health

Vision: To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD's statistical publications are currently classified as one of the following:

- National Statistics (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD's statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](#).

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics. Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.