



Department
of Health

Department of Health checks made on HSA4 forms for data quality and monitoring the Abortion Act

This document contains detailed information about the Department of Health procedures following receipt of HSA4 forms both paper and electronic.

Introduction

The Department of Health uses a thorough process for recording and monitoring information received on Abortion Notification forms HSA4. Checks on the forms assist in monitoring the Abortion Act and ensuring that best practice guidance from the Department of Health is followed. In addition, the methods used ensure that good quality, accurate data comply with the National Statistics' code of practice and are detailed below.

Contact Details

If you require further information on form processing or data quality please phone 020 7972 5537 or email abortion.statistics@dh.gsi.gov.uk or HSA4@dh.gsi.gov.uk

Form processing and validation checks

Data validation checks are both automated and manual.

For paper forms there are several separate sets of automated checks performed at various stages of data processing. For electronic forms, fields are validated at each stage of data entry.

Paper forms with missing or invalid information and all forms that need further clarification are returned to practitioners. When the information is received back, the form goes through the same validity checks as it did when it was first processed. The forms are returned to practitioners for clarification until all the necessary information is received.

The checks performed by the Department of Health (DH) are shown below under the sections of the form though may be duplicated where checks overlap.

DH INFORMATION READER BOX

Policy	Estates Commissioning IM & T Finance Social Care / Partnership Working
HR / Workforce Management Planning / Clinical	

Document Purpose	Best Practice Guidance
Gateway Reference	16434
Title	Department of Health checks made on HSA4 forms for data quality and monitoring the Abortion Act
Author	Department of Health, Abortion Statistics Team
Publication Date	24 May 2011
Target Audience	PCT CEs, SHA CEs, Directors of PH, PCT Chairs, doctors/clinicians working in hospitals and abortion clinics
Circulation List	Administrative staff working in hospitals and abortion clinics
Description	This document contains detailed information about the Department of Health procedures following receipt of HSA4 forms both paper and electronic.
Cross Ref	N/A
Superseded Docs	N/A
Action Required	N/A
Timing	N/A
Contact Details	Abortion Statistics Team Department of Health Room 5A Skipton House 80 London Road, London SE1 6LH - www.dh.gsi.gov.uk
For Recipient's Use	

Section 1 and Section 2 (page 1)

Terminating and certifying doctor details

A check is made on all paper forms to ensure the presence of the name, address and GMC number of the terminating doctor and the name and address of certifying doctor/doctors. Incorrect forms at this visual stage are highlighted by a cross and forms with this 'visual check error' are returned to practitioners. Validation of this information is automated for web forms which cannot be submitted unless they are completed correctly for all fields.

When the paper form is electronically processed a second check is made that name, address and signature for the terminating doctor and name and address for the certifying doctor or doctors are all present. The terminating doctor's GMC number is validated against the GMC register.

Forms with invalid GMC numbers, missing terminating doctor details and signature and missing certifying doctor details are sent back.

Section 3 (page 2)

Patient name/reference

A check is made to see that either patient name or reference number is completed. Paper forms without either patient name or reference number are returned to practitioners. Neither name nor patient reference is stored on the database, only the fact that either one is present, is recorded. Patient name and/or reference is however, present on the scanned image of the form which is stored in the image database for 3 years. This database cannot therefore be searched by patient name. The Department of Health encourage the use of patient reference rather than patient name.

Section 3 (page 2)

Date of birth

Dates of birth for women aged under 13 years and over 54 years are returned for confirmation by the terminating practitioner. In addition, forms for women aged between 14 and 16 are checked if number of previous pregnancies/miscarriages/abortions (parity) is greater than one and/or marital status is not equal to single/not known/not stated. Forms for women aged between 16 and 18 are checked if parity is greater than 2 and/or marital status is not equal to single/not known/not stated. Forms with missing or invalid dates of birth are returned to practitioners.

Section 3 (page 2)

Postcode

Full postcode of residence is validated against the Royal Mail postcode directory which is updated every three months. Paper forms with missing or invalid postcode and missing address are highlighted as invalid and are sent back to practitioners.

Electronic forms with invalid postcodes require information in the address box before they can be submitted. Postcode is then allocated by DH staff when the form reaches the temporary server before moving it to the main database.

Section 3 (page 2)

Country of residence

DH form processing staff allocate a country code for non-residents from the address given for both paper and web forms. Forms with an address given as 'Ireland' are returned for confirmation of either Northern Ireland or Southern Ireland and coded accordingly. Forms for women not resident in England and Wales and NHS funding selected are returned for confirmation.

Forms with missing date of birth, postcode and patient reference but date of termination given.

In these cases, clinics are given the patient references of the women who had abortions on the same day so that they can derive which of that day's patient details are missing. Often forms with so much missing information relate to women who did not attend their appointment and if this information confirmed the forms is deleted. A paper copy of the deleted form is kept for three years.

Section 3 (page 2)

Marital status

Marital status is checked against age. Forms with civil partnership stated are confirmed with the practitioner. Currently a sticker giving a definition of civil partnership is included for clarification that civil partnership is not mistaken for 'co-habiting'. Forms with missing marital status are returned if other information is missing. Forms with age under 18 and marital status are returned if marital status is not equal to single/not stated/not known.

Section 3 (page 2)

Ethnic group

Forms with missing ethnic group are returned if other information is missing.

Section 3 (page 2)

Parity

All parities over 4 are returned to practitioners for confirmation (see also checks for date of birth by parity). For women of young ages with previous abortions a check is made that the previous abortion and age were also recorded correctly. Forms with missing parity information are sent back if other information is missing otherwise parity is recorded as zero.

Section 4 (page 3)

Place of termination

A list is kept of current authorised clinics with clinic names, addresses, DH allocated clinic code and clinic type. All NHS hospitals are authorised to perform abortions but hospitals and clinics in the independent sector must apply to the Department of Health and be authorised. Clinic type examples are 'NHS hospital', 'Agency clinic', 'Closed Site'. Newly authorised clinics are allocated a clinic code by the Department of Health. This code is not required on paper HSA4s but is required on log in to the web form system.

Forms with invalid clinic codes such as a closed hospital site codes or forms where clinic code is inconsistent with the data (such as privately funded abortion in an NHS hospital) are identified within the processing system and returned for clarification.

Place of termination is checked against gestation and method used as some clinics are only registered to perform abortions up to a certain gestation. Where place of termination is missing this information can sometimes be assessed by looking at the previous and/or following forms in ID sequence. In the rare cases where this is not possible, forms are returned to the terminating practitioner.

Second place of termination is also checked for accuracy where the combinations of data are unusual ie less than 22 weeks gestation or invalid second place of termination.

Section 4 (page 3)

Funding

Place of termination is checked against funding and residency of the woman. Inconsistencies such as NHS funded in a private hospital, privately funded in an NHS hospital, non resident and NHS funded and both NHS and Privately funded selected are checked and returned to practitioners for clarification.

Section 4 (page 3)

Feticide

Forms with gestation under 22 weeks and a feticide recorded are checked to ensure gestation is correct and that selective termination information is recorded correctly. All gestations 22 weeks and over are checked for date and method of feticide. Forms for medical gestations 22 weeks and over which do not show a date or method of feticide are returned to practitioners for confirmation that no feticide was used.

Section 4 (page 3)

Date of termination

Forms with missing and invalid dates (including those in the future) are sent back.

Section 5 (page 4)

Gestation

Missing or invalid gestations (i.e. those that look like the gestation is less than 4 weeks or more than 42 weeks) are returned for clarification. All forms with gestations over 22 weeks are checked for good medical practice. Forms for medical abortions with gestations over 22 weeks which do not show a feticide are returned to practitioners to give more information as to why no feticide was used.

All gestations and medical conditions for abortions over 23 weeks are scrutinized by Department of Health medical practitioner. In addition, forms are checked where there are inconsistencies in gestation and method of abortions and grounds and place of termination (eg non NHS hospital). A check is made for gestation by clinic as some clinics are only authorised to perform abortions up to certain gestations.

Section 6 (page 4)

Grounds

Forms with missing grounds and/or ground conditions are returned. Medical conditions are coded and any queries are resolved by DH practitioner. Medical conditions are checked against gestation and diagnosis. Grounds are checked against gestation to ensure the abortion complies with the law. An additional check for rare cases performed under ground F or ground G is made. Ground D is checked against parity 1 (number of previous live/still born). Ground E conditions are checked against gestation and method of diagnosis used. A DH medical practitioner helps with coding medical conditions and assessing the primary condition.

Medical conditions

All medical conditions are coded by trained Department of Health (DH) staff using a list of valid diagnoses taken from the International Statistical Classification of Diseases and Related Health Problems - 10th Revision (ICD-10). Any conditions given by doctors that are unclear, unreadable or ambiguous (with regards to gestation or method of diagnosis) are examined by a DH medical practitioner. If the DH practitioner requires more information or if a diagnosis is missing forms are returned to the terminating doctor. In addition, all forms and coded medical conditions for abortions at gestations over 24 weeks and selective abortions are checked by a DH medical practitioner.

Section 7 (page 5)

Selective terminations

Original and reduced numbers of fetuses are checked against feticide information, method of abortion and gestation. All forms for selective terminations are seen by the DH medical practitioner.

Section 8 (page 5)

Chlamydia

Forms with missing chlamydia screening are returned if other information is missing.

Section 9 (page 5)

Complications

Forms with ticks in Complications NONE and complications OTHER are checked. Any complication listed in 'other' is seen by the DH medical practitioner.

Section 10 (page 5)

Date of Death

If a form is processed with a date of death an immediate 'popup' is activated on the team manager's computer. Any cases are referred to the DH medical practitioner.

Additional checks

A DH medical practitioner scrutinizes information provided on form HSA4 in the following cases:

- All forms with gestations 24 or more weeks
- All selective abortions

- All ground E forms with more than one diagnosis in order to allocate primary diagnosis
- All ground Fs and Gs
- Any deaths
- All forms with any medical condition that needs additional coding or a primary diagnosis allocated.
- All forms where information such as grounds, complications, feticide methods is ambiguous.

In addition, the DH doctor may request more information from the terminating practitioner with queries such as:

- Why was this Down's syndrome abortion performed at 20 weeks when diagnosis is possible at 13 weeks?
- What were the circumstances around the selective termination where 5 fetuses were reduced to 2?
- Please confirm use of feticide and gestation at 17 weeks.
- How was this condition diagnosed at 5 weeks?

Duplicate forms

Possible duplicated forms (2 or more forms received for the same abortion) are selected where there is a matching date of birth, postcode and date of termination. Gestation is also selected as an additional check on accuracy of information recorded. The pairs of forms are checked manually and if all entries for each field are the same, the form is confirmed to be a duplicate and one of the pair is deleted. Approximately 1000 forms each year are deleted as duplicates, usually a web form and a paper form has been sent for the same abortion.

A check is made on duplicate forms where date of birth and postcode match but date of termination does not match. This may highlight duplicate forms for women whose first abortion failed and needed to be repeated later. In these cases the first notification form is deleted. This check also shows a small number of duplicate forms where dates have been recorded incorrectly and these are amended.

Total forms

Each quarter a count of abortions by clinic and a count by PCT check is made. Further investigations are made where clinics have a 10% drop in the number of forms submitted.

Forms with missing data

Forms with missing data are returned at two month intervals until the information is received. However a small number of forms have missing data at the time of publication and imputation methods are used (see below).

Imputation methods

Data is provisional until the annual bulletin is published.

Note that information missing at time of publication is imputed only for statistical purposes. To comply with the Department of Health's duty to monitor the Abortion Act, any forms with missing information are followed up until all the necessary information is received and validated. This process continues after the annual publication to monitor the Abortion Act.

For publication purposes, the following imputations are used:

Missing date of birth

Missing date of birth is left missing and an 'age at termination' is imputed randomly from age, in years, of 20, 21, 22, 23 or 24. Age group 20-24 years currently has the highest total abortions.

Missing gestation

This is randomly imputed from weeks 6,7,8,9 or 10 unless grounds or method of abortion suggest otherwise. Gestations of 6-10 weeks currently have the five highest totals.

Missing and invalid postcode of residence

For missing postcodes the clinic code is used to identify PCTs that have a large number of their residents using the clinic. Then a postcode from a ward within these PCTs is randomly imputed. Each ward should not have more than 2 cases with postcode imputed.

After verification of address with practitioner if a postcode is still invalid, one of either the last two characters are amended in order that a valid postcode can generate a PCT of residence. Postcodes are amended in this way in for less than a quarter of a percent of records. An electronic note is made of the original invalid postcode and kept with the image of the form.

Funding

If the abortion was performed in an NHS hospital or agency for a resident of England and Wales, funding is imputed as NHS funded (around 100 cases per year). Missing funding for an abortion at a private hospital or for a non resident is imputed as Privately funded.

Ground

Ground is imputed as ground C unless other information on the form indicates otherwise.

Parity

Missing parity information is recorded as zero.

All other missing data is left as missing for publication.

The following table shows the number of cases that were imputed for publication for 2005-2012.

Number of cases where data were imputed for statistical purposes for each data item, 2005 - 2012, England and Wales

	Date of birth	Postcode	Gestation	Grounds	Funding
2005	26	55	223	158	.
2006	30	50	129	74	.
2007	71	69	213	69	94
2008	45	54	96	63	42
2009	20	36	84	84	30
2010	9	22	44	84	18
2011	19	42	42	22	33
2012	17	38	41	26	13

Derived fields

The following data items in the statistics are derived from information given on the form.

Date of termination

For medical abortions this is the prostaglandin date. If no prostaglandin was required, 'date of termination' is the date of anti progesterone. For surgical abortions, date of termination is not derived, all forms with a missing date of termination are returned for clarification.

Duration of stay

This is calculated from date of discharge minus date of admission (where an overnight stay was necessary).

Age at termination

This is calculated from date of birth minus date of termination.

Clinical Commissioning Groups (CCGs for England) and Locality Offices (LOs for Wales)

For women resident in England and Wales, each form is given a CCG or LO based on the resident postcode details on the form. The NHS postcode Directory is used to allocate a CCG and latest available version of the directory is used. The directory can be found at the following link.

<http://nww.connectingforhealth.nhs.uk/ods/downloads/officenatstats>

Other information

The Department of Health process and publish abortion notifications on behalf of the Chief Medical Officer of Wales. For this reason, 'residents' are defined as those women resident in England or Wales. For statistical purposes 'non residents' are those women resident anywhere else in the world including Scotland and Northern Ireland.

Published July 2013