

Statement of administrative sources

Annex B: Supporting metadata
Maternity Services Data Set
Published 3 December 2019

Organisation

NHS Digital: <https://digital.nhs.uk/>

Enquiries

- Please contact the NHS Digital contact centre:
- 0300 303 5678
- enquiries@nhsdigital.nhs.uk

Responsible statistician

Giles Foster, Community and Maternity team.

Statistical end product

Maternity Services Monthly Statistics.

Original Administrative/Management Source/System

Name	Maternity Services Data Set (MSDS)
Name of the organisation responsible	Organisations that provide NHS-funded maternity services.
Purpose of the administrative source	Manage patient care (women, mothers, babies).
Unit of enquiry	Antenatal booking appointments and delivery spells.
Intended coverage	All interactions between women/mothers and organisations that provide maternity services. Mandatory for providers of NHS-funded maternity services.

Actual coverage	All interactions submitted by organisations that provide maternity services.
Geographical coverage	England.
Lowest level of geographical coverage	Hospital site.
Extent to which statistical end-producers can influence system?	<p>The Maternity Services Data Set v2.0 Information Standard is the specification of a patient-level data extraction (output) standard.</p> <p>MSDS v2.0 DCB1513 Amd 10/2018 was accepted as an information standard by the Data Coordination Board (DCB) and an Information Standards Notice (ISN) was published on 14 September 2018.</p> <p>The ISN required that maternity information systems be fully conformant with the standard from 1 April 2019. The MSDS v2.0 mandated local data collection from 1 April 2019 and national submissions from May 2019.</p> <p>The associated ISN and standard documents can be found by reading the MSDS v2.0 DCB1513 publication.</p> <p>NHS Digital has been directed by NHS England under section 254 of the Health and Social Care Act 2012; to establish and operate a system for the collection and analysis of the MSDS.</p> <p>When we receive such a direction to collect information, we issue a Data Provision Notice to the appropriate providers of the required data.</p> <p>The data set is maintained by NHS Digital and any changes made via a change control process.</p>
Data definitions used	Where possible, the collection uses data dictionary definitions. Full details of data definitions can be found at https://digital.nhs.uk/data-and-information/data-collections-and-

	data-sets/data-sets/maternity-services-data-set/tools-and-guidance
Classification systems used	SNOMED CT terminology is preferred. However other clinical classifications, such as Read, CTV3, OPCS & ICD can flow via MSDS to accommodate organisations that have not yet migrated their systems to Snomed.
Data collection process 1. Periodicity/timing 2. Validation process	<p>1. Monthly. Data submission starting the following month with the window open for 2 months. Publication around 3 weeks after the end of the submission window.</p> <p>2. Providers of maternity care, primarily NHS Trusts with some independent sector providers, submit record level MSDS data to NHS Digital's Data Processing Service (DPS). Submission is in XML format and consists of around 40 different tables.</p> <p>The data is identifiable (including NHS number, DOB, postcode, local patient identifier) and is validated upon submission. Major data quality errors are rejected whilst minor errors are accepted with a warning notification.</p> <p>Submitters are able to re-submit data as many times as they wish until the window closes, allowing them to act upon any validation messages and improve the quality of the data.</p>
Access arrangements	<p>Information security is covered by three separate NHS Digital policies/processes/standards.</p> <p>(1) Technical and infrastructure security is covered by an internal review and documentation known as a System Level Security Policy. This specifies standards relating to hardware, software and data access policy (e.g. via 'Active Directory' permission groups).</p> <p>(2a) Access to record level data for internal staff, for analysis and processing purposes is managed by the Clear Data Access</p>

	<p>(CDA) policy, with CDA forms requiring sign-off at senior level (IAO – Information Asset owner). CDA forms are subject to ongoing review and are valid for a maximum of 1 year.</p> <p>(2b) Access to record level data for external staff is managed by individual Data Sharing Agreement (DSA), specifying legal basis, limits of allowable usage and retention period. Applications for data by 3rd party customers are subject to a security and ethical protocol overseen by the IGARD group (Independent Group Advising on the Release of Data).</p> <p>(3) Published data are subject to controls, including the use of rounding and data suppression of small numbers to minimise the risk of identification. Controls are ratified by NHS Digital's Disclosure Control Panel.</p>
Dissemination procedures	<p>Data disseminations will be available from the Data Access Request Service: https://digital.nhs.uk/services/data-access-request-service-dars</p> <p>Disseminations are regularly made to other professionals in NHS England and Data Services for Commissioners Regional Offices (DSCROs).</p>
Publication procedures	Data is published monthly in line with NHS Digital guidelines
Timing/periodicity of public release	Monthly
Nature of changes to system that could affect statistics	<p>Changes to MSDS are subject to Data Coordination Board (DCB) approval.</p> <p>Changes to local recording practices within clinical systems and to clinical system providers specifications can impact on these statistics. Changes to submissions for each provider are subject to validation processes discussed earlier to identify and address</p>

	any potential impact.
--	-----------------------

Change process

Changes to publications are announced as a methodological change on publication pages. See <https://digital.nhs.uk/data-and-information/publications/statistical/maternity-services-monthly-statistics/august-2019/methodology>

and

<https://digital.nhs.uk/data-and-information/find-data-and-publications/statement-of-administrative-sources/methodological-changes>

Data set changes would undergo the DCB process: <https://digital.nhs.uk/data-and-information/information-standards/information-standards-and-data-collections-including-extractions/data-coordination-board>

The subsequent statistical publication process

The processing of MSDS consists of three main stages.

- Providers of maternity care, primarily NHS Trusts with some independent sector providers, submit record level MSDS data to NHS Digital's Strategic Data Collection Service (SDCS) Cloud. Submission is in XML format and consists of around 40 different tables.

The data is identifiable (including NHS number, DOB, postcode, local patient identifier) and is validated upon submission. Major data quality errors are rejected whilst minor errors are accepted with a warning notification.

The data is processed into (a) identifiable data extracts to DSCROs for direct commissioning purposes, (b) a pseudonymised extract provided to NHS Digital's Data Management Service (DMS) and (c) a person index, which is not supplied to NHS Digital's analytical teams or external customers, but used internally for data linkage.

- Our Data Management Service take the validated submissions and further process to satisfy several different uses, including, but not limited to the following.
 - Derive additional fields from the submitted data.
 - Link MSDS with other NHS Digital owned datasets such as the Mental Health Services Dataset (MHSDS) for our perinatal mental health release.

- Providing the analytical team with a pseudonymised dataset with which to produce the monthly publication.
- The analytical team process the data from Data Management to produce the monthly Maternity publication. Data is aggregated, rounded and subject to small number suppression to minimise the risk of patient identification.

The team also use the data for the following purposes:

- Producing a range of maternity clinical indicators.
- Undertaking analysis for specific purposes e.g. in support of the Maternity Payment Pathway.
- Answering ad-hoc queries from providers, suppliers and commissioners.
- Providing contributions to Parliamentary Questions, media queries and Freedom of Information requests.

Potential impact of changes to the source on the statistics produced

Substantive changes to source data will result in breaks in time series data. For example, new diagnosis codes or changes in geographical boundaries.

Procedures for mitigating such discontinuities

Discontinuities are assessed on an individual basis and are explained and footnoted in publications