National Diabetes Inpatient Audit 2016
Data Quality Statement

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Introduction

The National Diabetes Inpatient Audit (NaDIA) is part of the National Diabetes Audit (NDA) programme and is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit Programme (NCA). The NDA is managed by NHS Digital in partnership with Diabetes UK and is supported by Public Health England (PHE).

The 2016 NaDIA report is the sixth annual snapshot audit of diabetes inpatient care in England and Wales. The audit is open to participation from hospitals with medical, surgical, gynaecology wards or intensive care units.

The audit sets out to measure the quality of diabetes care provided to people with diabetes while they are admitted to hospital, by answering the following questions:

- Did diabetes management minimise the risk of avoidable complications?
- Did harm result from the inpatient stay?
- Was patient experience of the inpatient stay favourable?

The report will be of interest to the public, especially to people with diabetes, to health planners and policy makers, as well as acute NHS Trusts, Clinical Commissioning Groups (CCGs), Local Health Boards (LHBs), Clinical Networks (CNs; formerly Strategic Clinical Networks or SCNs) and other providers and commissioners of specialist diabetes services.

The report presents findings from the 2016 audit – carried out on a day between 26 and 30 September 2016 – on patients admitted for at least 24 hours to specified types of inpatient ward. The audit collected data on characteristics of the hospital, patient clinical data and patient experience information using paper-based questionnaires.

Additional hospital episode outputs were acquired from the Hospital Episode Statistics (HES) database within NHS Digital, alongside data from the Patient Episode Database for Wales (PEDW).

Relevance

Data collection

The National Diabetes Inpatient Audit 2016 was carried out by hospital teams in England and Wales on a nominated day between 26 and 30 September 2016. The audit collected data on characteristics of the hospital including staffing structures, patient clinical data and patient experience information, using paper-based questionnaires.

Each participating hospital identified all eligible inpatients with diabetes (see inclusion criteria below) and distributed questionnaires. Where the patient was able and willing, a patient experience form was completed alongside a bedside audit form providing information on the patient’s medical treatment. If required, the patient was able to complete and return the patient experience questionnaire at a later time. The hospital team also completed a characteristics questionnaire providing information on the hospital’s resources and staffing.

1 Wales did not participate in NaDIA 2010.
Inclusion criteria

A patient was included in the inpatient audit if they had been admitted to a hospital bed for 24 hours or more. Patients on an Obstetric or Paediatric ward were excluded from this audit. Mental Health wards were also excluded due to the high prevalence of long stay patients. Other exclusions included:

- Patients who were hyperglycaemic but not yet formally diagnosed with diabetes
- Accident and Emergency
- Day case ward
- Day surgery unit patients
- Observation ward (if patients had been admitted for less than 24 hours)
- Surgical short stay unit (if patients had been admitted for less than 24 hours)
- Palliative care centres
- Community Hospitals.

Limitations of data collection

Participation in the audit is voluntary, but encouraged, for all hospitals with inpatient beds meeting the audit criteria. 136 NHS Trusts and 6 LHBs took part in the 2016 audit, assessing the clinical care of 15,774 patients. In comparison, the previous audit in 2015 collected data from 135 NHS Trusts and 6 LHBs on 15,229 inpatients with diabetes. The audit does not collect data from outside England and Wales.

There is not a definitive figure for the expected prevalence of people with diabetes amongst people admitted as inpatients.

Due to time and resource constraints, hospitals may not have been able to complete forms for all eligible audit patients.

Patient experience surveys are only completed by those patients who were willing and able to do so, either at the time of the bedside audit or returned later by mail.

Patients that did not want information related to them to be included in the audit could choose not to be included by informing the person carrying out the survey. None of their information was then collected. The number of patients who have chosen not to participate in the audit is not known.
on behalf of 142 NHS Trusts and LHBs. For comparison, 141 NHS Trusts and LHBs participated in 2015 NaDIA. The number of diabetes inpatients reported by each organisation varied from 257 to fewer than 5 cases. There is no central record of how many patients chose not to participate in the audit.

Many organisations that participated in the current audit have taken part in earlier audits, and participation in terms of the number of patients reported on remains steady in comparison to the 2015 audit (15,229 patients in 2015 and 15,774 in 2016).

The data returned to NHS Digital underwent data cleaning and mapping of responses to the audit questions in order to enable as much comparison as possible to earlier audit years.

A survey was not required to have every question completed in order to be included in the audit analysis, and completion rates varied between the different questions in the survey.

**Timeliness and Punctuality**

Sites participated in the audit between 26 and 30 September 2016, and returned questionnaires by 7 October 2016. The hospital level analyses and national level report were published on 8 March 2017. The time lag to the publication of the main report is five and a half months after organisations conducted the survey.

Hospital episode data was acquired from Hospital Episode Statistics (HES) within NHS Digital and from the Patient Episode Database for Wales (PEDW) for the latest available comparable time periods (21 to 25 September 2015 for HES and 26 to 30 September 2016 for PEDW). This was used to conduct comparisons between characteristics of patients with diabetes collected as part of the audit and characteristics of the general inpatient population. Supplementary Data containing the HES/PEDW comparisons and other NaDIA analysis not contained in the main report will be published after the main 8 March 2017 publication (date to be confirmed).

**Accessibility and Clarity**

The main report is presented in both Powerpoint and PDF formats on the NHS Digital website, with the Hospital Level Analysis for England and Wales, and Supporting Data accompanying the report as Excel spreadsheets. A CSV of data from England organisations at site level is available on the NHS Digital website and through data.gov.uk. All the above reports are available on the NHS Digital website at: http://content.digital.nhs.uk/pubs/nadia2016.

Further information about the audit may be found at: http://content.digital.nhs.uk/diabetesinpatientaudit.


More information on the methodology used to create the report can be found in the ‘overview’ sections present throughout the body of the main report.
Coherence and Comparability

Comparability over time

This report is the sixth NaDIA. The audit took place previously in 2010 to 2013 and 2015. There was no audit collection in 2014, so no NaDIA data is available for that year. Sites in Wales did not take part in the 2010 audit.

Some questions in the audit have changed over time. Comparisons have been made where there was enough consistency in the questions for a comparison to be meaningful, with variation in the question between audit years noted in the report.

A change to the wording of one of the bedside audit questions means that results for appropriate blood glucose monitoring and good diabetes days could not be compared to previous years for inpatients with non-insulin diabetes. Where applicable, this has been noted in the text of the main report and hospital level analysis.

Due to changes in 2015 to the guidance relating to hospital staffing levels and foot examinations, comparisons could only be made between figures from 2016 and 2015. Where applicable, this has been noted in the text of the main report and hospital level analysis.

Comparability with other sources

No other data source provides an equivalent snapshot of the inpatient care of people with diabetes in England and Wales. Most NaDIA data items are unique to the NaDIA collection. Other similar (but not directly comparable) data sources include:

- The core National Diabetes Audit (NDA) collects data on patient demographics, care processes and treatment targets amongst those registered with participating GP practices and secondary care organisations in England and Wales. Data from the NDA was used to provide comparisons to the general population of people with diabetes in the NaDIA Supplementary Data. 97.3 per cent of patients in the 2015-2016 NDA (covering 1 January 2015 to 31 March 2016) were from primary care records, with 82.4 per cent of general practices in England and Wales participating. Inpatients in the September 2016 NaDIA snapshot may be included in the core 2015-2016 NDA cohort if they were diagnosed with diabetes during or before the NDA collection period and their data was submitted to NDA by a participating GP practice or secondary care organisation.

- National Diabetes Foot Care Audit (NDFA) submitters include community as well as hospital-based services, meaning that NDFA care structures data cannot be directly compared with the hospital characteristics information on inpatient foot care services collected in NaDIA. Different periods of coverage and current low participation rates in the early years of the NDFA are additional reasons why comparison between NDFA and NaDIA is not robust.

- Data from the Hospital Episode Statistics (HES) in England and Patient Episode Database for Wales (PEDW) was used to provide comparisons to the general admitted hospital population in the NaDIA Supplementary Data. The hospital stays covered by 2016 NaDIA may be included in HES and PEDW data though NaDIA linkage to HES and PEDW data is not possible.

Patient identifiers are not collected in NaDIA, so direct linkage to other data sources is not possible.
Assessment of User Needs and Perceptions

The NaDIA advisory group (consisting of patient representatives, Diabetes UK, clinicians, GP representatives, researchers and interested analysts from NHS Digital and Public Health England) provide advice on both analysis and content of the reports as well as the direction and development of the audit.

The wider National Diabetes Audit (NDA) team has an active role in the National Cardiovascular Intelligence Network (NCVIN) workshops to gain a better understanding of how CCG’s and localities use the data and how we can improve the NDA programme’s publications and supporting information. These workshops are conducted quarterly and are co-ordinated by Public Health England (PHE) and bring together epidemiologists, analysts, clinicians and patient representatives.

NHS Digital is keen to gain a better understanding of the users of this publication and of their needs. Your feedback is welcome and may be sent to enquiries@nhsdigital.nhs.uk (please include ‘National Diabetes Inpatient Audit’ in the subject line).

Alternatively you can call our contact centre on 0300 303 5678

Or write to

NHS Digital,
1 Trevelyan Square,
Boar Lane,
Leeds,
LS1 6AE.

Performance, Cost and Respondent Burden

The survey questionnaires are reviewed and amended prior to the running of each audit in order to ensure the necessary information is collected with the least burden on audit participants (organisations and patients).

The audit team acknowledges that participation in the audit involves costs in both time and organisation for the patients and providers that take part, and thanks them for their efforts. The audit continues to look at ways in which to reduce respondent burden and increase ease of participation, and welcomes comments and suggestions (see contact details above).

Confidentiality, Transparency and Security

Audit information is held securely and with restricted access. No patient identifiable information (e.g. NHS number, date of birth) is collected by the audit. Audit data may be released to researchers with formal research approval for work related to the improvement of care for people with diabetes: http://content.digital.nhs.uk/DARS

A Patient Information Leaflet for NaDIA is available from the NHS Digital website. All patients may choose not to take part at the time the audit is conducted.

It is expected that, through the audit collection, all organisations will continue to follow existing NHS codes of practice in regard to patient confidentiality, information security management, record management and other legal obligations.
A risk assessment has been carried out on the audit publication, and suppression has been applied at hospital site level in order to protect patient confidentiality when the number of diabetes inpatients reported by an organisation was low.

As part of the government transparency agenda, NHS Digital provides hospital level data taken from the audit, in CSV format, both as part of the audit publication available through the NHS Digital website, and also through the UK open data portal, data.gov.uk.
Information and technology for better health and care

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