National Diabetes Inpatient Audit 2018
Methodology

Published 9 May 2019
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Introduction

The National Diabetes Inpatient Audit (NaDIA) is part of the National Diabetes Audit (NDA) portfolio within the National Clinical Audit and Patient Outcomes Programme (NCAPOP), commissioned by the Healthcare Quality Improvement Partnership (HQIP) and funded by NHS England.

The 2018 NaDIA report is the eighth annual audit of diabetes inpatient care in England and Wales\(^1\). The audit is open to participation from hospitals with medical, surgical, gynaecology wards or intensive care units.

2018 was a designated NaDIA Quality Improvement Collaborative (QIC) year. To reduce the burden on QIC participants, the NaDIA 2018 collection has undertaken the Hospital Characteristics (HC) survey only. The Bedside Audit (BA) and Patient Experience (PE) surveys will be repeated for NaDIA 2019.

Further information on the NaDIA 2018 report is available in the Data Quality Statement, published as part of the NaDIA 2018 publication suite:
http://digital.nhs.uk/pubs/nadia2018

\(^{1}\) Organisations in Wales did not participate in 2010.
Data collection, processing and analysis

Data collection

The NaDIA 2018 Hospital Characteristics (HC) survey was undertaken between 26 September and 19 October 2018 by hospital teams in England and Wales. The HC data was collected using an electronic data collection form submitted to the NHS Digital Strategic Data Collection Service (SDCS): https://datacollection.sdc.social.hosp.uk/. All surveys submitted on or before the 19 October 2018 were collated and cleaned to produce the analysis for this report.

Data cleaning

The data returned to NHS Digital underwent data cleaning and mapping of responses to previous audit questions in order to enable as much comparison as possible to earlier audit years. As part of this process a number of organisations were given the opportunity to correct or confirm responses that had been flagged as uncharacteristic. 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.

Data analysis

In NaDIA analysis a single HC form may represent a single hospital, multiple hospitals or an entire NHS Trust/Local Health Board (LHB). The chosen unit of aggregation is referred to as the ‘NaDIA site’. Because NaDIA site aggregations vary over time, year-on-year changes in the number of NaDIA sites may not represent real changes in participation.

All percentages, charts and tables in this report relate to all NaDIA sites in England and Wales that supplied the required data, unless otherwise stated. Because transformation funding is an NHS England initiative, related analysis (Tables 2.1 and 2.2) cover English NaDIA sites only.

Further information on the accuracy, reliability and comparability of the NaDIA 2018 report is available in the Data Quality Statement, published as part of the NaDIA 2018 publication suite: http://digital.nhs.uk/pubs/nadia2018
How did we calculate the values in the audit?

The ‘all recorded data’ method

The information in the National Diabetes Inpatient Audit is collected by medical and audit professionals across England and Wales. We appreciate all their hard work.

The audit form is divided into sections. When we receive audit forms most are filled in completely but some have gaps. Some sections will have an answer in some boxes but other boxes will be blank.

When we analyse the data we have to make a decision. Do we only include results for patients where every box in a section has been completed (i.e. only include complete records)? Or do we include results from all boxes that have been completed, even if there is missing information elsewhere in that section (i.e. use all the recorded data)? Both methods of analysis are valid (see the examples below).

It has been decided that the audit should be using as much of the data as possible (all recorded data). The audit report was prepared using the ‘all recorded data’ method for the first time in 2012.

For more detail or any questions please contact NaDIA@nhs.net.

Example - Insulin prescription errors:

Table # Bedside Audit Questionnaire, Question #, Insulin prescription errors:

<table>
<thead>
<tr>
<th>Insulin</th>
<th>Form 1</th>
<th>Form 2</th>
<th>Form 3</th>
<th>Form 4</th>
<th>Form 5</th>
<th>Form 6</th>
<th>Form 7</th>
<th>Form 8</th>
<th>Form 9</th>
<th>Form 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulin not written up</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Name of insulin incorrect (e.g. Humalog)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Number (dose) unclear</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Unit abbreviated to ‘u’ or written unclearly</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Insulin or prescription chart not signed by prescriber</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Insulin not signed as given</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Insulin given/prescribed at wrong time</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

Y = did occur, N = did not occur

‘Completed records method’ using only forms in which every box was completed (grey columns): 2 Y in 8 forms = 25% had a prescription error.

‘All recorded data method’ using all completed boxes: 4 Y in 10 forms = 40% had a prescription error.
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