National Diabetes Inpatient Safety Audit:
Are hospitals providing effective care for inpatients with diabetes?

2018-21
Summary report 2018-21

The National Diabetes Inpatient Safety Audit (NDISA) measures the effectiveness of care provided to people with diabetes whilst they are in hospital. The information in the audit is collected and submitted by hospitals in England and Wales. It has two parts:

• A review of inpatient services for people with diabetes assessed against the 2020 Diabetes Getting It Right First Time (GIRFT) recommendations.

• A review of the rate of four life-threatening diabetes-specific harms that can occur in people with diabetes in hospital.

In the 2017 audit (the last time it was measured) around 1 in 6 (18%) of all people in hospital had diabetes. In some hospitals over one in four (25%) of inpatients had diabetes.
Key findings

Do hospitals provide the recommended service standards for inpatients with diabetes?

All hospitals should have a multi-disciplinary team of specialist diabetes inpatient professionals, for examples diabetes inpatient specialist nurses, consultants and podiatrists. This should be available at the weekends. If not currently provided at weekends, the hospital should be working towards this.

59% of hospitals fully met this standard.

The multi-disciplinary team should meet regularly to talk about errors and safety issues. This team should report to the diabetes safety board to review the overall quality of the service every quarter.

Less than half (44%) of hospitals met this standard.

A system to identify all people with diabetes when they are admitted to hospital. People with diabetes who are at risk of developing one of the 4 serious harms should be identified and rapidly referred to the diabetes team.

An electronic system linked with blood glucose monitors which alert staff when a patient’s blood glucose reading is too high or too low.

Only 27% of hospitals fully met this standard.

All staff who prescribe and/or give out insulin should be trained to do this safely.

Nearly 3 in 4 hospitals (72%) met this standard.

A pathway to care for people who are having operations, that works from referral through to post-operative care.

2 in 3 hospitals (64%) met this standard.

A self-management policy which supports patients who want to manage their diabetes while in hospital when it is safe and clinically appropriate to do so. A pathway to care for people who are having operations, that works from referral through to post-operative care.

Nearly 3 in 4 hospitals (72%) met this standard.

How many serious inpatient harms were recorded?

There are four serious problems that can occur in people with diabetes whilst they are in hospital:

- **Hypoglycaemic rescue**: where somebody’s blood sugar level gets so low the patient is unable to treat their own hypo and rescue treatment has to be given by injection.

- **Diabetic Ketoacidosis (DKA)**: mainly happens in people with Type 1 diabetes when a severe lack of insulin means the body cannot use glucose for energy and switches to burning fatty acids.

- **Hyperosmolar Hyperglycaemic State (HHS)**: mainly affects people with Type 2 diabetes who experience very high blood glucose levels. It can develop over a course of days or weeks through a combination of illness and dehydration.

- **Diabetic foot ulcer**: Patients with diabetes are at a higher risk of developing foot ulcers because of associated blood flow and nerve problems.

These harms are serious and can be life-threatening. They are distressing for people with diabetes and slow down recovery. With good management and preventative care, these problems should not occur when someone is in hospital.
The table below shows the total number of each inpatient harm recorded between May 2018 and October 2021. Next to each healthcare check is an arrow that shows whether the number of harms recorded in each three month period has decreased (green downwards arrow) or increased (red upwards arrow) since. A blue line means the number of harms recorded in each three month period has stayed the same.

The final column in the table shows whether the number of harms recorded in each three month period has decreased, increased or stayed the same.

<table>
<thead>
<tr>
<th>Inpatient harm</th>
<th>Total number of occurrences (May 2018-October 2021)</th>
<th>Trend over time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypoglycaemic rescue</td>
<td>4255</td>
<td>Decreased 🔻</td>
</tr>
<tr>
<td>DKA</td>
<td>1060</td>
<td>Same ↔</td>
</tr>
<tr>
<td>HHS</td>
<td>190</td>
<td>Same ↔</td>
</tr>
<tr>
<td>Diabetic foot ulcer</td>
<td>645</td>
<td>Decreased 🔻</td>
</tr>
</tbody>
</table>

The rate of total inpatient harms decreased by almost 40%.
Which individual characteristics are associated with a greater risk of inpatient harm?

Individual characteristics means things like a person’s:

- Ethnicity, age and gender
- Type and duration of diabetes
- HbA1c (blood sugar levels)
- Care received for diabetes in the year before admission to hospital

This analysis helped us to understand whether some people are at higher risk of the inpatient harms occurring during their stay in hospital than others. People at higher risk of inpatient harms had:

- Type 1 diabetes
- Diabetes for a longer time
- Higher HbA1c (average blood glucose levels over a 3 month period)
- Missing care processes and treatment targets in year before admission
- Been admitted as an emergency rather than planned care
- Experienced cardiovascular or diabetes-specific complications on admission or during their hospital stay

For more information on the National Diabetes Inpatient Safety Audit 2018-21, you can download the full report. To find out more about the audit results for your local service please click here.