

# National Diabetes Inpatient Audit 2015

## Hospital Level Analysis - England

In September 2015 the National Diabetes Inpatient Audit was conducted in acute hospitals across England and Wales; this was a repeat of the 2010, 2011, 2012 and 2013 audits (see FAQs tab for further information). There was no 2014 audit. The audit collected information on the make up of the teams working in hospitals that care for people with diabetes, information on the care received and the patient experience of those in hospital at the time of the audit. This report provides comparative analysis from 2010 to 2013 and 2015 for sites in England.

The information in this document should be used to reflect on and improve local service provision. The casemix of the patient population may impact on the indicators presented and these findings should be considered alongside the national report findings.

Caution should be taken when looking at the data for some sites in these summaries as they may be based on a small sample of inpatients with diabetes. This means that a small variation would have a substantial impact on the indicators presented. Care should also be taken when comparing across sites. A time series has been provided where possible.

For the purpose of this hospital level analysis the 2010, 2011, 2012 and 2013 data is only presented for sites that submitted a Hospital Characteristics form in the 2015 audit. Sites that participated in 2010, 2011, 2012 or 2013 but did not submit a Hospital Characteristics form in 2015 have been excluded from this analysis. The overall 2010, 2011, 2012, 2013 and 2015 values for England are based on the sites that submitted a Hospital Characteristics form in the 2015 audit. These values may differ from previously published values and from the values that will be presented in the national report, which uses the total cohort and is due to be published in June 2016.

Choose your site >>>

The charts within this report show the England data for 2015 with Royal Derby Hospital shown as the red line and the England values shown as the blue line. Where possible, historical values for Royal Derby Hospital are shown in the corresponding table next to each of the charts. Where values are shown as \* (an asterisk), the data has been suppressed in order to protect patient confidentiality.

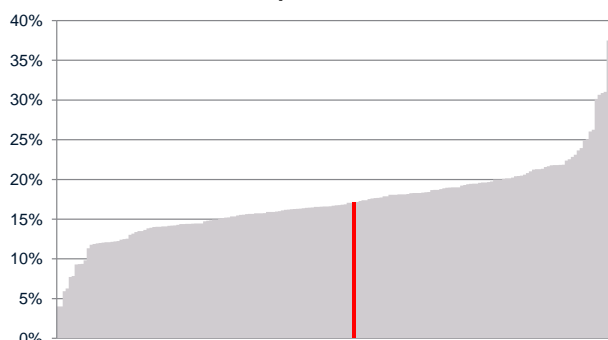
The quartile column represents how each value compares to the England distribution for that audit year; **Quartile 1 means that the result is in the lowest 25 per cent**, whereas **Quartile 4 means that the result is in the highest 25 per cent** for that audit year. The overall England values for the audit years are also presented in the tables.

### Inpatients with diabetes

The 2015 National Diabetes Inpatient Audit identified 141 inpatients with diabetes at Royal Derby Hospital. This was equal to 17.1 per cent of the beds audited, which places Royal Derby Hospital in Quartile 3.

The table shows the historical diabetes prevalence values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.

**Diabetes prevalence 2015**



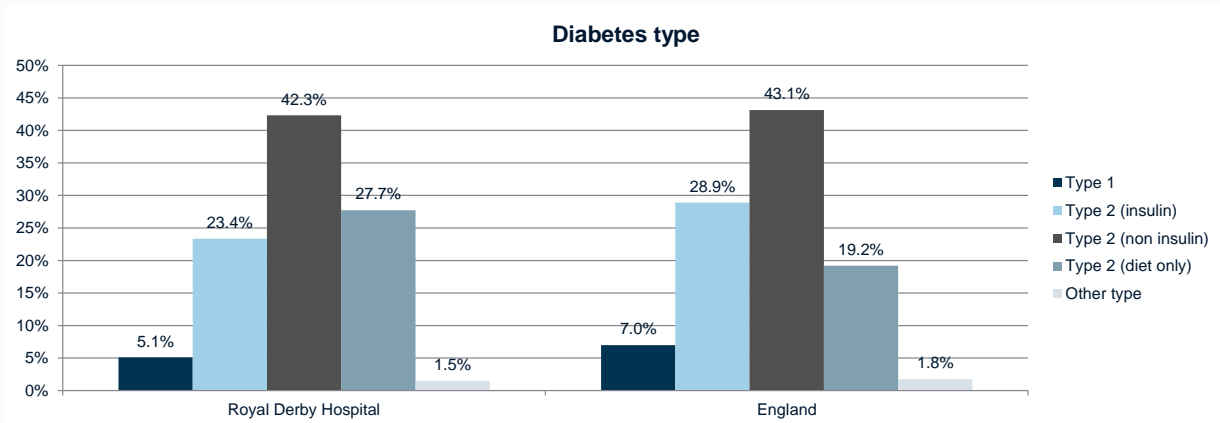
**Diabetes prevalence 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	19.3%	Quartile 4	14.5%
2011	16.8%	Quartile 3	15.0%
2012	18.4%	Quartile 4	15.2%
2013	13.0%	Quartile 1	15.8%
2015	17.1%	Quartile 3	16.6%

# National Diabetes Inpatient Audit 2015

## Type of diabetes

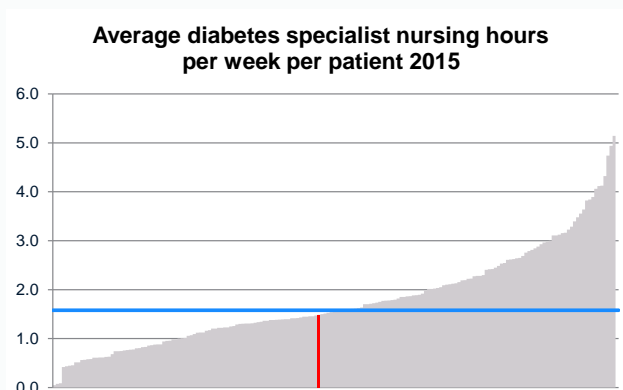
Of the inpatients with diabetes in Royal Derby Hospital, 5.1 per cent had Type 1 diabetes and 23.4 per cent had Type 2 diabetes treated with insulin. The chart allows you to see how the site compares to the overall England values.



## Structure of staffing

### Average staffing for the care of people with diabetes (total team hours spent on inpatient care and outpatient care)

The chart shows the average number of diabetes specialist nursing hours (DISNs and DSNs) spent providing inpatient and outpatient care per week per diabetes patient. In Royal Derby Hospital, on average 1.49 diabetes specialist nursing hours per week were spent with each patient in 2015, which places this site in Quartile 2. The table shows the average diabetes specialist nursing hours, with corresponding quartile, for Royal Derby Hospital, as well as the overall England values for 2015. The NaDIA questions relating to these outputs have been revised to make them easier to complete reliably. Consequently there will be no time series measurements in the 2015 hospital level report.

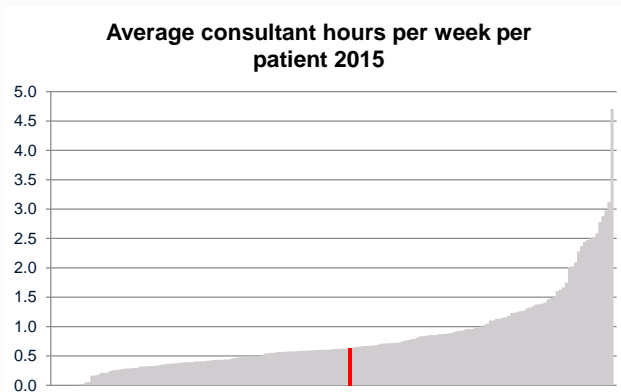


### Average diabetes specialist nursing hours per week per patient 2015

Audit year	Chosen site	Quartile	England
2015	1.49	Quartile 2	1.58

# National Diabetes Inpatient Audit 2015

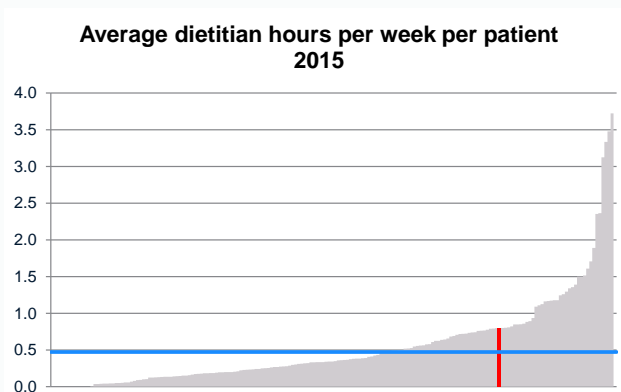
The chart shows the average number of consultant hours spent providing inpatient and outpatient care per week per diabetes patient. In Royal Derby Hospital, on average 0.64 consultant hours per week were spent with each patient in 2015, which places this site in Quartile 3. The table shows the average consultant hours, with corresponding quartile, for Royal Derby Hospital, as well as the overall England values for 2015. The NaDIA questions relating to these outputs have been revised to make them easier to complete reliably. Consequently there will be no time series measurements in the 2015 hospital level report.



**Average consultant hours per week per patient 2015**

Audit year	Chosen site	Quartile	England
2015	0.64	Quartile 3	0.71

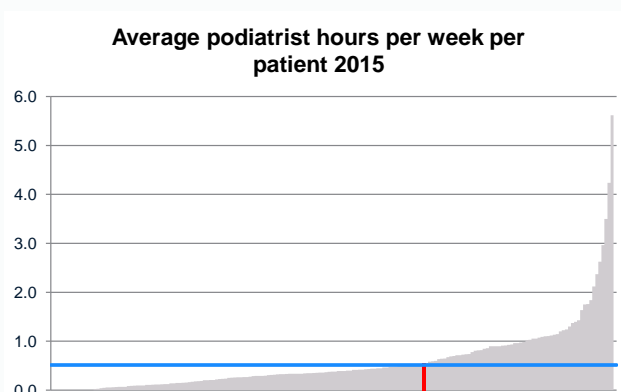
The chart shows the average number of dietitian hours spent providing inpatient and outpatient care per week per diabetes patient. In Royal Derby Hospital, on average 0.8 dietitian hours per week were spent with each patient in 2015, which places this site in Quartile 4. The table shows the average dietitian hours, with corresponding quartile, for Royal Derby Hospital, as well as the overall England values for 2015. The NaDIA questions relating to these outputs have been revised to make them easier to complete reliably. Consequently there will be no time series measurements in the 2015 hospital level report.



**Average dietitian hours per week per patient 2015**

Audit year	Chosen site	Quartile	England
2015	0.80	Quartile 4	0.47

The chart shows the average number of podiatrist hours spent providing inpatient and outpatient care per week per diabetes patient. In Royal Derby Hospital, on average 0.55 podiatrist hours per week were spent with each patient in 2015, which places this site in Quartile 3. The table shows the average podiatrist hours, with corresponding quartile, for Royal Derby Hospital, as well as the overall England values for 2015. The NaDIA questions relating to these outputs have been revised to make them easier to complete reliably. Consequently there will be no time series measurements in the 2015 hospital level report.



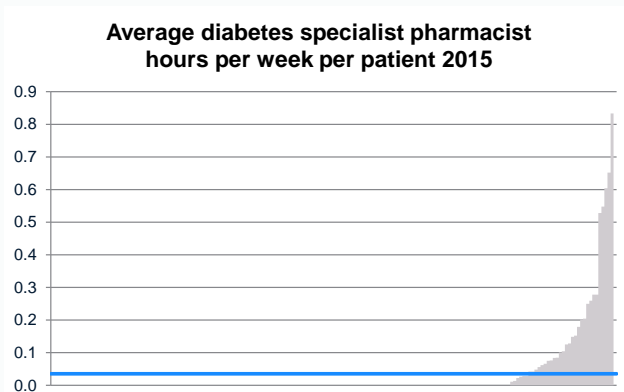
**Average podiatrist hours per week per patient 2015**

Audit year	Chosen site	Quartile	England
2015	0.55	Quartile 3	0.51

# National Diabetes Inpatient Audit 2015

# National Diabetes Inpatient Audit 2015

The chart shows the average number of diabetes specialist pharmacist hours spent providing inpatient and outpatient care per week per diabetes patient. In Royal Derby Hospital, on average 0 diabetes specialist pharmacist hours per week were spent with each patient in 2015, which places this site in N/A. The table shows the average pharmacist hours, with corresponding quartile, for Royal Derby Hospital, as well as the overall England values for 2015. The NaDIA questions relating to these outputs have been revised to make them easier to complete reliably. Consequently there will be no time series measurements in the 2015 hospital level report.



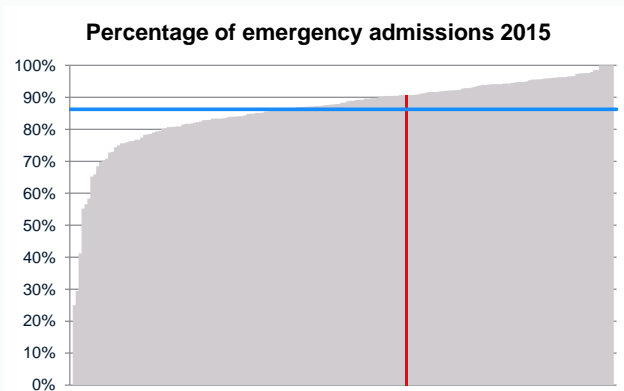
**Average diabetes specialist pharmacist hours per week per patient 2015**

Audit year	Chosen site	Quartile *	England
2015	0.00	N/A	0.04

\* Unable to allocate results to quartiles due to the high proportion of organisations with 0.00 returned

## Type of admission

At the time of the audit in 2015, 90.7 per cent of patients with diabetes in Royal Derby Hospital had been admitted to hospital as an emergency, which places this site in Quartile 3. The table shows the historical emergency admissions values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.



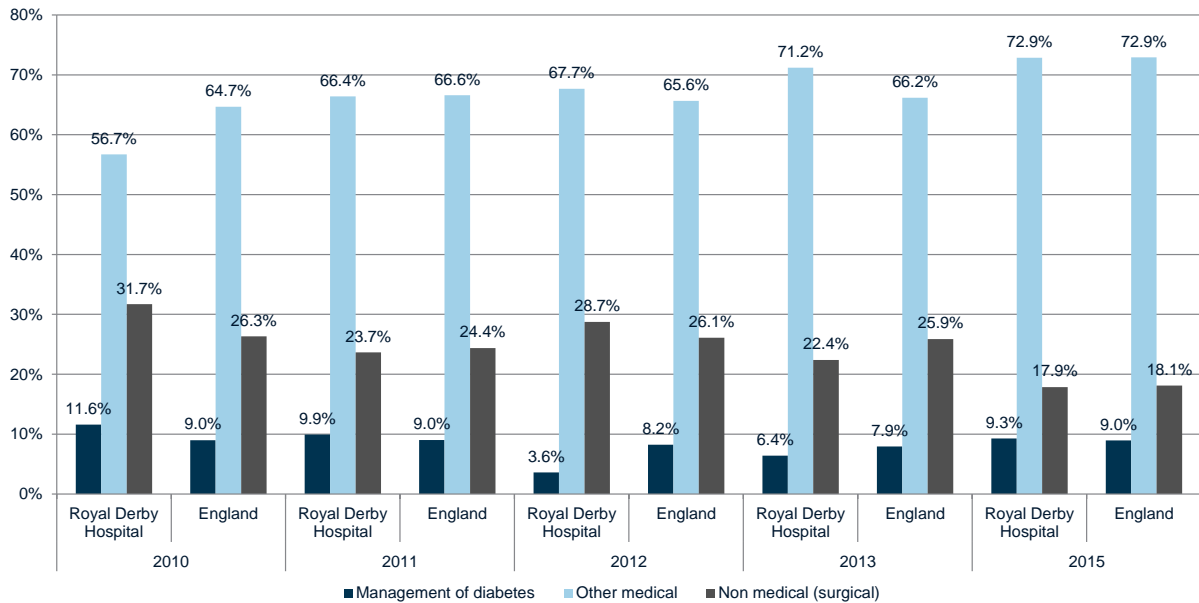
**Percentage of emergency admissions 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	86.0%	Quartile 2	86.8%
2011	89.2%	Quartile 3	84.6%
2012	88.2%	Quartile 3	83.9%
2013	92.7%	Quartile 4	84.6%
2015	90.7%	Quartile 3	86.2%

# National Diabetes Inpatient Audit 2015

## Reason for admission

In Royal Derby Hospital in 2015, 9.3 per cent of patients with diabetes were admitted to hospital specifically for the management of diabetes, 72.9 per cent were admitted for other medical reasons and 17.9 per cent were admitted for non-medical (i.e. surgical) reasons. The time series chart shows the values for Royal Derby Hospital compared against the overall England values for each audit year.



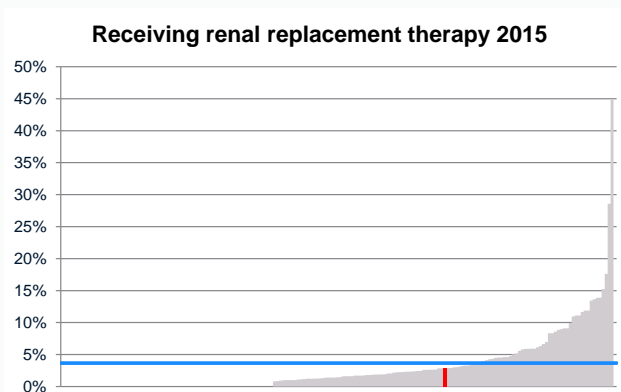
## Diabetes management

### Complications

Good management of diabetes is essential to reduce the risk of long term complications. Kidney problems and foot complications are a particular risk for people with diabetes. The following two charts show the prevalence of renal replacement therapy and active foot disease for all England sites in 2015 with Royal Derby Hospital shown as the red line and the England values shown as the blue line. Historical values for Royal Derby Hospital are shown in the corresponding tables.

### Kidney problems

2.8 per cent of patients with diabetes in Royal Derby Hospital were receiving renal replacement therapy in 2015, which places this site in N/A. The table shows the historical receiving renal replacement therapy values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.



Receiving renal replacement therapy 2010 - 2013, 2015			
Audit year	Chosen site	Quartile *	England
2010	3.0%	N/A	3.2%
2011	4.7%	N/A	3.2%
2012	3.0%	N/A	3.8%
2013	2.4%	N/A	4.2%
2015	2.8%	N/A	3.7%

\* Where N/A is returned, it is not possible to allocate

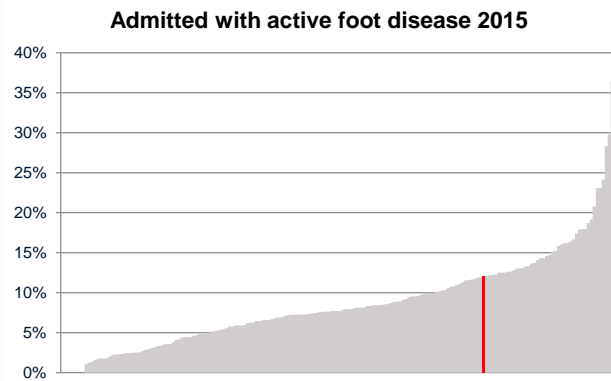
# National Diabetes Inpatient Audit 2015

results to quartiles due to the high proportion of organisations with 0.0% returned

# National Diabetes Inpatient Audit 2015

## Diabetic foot disease

12.1 per cent of patients with diabetes in Royal Derby Hospital were admitted with active foot disease in 2015, which places this site in Quartile 4. The table shows the historical admitted with active foot disease values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.

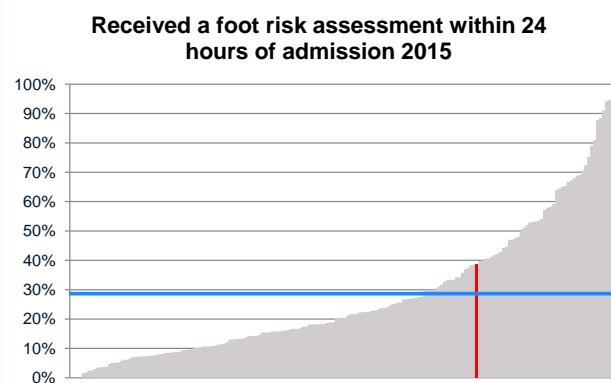


**Admitted with active foot disease 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	8.8%	Quartile 2	9.3%
2011	13.7%	Quartile 4	9.2%
2012	7.8%	Quartile 2	9.2%
2013	13.6%	Quartile 4	9.1%
2015	12.1%	Quartile 4	8.9%

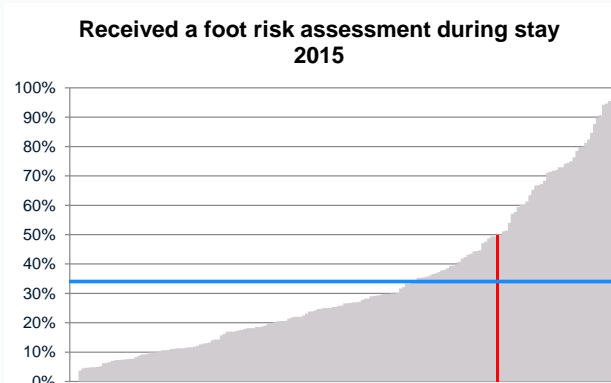
## Foot risk assessment

In Royal Derby Hospital in 2015, 38.6 per cent of patients with diabetes received a diabetic foot risk assessment within 24 hours of admission, which places this site in Quartile 4. 50 per cent of patients received a diabetic foot risk assessment at some point during their hospital stay, which places Royal Derby Hospital in Quartile 4. The tables show the historical foot risk assessment values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.



**Received a foot risk assessment within 24 hours of admission 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	13.3%	Quartile 1	23.5%
2011	12.7%	Quartile 2	22.3%
2012	5.0%	Quartile 1	30.1%
2013	14.6%	Quartile 1	37.5%
2015	38.6%	Quartile 4	28.7%



**Received a foot risk assessment during stay 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	13.3%	Quartile 1	28.2%
2011	19.5%	Quartile 2	26.8%
2012	13.2%	Quartile 1	35.5%
2013	17.1%	Quartile 1	43.7%
2015	50.0%	Quartile 4	34.0%



# National Diabetes Inpatient Audit 2015

# National Diabetes Inpatient Audit 2015

## Blood glucose monitoring

Information was collected on the patients' blood glucose control. Looking at the previous 7 days, a "good diabetes day" was defined as a day when the frequency of blood glucose monitoring was appropriate, there was no more than one measurement of greater than 11mmol/L and no measurement of less than 4mmol/L.

In Royal Derby Hospital in 2015, appropriate blood glucose testing was undertaken on 6.8 days out of the previous 7 days, which places this site in Quartile 4, and patients with diabetes had an average of 5.1 good diabetes days out of the previous 7 days, which places this site in Quartile 4. The tables show the historical appropriate blood glucose testing and good diabetes days values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.

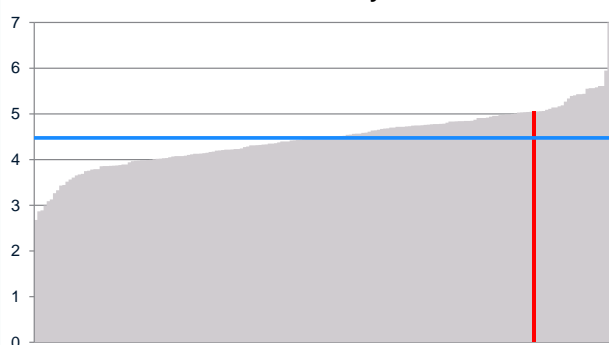
**Appropriate blood glucose testing 2015**



**Appropriate blood glucose testing  
2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	5.5	Quartile 1	6.2
2011	6.0	Quartile 1	6.3
2012	6.0	Quartile 1	6.3
2013	6.5	Quartile 2	6.4
2015	6.8	Quartile 4	6.5

**Good diabetes days 2015**



**Good diabetes days  
2010 - 2013, 2015**

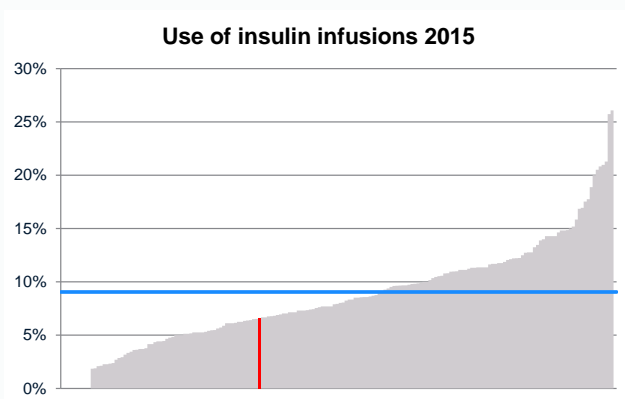
Audit year	Chosen site	Quartile	England
2010	3.9	Quartile 2	3.9
2011	4.1	Quartile 3	4.1
2012	3.6	Quartile 1	4.1
2013	3.7	Quartile 1	4.2
2015	5.1	Quartile 4	4.5

# National Diabetes Inpatient Audit 2015

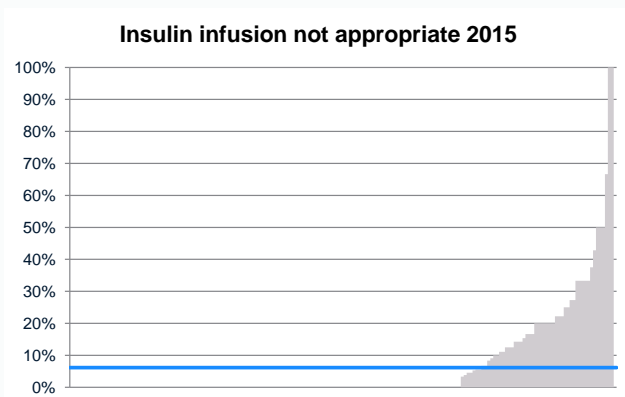
## Use of insulin infusions

Information was collected on the patients' use of insulin infusions. The healthcare professionals collecting the data have also assessed the appropriateness of the use of insulin infusions for the patients.

In Royal Derby Hospital in 2015, 6.6 per cent of patients had been on an insulin infusion in the last 7 days, which places this site in Quartile 2. The healthcare professionals collecting the data suggested that the use of insulin infusions was not appropriate for 0 per cent of these patients, which places this site in N/A. The tables show the historical use and appropriateness of insulin infusions, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.



Audit year	Chosen site	Quartile	England
2010	9.8%	Quartile 2	12.4%
2011	9.2%	Quartile 2	11.4%
2012	7.8%	Quartile 2	10.8%
2013	3.2%	Quartile 1	10.1%
2015	6.6%	Quartile 2	9.0%



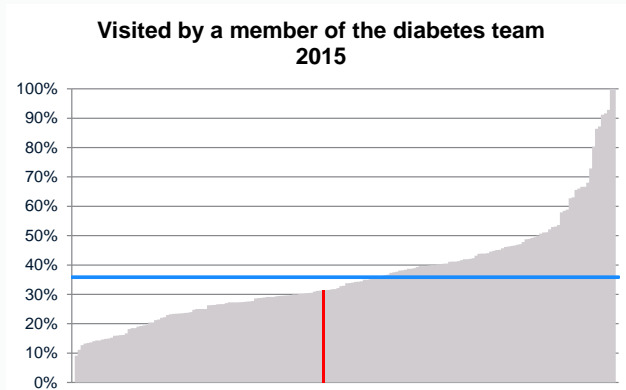
Audit year	Chosen site	Quartile *	England
2010	6.7%	N/A	7.4%
2011	8.3%	N/A	6.8%
2012	7.7%	N/A	6.2%
2013	50.0%	N/A	6.5%
2015	0.0%	N/A	6.2%

\* Where N/A is returned, it is not possible to allocate results to quartiles due to the high proportion of organisations with 0.0% returned

# National Diabetes Inpatient Audit 2015

## Visits by specialist teams

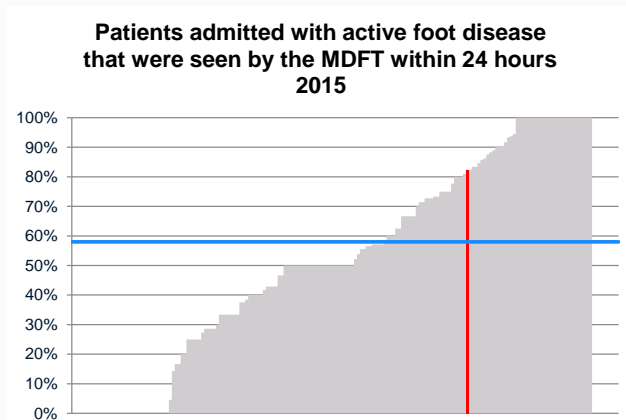
In Royal Derby Hospital in 2015, 31.4 per cent of patients with diabetes were visited by a member of the diabetes team, which places this site in Quartile 2. The table shows the historical visited by a member of the diabetes team values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.



**Visited by a member of the diabetes team  
2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	14.4%	Quartile 1	30.3%
2011	17.8%	Quartile 1	30.4%
2012	22.2%	Quartile 1	31.6%
2013	22.3%	Quartile 1	34.4%
2015	31.4%	Quartile 2	35.8%

In Royal Derby Hospital in 2015, 82.4 per cent of patients with diabetes admitted with active foot disease were seen by the multidisciplinary diabetic foot team (MDFT) within 24 hours, which places this site in Quartile 4. The table shows the historical seen by the MDFT within 24 hours values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.



**Patients admitted with active foot disease that  
were seen by the MDFT within 24 hours  
2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	78.6%	Quartile 4	51.3%
2011	37.5%	Quartile 2	58.5%
2012	11.1%	Quartile 1	53.7%
2013	76.5%	Quartile 3	59.0%
2015	82.4%	Quartile 4	58.0%

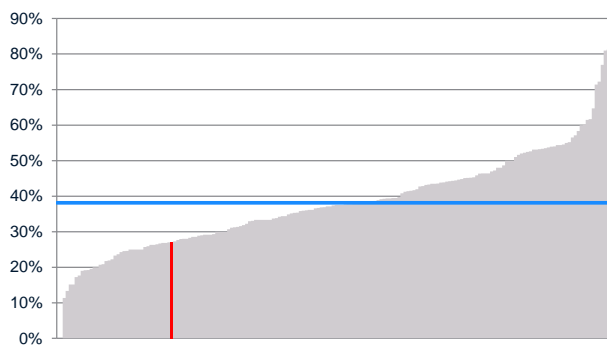
# National Diabetes Inpatient Audit 2015

## Harm resulting from the inpatients' stay

### Medication errors

In Royal Derby Hospital in 2015, 27.1 per cent of patients with diabetes experienced one or more medication error, which places this site in Quartile 1. 8.3 per cent of patients with diabetes experienced at least one prescription error, which places this site in Quartile 1, and 19.8 per cent of patients with diabetes experienced at least one management error, which places this site in Quartile 2. Of the patients on insulin, 10.4 per cent experienced one or more insulin (prescription or management) error, which places this site in Quartile 1. The tables below show the historical medication, prescription, management and insulin errors values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.

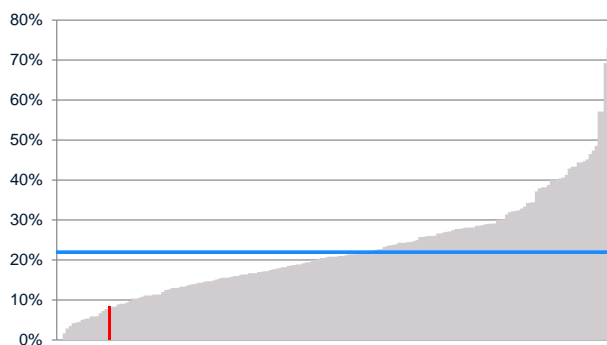
**Medication errors 2015**



**Medication errors 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	50.0%	Quartile 3	44.6%
2011	37.0%	Quartile 2	40.1%
2012	50.0%	Quartile 4	39.8%
2013	41.4%	Quartile 3	37.0%
2015	27.1%	Quartile 1	38.1%

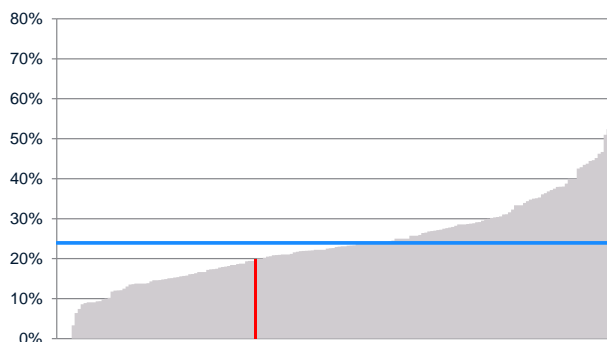
**Prescription errors 2015**



**Prescription errors 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	36.0%	Quartile 3	30.6%
2011	28.0%	Quartile 3	25.5%
2012	33.9%	Quartile 4	24.3%
2013	14.9%	Quartile 2	21.8%
2015	8.3%	Quartile 1	22.0%

**Management errors 2015**

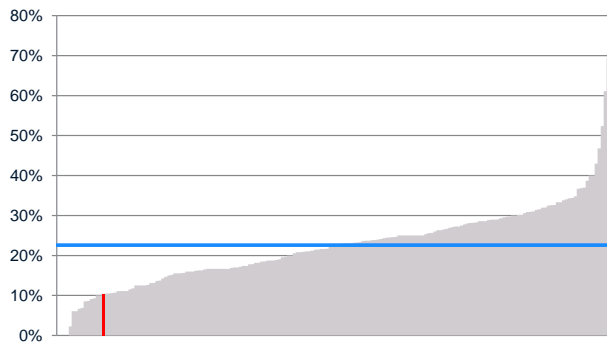


**Management errors 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	23.7%	Quartile 2	24.3%
2011	19.0%	Quartile 2	23.0%
2012	28.6%	Quartile 3	23.7%
2013	29.9%	Quartile 4	22.2%
2015	19.8%	Quartile 2	23.9%

# National Diabetes Inpatient Audit 2015

**Insulin errors 2015**



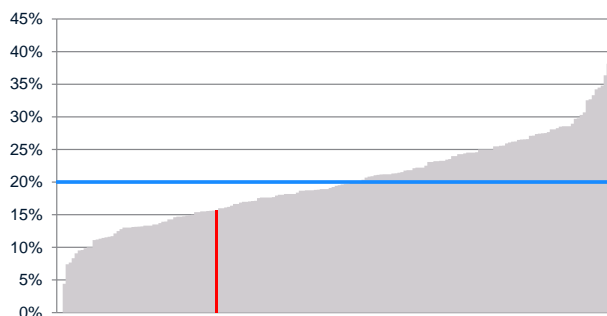
**Insulin errors 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	28.9%	Quartile 3	25.7%
2011	17.0%	Quartile 2	22.8%
2012	26.8%	Quartile 4	21.7%
2013	20.7%	Quartile 3	20.8%
2015	10.4%	Quartile 1	22.6%

## Hypoglycaemic episodes

In Royal Derby Hospital in 2015, 15.7 per cent of patients with diabetes experienced one or more mild hypoglycaemic episode (3.0-3.9mmol/L), which places this site in Quartile 2, and 4.4 per cent of patients with diabetes experienced one or more severe hypoglycaemic episode (<3.0mmol/L), which places this site in Quartile 1. The tables show the historical mild and severe hypoglycaemic episode values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.

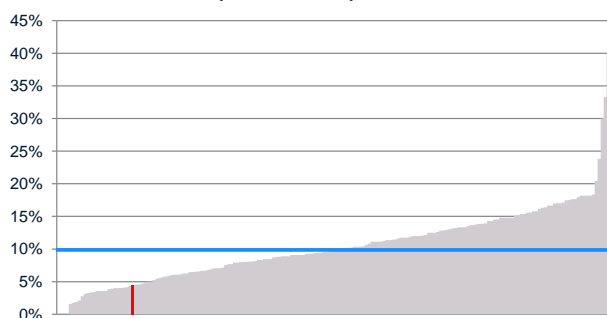
**Mild hypoglycaemic episodes (3.0-3.9mmol/L) 2015**



**Mild hypoglycaemic episodes (3.0-3.9mmol/L) 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	14.3%	Quartile 1	22.8%
2011	21.7%	Quartile 2	23.4%
2012	20.4%	Quartile 3	20.5%
2013	15.3%	Quartile 1	19.9%
2015	15.7%	Quartile 2	20.0%

**Severe hypoglycaemic episodes (<3.0mmol/L) 2015**



**Severe hypoglycaemic episodes (<3.0mmol/L) 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	6.4%	Quartile 1	11.7%
2011	12.6%	Quartile 3	10.7%
2012	6.6%	Quartile 1	10.4%
2013	9.8%	Quartile 3	9.2%
2015	4.4%	Quartile 1	9.9%

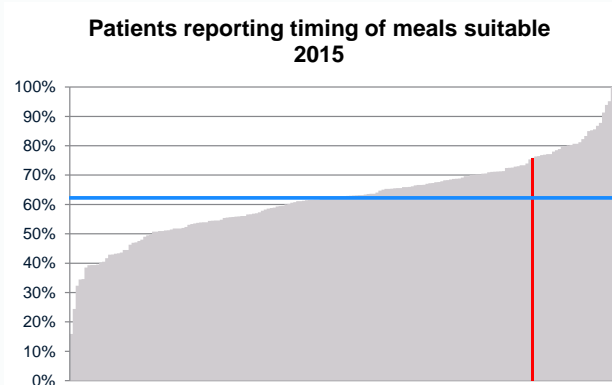
# National Diabetes Inpatient Audit 2015

## Patient experience

Patients who were able and willing were asked to provide information on the management of their diabetes while they were in hospital. They did this by completing questionnaires about their inpatient experience. In 2015, 74 Patient Experience forms were returned from Royal Derby Hospital.

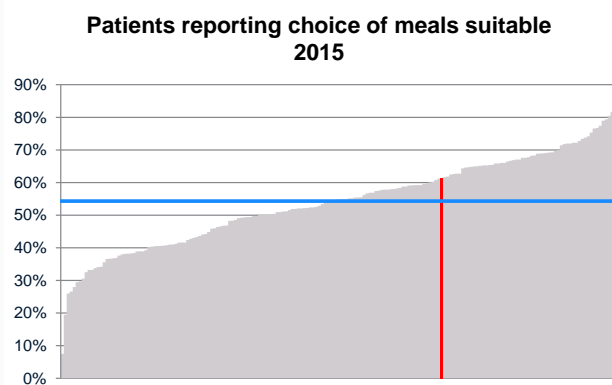
## Meals

In Royal Derby Hospital in 2015, 75.9 per cent of patients with diabetes reported that the timing of their meals was always or almost always suitable, which places this site in Quartile 4, and 61.3 per cent of patients with diabetes reported that the choice of their meals was always or almost always suitable, which places this site in Quartile 3. The tables show the historical meal timing and meal choice values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.



**Patients reporting timing of meals suitable 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	75.0%	Quartile 3	68.1%
2011	77.6%	Quartile 3	70.2%
2012	83.3%	Quartile 4	72.4%
2013	61.7%	Quartile 1	70.0%
2015	75.9%	Quartile 4	62.2%



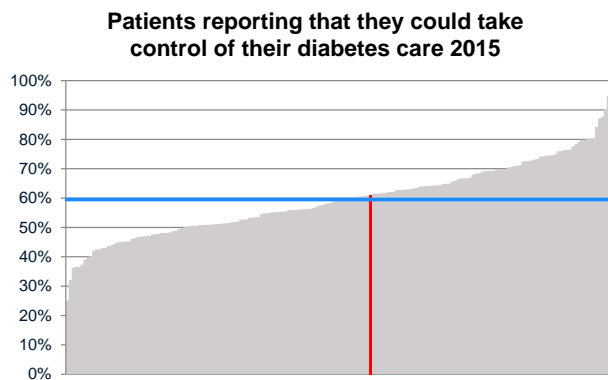
**Patients reporting choice of meals suitable 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	56.3%	Quartile 2	64.6%
2011	82.2%	Quartile 4	64.9%
2012	76.0%	Quartile 3	65.1%
2013	66.0%	Quartile 3	63.4%
2015	61.3%	Quartile 3	54.3%

# National Diabetes Inpatient Audit 2015

## Diabetes control

In Royal Derby Hospital in 2015, 61.1 per cent of patients with diabetes reported that they could take control of their diabetes care while in hospital, which places this site in Quartile 3. The table shows the historical take control of diabetes care values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.

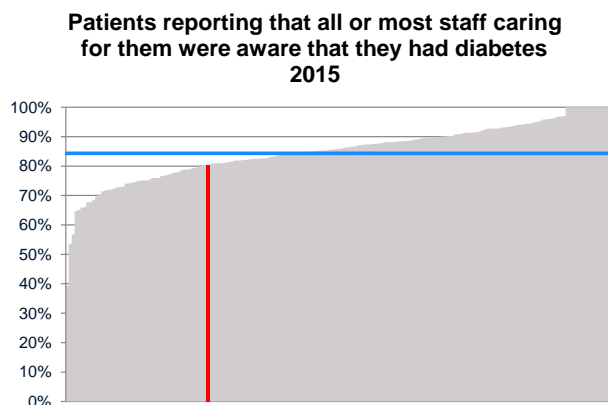


**Patients reporting that they could take control of their diabetes care 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	58.8%	Quartile 3	56.1%
2011	63.2%	Quartile 3	57.0%
2012	52.4%	Quartile 2	55.5%
2013	60.1%	Quartile 3	55.0%
2015	61.1%	Quartile 3	59.5%

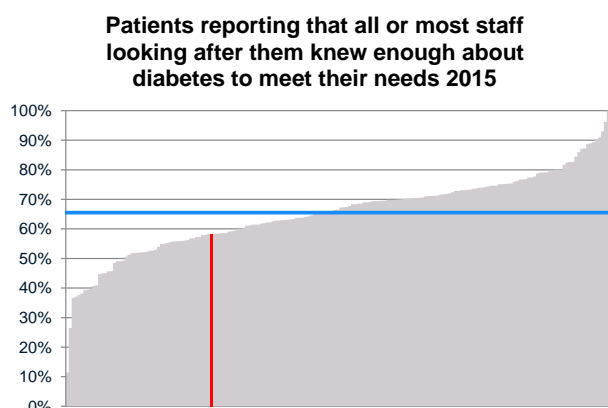
## Staff knowledge

In Royal Derby Hospital in 2015, 80.4 per cent of patients with diabetes reported that all or most of the staff caring for them were aware that they had diabetes, which places this site in Quartile 2, and 58.3 per cent of patients with diabetes reported that all or most of the staff looking after them had enough knowledge of their diabetes to meet their needs while in hospital, which places this site in Quartile 2. The tables show the historical staff awareness and staff knowledge values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.



**Patients reporting that all or most staff caring for them were aware that they had diabetes 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	82.5%	Quartile 1	87.6%
2011	83.3%	Quartile 2	84.4%
2012	84.9%	Quartile 3	81.4%
2013	81.0%	Quartile 2	82.0%
2015	80.4%	Quartile 2	84.3%



**Patients reporting that all or most staff looking after them knew enough about diabetes to meet their needs 2010 - 2013, 2015**

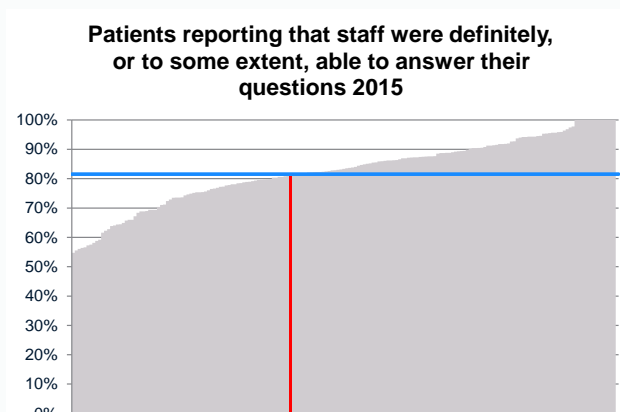
Audit year	Chosen site	Quartile	England
2010	56.6%	Quartile 2	65.1%
2011	69.1%	Quartile 3	66.3%
2012	76.3%	Quartile 3	68.9%
2013	71.9%	Quartile 3	67.3%
2015	58.3%	Quartile 2	65.5%



# National Diabetes Inpatient Audit 2015

# National Diabetes Inpatient Audit 2015

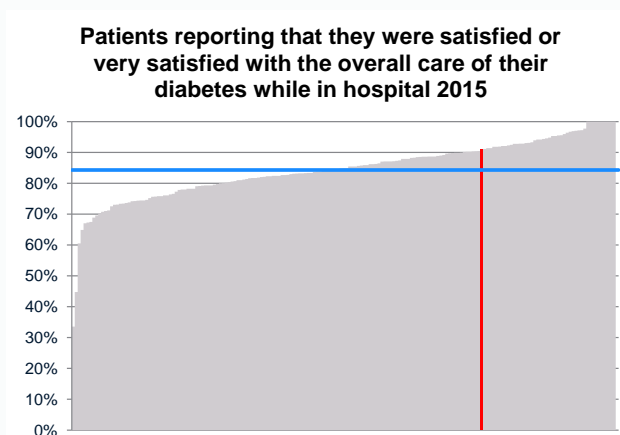
In Royal Derby Hospital in 2015, 81 per cent of patients with diabetes reported that staff were definitely, or to some extent, able to answer their questions in a way that they understood, which places this site in Quartile 2. The tables show the historical staff effectively answering questions values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.



**Patients reporting that staff were definitely, or to some extent, able to answer their questions 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	72.1%	Quartile 1	82.2%
2011	73.6%	Quartile 2	77.9%
2012	80.1%	Quartile 2	79.5%
2013	83.9%	Quartile 3	79.5%
2015	81.0%	Quartile 2	81.5%

In Royal Derby Hospital in 2015, 91 per cent of patients with diabetes reported that they were satisfied or very satisfied with the overall care of their diabetes while in hospital, which places this site in Quartile 4. The table shows the historical overall satisfaction values, with corresponding quartiles, for Royal Derby Hospital, as well as the overall England values for each of these years.



**Patients reporting that they were satisfied or very satisfied with the overall care of their diabetes while in hospital 2010 - 2013, 2015**

Audit year	Chosen site	Quartile	England
2010	72.4%	Quartile 1	80.8%
2011	83.9%	Quartile 2	84.7%
2012	88.2%	Quartile 3	85.7%
2013	76.9%	Quartile 1	86.1%
2015	91.0%	Quartile 4	84.3%