After adjusting for age, sex, method of admission and HRG, inpatients with recorded diabetes in Barking, Havering And Redbridge University Hospitals NHS Trust between 1 April 2009 and 31 March 2011 have a standardised mortality ratio of 96.2 (95% CI 89.9 to 102.9) when compared to inpatients with recorded diabetes across all trusts in the analysis.

This profile presents data on inpatient mortality for patients with recorded diabetes in Barking, Havering And Redbridge University Hospitals NHS Trust between 1 April 2009 and 31 March 2011.

Analysis of mortality among inpatients in England shows that after controlling for age, sex, method of admission (elective, emergency or transfer from another Trust) and Health Resource Group (HRG) inpatients with recorded diabetes are 9.9% more likely to die than those without recorded diabetes. It also shows that there is variation in inpatient mortality across acute Trusts in England.

There is no association between deprivation and inpatient mortality among patients recorded as having diabetes (unlike in patients without recorded diabetes). As a result the data presented in this profile has not been adjusted for deprivation.

To aid comparisons and benchmarking Trusts have been grouped into four groups. Barking, Havering And Redbridge University Hospitals NHS Trust has been categorised as a Large Acute Trust.

Mortality of inpatients with diabetes in Barking, Havering And Redbridge University Hospitals NHS Trust compared to inpatients with diabetes across England

Between 1 April 2009 and 31 March 2011 there were 16286 inpatient admissions for patients recorded as having diabetes in Barking, Havering And Redbridge University Hospitals NHS Trust. Of these 868 ended with the patient dying.

After adjusting for age, sex, method of admission and HRG, inpatients with recorded diabetes in Barking, Havering And Redbridge University Hospitals NHS Trust have a standardised mortality ratio of 96.2 (95% CI 89.9 to 102.9) when compared to inpatients with recorded diabetes across all trusts in the analysis.

This indicates that Barking, Havering And Redbridge University Hospitals NHS Trust had 3.8% fewer deaths among inpatients with recorded diabetes than would be expected based on the pattern of mortality among those in all Trusts in the analysis.

If Barking, Havering And Redbridge University Hospitals NHS Trust had the same inpatient mortality for patients with recorded diabetes as all Trusts included in the analysis they would have had 33 more deaths between 1 April 2009 and 31 March 2011.

The variation in mortality shown above will be partly due to the differences in mortality across all inpatients by Trust across England and partly related to the differing additional risk of dying experienced by inpatients with diabetes.
More detailed information

In order to gain a detailed understanding of the data, a similar profile with a detailed breakdown of case-mix and mortality rates can be requested by individuals for their own Trust. Please contact Naomi Holman, Diabetes Health Intelligence, naomi.holman@york.ac.uk to obtain a detailed profile for your Trust.
Reading a funnel plot
The data on the previous two pages is presented in funnel plots. This is a way of showing the variation in an indicator and illustrating statistical significance. The dotted dark blue lines show the limits of statistical significance or the extent of the normal variation that would be expected. The limits of statistical significance are narrower in larger samples/cohorts. This is why the dotted blue lines are wide on the left of the chart but narrow in a funnel shape towards the right of the chart. If your trust is shown below the dotted blue lines this indicates that mortality is statistically significantly lower. If your trust is shown above the dotted blue lines mortality is statistically significantly higher.

Definitions
An inpatient with recorded diabetes is defined as an inpatient that has one or more diabetes codes (ICD-10 E10 to E14) recorded in any of the primary or secondary diagnosis fields. The patient is recorded as dying if the hospital stay ended in death. Deaths after discharge are not included in the analysis.

The Trusts included in this analysis have been categorised into four groups
- Acute Teaching Trusts - Acute trusts that are affiliated to a medical school
- Large Acute Trusts - Acute trusts with more than 750 inpatient beds
- Medium Acute Trusts - Acute trusts with between 500 and 749 inpatient beds
- Small Acute Trusts - Acute trusts with less than 500 beds

Acute Specialist Trusts and Primary Care Trusts/Community Health Provider Trusts have been excluded from the analysis.

Specially data was taken from the Health Resource Group (HRG) v3.5 allocated to the inpatient spell.
- HRG - A  The nervous system
- HRG - B  Eyes and periobita
- HRG - C  Mouth, head, neck & ears
- HRG - D  Respiratory system
- HRG - E  Cardiac surgery and primary cardiac conditions
- HRG - F  Digestive system
- HRG - G  Hepato-biliary and pancreatic system
- HRG - H  Musculoskeletal system
- HRG - J  Skin, breast and burns
- HRG - K  Endocrine and metabolic system
- HRG - L  Urinary tract and male reproductive system
- HRG - M  Female reproductive system
- HRG - P  Diseases of childhood
- HRG - Q  Vascular system
- HRG - R  Spinal surgery and primary spinal conditions
- HRG - S  Haematology, infectious diseases, poisoning and non-specific groupings
- HRG - T  Mental health
- HRG - U  Undefined groups

Inpatient stays related to HRG N - Obstetrics and Neonatal Care and babies born in hospital are excluded from the analysis.

Impact of coding
This analysis uses data from the clinical coding of hospital admissions provided by individual trusts. Local variation in coding practices, particularly in identifying diabetes as a secondary diagnosis, will influence the figures presented in this document. Individual trusts should consider the quality of their clinical coding to assist their understanding of the figures presented.