1 Five key points

1. In 2017/18, nearly 50,000 residents in the three CCG areas covering Suffolk had a diagnosis of diabetes. (3.1 Prevalence)

2. In addition to people with diagnosed diabetes, it is estimated that a further 18,000 people in Suffolk are living with undiagnosed diabetes. (3.1 Prevalence)

3. Around 9 in 10 children with diabetes have type 1, although the number of children and young adults affected by type 2 diabetes is beginning to rise. Young people with diabetes may require additional support to manage their condition, both whilst young and throughout their lives. (2 Why is diabetes important?)

4. An ageing population and high obesity rate mean that, if the costs of treating a patient with diabetes stay the same, the overall costs of diabetes are set to grow over the next 20 years, when it is projected to account for 17% of the entire NHS budget. (2 Why is diabetes important?)

5. There are certain factors that can increase the risk of type 2 diabetes in an individual. Some are potentially modifiable (like being overweight, eating a healthy diet and
having high blood pressure) and some are non-modifiable (such as age, ethnicity and family history). (2 Why is diabetes important?)

2 Why is diabetes important in Suffolk?
There are two main types of diabetes, type 1 and type 2. People with type 1 diabetes naturally produce little or no insulin, so the missing insulin has to be replaced by insulin injections and a healthy diet. In type 2 diabetes, the pancreas is unable to produce enough insulin, or the insulin produced does not work properly. Type 2 is more common, accounting for around 90% of all cases among adults in the UK.[1] Type 2 diabetes is initially treated through a healthy diet, but tablets, insulin, or both, may become necessary.

Both types of diabetes are serious, lifelong conditions that can lead to severe complications if they are not managed well. However, with the right treatment and support, people with diabetes can reduce their risk of developing complications. Some of the complications that can arise from diabetes include heart disease, blindness, kidney failure and lower-extremity amputations.

The costs associated with diabetes are high. In 2010/11, diabetes cost the NHS an estimated £9.8 billion in direct costs, which equates to £18,645 per minute.[2] Around one fifth of this money (£2.1bn) was spent on the treatment costs of diabetes and the remaining four fifths (£7.7bn) was paid out on complications of diabetes such as cardiovascular disease, stroke, blindness, kidney failure and amputation. These figures do not include the cost of diabetes in social care, which may be higher for people who have serious complications such as an amputation. An ageing population and the high obesity rate mean that, if the costs of treating a patient with diabetes stay the same, the overall costs of diabetes are set to grow over the next 20 years, when it is projected to account for 17% of the entire NHS budget.[3]

Around 9 in 10 children with diabetes have type 1, although the number of children and young adults affected by type 2 diabetes is beginning to rise.[4] The exact cause of type 1 diabetes is unknown, whereas type 2 diabetes amongst children is usually caused by an unhealthy diet from a young age, coupled with a sedentary lifestyle without exercise. Young people with diabetes will experience the negative impact of the condition for longer than people who develop the disease later in life. Young people with diabetes may require additional support to manage their condition, both whilst young and throughout their lives.

There are certain factors that can increase the risk of type 2 diabetes in an individual. Some are potentially modifiable (like being overweight) and some are non-modifiable (such as age or ethnicity). Some of the key risk factors are outlined below:[5]

- **age**: risk of diabetes increases among people from white ethnicities aged over 40 years old and among people from African-Caribbean, Black African and South Asian ethnicities aged over 25
- **ethnicity**: type 2 diabetes is 2-4 times more likely among people of South Asian, African-Caribbean and Black African descent
- **family history**: an individual is 2-6 times more likely to get type 2 diabetes if they have a parent, brother, sister or child with diabetes
- **high blood pressure**: people that have had or currently have high blood pressure are more at risk
• **overweight/obesity:** people that are overweight (especially around the stomach area) are at increased risk

### 3 What is the local picture?

Note that Suffolk is covered by three Clinical Commissioning Groups (CCGs) and one of them spans Suffolk and Norfolk (Great Yarmouth and Waveney CCG). Figures are presented at CCG level because the data cannot be disaggregated into Great Yarmouth and Waveney.

#### 3.1 Prevalence

Within the three CCG areas that cover Suffolk, a total of 49,557 adults (aged 17 and over+) had a GP registered diagnosis of diabetes in 2017/18 (Table 1). Prevalence was higher than East of England in Great Yarmouth and Waveney CCG (8.1%), comparable in West Suffolk CCG (6.8%) and lower in Ipswich and East Suffolk CCG (6.2%).[6]

The true number of people with diabetes in Suffolk is unknown because a certain number of people live with the condition but have not been diagnosed. It is possible to estimate the true number of people with diabetes in Suffolk using prevalence estimates developed by Public Health England.[7] The prevalence estimates suggest that around 18,000 people in Suffolk CCGs have undiagnosed diabetes, of which over 9,000 are registered in Ipswich and East Suffolk CCG (Table 1).

#### Table 1: GP registered prevalence of diabetes among individuals aged 17+ (2017/18) and estimated true diabetes caseload aged 16+ (2018), CCGs, East of England, England[6],[7]

<table>
<thead>
<tr>
<th>Geographical area</th>
<th>GP registered diagnoses of diabetes, 17+</th>
<th>Estimated true diabetes caseload, 16+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Prevalence</td>
</tr>
<tr>
<td>Ipswich and East Suffolk CCG</td>
<td>20,418</td>
<td>6.2%</td>
</tr>
<tr>
<td>Great Yarmouth and Waveney CCG</td>
<td>15,249</td>
<td>8.1%</td>
</tr>
<tr>
<td>West Suffolk CCG</td>
<td>13,890</td>
<td>6.8%</td>
</tr>
<tr>
<td>East of England</td>
<td>241,647</td>
<td>6.6%</td>
</tr>
<tr>
<td>England</td>
<td>3,196,124</td>
<td>6.8%</td>
</tr>
</tbody>
</table>


#### 3.2 Hospital admissions

Both elective and emergency admissions are common for diabetes.

An elective admission is an admission “that has been arranged in advance (not an emergency admission, a maternity admission, or a transfer)”. An emergency admission is one that “is unpredictable and at short notice because of clinical need.”[11]

In 2017/18, both the age-sex standardised elective and emergency hospital admission rates for diabetes were significantly lower in Ipswich and East Suffolk CCG and West Suffolk CCG compared with East of England, but higher in Great Yarmouth and Waveney CCG (Table 2).[8]
The higher elective and emergency admission rates in Great Yarmouth and Waveney CCG could be linked to unhealthy behaviours that are generally more common in areas that are relatively more deprived than the rest of the East of England region. Unhealthy behaviours include being overweight, eating an unhealthy diet, and being physically inactive.

### Table 2: Age-sex standardised hospital admission rate per 100,000 registered patients/residents for diabetes, CCGs, East of England, England, 2017/18

<table>
<thead>
<tr>
<th>Geographical area</th>
<th>Elective hospital admission rate per 100,000 registered patients/residents</th>
<th>Emergency hospital admission rate per 100,000 registered patients/residents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rate</td>
<td>Compared to East of England</td>
</tr>
<tr>
<td>Ipswich and East Suffolk CCG</td>
<td>1,222</td>
<td>-</td>
</tr>
<tr>
<td>Great Yarmouth and Waveney CCG</td>
<td>1,864</td>
<td>-</td>
</tr>
<tr>
<td>West Suffolk CCG</td>
<td>1,161</td>
<td>-</td>
</tr>
<tr>
<td>East of England</td>
<td>1,446</td>
<td>-</td>
</tr>
<tr>
<td>England</td>
<td>1,513</td>
<td>-</td>
</tr>
</tbody>
</table>


Notes: CCG admission rates calculated per 100,000 registered patients; East of England and England admission rates calculated per 100,000 residents; RAG calculated using 95% confidence interval.

### 3.3 Mortality

The number of Suffolk deaths directly attributed to diabetes are relatively low, totalling 123 in 2017/18. However, it is likely that diabetes indirectly contributes to many more deaths, particularly those caused by heart disease, but is not recorded as the primary cause of death.

In 2017/18, the age-sex standardised mortality rates from diabetes in Ipswich and East Suffolk CCG, Great Yarmouth and Waveney CCG and West Suffolk CCG were all comparable to East of England (Table 3).

### Table 3: Age-sex standardised mortality rate per 100,000 registered patients/residents from diabetes, CCGs, East of England, England, 2017/18

<table>
<thead>
<tr>
<th>Geographical area</th>
<th>Mortality rate per 100,000 registered patients/residents</th>
<th>RAG compared to East of England</th>
<th>Number of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ipswich and East Suffolk CCG</td>
<td>12.7</td>
<td>-</td>
<td>57</td>
</tr>
<tr>
<td>Great Yarmouth and Waveney CCG</td>
<td>13.4</td>
<td>-</td>
<td>38</td>
</tr>
<tr>
<td>West Suffolk CCG</td>
<td>10.4</td>
<td>-</td>
<td>28</td>
</tr>
<tr>
<td>East of England</td>
<td>10.9</td>
<td>-</td>
<td>648</td>
</tr>
<tr>
<td>England</td>
<td>10.7</td>
<td>-</td>
<td>5,330</td>
</tr>
</tbody>
</table>


Notes: CCG mortality rates calculated per 100,000 registered patients; East of England and England mortality rates calculated per 100,000 residents; RAG calculated using 95% confidence interval.
4 What policies affect diabetes?

A large proportion of type 2 diabetes cases could be prevented. The recently launched *National NHS Diabetes Prevention programme* (called Healthier You)\(^9\), which is a joint initiative between NHS England, Public Health England and Diabetes UK, aims to significantly reduce the four million people in England otherwise expected to be living with type 2 diabetes by 2025. The programme offers behavioural interventions to people at high risk of developing type 2 diabetes via face-to-face group sessions over a minimum period of nine months.\(^9\)

The National Institute for Health and Care Excellence (NICE) guidance is that adults with type 2 diabetes are offered structured education programmes at diagnosis as part of their diabetes care. The courses are designed to improve understanding of diabetes and help individual’s feel more confident in managing their condition. For residents living in Ipswich & East and West Suffolk CCGs, face to face courses are available for people living with type 1 and type 2 diabetes.

5 Further information


NICE pathways allow users to navigate the breadth and depth of NICE recommendations on a given subject through topic-based diagrams, linking to the tools and resources that NICE has produced to support the implementation of the guidance. There are several pathways relating to CVD, both in general and specific conditions. www.nice.org.uk/guidance/conditions-and-diseases/diabetes-and-other-endocrinal--nutritional-and-metabolic-conditions/diabetes

The Public Health England *Diabetes Fingertips Profile*\(^6\) provides an overview of data on diabetes. The data used for the indicators comes from a variety of sources including routine primary care data, national survey data, national clinical audit data and hospital records. The indicators provide information on the distribution and determinants of diabetes, measures of patient treatment and care and diabetes-related complications. fingertips.phe.org.uk/profile-group/cardiovascular-disease-diabetes-kidney-disease/profile/diabetes-ft

Diabetes UK are a diabetes charity who aim to support those living with diabetes, prevent type 2 diabetes, make research breakthroughs, and ultimately find a cure. Several documents produced by Diabetes UK were used to research this report. www.diabetes.org.uk

The NHS Health Check programme\(^10\) offers free of charge health check-ups for adults aged 40-74. It is designed to spot early signs of stroke, kidney disease, heart disease, type 2 diabetes or dementia. Where early signs of diabetes are identified, a healthcare professional can give advice to help reduce the risk of diabetes developing. www.healthcheck.nhs.uk

OneLife Suffolk is a healthy lifestyles organisation who can offer free tips and practical advice on a number of health and wellbeing topics. onelifesuffolk.co.uk
6 References


