Lincolnshire JSNA: Diabetes

What do we know?

Summary

Diabetes is a chronic and progressive disease that impacts upon almost every aspect of life. It affects people of all ages, and is becoming more common. People with diabetes:

- Are twice as likely as people without the condition to die between the ages of 20 and 79.
- On average have a reduced life expectancy of 15 years
- Are five times more likely to die from coronary heart disease
- Are three times more likely to have a stroke
- Women who are at pregnant have an increased risk

Diabetes is:

- A leading cause of renal failure
- A leading cause of blindness in people of working ages
- The second commonest cause of lower limb amputation

Cost of Diabetes in terms of health and social care services are:

- Around 5% of the total spend on NHS resources
- Up to 10% of the spend on Hospital in-patient resources
- Diabetic patients are twice as likely to be admitted to hospital as general population
- Diabetic patients are likely to have twice the average length of stay in hospital
- NHS Cost from diabetic complications increased more than five fold
- Social Service Cost from diabetic complications increased four fold
- Personal cost, in excess of £800 plus loss of earnings

Information from National Service Framework for Diabetes

Over the previous two years a revised integrated diabetes model of care has been implemented within Lincolnshire and is almost complete. Service improvement in diabetes care needs to be a continual cycle and will have to be maintained by GP Commissioning Consortia.
Facts and figures

Diabetes actual recorded mean prevalence in 2009/10 was 4.92%, the highest prevalence being 6.50% in East Lindsey and lowest at 4.03% in Lincoln. *

Diabetes estimated modelled mean prevalence in 2009/10, again being highest in East Lindsey estimated at 6.00% and lowest in Lincoln estimated at 4.29% *

Diabetes projection of estimated mean Prevalence for 2025 (Source: YHPHO) is 7.16%. Being highest in East Lindsey at 8.97% and lowest in Lincoln at 5.76% *

*These figures are based on the full population and can be benchmarked against national figures. In 2010/11 adult population (17+) prevalence figures can be calculated, thus we expect to see a rise in prevalence when looking at the adult population only.

Age is a key factor in diabetes prevalence. Type 1 Diabetes tends to be diagnosed in childhood but the prevalence of Type 2 diabetes increases steadily after the age of 45 years.

Diabetes prevalence is higher in areas experiencing deprivation. People living in the 20% most deprived neighbourhoods in England are 56% more likely to have diabetes than those living in the least deprived areas.

Being obese increases the likelihood of someone developing diabetes. Reported patient obesity in Lincolnshire is 32.5% - LRO Data GP Registered Population Lifestyle -Adult Obesity (%) 2010-11 QTR2 County mean.

Diabetes Community Health Profile YHPHO

Trends

Economic modelling for diabetes was carried out in Lincolnshire by the Courtyard Group using data and information sourced from the county. This work was carried out in 2007-08. The incidence of diabetes in Lincolnshire over the next ten years is not expected to change, however a growing population, particularly an ageing population and rising obesity, means that the number of people with diabetes is expected to increase.

Table 1 – Projected Prevalence of Persons on GP Register with Diabetes, 2007 to 2027

<table>
<thead>
<tr>
<th>Area</th>
<th>No of Persons on GP Register With Diabetes</th>
<th>Increase in No. of Persons With Diabetes</th>
<th>Percentage Increase in No. on Diabetes Register</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>2012</td>
<td>2017</td>
</tr>
<tr>
<td>Boston</td>
<td>3322</td>
<td>3716</td>
<td>3741</td>
</tr>
<tr>
<td>East Lindsey</td>
<td>3801</td>
<td>4373</td>
<td>5081</td>
</tr>
<tr>
<td>Lincoln South</td>
<td>3814</td>
<td>4242</td>
<td>4552</td>
</tr>
<tr>
<td>Mid Kesteven</td>
<td>4167</td>
<td>5517</td>
<td>7614</td>
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<tr>
<td>North West Lincs</td>
<td>3806</td>
<td>4761</td>
<td>5588</td>
</tr>
<tr>
<td>Skegness &amp; Coast</td>
<td>4518</td>
<td>5226</td>
<td>4714</td>
</tr>
<tr>
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<td>4038</td>
<td>4367</td>
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<tr>
<td>Welland</td>
<td>2475</td>
<td>2779</td>
<td>3580</td>
</tr>
<tr>
<td>Lincolnshire</td>
<td>29244</td>
<td>34652</td>
<td>39238</td>
</tr>
</tbody>
</table>

The burden on health resources will increase from both a financial and a resource perspective, with hospital admissions potentially escalating from £22,689,608 to £39,852,690 in just ten years.
Table 2 - Projected Cost of Acute Hospital Admissions for Diabetes, 2007 to 2027

<table>
<thead>
<tr>
<th>Cluster</th>
<th>2007</th>
<th>2012</th>
<th>2017</th>
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Cost of Admissions for Diabetes (Assuming 4% increase in cost) Increase in Cost of Admissions for Diabetes

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(From the Lincolnshire PCT Public Health Annual Report 2007)

Targets

The following are Corporate Targets on which we are measured:

- To offer 95% of eligible people with diabetes Diabetic Retinopathy Screening

  NHS Lincolnshire Press Release

The following are measured locally based on the Diabetes Commissioning Framework and from the Economic Health Needs Assessment Document from Courtyard Group

- To deliver 90% of diabetes care within the community by 2013
- To reduce outpatient referral by 65% by 2013
- To reduce diabetic related admissions by 20% by 2013

The following are National Best Practice such as NICE, NSF, DOH etc (or national projects)

- All known people with diabetes to be offered an annual foot check (NSF)
- All newly diagnosed to be offered a structured education programme by 2013. This includes continuous updates on an ongoing basis to anyone with diabetes. (NSF, NICE, Operating Framework)
- To offer lifestyle advice to 100% of people identified at risk of developing diabetes (NICE, NSF)
- Reduce the length of stay for people with diabetes, the current average stay being three days longer. (Think Glucose)
- All people with diabetes to be offered a personalised care plan (DoH)

Performance
In quarter four of 2010-2011 NHS Lincolnshire offered diabetic retinopathy screening to 99% of eligible patients, Care Quality Commission (CQC) target is 95%.

The percentage of patients with diabetes who’s last HbA1c is 7.5 or less in the previous 15 months was 66% in 2008/09.

Data is not available from 2009/10 as it will not be reported for 7.5 anymore. This is due to new QOF reporting based on test results of 7.0, 8.0 and 9.0. Therefore there is no longer a national corporate target for this, but there are a large number of diabetes QOF indicators which will allow us to be benchmarked nationally.

In 2009-2010 there were 16 Quality Outcomes Framework (QOF) targets for diabetes (with varying thresholds). NHS Lincolnshire achieved an average that was higher than the maximum threshold for all indicators.

Specialist Community Diabetes Service provided by Lincolnshire Community Health Service NHS Trust (LCHSNHST) achieved 92% or routine referrals seen within 4 weeks (Local Key Performance Indicator (KPI) of 90%).

On quality the Diabetes E Assessment (DiabetesE is a web based, self assessment, diabetes care performance improvement tool that supports the implementation of the Diabetes NSF. DiabetesE measures and benchmarks the performance of all aspects of a system of diabetes care and actively encourages continuous improvement to meet and surpass the Diabetes NSF standards).

NHS Lincolnshire submitted a response to the Diabetes E Assessment for the second year in 2010/11. Against the main indicators the following were achieved:

- For Leadership, Policy and Strategy 96%
- For Productivity and Contracting 72%
- For Health Promotion and Prevention 82%
What is this telling us?

Summary

People living in the 20% most deprived areas of England are 56% more likely to have diabetic than those living in the least deprived areas.

Certain ethnic group such as South Asia and Black Afro Caribbean are more prone to diabetes.

Primary Prevention remains an important element of the diabetic pathway.

Gaps in services must be addressed.

Local views

Four public health forums were held in 2008-2009 prior to the implementation of the revised model of care to gauge public opinion.

NHS Lincolnshire is currently involved in a two year national project on user involvement in local diabetes care. NHS Lincolnshire has a group membership of approximately 20 who are representative of people with diabetes in Lincolnshire. The group have been involved in the local decision making process to influence service improvement including:

- Membership of the Diabetes Clinical Network
- Developing a local information leaflet “Your Diabetes Care in Lincolnshire”
- Helping to make improvements to information on the NHS Lincolnshire website
- Developing a newsletter
- Helping to shape review of local structured education programmes

National and local strategies

National Service Framework

NICE Guidelines for Diabetes

Diabetes is also within other national strategies such as the:

- Health Care Commission: Standards for Better Health
- The Government White Paper – Our Health, Our Care, Our Say
- Equity and Excellence: Liberating the NHS -Operating Framework
- Better Care, Better Value
- Local NHS Lincolnshire Local Diabetes Commissioning Framework
Current activity and services

Integrated revised model of care based on 4 levels of care:

- Level 1 - GP
- Level 2 - supported GP
- Level 3 - Specialist Community Nursing
- Level 4 - Hospital based care

Links to Lincolnshire County Council for health and wellbeing support and to Lincolnshire Partnership Foundation Trust (LPFT) for access to psychological therapy and specialist support.

Key inequalities

People living in the 20% most deprived areas of England are 56% more likely to have diabetes than those living in the least deprived areas.

Certain ethnic groups such as South Asian and Black Afro Caribbean are more prone to diabetes.

Marmot’s term of “proportionate universalism” is key when considering how we can ensure people from more deprived communities and groups, achieve the same health outcome as those from less deprived communities.

The primary prevention (life style activities, such as healthy weight; stopping smoking) are important in addressing risk factors, and will be vital if we are to address the social gradient, particularly in “Life Expectancy” and “Disability Free Life Expectancy”.

Key gaps in knowledge and services

Access to quality assessed structured education programmes, not only for the newly diagnosed, but on an ongoing basis.

Service gaps in the diabetes podiatry service is a risk to having a responsive service and the ability to provide an annual foot check.

Quick access to specialist psychological support.

Risks of not doing something

Conditions associated with diabetes, particularly poorly managed diabetes will continue to rise, for example diabetes is commonly associated with raised blood pressure, or raised blood lipid levels increasing the risk of cardiovascular disease and (heart attack; angina; strokes). Other conditions associated with poorly managed diabetes can include eye damage, and even blindness, and in some cases risk of gangrene and amputation due to poor circulation.

The risks of doing nothing are people with diabetes will not all be educated to an appropriate level for adequate self care and management of their diabetes, such that we will continue to see a rise in first and follow up outpatient appointments, A&E attendances and emergency admissions.
What is coming on the horizon?

GP Commissioning Consortia and a move away from countywide commissioning and service improvement.

Diabetes will continue to be a focus for service improvement through:

- National Institute of Clinical Excellence (NICE)
- Quality Outcomes Framework (QOF)
- NHS Diabetes
- NHS Outcome Frameworks
- Hospital Admission and time spent in hospital
- Public Health Outcome Framework

What should we be doing next?

Ensure that improvements made to diabetes services are not lost in the move to GP Commissioning Consortia, and that the gaps in service in the county are continued to be addressed.

Ensure that GP Commissioning Consortia continue to deliver care based on published best practice.