

Item 6: Services Overview: a) Diabetes Services; and b) Ophthalmology: Background Note.

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To: Health Overview and Scrutiny Committee

Subject: Services Overview: a) Diabetes Services; and b) Ophthalmology

A. Diabetes Services

1. Introduction

- (a) Diabetes is caused by the body not producing enough insulin to regulate the levels of glucose in the blood. Approximately 2.9 million people in the UK have diabetes. There are believed to be around 850,000 undiagnosed cases.¹
- (b) The number of people in the UK with diabetes is expected to grow to 3.8 million by 2020.² Between 1994 and 2009, the proportion of the population diagnosed with diabetes in England more than doubled – from 2.9 - 6.5% among men; and from 1.9 - 4.5% among women.³
- (c) There are two main types of diabetes:
- Type 1 diabetes is when the body does not produce any insulin. It often develops before the age of 40. Type 1 diabetes can be referred to as insulin-dependent diabetes, juvenile diabetes or early onset diabetes.⁴
 - Type 2 diabetes is when the body does not produce enough insulin to function properly or the body's cells do not react to it (insulin resistance). Although it usually affects people over 40, increasing numbers of people below this age are being affected. It is more common in people of South Asian, African-Caribbean or Middle Eastern descent. 90% of people with diabetes in the UK have type 2.⁵
- (d) If not treated, diabetes can result in a number of complications and other health issues, including: heart disease, stroke, eye problems such as retinopathy, kidney disease, foot problems, sexual dysfunction,

¹ NHS Choices, *Diabetes, type 2*, <http://www.nhs.uk/Conditions/Diabetes-type2/Pages/Introduction.aspx>

² National Audit Office, *The management of adult diabetes services in the NHS*, March 2012, p.4. http://www.nao.org.uk/publications/1213/adult_diabetes_services.aspx

³ Ibid., p.15

⁴ NHS Choices, *Diabetes, type 1*, <http://www.nhs.uk/Conditions/Diabetes-type1/Pages/Introduction.aspx?url=Pages/What-is-it.aspx>

⁵ NHS Choices, *Diabetes, type 2*, <http://www.nhs.uk/Conditions/Diabetes-type2/Pages/Introduction.aspx>

miscarriage and stillbirth.⁶ Life expectancy for people with type 1 diabetes is reduced by 20 years on average; for those with type 2, it is 10 years.⁷ The Department of Health has estimated that each year “there are 24,000 people more with diabetes who die than an equivalent population who do not have diabetes.”⁸

- (e) In 2009/10, £3.9 billion was spent on diabetes by the NHS. This was around 4% of the budget. In a report from May 2012, the National Audit Office has estimated that better management of diabetes could save around £170 million a year.⁹
- (f) in 2009/10, people with diabetes stayed 19.4% longer in hospital than would have been expected if they did not have diabetes.¹⁰

2. National Standards

- (a) The Department of Health published the National Service Framework for Diabetes in 2001. This set out recommended standards of care aimed at “reducing the burden of diabetes and the associated health inequalities as well as ensuring high quality of care wherever people live.”¹¹ The Quality Standard developed by the National Institute for Health and Clinical Evidence (NICE) for *Diabetes in adults*, published March 2011, supports this National Service Framework.¹²
- (b) Quality standards formed part of the NHS White Paper, *Equity and Excellence: Liberating the NHS*,¹³ and the subsequent Health and Social Care Act 2012¹⁴ and “are a concise set of statements designed to drive and measure priority quality improvements within a particular area of care.”

⁶ NHS Choices, *Diabetes, type 2 - complications*, <http://www.nhs.uk/Conditions/Diabetes-type2/Pages/Complications.aspx>

⁷ National Audit Office, *The management of adult diabetes services in the NHS*, March 2012, p.12. http://www.nao.org.uk/publications/1213/adult_diabetes_services.aspx

⁸ Sir Bruce Keogh, NHS Medical Director for England, House of Commons Committee of Public Accounts evidence session, 12 June 2012, Q45, <http://www.publications.parliament.uk/pa/cm201213/cmselect/cmpublicacc/289/120612.htm>

⁹ National Audit Office, *The management of adult diabetes services in the NHS*, March 2012, pp.4-8. http://www.nao.org.uk/publications/1213/adult_diabetes_services.aspx

¹⁰ http://www.rightcare.nhs.uk/atlas/downloads/EndocrineMaps_AoV_2011.pdf

¹¹ Department of Health, *National Service Framework for Diabetes: Standards*, December 2001, p.3,

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4058938.pdf

¹² NICE, *Diabetes in adults quality standard*, <http://publications.nice.org.uk/diabetes-in-adults-quality-standard-qs6/introduction-and-overview>

¹³ Department of Health, *Equity and Excellence: Liberating the NHS*, July 2010, pp.23-4

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_117794.pdf

¹⁴ Health and Social Care Act 2012, S.234,

http://www.legislation.gov.uk/ukpga/2012/7/pdfs/ukpga_20120007_en.pdf

(c) The 14 statements of the NICE Quality Standard for diabetes in adults are:¹⁵

- Statement 1. People with diabetes and/or their carers receive a structured educational programme that fulfils the nationally agreed criteria from the time of diagnosis, with annual review and access to ongoing education.
- Statement 2. People with diabetes receive personalised advice on nutrition and physical activity from an appropriately trained healthcare professional or as part of a structured educational programme.
- Statement 3. People with diabetes participate in annual care planning which leads to documented agreed goals and an action plan.
- Statement 4. People with diabetes agree with their healthcare professional a documented personalised HbA1c target, usually between 48 mmol/mol and 58 mmol/mol (6.5% and 7.5%), and receive an ongoing review of treatment to minimise hypoglycaemia.
- Statement 5. People with diabetes agree with their healthcare professional to start, review and stop medications to lower blood glucose, blood pressure and blood lipids in accordance with NICE guidance.
- Statement 6. Trained healthcare professionals initiate and manage therapy with insulin within a structured programme that includes dose titration by the person with diabetes.
- Statement 7. Women of childbearing age with diabetes are regularly informed of the benefits of preconception glycaemic control and of any risks, including medication that may harm an unborn child. Women with diabetes planning a pregnancy are offered preconception care and those not planning a pregnancy are offered advice on contraception.
- Statement 8. People with diabetes receive an annual assessment for the risk and presence of the complications of diabetes, and these are managed appropriately.
- Statement 9. People with diabetes are assessed for psychological problems, which are then managed appropriately.
- Statement 10. People with diabetes at risk of foot ulceration receive regular review by a foot protection team in accordance with NICE guidance.

¹⁵ NICE, *Diabetes in adults quality standard*, <http://publications.nice.org.uk/diabetes-in-adults-quality-standard-qs6/list-of-statements>

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- Statement 11. People with diabetes with a foot problem requiring urgent medical attention are referred to and treated by a multidisciplinary foot care team within 24 hours.
 - Statement 12. People with diabetes admitted to hospital are cared for by appropriately trained staff, provided with access to a specialist diabetes team, and given the choice of self-monitoring and managing their own insulin.
 - Statement 13. People admitted to hospital with diabetic ketoacidosis receive educational and psychological support prior to discharge and are followed up by a specialist diabetes team.
 - Statement 14. People with diabetes who have experienced hypoglycaemia requiring medical attention are referred to a specialist diabetes team.
- (d) In May 2012, the National Audit Office published a report into *The management of adult diabetes services in the NHS*. Part of the report looked at the delivery of nine basic care processes set out in the National Service Framework which are meant to be delivered annually. This issue was also considered by the House of Commons Committee of Public Accounts and formed part of their November 2012 report, *Department of Health: The management of adult diabetes services in the NHS*.¹⁶
- (e) Based on the *National Diabetes Audit* for 2009-10, the NAO found that nationally, “90 per cent of people with diabetes receive six of the recommended care processes, but only 49 per cent were assessed for the early signs of all complications.”¹⁷ The proportion of patients receiving all 9 basic care processes ranged from less than 10% in two Primary Care Trusts (PCTs) and no more than 69% in any PCT.^{18 19}
- (f) A table listing the care processes and a second table listing the NAO findings by Primary Care Trust are appended to this Note.²⁰
- (g) In response to a question about the expiry of the National Service Framework for Diabetes in 2013, the Department of Health provided the following statement in a Written Answer:

¹⁶ House of Commons Committee of Public Accounts, *Department of Health: The management of adult diabetes services in the NHS*, 6 November 2012,

<http://www.publications.parliament.uk/pa/cm201213/cmselect/cmpubacc/289/289.pdf>

¹⁷ National Audit Office, *The management of adult diabetes services in the NHS*, March 2012, p.20. http://www.nao.org.uk/publications/1213/adult_diabetes_services.aspx

¹⁸ *Ibid.*, p.21. For more detailed information on these variation see:

http://www.rightcare.nhs.uk/atlas/downloads/EndocrineMaps_AoV_2011.pdf

¹⁹ The National Diabetes Audit data can be accessed here:

<http://www.ic.nhs.uk/searchcatalogue?productid=7331&infotype=0%2fAudit&sort=Relevance&size=10&page=2#top>

²⁰ Sourced from: *Ibid.*, pp.14 and 41,

http://www.nao.org.uk/publications/1213/adult_diabetes_services.aspx

The National Audit Office (NAO) recently published their report on “The Management of Adult Diabetes Services in the NHS”. This report stated that the Department had been successful, through the National Service Framework for Diabetes, in setting clear standards for good diabetes care and these had been reinforced by the Quality Standard set by the National Institute for Health and Clinical Excellence in 2011; but that further improvements were needed. The Public Accounts Committee (PAC) held a hearing on the NAO report on 12 June 2012 and our intention is to wait for the PAC to publish its conclusions before finalising our plans in relation to diabetes. Three documents will be produced over the next several months that will offer the opportunity to publish these plans: the Diabetes action plan, the Long Term Conditions (LTCs) Outcomes Strategy (to include a diabetes companion document), and the Cardiovascular Disease (CVD) Outcomes Strategy.

The Diabetes action plan will set out the actions the national health service will be taking to increase identification, improve prevention and treatment of diabetes, and will be published later this year.

The Long Term Conditions Outcomes Strategy is aimed at improving outcomes for all people with LTCs. The strategy will look at all of the aspects that impact on the lives of people with LTCs, and outline how the key players (Government Departments, local authorities, charities and individuals) can act in future in order to reduce LTC incidence, and improve outcomes for those with LTCs. We aim to publish the strategy towards the end of 2012; a companion document on diabetes will be published at the same time.

The Cardiovascular Disease Outcomes Strategy will outline how the healthcare system can improve outcomes for people with—or at risk of—CVD. The strategy will consider the whole of the patient pathway from prevention through to long-term care. As diabetes is a major risk factor for CVD, it will be considered as part of the strategy's development.²¹

- (h) In a Westminster Hall debate on diabetes on 9 January 2013, the Health Minister stated these documents will be published in “the coming months.”²²

²¹ House of Commons Hansard Written Answer, 2 July 2012, PQs 114881-4, <http://www.publications.parliament.uk/pa/cm201213/cmhansrd/cm120702/text/120702w0005.htm#12070315000010> When the Long term Conditions Outcomes Strategy is published it is likely to be available here: <http://www.dh.gov.uk/health/category/policy-areas/nhs/long-term-conditions/>

²² Anna Soubry MP, The Parliamentary Under-Secretary of State for Health, Westminster Hall debate, 9 January 2013, Col. 97WH, <http://www.publications.parliament.uk/pa/cm201213/cmhansrd/cm130109/halltext/130109h0001.htm#13010940000001>

- (i) The Government response to the Public Accounts Committee report into the management of adult diabetes services in the NHS was published on 25 February 2013.²³

B. Ophthalmology

1. Introduction

- (a) Ophthalmology deals with the diagnosis, treatment and prevention of diseases of the visual system and eye. An ophthalmologist is a medically trained doctor often acting as a physician and a surgeon. Medical ophthalmology has been a separate specialty from ophthalmology since 1995. Medical ophthalmologists (ophthalmic physicians) are trained in both general internal medicine and ophthalmology and diagnose and whose work includes managing patients with systemic disease such as diabetes.
- (b) Patients often have conditions related to ageing such as macular degeneration, glaucoma, and cataracts. Cataract operations under the NHS number over 300,000 each year; this is the most common operation carried out under the NHS. Diseases of the eye often have connection to an underlying systemic condition like diabetes.
- (c) Optometrists, sometimes referred to as opticians, carry out eye examinations, advise on problems and prescribe/fit glasses and contact lenses. An orthoptist diagnosis and treats vision defects and eye movement abnormalities.²⁴
- (d) Ophthalmology outpatient attendances in England numbered 6,365,308 in 2010/11. This is an increase of 1,145,330 over five years.²⁵
- (e) By 2020, the number of people across the UK living with sight loss is estimated to increase by 22% from the current 2 million.²⁶ The commissioning spend on eye care is around £4.27 million per 100,000 population on average.²⁷

²³ HM Treasury, Treasury Minutes, *Government responses on the Fourteenth, the Seventeenth to the Nineteenth, and the Twenty First Reports from the Committee of Public Accounts Session: 2012-13*, 25 February 2013, pp.8-14, http://www.hm-treasury.gov.uk/d/hmt_minutes_14_17_19_21_reports_cpas_feb2013.pdf

²⁴ The Royal College of Ophthalmologists, *What is an ophthalmologist?* and *Ophthalmology as a career*, <http://www.rcophth.ac.uk/page.asp?section=102§ionTitle=What+is+an+Ophthalmologist>

²⁵ <http://www.commissioningforeyecare.org.uk/commhome.asp?section=160§ionTitle=The+business+case+for+improved+quality+in+eye+care>

²⁶ <http://www.commissioningforeyecare.org.uk/commhome.asp?section=163§ionTitle=Room+for+improvement>

²⁷ Ibid.

2. Diabetes and Eye Health

- (a) People with diabetes are around 25 times more likely to become blind than the general population.
- (b) Diabetic retinopathy is the most common cause of sight loss in working age people and arises when diabetes affects the small blood vessels in the retina. There may not be any symptoms until it is quite advanced. Approximately 4,200 people each year are at risk of blindness from diabetic retinopathy and cause 1,280 new cases of blindness.²⁸ 40% of people with type 1 diabetes and 20% with type 2 diabetes will develop some sort of diabetic retinopathy.²⁹
- (c) Under the NHS Diabetic Eye Screening Programme, all people with diabetes aged 12 or over are offered an annual screening appointment.³⁰ The screening programme was announced in 2003 in the Delivery Strategy for the National Service Framework for Diabetes. The programme was implemented between 2003 and 2008 and is delivered by over 80 programmes.³¹
- (d) In 2010-2011:
- 2,470,000 people in England aged 12 and over were identified with diabetes
 - 2,260,000 were offered screening for diabetic retinopathy
 - 1,790,000 received screening, an uptake of 79%³²
- (e) The national quality standards are:
- For an initial screening test:
 - The minimum standard is 70% for the eligible population taking up the offer.
 - The achievable standard is 90% for the eligible population taking up the offer.
 - For a repeat screening test:
 - The minimum standard is 80% for the eligible population taking up the offer.

²⁸ <http://diabeticeye.screening.nhs.uk/diabetic-retinopathy>

²⁹ The Royal College of Ophthalmologists, *Understanding Eye Conditions Related to Diabetes*, <http://www.rcophth.ac.uk/page.asp?section=365§ionTitle=Information+Booklets>

³⁰ <http://diabeticeye.screening.nhs.uk/screening>

³¹ <http://diabeticeye.screening.nhs.uk/about>

³² <http://diabeticeye.screening.nhs.uk/statistics>

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- The achievable standard is 95% for the eligible population taking up the offer.

(f) According to *The NHS Atlas of Variation in Healthcare*:

- “For PCTs in England, the percentage of the diabetic population receiving screening for diabetic retinopathy ranged from 7.4% to 91.8% (12-fold). When the five PCTs with the highest percentages and the five PCTs with the lowest percentages are excluded, the range is 57.7–87.0%, and the variation is 1.5-fold.”³³

³³ http://www.rightcare.nhs.uk/atlas/downloads/Vision_AoV_2011.pdf