

Integrated diabetes care, bringing specialist diabetes care to primary care-diabetes local improvement scheme SWBCCG

Abbreviations: IDF, international diabetes federation; QOF, quality and outcomes framework; IFG, impaired fasting glucose; IGT, impaired glucose tolerance; WHO, world health organization; CCG, clinical commissioning group; DiCE, diabetes community care extension; LIS, local improvement scheme

Introduction

Diabetes is a chronic disease characterised by an inability to regulate blood glucose concentrations. According to latest figures from International Diabetes federation¹ worldwide prevalence of Diabetes is 8.3%. There are 387 million people worldwide with Diabetes, and it is estimated that by 2035 there will be an additional 205 million people diagnosed with diabetes in the world.¹ It is also estimated that there are more than 3 million people in the world who have undiagnosed Diabetes. In United Kingdom there are 3.2 million people who have been diagnosed with diabetes in the UK.²

In 2013 in England, the number of people aged 16 and older with diabetes was approximately 2.7 million, accounting for 6.0% of England's population. Figures based on AHPO diabetes prevalence model estimates that by 2025, there will be approximately 5 million people with diabetes in the UK³ it is estimated to rise to 4.6 million—that is, nearly 10% of the population-by 2030. Around 90% of these people will have type 2 diabetes. An estimated 850,000 people in England may have diabetes but have not been diagnosed.⁴ Around 1 in 7 adults may have either impaired fasting glucose (IFG) or impaired glucose tolerance (IGT), based on World Health Organization (WHO) criteria.⁴

Diabetes can lead to serious complications in the long term. It is the most common cause of visual impairment and blindness among people of working age. It is also the most common cause of kidney failure and non-traumatic lower limb amputations. People with diabetes are up to five times more likely to have cardiovascular disease and stroke, compared to those without diabetes⁴ In England, people aged between 20 and 79 with type 2 diabetes are 1.6 times as likely to die prematurely than those without the disease (The Healthcare Quality Improvement Partnership 2011). It is estimated that, generally, they die 10 years earlier than average.⁴ Treating type 2 diabetes and its complications currently costs the NHS £8.8 billion a year⁵ just over 8% of its annual budget. The cost of prescribing drugs to treat diabetes rose from £513.9 million in 2005/06 to £725.1 million in 2010/11 (The NHS Information Centre for Health and Social Care 2011). The indirect costs associated with type 2 diabetes, such as those related to an increase in premature deaths and illness, loss of productivity and the need for informal care, are estimated at £13 billion.⁵ By 2035/36, the cost of direct care and other indirect costs for type 2 diabetes are estimated to rise to £15.1 billion and £20.5 billion respectively.⁵

The growing burden of type 2 diabetes is due to obesity, sedentary lifestyles, dietary trends and an ageing population (Yorkshire and Humber Public Health Observatory 2010). However, lifestyle interventions targeting these risk factors have reduced its incidence by about 50% among high risk individuals.⁶

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Author, Dr Salman Shahid, worked as Clinical Lead for Diabetes in Sandwell and West Birmingham Clinical Commissioning Group (CCG). In this CCG the prevalence of diagnosed diabetes among people aged 17 years and older is 7.9% compared to 6.1% in similar CCGs. In 2011/12 there were 32, 533 people aged 17 years and older diagnosed with diabetes. In 2011/12, only 65.7% of adults with diabetes had a HbA1c measurement of 59mmol/mol or less. This is higher than in other similar CCGs and lower than England. Risk factors for type 2 diabetes are increasing within Sandwell and West Birmingham's population. We have increasing numbers in the older at risk age groups; the ethnic groups that are at increased risk are growing in number and are ageing and obesity is increasing. Diabetes is more prevalent in Sandwell and West Birmingham compared with the national and regional average.

People with diabetes in Sandwell PCT were 39% more likely to have a myocardial infarction, 17.8% more likely to have a stroke, 45.1% more likely to have a hospital admission related to heart failure and 19.2% more likely to die than the general population in the same area.⁷ In view of these observed disparities in terms of higher prevalence and poor outcomes, Sandwell and West Birmingham CCG embarked on a Local Improvement Scheme for Diabetes (SWB CCG Diabetes LIS, 2014). Main aims and objectives of this improvement scheme were:

Aim

- To increase primary care expertise and management to enable a greater percentage of diabetes care for type 2 and stable type 1 diabetics to take place within the GP practice with the support of the Diabetes Community Care Extension (DiCE) team.
- To enable primary care clinicians and diabetes specialists to work together in the best interests of the patient.
- To improve patient experience with more care delivered locally.

- d. To empower patients to take responsibility for their health, ensuring that patients are offered the opportunity to learn about and self-manage their condition through structured education programmes.

Objectives

- a. To improve the knowledge and confidence of primary care clinicians to treat and manage diabetic patients in their own practice with the aim of reaching a point where 95% of the diabetes care for type 2 and stable type 1 diabetics occurs within the practice without the need for onward referral.
- b. To achieve a year on year increase in the number of patients completing education programmes (e.g. DAFNE, XPERT, Conversation Maps etc.)
- c. To ensure value for money prescribing and medicine management provision in line with Health Economy Formulary.
- d. To improve formulary compliance with blood glucose test strips achieving better value for money and aiming to meet or exceed the West Midlands target.
- e. To move towards the National QIPP targets for Type 2 Diabetes.
- f. To achieve a year on year reduction in emergency admissions from specific diabetes related complications.
- g. To achieve a year on year reduction in A&E attendances from specific diabetes related complications.
- h. To achieve a year on year reduction in the number of amputations, renal dialysis and blindness arising in people with diabetes.
- i. All patients will receive a service which encourages partnership in decision-making, supports them in managing their diabetes and helps them to adopt and maintain a healthy lifestyle. This will be reflected in an agreed and shared care plan in an appropriate format and language. Where appropriate, parents and carers should be fully engaged in this process.
- j. All patients will have an individualised agreed shared care plan detailing a target HbA1c and agreed targets for medication management, cholesterol level, BMI, blood pressure, weight loss, diet, exercise etc. together with the agreed approach the patient will take to meeting these targets. A written record of these targets and plan will be given to the patient in written form and a copy kept in the patient's records.
- k. Savings made as improvements in primary care and community services lead to a reduction in the need for hospital based care.

Service description/care pathway

Sandwell and West Birmingham CCG comprised of more than 113 GP practices, representing a wide and diverse experience in management of Diabetes. In View of this diversity of experience and prior skills, SWBCCG's Diabetes Local improvement Scheme (LIS) was launched with two levels of Tiers.

Tier 1-practices for enhanced diabetes care

Tier 1 practice were responsible for providing diabetes management for adults of its type 2 and stable type 1 patients at a practice level with the support of a specific named Diabetes Community Care Extension (DiCE) team (Diabetes Consultant and Diabetes Specialist Nurse). The aim was to reach a point where 95% of the care for type 2 and stable type 1 diabetics occurs within the practice without the need for onward referral.

Each practice signed up to the LIS will have named DiCE Team. As they begin working together, the detail and type of support tier 1 practice and patients require was to be readily established. Some of the examples of the support DiCE teams offer included:

- i. Advice and guidance: via telephone, video conferencing or email during normal working hours. Wherever possible telephone and email enquiries were planned is dealt with on the same day, with a maximum turnaround time for non-urgent enquiries of two working days.
- ii. Joint meetings between DiCE and the practice diabetes team: e.g. for activities including case note reviews, with DiCE teams offering advice/support and reviewing management plans.
- iii. Specific diabetes related education and training: at a practice level.
- iv. Joint consultation clinics within the practice: for cases where it is optimal that primary care clinicians and DiCE clinicians see patients together at the practice.

Tier 2-injectable therapies initiation and ongoing management

Practices opting to choose this level were responsible for provided in accordance with NICE Clinical Guidelines, NICE Technology Appraisals, locally agreed pathways and Health Economy Formulary with responsibility sitting with the prescribing clinician. Patients discharged from the Specialist Diabetes Service were to receive all ongoing diabetes care from the practice in accordance with the locally agreed pathways. The practice was responsible for communicating with the patient and liaising with the Specialist diabetes team to ensure a smooth and appropriate transition of care. The ongoing management of patients on injectable therapies was planned to be in line with locally agreed pathways. Local pathways and guidelines for use of pharmacological agents (Oral and injectable) in management of diabetes were developed and incorporated in this LIS.

Accreditation of practices

In order to participate in level 1 of the Diabetes Local Incentive Scheme providers must have met the following requirements:

- i. At least one GP and Practice Nurse must have attained the Certificate in Diabetes Care accredited by Warwick University; or equivalent courses recognised by SWB CCG; or provide evidence of CPD which must be accepted by the CCG as equivalent.
- ii. All clinicians providing enhanced diabetes care to attend a minimum of 6 hours of diabetes direct learning (6 CPD credits) per year.
- iii. The practice needed to participate in the National Diabetes Audit annually and give consent for the CCG to access practice level data and to share this data with their DiCE Team and other SWB CCG member practices.

In order to participate in level 2 of the Diabetes Local Incentive Scheme providers were required to be delivering level 1 enhanced diabetes care and in addition to the accreditation requirements of level 1 all GPs and Practice Nurses were required to:

- a. Complete a GLP1 Initiation and management training programme before delivering this aspect of level 2.
- b. Complete injectable therapies initiation and management training programmes and be formally assessed as competent before delivering this aspect of level 2.
- c. Complete all modules on insulin safety that are available free of

- charge for NHS professionals online through the NHS England Virtual college.
- d. Undertake a minimum of 10 insulin initiations per annum to maintain competency.
 - e. Be competent in resuscitation, and ensure that these skills are regularly updated. As for level 1 this evidence should be documented in Diabetes LIS Application Template on sign up.

Financial Incentives for the practices

Tier 1 Practices qualified for £15 per registered diabetic patient in one payment at the start of the financial year. Whereas Tier 2 practices with in house injectable therapy initiation qualified for £100 for GLP1 analogue initiation and £200 for an Insulin initiation subject to strict adherence to NICE criteria for initiation of these therapies.

End of year evaluation

Participating Practice's agreed to be monitored against the following indicators:

- a. Number of outpatient referrals for diabetes.
- b. Emergency admissions for diabetic complications including episodes of hypoglycaemia.
- c. A&E attendances for diabetic complications.
- d. Number of amputations occurring as a result of diabetes complications.
- e. Number of diabetic patients on renal dialysis.
- f. Number of diabetic patients who have lost their sight due to diabetes complications.
- g. Formulary compliance with use of blood glucose strips.
- h. Number of prescription items for metformin and sulfonylureas as a percentage of the total number of prescription items for all antidiabetic drugs.

- i. National Diabetes Audit care processes and Treatment targets.
- j. QOF Achievement.
- k. Total number of patients seen in Joint Clinics at the practice.

This Diabetes Local Improvement Scheme (LIS) has now been successfully in operation for the last 18 months approximately. This model of Diabetes care delivery has been widely popular and taken up by the local practices.

Acknowledgments

None.

Conflicts of interest

The author declares there is no conflict of interest.

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