

How Leicester City CCG is addressing the diabetes challenge and proactively managing the health of people living with diabetes

National Context

“Diabetes - the epidemic of our times, is a key barrier to improvements in the health of our nation”

Professor Azhar Farooqi – Clinical Lead for Leicester City CCG

1. Improving the management of high cost patients, especially those with long term conditions and a number of comorbidities, is increasingly seen as an important strategy for improving health outcomes and controlling healthcare expenditure in NHS policy. Diabetes is a national, regional and local clinical priority. It is associated with significant morbidity and early mortality. Adults with diabetes have an excess risk of a range of complications including major vascular disease (heart attack and stroke) and microvascular disease (kidney disease, amputation, and retinopathy).
2. Diabetes is a chronic and progressive disorder that impacts upon almost every aspect of life. Leicester City has a very high prevalence of diabetes with 30,381 identified Type 1 and Type 2 patients in December 2018 (up from 26,201 in 2014) and estimated to rise to 40,000 patients by 2030. This is in part, due to our large black and ethnic minority communities (South Asian origin people for example are six times more likely to have diabetes than the general population) and high deprivation in the City.
3. As part of the NHS England RightCare national programme of reducing unwarranted variation in peoples’ health and outcomes, an optimal pathway has been developed for cardiovascular disease prevention which includes diabetes. NHS RightCare supports local systems to ensure that the right person has the right care, in the right place, at the right time, making the best use of available resources.
4. The optimal pathway has been developed for cardiovascular disease prevention (CVD) as per the table below:

Table 1- NHS RightCare CVD Opportunities:

Cardiovascular Disease Prevention: Risk Detection and Management in Primary Care

The Interventions	Cross Cutting: 1. NHS Health Check - systematic detection of high BP, AF, NDH, T2DM, CKD, high cholesterol, CVD risk 2. System level action to support guideline implementation by clinicians 3. Support for patient activation, individual behaviour change and self management					
	High BP detection and treatment	AF detection & anticoagulation	Detection, CVD risk assessment, treatment	Type 2 Diabetes preventive intervention	Diabetes detection and treatment	CKD detection and management
The Opportunities	5 million un-diagnosed. 40% poorly controlled	30% undiagnosed. Over half untreated or poorly controlled	85% of FH undiagnosed. Most people at high CVD risk don't receive statins	5 million with NDH. Most do not receive intervention	940k undiagnosed. 40% do not receive all 8 care processes	1.2m undiagnosed. Many have poor BP & proteinuria control
The Evidence	BP lowering prevents strokes and heart attacks	Anticoagulation prevents 2/3 of strokes in AF	Behaviour change and statins reduce lifetime risk of CVD	Intensive behaviour change (eg NHS DPP) reduces T2DM risk 30-60%	Control of BP, HbA1c and lipids improves CVD outcomes	Control of BP, CVD risk and proteinuria improves outcomes
The Risk Condition	Blood Pressure	Atrial Fibrillation	High CVD risk & Familial H/cholesterol	Non Diabetic Hyperglycemia ('pre-diabetes')	Type 1 and 2 Diabetes	Chronic Kidney Disease

Detection and 2°/3° Prevention

The Outcomes	50% of all strokes & heart attacks, plus CKD & dementia	5-fold increase in strokes, often of greater severity	Marked increase in premature death and disability from CVD	Marked increase in Type 2 DM and CVD at an earlier age	Marked increase in heart attack, stroke, kidney, eye, nerve damage	Increase in CVD, acute kidney injury & renal replacement
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5. Leicester City CCG (LCCCG) is at the forefront of innovative and transformation diabetes work and is also working to the criteria within the optimal pathway in terms of prevention, detection and treatment.

Commissioning Priorities:

6. LCCCG has the 4th highest rate of diabetes in the country. In order to support primary care in their delivery of high quality care the CCG has the following in place:
 - a. Strong clinical leadership.
 - b. Three GP diabetes mentors who lead monthly clinical education meetings (open to all practices) and support practices.
 - c. Education programmes for diabetes prevention, Type 1 and Type 2 patients.
 - d. EDEN competency based health care professional training.
 - e. Significant investment from the NHSE diabetes transformational funds for a 7 day service at UHL and improved patients outcomes in primary care including control of blood pressure, HbA1C and cholesterol (as per the optimal pathway).
 - f. 21 enhanced practices in primary care.

Prevention

7. As per the optimal pathway (Table 1) LCCCG has commissioned the Type 2 National Diabetes Prevention Pathway (NDPP), which is designed to empower patients into taking control of their condition.
8. The aim of this programme is to reduce or prevent the onset of Type 2 diabetes in individuals at risk of developing diabetes.
9. LCCCG is the second highest referrer in the East Midlands to the National Diabetes Prevention Pathway (NDPP) with 3477 referrals between April-October 2018. Since implementation of the programme the CCG has exceeded our target for referrals.

Education

10. The CCG has made it a priority to focus on increasing the Type 2 diabetes education attendance from the 15/16 national diabetes audit result of 0.5% to 15.21% in 17/18 and now 30% in 18/19.
11. EMPOWER Type 2 Structured Diabetes Education is provided by Spirit Healthcare for people with Type 2 diabetes to help them understand what diabetes is, the effect it has on their body and how to make small achievable changes to the food they eat and their everyday life.
12. Spirit Healthcare has worked closely with the CCG to provide diabetes education to meet the needs of the population, based on the feedback from patients and carers. Some of the ways in which they have done this include:
 - Offering the course in first language in English, Gujarati, Urdu and Hindi and a qualified interpreter when required
 - Online booking portal so patients can book themselves directly onto training and not go through their GP practice (funded from NHSE transformational funds). The online booking page shows dates, times, venues and the language the course is delivered in.
 - With funding from NHSE transformational funds set up a course specifically for 18-35 year olds after undertaking patient and clinical engagement across LLR. This course covers subjects more pertinent to a younger population. There is also a web based offer for this cohort of the population as well which is NICE endorsed and QISMET accredited.
 - Spirit is offering, free of charge to the CCGs, the DoSA (Diabetes for South Asians) course which is specifically for South Asian

communities. They also have a South Asian nurse who runs one of the education programmes to ensure that the courses are all culturally appropriate.

13. Spirit Healthcare currently has a 100% Friends and Family test score. Since the programme started in April 2016 until the current day this score has ranged between 97-100%.
14. Type 1 diabetes education is part of the core UHL contract and the CCG commissions Dose Adjusted Food and Nutrition Education (DAFNE). This is for Type1 diabetes of any age, which involves attending a 5 day training course with other patients in a group.

EDEN health care professional training:

15. Effective Diabetes Education Now! (EDEN) is a service, including comprehensive training packages, which aims to increase competency and knowledge of clinicians and primary care teams and therefore provide patient focused care with improved outcomes. The award winning programme is RCGP accredited, Diabetes UK endorsed and the training is rigorously developed, updated and evaluated. Evaluation scores are consistently above 95%.
16. Training is developed by horizon scanning locally and nationally for priorities and pressures. A choice of blended training (face to face and digital) supports the ever increasing pressures in primary care.
17. The blended approach supports findings from the RightCare packs e.g. increased Three Treatment Target training especially around blood pressure and also supports the CCG agenda with modules being developed, and updates around Diabetes and the Older Person, Foot care and Obesity & Lifestyle Changes to name a few .
18. Since April 2018 EDEN has developed two new eLearning modules: Three Treatment Targets and Hypoglycaemia. The eLearning modules have been developed into a new platform and new interactive formats for a greater learning experience. The courses receive excellent feedback with 100% strongly agreeing /agreeing that their knowledge and confidence had increased following the training.
19. EDEN is working closely with the CCG on supporting practices around the transformational funding initiatives and the innovative primary care work which is taking place through the City.

NHSE Diabetes Transformational Funds:

20. Patients have benefitted from an £800,000 injection awarded by NHS England to the three local CCGs to help standardise, improve and expand diabetes prevention and education services across Leicester, Leicestershire and Rutland.
21. The funding which is part of the NHS England Transformation Fund, is used on supporting GP practices to monitor patients with diabetes in the community, help diabetes patients staying in hospital, and provide more structured education sessions for high risk patients.
22. The funding is utilised to :
 - Focus on structured diabetes education to maximise the number of people receiving tailored education by encouraging more young people aged 18- 35 years to take up these courses.
 - Ensure GP practices are meeting NICE recommended targets to record and monitor blood sugar (glucose control), blood pressure and blood cholesterol in patients at risk of diabetes and those who already have a diagnosis to ensure all GP practices are working in the same way.
 - Expand the current Diabetes Inpatient Specialist Nursing (DISN) service, funding a number of additional posts which will aim to deliver a service from a five working day week to a seven day service.
23. Transformational funding is being spent in the following ways:
 - a. Coding and case finding over 2 years - those with diabetes and the potential opportunity to refer into education programmes based on prevalence and register.
 - b. Development of a primary care diabetes template which codes patients so accurate data is collected.
 - c. Pre-conception diabetes education offered by Oviva for ladies with Type 2 diabetes, who are planning on becoming pregnant.
 - d. Religious fasting education being offered by the Leicester Diabetes Centre for a 12 month period.
 - e. An innovative under 18s education programme has been developed and is being rolled out by the Leicester Diabetes Centre and then becoming core business through the Best Practice Tariff.
24. Reducing the variation between practices was key to improving better patient outcomes. Work has been done through 2017 to the present day to increase those with the poorest scores (taken from the National Diabetes Audit) with support through:
 - EDEN mentors and trainers;
 - Personalised offers of support for practices at in-house PLT;

- Intensive support from GP mentors;
- In house consultant support around patient outcomes;
- Access for all practices to attend monthly clinical learning sessions.

25. Achievement of the 3 Treatment Targets for patients with Type 1 diabetes remains under England averages. Clinicians have highlighted their need for education around the management of people with Type 1 diabetes. According to the National Diabetes Audit the range of achievement for Type 1 diabetes measures ranges from 0 – 100%.

26. On-going training activities to meet these areas under the Three Treatment Target umbrella will continue to ensure alignment between STP and City Eden work for best outcomes for patients.

Enhanced practices in Primary Care:

27. The Leicester City CCG current service model has two types of care in General Practice - 'core' and 'enhanced'. Core care is defined GP diabetes care with referral for anything above the competence / capacity of the practice to hospital based intermediate or specialist care. Enhanced care is delivery of the "necessary nine" categories of care in primary care with only complex patients (referred to as 'super seven') go to specialists in line with agreed criteria. Enhanced practices have minimum training standards and are externally accredited by diabetes mentors (including assessment of organisational standards, staffing levels, audit of KPIs and agreed 'repatriation' of patients in hospital OPD care in liaison with specialists). Only patients requiring specialist care are seen in hospital services.

Service Transformation:

28. The current "core" practices receive a high volume of care for their patients through hospital attendances. Leicester City CCG is working towards expanding the 'enhanced primary care' to 38 of our practices which cover 80% of the diabetic population.

29. Experience is that historically 85% of patients with diabetes are managed in primary care with 15% either shared care or hospital care only. Our enhanced practices now care for 95% of patients solely in primary care. In January 2017, there were a total of 265 non-elective diabetes related hospitalisations across the LCCCG, incurring a cost of £557,284.

30. In order to expand services in primary care the CCG is commissioning the following:

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- Bespoke training for primary care by Effective Diabetes Education Now! (EDEN) run from the Leicester Diabetes Centre.
- Have strong clinical and mentoring leadership for primary care through GP diabetes mentors.
- Ongoing mentorship through monthly clinical forum meeting and emails.
- Development of an IT diabetes template as a platform to develop individualised care planning with the patient involvement.
- Tailored deployment of in-reach diabetes clinical team to support practices – this is being provided by UHL.

31. The achievement of enhanced diabetes care in 21 practices is a significant achievement in Leicester City with many deprived and under doctored areas. The CCG has evaluated the work of the enhanced practices and early results include:

- Reducing admission to hospital due to diabetes related complications including DKA and hypoglycaemia.
- Reduction in unplanned in-patient bed days due to diabetes related complications among the enhanced group of practices.
- Higher achievement of treatment targets for glycated haemoglobin, blood pressure and lipids (46.6% of patients in the enhanced practices vs 40.2% in the core practices, $p=0.01$) and better management of care processes as defined by NICE using recently (with 44.9 % enhanced practices completing the care processes vs 30.5% in the core practices $P= 0.03$).
- Increased participation in the national diabetes audit from 40.3% in 14/15 to 88.3% in 15/16 and anticipated to be 98% in 16/17 (although the window for participation has not closed at time of writing).
- The CCG is also at or near the top of 10 'peer' CCGs in all diabetes performance parameters.

32. Research shows that practices who are enhanced are achieving statistically significantly better outcomes for patients than those who are not (published Seidu S. et al - Primary Care Diabetes 2016).

Other Initiatives:

33. The CCG is also working on a number of initiative projects to support patients living with diabetes and their households / carers. These include:

- **Cities Changing Diabetes** – *Leicester is the first City in the UK to be part of this international programme:*

This programme recognises that the “world is rapidly urbanising, changing not just where we live, but the way we live. Today, the way cities are designed, built and run risks fuelling the health challenges of their citizens. Urban environments are already home to two-thirds of people with diabetes. This makes cities the front line in the fight against Type 2 diabetes and where we must take action to hold back the alarming rise of the condition”. In 2014, three global partners, Steno Diabetes Center Copenhagen, University College London and Novo Nordisk, launched the Cities Changing Diabetes programme to accelerate the global fight against urban diabetes. Leicester is one of the 15 cities to be part of this programme.

<http://www.citieschangingdiabetes.com/about/overview.html>

- **The Diabetes Village** - *Leicester will be the first City in the UK to be part of this international phenomenon.*

Based on the Steno Diabetes Center Copenhagen and the Endocrine Associates of West Village in New York; Rt Hon Keith Vaz MP, is working with the CCG to try and establish a location for a diabetes village in Leicester. This is likely to be Merlyn Vaz or the Diabetes Centre at the General Hospital. A diabetes village has the opportunity to bring together competencies related to treating people with diabetes (e.g. eye screening and foot care), clinical diabetes research and education programmes under the same roof, thereby offering more integrated treatment to each individual whilst recognising that the GP is still the main person responsible for the patient.

Conclusion:

34. The CCG is addressing the diabetes challenge by working towards the NHS England RightCare Optimal CVD Pathway and providing a local service for our patients from prevention through to education, diagnostics and treatment. Leicester as a City is at the forefront of commissioning innovative and supportive care for patients living with diabetes in the form of the Cities Changing Diabetes initiative and also the future Diabetes Village. This alongside our educational offer to patients and health care professionals, our research capacity at the Leicester Diabetes Centre and highly successful primary care programme places our patients at the centre of care being commissioned.

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