NHS Confederation and ABPI: An examination of health inequalities in diabetes care in Leicester

Preface

The COVID-19 pandemic has thrown into sharp focus the issue of health inequalities in the UK and demonstrated the need for a renewed focus on this deep-rooted and multi-faceted problem. The Association of the British Pharmaceutical Industry (ABPI) and the NHS Confederation are partnering on a series of activities focused on this crucial issue. Our aim is to share learning and look at the opportunities for greater cross-sector collaboration between industry and the NHS to address health inequalities. This report is part of a joint programme of work.

Background

Health inequalities are defined within the context of the English health system as “unfair and avoidable differences in health across the population, and between different groups within society”. ¹

Health inequalities arise because of the conditions in which we are born, grow, live, work and age, influencing opportunities for good health and shaping physical and mental health and wellbeing.

NHS England has documented health inequalities as existing across four overlapping dimensions: socio-economic status and deprivation; protected characteristics such as age, sex, race, sexual orientation, and disability; vulnerable groups such as migrants, Gypsy Roma and Traveller communities, rough sleepers, homeless people and sex workers; and geography, though this list is not exhaustive.

The COVID-19 pandemic has shone a spotlight on health inequalities and the role of the public sector in tackling them. For the NHS, this has been underscored in the third and fourth phase planning for NHS service recovery² highlighting the need to be more aware of, and take steps to address, inequalities in health.
Leicester, Leicestershire and Rutland Integrated Care System (ICS)

The ICS in Leicester, Leicestershire, and Rutland serves a population of around 1m. The ICS brings together three NHS trusts and one single clinical commissioning group working alongside a range of other independent, voluntary and community sector providers and local councils. The area is a 2-tier local government area comprising of a City Council, a County Council and seven District and Borough Councils.

One of the key drivers for the ICS is changes in demographics and increasing demand for services, driven by a growing and ageing population with increasing numbers of people living with long-term and complex conditions.

Key priority areas for the ICS are to:

• Keep more people well and out of hospital
• Move care closer to home
• Provide care in a crisis
• Deliver high quality specialist care

There has recently been a public consultation which closed in December 2020 about the redesign of acute and maternity services across Leicester, Leicestershire, and Rutland, including £450m capital investment which will have a significant impact on both the estate and delivery plans for the future.

Health inequalities in Leicester

Leicester is a city with significant levels of deprivation and in 2019 was ranked 32nd most deprived out of 317 local authorities in England. Analysis produced by Leicester City Council in 2016 found that 44% of people in the city lived in the 20% most deprived areas in England, and one in three people (including children, young people and adults) lived in areas of high deprivation. Leicester has a large proportion of people from black, Asian and minority ethnic backgrounds.
Diabetes prevalence in Leicester

Leicester, along with Birmingham, has some of the highest diabetes rates outside London. In 2016/17, the Leicester East parliamentary constituency had a diabetes prevalence level of 12.1%, with neighbouring constituencies Leicester South and Leicester West having prevalence levels of 8.0% and 7.3% respectively, compared with an England average of 6.7%.\(^5\)

Type 2 diabetes is up to six times more likely in people of South Asian descent and three times more likely in African and African-Caribbean people.\(^6\) Lifestyle factors that contribute to Type 2 diabetes risk include high blood pressure, being overweight and smoking.\(^7\) Leicester has a higher-than-average level of smoking, with 17.3% of people in the local authority area in 2018 reporting that they were current smokers, compared with a UK average of 14.7%.\(^8\) According to Leicester City Council, only 37% of people living in the city are a healthy weight.\(^9\)

Previous research carried out by Diabetes UK has found that poorest people in the UK are 2.5 times more likely than the average person to have diabetes at any age.\(^10\)

Diabetes care in Leicester

Leicester is part of the Leicester, Leicestershire, and Rutland ICS, which spans three clinical commissioning groups at present (Leicester City, Leicestershire, and Rutland). Many local organisations focusing on diabetes strategy, such as the Leicestershire and Rutland diabetes board, share a footprint with the ICS.

The Leicester City CCG area has one of the highest prevalences of diabetes in England. Leaders in Leicester have invested significant resources in prioritising up-to-date, evidence-based approaches to treating diabetes. Effective Diabetes Education Now (EDEN), based in Leicester General Hospital (part of University Hospitals of Leicester NHS Trust), was launched in the city in 2012 as a wide-scale transformation programme to address skill gaps and change models of diabetes care in the city and the wider area.
The EDEN team consists of diabetes specialist nurses, GPs, consultants and other core allied health professional roles such as dietitians, psychologists, and physiotherapists. EDEN supports commissioning groups and healthcare professionals by providing diabetes training for staff that means specialised diabetes services can be commissioned and provided across the city.

Diabetes services in Leicester are provided in primary care, by University Hospitals of Leicester NHS Trust and with community services provided by Leicestershire Partnership NHS Trust.

Viewpoints on diabetes care and health inequalities in Leicester

The next section of this report summarises views from health leaders working in diabetes services in Leicester. Participants’ roles encompassed commissioning, general and specialist primary care, community services and strategic planning. Findings explore the nature of diabetes services in Leicester, how health inequalities are understood in relation to diabetes, programmes under way to improve diabetes care in the city and potential roles for the pharmaceutical sector in relation to this work.

Diabetes services in Leicester

Participants described how significant activity takes place in primary care, and a local enhanced service is in place in the city to provide enhanced diabetes care. A proposal is currently under consideration to extend this across the entire Leicester, Leicestershire and Rutland region.

Participants working in primary care mentioned that more than half of GP practices in the city now have “enhanced status”, meaning they are able to provide a very high level of diabetes care.

The COVID-19 pandemic has affected the ability of clinical staff to provide the level of treatment to diabetic patients that they
would like to offer. One participant said that nationally, diabetes reviews fell by 40% over the pandemic period. In response to the pandemic, service providers have moved many diabetes services online.

Drivers of improvement in diabetes care

It was felt that enhanced diabetes provision in primary care had helped reduce hospital admissions due to diabetes and improved the appropriateness of referrals. Also highlighted were highly effective liaison structures between primary care and secondary care, that are beneficial in the coordination of care for patients with both Type 1 and Type 2 diabetes.

Clinicians emphasised the value of developing personalised healthcare plans for patients with diabetes, so that patients feel engaged in their care and believe that the changes health professionals are asking them to make are achievable. Primary care clinicians spoke about the importance of persistence in contacting patients who do not attend appointments for diabetes care and repeatedly checking that they understand their care plan.

Work is under way to develop a proactive care approach to diabetes, working through primary care networks (PCNs) and using risk stratification and sociodemographic profiles to target support.

Understanding health inequalities in relation to diabetes

Leicester has a large number of people from black, Asian and minority ethnic backgrounds, as well as pockets of significant deprivation. Diabetes is more prevalent among black and minority ethnic communities and those living in deprived areas.

Participants pointed to the fact that COVID-19 patients with diabetes were over-represented in intensive care units as well as having higher mortality rates. They attributed this in large part to inequalities, linking COVID-19 infection risk with the need to work
in multiple jobs and in the type of roles, such as hospital work and driving buses and working in overcrowded factories, that increase the risk of exposure to COVID-19. COVID-19 was seen to have widened inequalities in Leicester.

Participants highlighted the fact that in parts of the city, many people lived in multi-generational households, and family members were sometimes unable to read or speak English. This poses challenges in terms of health literacy and participants spoke of using one-to-one interaction and YouTube videos as well as printed materials in multiple languages to communicate with patients about their diabetes.

A large proportion of diabetes care is provided in primary care, but this faces challenges in Leicester with an older primary care workforce that means the health system will face a supply challenge in the coming years unless action is taken. Under-doctored areas (where GPs are responsible for a larger than average number of patients) tend to map onto areas of deprivation, meaning it can be harder for patients in deprived areas to access primary care. Leicester is looking to allocate more primary care funding based on need, so that practices with higher levels of need will have access to more available resources.

In broad terms, the ICS has developed a system-wide framework for health inequalities, with principles and actions focusing on the collection of high-level data, and a health inequalities unit to support the use of data and a population health approach.

Leaders spoke of having learned a lot during the pandemic in Leicester, which has spent more time than any other part of England under “lockdown” restrictions. One participant described how in working to counter COVID-19 vaccine hesitancy in the city, healthcare leaders had learned a great deal from working with local communities, which would enable them to work better at a “hyper-local” level and would be helpful in their work to close gaps between the best off and worst off in the city.
Role of the pharmaceutical industry in tackling health inequalities in diabetes care

Participants highlighted work with Novo Nordisk in Leicester as part of Novo Nordisk’s Cities Changing Diabetes global initiative as an example of NHS and pharmaceutical sector collaboration in action (see case study on page 9).

Data was another area where participants felt pharmaceutical companies had a role in addressing health inequalities in diabetes. One participant mentioned work that had been undertaken with a different healthcare devices company, Abbott, to identify trends in prescribing of its Freestyle Libre diabetes monitoring device, using postcode data owned by the pharmaceutical company. This data was not routinely collected by the NHS.

Finally, participants highlighted a role for pharmaceutical companies to provide additional support for both patient and professional education – for instance through developing larger numbers of patient YouTube videos to support the use of their diabetes products, working with local faith communities to raise awareness, and helping healthcare professionals to understand the suitability of different products for different target groups.

Conclusion

Leicester faces particular challenges in relation to diabetes because of the socio-demographic characteristics of its population. With high levels of deprivation and a large number of people from black, Asian and minority ethnic groups, diabetes is a significant issue affecting the health of local people.

Leicester has been able to achieve a great deal of progress in its diabetes services because of focused effort and investment by leaders in all parts of the local health and care system. Recognising the interactions between poverty and diabetes and between deprivation, diabetes and poorer COVID-19 outcomes, the health system has built on the experience of the past year to strengthen its links with different communities at a “hyper-local” level.
Primary care has played a particularly strong leadership role, but the approach in the city is genuinely system-wide and has engaged the pharmaceutical industry in work to improve the health of local people with diabetes.

**Industry view**

The ABPI agrees that the pharmaceutical industry has significant expertise that can be bought to the fore to support the NHS improve the health outcomes for its diabetic patients. COVID-19 has further highlighted the inequalities related to diabetes with a third of those who died in wave one in England found to have diabetes. The University of Manchester found 45,000 people have missed or delayed diagnoses for Type 2 diabetes during the first wave, while the number of blood tests to monitor control dropped by 77% in England during April.

There is a real opportunity for companies and the NHS to build stronger collaborations so that all patients can get timely access to diagnostic services, preventative support for smoking and obesity and education to aid the achievement of the best possible health outcomes.

Companies and the NHS are committed to delivering for patients on this, and examples of industry collaborations can be viewed through the [ABPI NHS-Industry Partnership Case Studies Repository](#).

Two case studies of industry and NHS partnerships to support the health outcomes of patients through boosting early prevention and providing culturally relevant education are outlined overleaf.
Case studies: Industry and the NHS working together

**Novo Nordisk: Supporting the NHS and local partners to tackle the impact of Type 2 diabetes in the South Asian community**

**Issue:** The NHS Long Term Plan highlights that the risk of developing Type 2 diabetes is up to six times higher amongst people from certain ethnic minorities. People of South Asian heritage are amongst those more at risk of developing the condition.

**Intervention:** The Leicester Cities Changing Diabetes project is a joint working project funded and supported by Leicester Diabetes Centre and Novo Nordisk. Collaborative work has taken place alongside the local NHS clinical commissioning group, the city council, sports clubs and faith groups to develop new health and wellbeing programmes tailored to the needs of Leicester's South Asian community. This includes the ‘Healthy Goals’ initiative that Leicester Diabetes Centre has helped launch together with key partners, including the Centre for Black and Minority Ethnic Health (CBMEH) and Leicester City in the Community, the community outreach arm of Leicester City Football Club. The Healthy Goals programme aims to promote healthy lifestyles and prevent Type 2 diabetes. The 12-week programme includes interactive lifestyle education, covering elements of a healthy lifestyle like diets, cooking methods, increasing physical activity, reducing sedentary behaviour and managing emotions, followed by an hour of physical activity. Training has also been developed to support community champions in local places of work and worship and other community organisations to help raise awareness of Type 2 diabetes amongst their peers, and signpost people to support.

**Results:** Leicester City Clinical Commissioning Group (CCG) is working with Leicester Diabetes Centre to expand the number of community champions trained and supported to deliver health information and signposting. Local sports clubs are also working to embed the educational elements of the Healthy Goals programme into their health and wellbeing offerings, to help ensure the sustainability of support for the South Asian community and other local residents.
The Leicester Cities Changing Diabetes project is part of a wider global programme developed by Novo Nordisk and University College London, which supports partners from different cities to come together in more than 30 cities around the world to develop tailored solutions to address the prevalence of Type 2 diabetes and obesity. Leicester Diabetes Centre is continuing to exchange knowledge about tackling health inequalities and improving population health with other cities, including Manchester which joined the programme last year.

**Boehringer Ingelheim: Implementing a novel primary care MDT approach with Poole Hospital NHS Foundation Trust**

Improving patient health outcomes through an innovative primary care multi-disciplinary team (MDT) approach, to help address the inequities in achieving the diabetes treatment targets set in NICE Guidelines NG28 and NG17 within Wessex.

A collaborative joint-working project between Poole Hospital NHS Foundation Trust and Boehringer Ingelheim Ltd.

Diabetes is one of NHS England’s vital clinical priorities with the aim of improving outcomes for people with and at risk of diabetes as part of the wider goal to achieve high quality care for all. The National Diabetes Audit (NDA) measures the effectiveness of diabetes healthcare against NICE Clinical Guidelines and NICE Quality Standards, in England and Wales. NDA collects and analyses data for use by a range of stakeholders to drive changes and improvements in the quality of services and health outcomes for people with diabetes. National Diabetes Audit data support the findings that there are inequities in achieving the diabetes treatment targets within Wessex.
Poole Hospital NHS Foundation Trust and Boehringer Ingelheim Ltd are undertaking joint working to address inequities and deliver quality improvement through an innovative multidisciplinary team (MDT) primary care approach run across selected localities in two STP areas, Dorset and Hampshire & the Isle of Wight. The project aims to improve and sustain attainment of the three NICE recommended treatment targets for adults with Type 1 diabetes and adults with Type 2 diabetes:  

• HbA1c (glucose control)  
• blood pressure  
• serum cholesterol  

Specifically, the joint working project will invest in additional MDT co-ordinator resources to facilitate and sustain the goals of the MDT teams that support GP practices, which will improve the number of people living with diabetes treated to target. Progress and quality improvement in diabetes treatment and care will be tracked by the project team, which will consist of members from Poole Hospital NHS Foundation Trust, Wessex Clinical Networks and Boehringer Ingelheim Ltd. The overall project delivery will be overseen by a project manager.  

The project started mid-2019 and completed at the end of October 2020.  

Boehringer Ingelheim Ltd believe they share one fundamental principle with the NHS: putting patients at the heart of everything they do. Joint working enables NHS organisations and pharmaceutical companies to work together to improve the health and quality of patients’ lives.  

Full information can be found at www.boehringer-ingelheim.co.uk/joint-working/joint-working-executive-summary/poole-hospital-nhs-trust-mdt-approach-diabetes
References

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About NHS Reset

COVID-19 has changed the NHS and social care, precipitating rapid transformation at a time of immense pressure and personal and professional challenge. One message from leaders and clinicians across the UK has been clear: we must build on the progress made to chart a new course.

NHS Reset is an NHS Confederation campaign to help shape what the health and care system should look like in the aftermath of the pandemic. Recognising the sacrifices and achievements of the COVID-19 period, it brings together NHS Confederation members and partners to look at how we rebuild local systems and reset the way we plan, commission and deliver health and care.

NHS Reset is part funded through sponsorship by Novartis Pharmaceuticals UK Limited.

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Find out more at www.nhsconfed.org/NHSReset