Final Project Report

Collaborative working project between Leicester, Leicestershire and Rutland ICB and Sanofi to review health inequalities in people with diabetes and implement changes to improve equitable care.

1.0 Project Aims and Objectives

This project aimed to use existing data to shine the light on inequalities within diabetes and to identify areas of highest inequality and produce an options appraisal and recommendations for consideration by Leicester, Leicestershire and Rutland ICB (LLR ICB) to address inequalities and improve the diagnosis and management of diabetic patients.

In addition, the project will develop an Action Plan for implementation of agreed recommendations, support implementation of the action plan and develop and implement an evaluation framework to measure the outcome achieved by implementing the Action Plan.

The objectives of the project were to:

- **Analyse existing data on at risk population and population with diabetes within the ICB to identify inequalities in access to health care service and outcomes.** This will involve undertaking a population health data analysis focusing on health inequalities of patients that have type 1 and type 2 diabetes, and those that are at risk of diabetes (prediabetic). This will be achieved by utilising existing published data including QOF, National Diabetes Audit and primary care data (where available). The project will identify variations in care and health inequalities.
- **Produce an options appraisal and recommendations to address health inequalities** and improve the diagnosis and management and health outcomes for patients with diabetes and for consideration by the ICB Diabetes Delivery Board and the LLR ICB. This will consider and recommend key interventions to improve the diagnosis and management of patients with diabetes to target health inequalities.
- Develop a **Health Inequalities Action Plan** for implementation of agreed recommendations to address health inequalities and co-ordinate and support the implementation of the Action Plan.
- Develop an **evaluation framework** to measure the outcomes of implementing the Health Inequalities Action Plan and support the evaluation of implementing the Action Plan.

Representatives from Sanofi including Lee Blakeney, Project Manager, Martin Cassidy, Project Support Manager and David Birtles, Medical Scientific Liaison worked with Professor Azhar Farooqi, GP Clinical Lead for Diabetes to co-ordinate and deliver the project. A Project Steering Group was established and met regularly to oversee the project including Dr Raj Tan, GP Lead for Health Inequalities, Pratik Choudhry, Diabetes Consultant, Robert Watkins, NHS Midlands and Lancashire Commissioning Support Unit, Becky Hartlett, Diabetes Commissioning Lead, Jeremy Bennett, Integration and Transformation Manager along with a representative from Diabetes UK.

2.0 Expected Benefits

When the project was set up the following benefits for patients and the NHS in LLR and Sanofi were identified as expected outcomes from the project:

Patients

- To ensure equity of pathway access, provision, and outcomes for patients with diabetes in Leicester, Leicestershire & Rutland ICB ensuring the right patients receive the right care in the right place at the right time.
- Quicker and more equitable access to care for patients with diabetes.
- Identifying areas where patients are experiencing inequity in access to diabetes services and putting in place changes to provide an improved pathway for patients.

NHS

- Reduction in unwarranted variations in care for patients with diabetes through targeting the programme at areas of high deprivation and health inequality.
- Learning from the implementation of a population health management approach to addressing health inequalities for patients at risk of and with diabetes that can inform the implementation of similar projects in other disease areas/population groups.

Sanofi

- Improved knowledge of the needs of the customers in managing patients with diabetes who experience inequalities of care and how targeting health inequalities can be used to improve patient care.
- Improved reputation with relevant stakeholders within LLR ICB and partner organisations.

3.0 Project Delivery

Analyse existing data on at risk population and population with diabetes within the ICB to identify inequalities in access to health care service and outcomes.	
This will involve undertaking a population health data analysis focusing on health inequalities of patients that have type 1 and type 2 diabetes, and those that are at risk of diabetes (prediabetic).	A review was undertaken of data that is readily available including National Diabetes Audit, QOF, data on referrals to and uptake of NHS Diabetes Prevention Programme and Structured Diabetes Education and diabetes technology uptake data. In addition, data was also taken and cross referenced with data from the population health management tool (ACG). The data was analysed to compare current access and outcomes by deprivation and ethnic minority population. The analysis of population health data on health inequalities in people with diabetes explored the following key elements: • Population with diabetes. • Population with Non-Diabetic Hyperglycaemia (at high risk of diabetes) and diabetes prevention. • Delivery of 9 care processes, 3 treatment targets and structured diabetes education. • Access to treatment and technologies. • Outcomes for people with diabetes. The majority of the data analysis was undertaken at a Primary Care Network (PCN) level.

Identify inequalities in access to health care service and outcomes.	<u>Population with diabetes:</u> • The prevalence of diabetes in LLR has increased from 8.37% in 2022-23 to 9.5% in 2023-24 and is now the 3rd highest diabetes prevalence of all ICBs in England. • There is a higher prevalence of diabetes in PCNs and practices with higher deprived and ethnic minority populations with a 3-to-4-fold difference in prevalence of diabetes across PCNs. • Eight PCNs that have a prevalence of Type 2 diabetes in the population aged under 40 that is statistically above the LLR rate. • There is a strong correlation between percentage from an ethnic minority population and Type 2 diabetes. • There is a correlation between percentage of deprived population and Type 2 diabetes, but this is not as high as for ethnic minority population. • There is a higher proportion of young people with Type 2 diabetes under 40 within PCNs with the highest ethnic minority populations. • There is a high level of multi-morbidity amongst people with diabetes which creates additional burden on patients and demands on the NHS. <u>Population with Non-Diabetic Hyperglycaemia (at high risk of diabetes) and diabetes prevention:</u> • Significantly lower levels of diagnosis of NHD in LLR (5.22%) compared to England average of 7.10% and is much lower than expected given the higher prevalence of type 2 diabetes within LLR. • There is significant variation in the recording of NDH across PCNs with a much lower than expected level of identification of NDH population given their higher levels of diabetes prevalence. • For some PCNs particularly those in Leicester City both NDH and Type 2 diabetes is occurring at an earlier age, and this is probably linked to ethnicity. PCNs with the highest prevalence of diabetes identify NDH and diagnose Type 2 diabetes at a younger median age. There is also a greater gap in the median ages of identification of NDH and diagnosis of Type 2 diabetes in PCNs with higher prevalence. • Referrals to NHS Diabetes Prevention Programme (NHS DPP) are lowest in the most deprived quintile. Data on ethnicity is not recorded at referral. Data on uptake of and completion of NHS DPP shows that these are lowest in the younger age groups, most deprived communities and Asian or Asian British and Black or Black British population groups. There is a need to especially increase uptake and completion of NHS DPP in younger population groups to have an impact on longer term development of diabetes. <u>Delivery of 9 care processes, 3 treatment targets and structured diabetes education:</u> A review of delivery of the 9 care processes and achievement of 3 treatment targets by PCN was undertaken considering levels of deprivation and ethnic minority populations. This showed that: • The 9 care processes which have lowest delivery levels across LLR for people with Type 2 diabetes are: Retinal Screening – 40.4%, Urine Albumin – 66.5%, Foot Surveillance – 81.5%. • 3 PCNs are doing better with 3 treatment targets despite having high percentages of Core 20 (most deprived) and ethnic minority populations. • Some of the PCNs with higher prevalence of Type 2 diabetes are delivering a higher achievement of 3 treatment targets.

	• A comparison of enhanced practices and non-enhanced practices shows that enhanced practices are achieving higher in relation to the proportion of people with diabetes meeting the 3 individual treatment targets of HbA1c, blood pressure combined prevention with statins as well as the proportion of people with diabetes meeting all three treatment targets. <u>Uptake of Diabetes Education and Support</u> • Registrations for the Health Living on-line programme by people with Type 2 diabetes within LLR ICB is lower in the most deprived quintiles. • Referrals to Oviva structured diabetes education for people with Type 2 diabetes shows highest level of referrals from White and Asian population groups but a low percentage from Black population groups. <u>Access to treatment and technologies:</u> Prescribing • There is variation in prescribing of GLP1, SGLT2 and Insulin for people with Type 2 diabetes across PCNs considering the levels of ethnic minority population and deprived population. • There are potential opportunities for savings to the ICB due to variation in GLP1 prescribing. • This identifies potential educational opportunities for primary care around diabetes prescribing. Technologies • Uptake of Continuous Glucose Monitoring is lower within Leicester City compared to other places within LLR ICB. The prescribing of CGM is lowest in the most deprived population. • The use of CGM and insulin pumps in children and young people with type 1 diabetes is lower in Black and Asian groups and most deprived groups. <u>Outcomes for people with diabetes:</u> • Two PCNs have a diabetes admission rate which is significantly above the average for LLR ICB. • Microvascular disease is lower in ethnic minorities and therefore foot amputations are lower in LLR ICB as expected given the higher ethnic minority population. • Levels of kidney renal replacement therapy in Leicester City are significantly above the England average. It is important to improve the early diagnosis of kidney disease particularly in Leicester City and work is required to improve the provision of Urine Albumin and eGFR testing for patients with diabetes particularly amongst the South Asian population.
Develop Options Appraisal	
Produce an options appraisal and recommendations to address health inequalities and improve the diagnosis and management and health outcomes for patients with diabetes and for consideration by the ICB Diabetes	A report was produced setting out the findings from the detailed analysis of the data including a summary of the key findings. The report also proposed recommendations to address health inequalities and improve the diagnosis and management and health outcomes for patients with diabetes within LLR ICB. The ICB Diabetes Delivery Board and the LLR ICB are asked to review and consider adoption of these recommendations.

Delivery Board and the LLR ICB. This will consider and recommend key interventions to improve the diagnosis and management of patients with diabetes to target health inequalities.	The key recommendations are: • There should be continued and enhanced targeted **communication and Public Health awareness** campaigns on healthy lifestyles and diabetes risk to specific population groups. • It is highly likely that **non-diabetic hyperglycaemia** is under detected particularly in practices with large minority populations. PCNs and GP practices with higher levels of type 2 diabetes should prioritise case finding to identify people at high risk of diabetes particularly amongst those under 40 in deprived and ethnic minority populations (particularly South Asian). Further work should also be undertaken to engage with communities to support the early identification of people at high risk of diabetes. • PCNs and GP practices should target population groups to access the NHS **Diabetes Prevention Programme** and particularly those aged under 60 identified with non-diabetic hyperglycaemia, and ethnic minority populations (particularly South Asian groups). Further work should be undertaken with the PCNs, GP practices and provider of NHS DPP to understand why people decline the programme and how they could be best supported. • Focussed work should be considered within PCNs and GP practices where the **diagnosis of diabetes** is lower than expected given the higher proportion of deprived and ethnic minority populations. There should be greater outreach and testing for Type 2 diabetes in deprived and ethnic minority groups. • There is a need to target access to NHS Type 2 **Diabetes Path to Remission** (T2DR) programme to those diagnosed with diabetes under 40 and targeting people from deprived and ethnic minority communities. • There is a need to improve the **delivery of care processes** across the board and particularly **urine albumin, retinal screening and foot surveillance** which were identified as **'Three Ignored Targets'**. Lower performance in these care processes is affecting the overall delivery of all 8 and 9 care processes. There is a need for an ICB strategy to address this wide variation in delivery of these care processes as they are likely to lead to harm due to early retinal, kidney and foot disease. It is proposed to implement the direct entry of retinal screening into SystmOne by the retinal screening service in order to improve recording. • Although the rate of diabetic foot amputations is lower across LLR ICB, it is important to improve **diabetic foot screening** amongst the deprived and white population groups. Due to the established higher level of renal replacement therapy in Leicester City, it is important to improve the **early diagnosis of kidney disease** and that work is undertaken to improve the provision of Urine Albumin testing for people with diabetes. • **Enhanced funding for diabetes** care should be maintained but consideration is given to how the enhanced funding could support targeting specific high-risk groups e.g. people diagnosed with T2 diabetes under 40. As there is variation in enhanced practices in delivery of care processes and 3 treatment targets that a review of performance focusing on 2023-24 data is undertaken across all enhanced GP practices to identify and agree areas for improvement. • Consideration should be given to funding further targeted support for people diagnosed with **Type 2 diabetes under 40** to provide an additional review, ensure all care processes are completed and provide additional advice from a health and wellbeing coach. • The data shows the LLR **enhanced practice scheme** is delivering benefits for people with diabetes registered in those practices. In addition, the high workload in practices with high prevalence is matched to a degree with greater resources offered by the scheme. It is recommended that the enhanced scheme continues, and when

	circumstances allow funding for the scheme increase to allow increasing staff costs to be met. • Work is required to improve the level of referrals to and registrations to the **Health Living programme for people with Type 2 diabetes**. There is a need to work with people with diabetes and providers of diabetes education to understand why people from ethnic minority groups and deprived populations are not being referred to, commencing, and completing structured education. There is a need for further community engagement to promote the benefits of diabetes education and support. • There is variation in **prescribing** of GLP-1, SGLT2 and Insulin for people with Type 2 diabetes across PCNs. This identifies potential educational opportunities for primary care around diabetes prescribing. There are potential opportunities for significant savings to the ICB due to variation in GLP1 prescribing and NPH insulins. • ICB to undertake an analysis to explore where patients with Type 2 diabetes and high HbA1c are not being initiated on **insulin therapy** (including HbA1c over 8% and only on 1 diabetic therapy and HbA1c over 75 [9%] and over 86 [10%] and not prescribed insulin). • PCNs, GP practices and University Hospitals Leicester are encouraged to undertake a **health equity audit of the uptake of technologies** (CGM, Insulin Pumps and Closed Loop) to understand any variation in uptake by deprived and ethnic minority populations and to develop an action plan to address this variation. The approach to promotion of these technologies needs to change to take account of the existing inequity. • It is important to improve the **prevention and early diagnosis of kidney disease** particularly in Leicester City. Work is required to improve the provision of Urine Albumin and eGFR testing for patients with diabetes particularly amongst south Asian population.
Health Inequalities Action Plan	
Develop a **Health Inequalities Action Plan** for implementation of agreed recommendations to address health inequalities and co-ordinate and support the implementation of the Action Plan.	A report of the findings from the review of health inequalities within diabetes and the recommendations for addressing health inequalities were presented and agreed at ICB Diabetes Delivery Group in December 2024. It is planned that the report and recommendations will also be presented to the ICB to obtain approval of the report's recommendations. A Diabetes Health Inequalities Action Plan will be developed and agreed by the LLR ICB Diabetes Delivery Board and implementation of the Action Plan will be overseen by this Board.
Evaluation Framework	
Develop an evaluation framework to measure the outcomes of implementing the Health Inequalities Action Plan and support the evaluation of implementing the Action Plan.	The logic framework has been shared with the Clinical Lead for the collaborative working project as a resource to assist the LLR ICB Diabetes Delivery Board to develop an evaluation framework for the Diabetes Health Inequalities Action Plan agreed by the Diabetes Delivery Board and ICB.

4.0 Project timelines

The project commenced in August 2023 and was completed in December 2024. This project lasted 3 months longer than originally planned. This was due to a delay of three months in presentation of the Report and Recommendations to the ICB Diabetes Delivery Board which was delayed from September to December 2023.

5.0 Project Outcomes

The report and recommendations were presented in December 2024 to the LLR ICB Diabetes Delivery Board for consideration and approval.

The project has delivered the following benefits:

- Identification of areas where patients are experiencing inequity in access to diabetes services and recommendations proposed to deliver improvements for patients.
- The Clinical Lead for diabetes has recognised that this is the first time that the ICB has been able to undertake analysis of health inequalities to this level and the learning from the implementation of a population health management approach to addressing health inequalities in diabetes will help to inform the implementation of similar projects in other disease areas/population groups within the ICB.
- Sanofi has gained improved knowledge of the needs of the customers in managing patients with diabetes who experience inequalities of care and how targeting health inequalities can be used to improve patient care.
- Improvement of Sanofi's corporate reputation with stakeholders within LLR ICB and partner organisations through creation of a positive and supportive relationship and bringing expertise and rigour to support the data analysis of health inequalities in diabetes.

The project has proposed a series of recommendations to the ICB Diabetes Delivery Board. The Board will develop an Action Plan to address health inequalities in diabetes. Implementation of this action plan has the potential to deliver the following additional benefits:

- To ensure equity of pathway access, provision, and outcomes for patients with diabetes in Leicester, Leicestershire & Rutland ICB ensuring the right patients receive the right care in the right place at the right time.
- Quicker and more equitable access to care for patients with diabetes.
- Reduction in unwarranted variations in care for patients with diabetes through targeting the programme at areas of high deprivation and health inequality.

In addition, the data analysis undertaken early on within this collaborative working project has informed and acted as a template for the population health analysis work by undertaken by Sanofi within the other diabetes collaborative working projects. We had a positive experience of working with the representative from ML Commissioning Support Unit to gain access to data and support with the production and analysis of data.

6.0 Project Feedback

Written Feedback on the outcomes of the collaborative working project and working with Sanofi has been received from:

Professor Azhar Farooqi OBE, GP Clinical Lead for Diabetes, Leicester, Leicestershire, and Rutland ICB:

"This has been an important project to LLR ICB and the Diabetes Delivery Group. The findings are important to the local service and have national implications in the organisation and delivery of services to reduce inequity in outcomes for people with diabetes.

As far as I am aware this is the most comprehensive report of diabetes health inequalities data undertaken by any health system in the UK. The work has been presented regionally and has been well received. LLR ICB has requested further discussion in some of its key committees to facilitate service planning.

We are grateful for the significant support of Sanofi which has been of high quality. The Sanofi team led by Martin Cassidy and Lee Blakeney has been very committed and approachable at all stages of the project.

The work undertaken by team on databases, data analysis and the report writing has been very impressive and more than met my expectations for this project. Thank you.