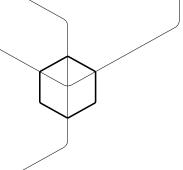


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Preventing type 2 diabetes with Healthy Goals

Healthy Goals is a targeted programme to help prevent the rise of type 2 diabetes in the South Asian community in Leicester. It spans 12 weeks and focuses on education, lifestyle changes and physical activity.



Prevalence of type 2 diabetes is rising in the diverse city of Leicester

Leicester is a particularly diverse city located in the East Midlands of England. More than 70 languages¹ are spoken in Leicester, and of the city's 354,000 inhabitants² only half identify as being of white ethnicity³. The city has a significant population of people of South Asian descent, and people of South Asian ethnicity are known to be at higher risk of developing type 2 diabetes⁴.

More than half (56.5%) of the adult population of Leicester is living with overweight or obesity⁵, which is thought to be the main factor that puts people at risk of developing type 2 diabetes⁴.

The city has one of the highest diabetes prevalence rates in the UK, with about 9% of Leicester's population known to have diabetes, which is higher than the average diabetes prevalence of 6.9% in England⁶. Cities Changing Diabetes research in Leicester has indicated that there are substantially more people in the city who are undiagnosed or who have prediabetes.

A total of 29,720 people are known to be living with type 2 diabetes in Leicester⁷. Cities Changing Diabetes research in Leicester suggests that more than 6,750* additional people have undiagnosed type 2 diabetes and more than 16,800* have prediabetes.

An unequal healthcare landscape

Local evidence from Leicester suggests that a lack of awareness of and knowledge about diabetes among ethnic minority groups could limit the access that these groups have to preventative healthcare in general practice settings⁸. The Leicester-based Centre for Black and Minority Ethnic (BME) Health works specifically to address inequalities in healthcare access and health outcomes by using community-based research staff to engage with these communities.

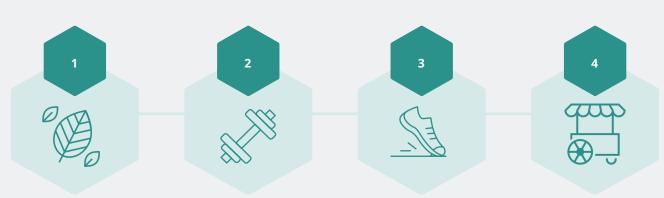
Leveraging the city's sporting pedigree

Leicester is home to a proud sporting tradition that spans cultural and ethnic divides. In addition to a successful football team, the city also has high engagement in sports such as rugby and cricket. In 2016, the top-flight local football team brought home a Premier League title for the first time in the club's history, and this acted as a rallying point for the community. The city provides leisure and sports facilities and has 13 large parks and 31 outdoor gyms.

Assembling a winning team

After working in close collaboration with the Centre for BME Health, the Leicester Changing Diabetes team determined that the South Asian community in Leicester might benefit from a targeted intervention to increase engagement, with support to encourage healthy living. This led to the creation of Healthy Goals, a 12-week programme incorporating educational content about healthy lifestyles, diet and physical activity.

Leicester's environment



The city of Leicester has 13 large parks

The city of Leicester has 31 outdoor gyms

800 runners and walkers take part in Parkruns every Saturday Leicester is home to Europe's largest outdoor market

*Estimated figures. 2



In Leicester, the organiser was Leicester Diabetes Centre. Lead roles were taken by members of the Cities Changing Diabetes team in Leicester and the Centre for BME Health. An enthusiastic partner was found in the community outreach arm of the Premier League's Leicester City Football Club, Leicester City in the Community, which was able to offer coaching sessions as part of the introduction to exercise component of the Healthy Goals programme.

The IMPACT team at Leicester Diabetes Centre – the outcome of a partnership between University Hospitals of Leicester NHS Trust and the University of Leicester – provided expertise to support the development of the educational element of the Healthy Goals programme.

Importantly, the Healthy Goals initiative had the support of local municipal bodies, including the city council and its network of community centres.

Diet and exercise prioritised

The founding partners determined that a blended approach of physical education and discussion-led classes would be effective. The educational component of the programme was designed to encourage healthy lifestyle and dietary changes and was adapted to the target audience: older and physically inactive individuals from the South Asian community who did not typically engage with locally delivered health promotion programmes.

Within this target audience, Leicester City in the Community identified women as a priority group, because of the barriers they face that may prevent them from engaging in physical activity or introducing beneficial lifestyle changes. These barriers, identified through Cities Changing Diabetes research in Leicester, include lack of confidence and inclusion as well as misconceptions about what it takes to improve health.

Consequently, some cohorts of the Healthy Goals programme, which was designed around culturally appropriate lifestyle and dietary changes, were delivered specifically to women. This provides a good example of how programme design is optimal when it adapts to the local context and to the stakeholders involved in the delivery and reception of the programme.

Healthy Goals in action: small steps to a healthier life

The IMPACT team at Leicester Diabetes Centre delivered the educational component of the programme. These participant-led sessions provided a forum for attendees to discuss their diet, physical activity and lifestyle. A trained facilitator used interactive games and activities to guide these conversations and help participants understand various elements of a healthy lifestyle. The topics covered helped participants to understand, for example, how many calories there are in the food they are eating, the difference between good and bad fats, what counts as physical





activity and how much exercise they should be aiming to do. These activities and peer-led conversations encouraged participants to make more informed decisions about their behaviour and empowered them to make healthy choices.

The educational component was followed by a one-hour session of accessible and socially engaging physical activity led by Leicester City in the Community. The activity component increased peer support, strengthened motivation and encouraged programme uptake.

The 12-week programme provided excellent opportunities for the South Asian community in Leicester to take small steps towards lifestyle improvements.

"We're doing as much as we can to promote healthier lifestyles across Leicester in a bid to drive down the number of people who are being diagnosed with type 2 diabetes. The Healthy Goals programme is the perfect way to empower communities and give them the opportunity to take better care of their health."

Prof Melanie Davies, Director of the Leicester Diabetes Centre and Professor of Diabetes Medicine at the University of Leicester.

Healthy Goals in brief

Organiser: Leicester Diabetes Centre
Project leads: Sophie O'Connell, Sunny Rohit
and Centre for BME Health
Location: Leicester, United Kingdom
Action type: education and physical activity
programme to prevent type 2 diabetes

Action arena: community, health

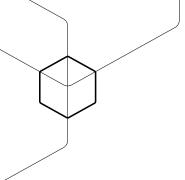
Key focus area: empowering individuals from
the South Asian community to lead healthier

Health issues: type 2 diabetes, overweight, obesity, social isolation

Cities Changing Diabetes Leicester mission statement: "To raise awareness, educate and train communities to deliver type 2 diabetes prevention and lifestyle education in Leicester City."







Challenges along the way

Some key challenges have been met and are being overcome in the programme delivery.

One example has been delivering the Healthy Goals programme at scale. As the initial focus has been on developing and establishing the new intervention, there has not yet been an opportunity to deliver the programme at scale and measure its impact across a larger section of the community.

The Cities Changing Diabetes team in Leicester is now working with local partners to embed the Healthy Goals programme and widen its impact. This includes working with local sports clubs to incorporate the programme into their health and well-being offerings in order to support sustainability and provide resources for more local people to benefit from it over the longer term.

Programme outcomes

The Healthy Goals programme has been well received and is delivering on its core aims. Advocates for and stakeholders of the intervention have spoken of the positive impact experienced by participants, which is supported by solid feedback.

"The Healthy Goals programme gives attendees the chance to participate in some gentle exercise, develop skills to make healthy lifestyle changes and meet new people. We've overseen three different groups so far, and feedback has been positive, with plans for local sports clubs to continue incorporating the programme into their health and wellbeing offerings for the local community."

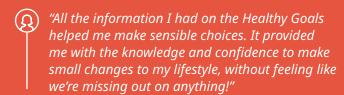
Dr Sophie O'Connell, programme manager.

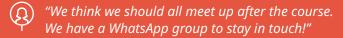
Anthropometric data

Although the data are currently based on a small number of participants (24), measurements for weight, blood pressure, body fat, fat mass, body mass index (BMI) and waist circumference all reduced between the baseline and follow-up readings.

Looking at the 15 individuals who provided full baseline and follow-up data sets, there were statistically significant reductions in waist circumference, systolic blood pressure and diastolic blood pressure, but only a borderline significant reduction in BMI. This could be attributed to the small number of participants who provided full data.

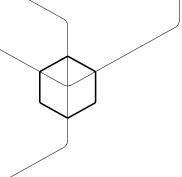
We shoot, we score!





- "We all really enjoyed playing new sports and new activities; it's the first time we did circuit training, and we thoroughly enjoyed it. It was something different. We were shown how to do exercise with the resistance bands, so I went out and bought the resistance bands so I can do them at home!"
- "Learning how to use the local outdoor gyms was quite good. Me and my friends normally go for a walk around, but because it was nice, we decided we should use the outdoor gym and used the outdoor gym there. Because they've never tried it and I had, I showed them how to use it!"

Healthy Goals participants



Catalysts for success

Leicester Diabetes Centre, which is one of the leading diabetes research facilities in Europe, was fundamental to the development of Healthy Goals, providing evidence-based educational content for the programme and coordinating the input of local partners in order for the programme to benefit from their collective expertise and resources.

A strong network to inspire successful interventions

Leicester is a member of the Cities Changing Diabetes Global Academic Network, which is convened on an annual basis at University College London (UCL). The network gives access to comparative data from local and global partners, and provides an opportunity for sparring and dialogue with other Cities Changing Diabetes cities. This network and collaboration strengthen the evidence base necessary for developing and improving successful interventions and activities such as the Healthy Goals programme.

Three key reasons have been highlighted as catalysts for success for the Healthy Goals programme:

Local expertise

There was a pool of knowledge and expertise among local partners that supported the collaboration. Experts from the Centre for BME Health, behavioural change specialists at Leicester Diabetes Centre and coaches from Leicester City in the Community were instrumental in the success of the programme.

Asset awareness

Making use of community facilities, such as outdoor gyms and health and community centres, has meant people have the tools to participate in and continue with their new exercise regime in their own neighbourhoods.

Community activation

The intervention was created by people in, or closely acquainted with, the wider community. These people were able to leverage good social and cultural advice to effectively target the local population of South Asian origin.

Official Healthy Goals partners

The Cities Changing Diabetes programme in Leicester is a joint working project funded by and developed in collaboration with Leicester Diabetes Centre and Novo Nordisk. Leicester partners involved in the development and delivery of Healthy Goals include:

Centre for Black and Minority Ethnic (BME) Health

Leicester Diabetes Centre

Leicester City in the Community.

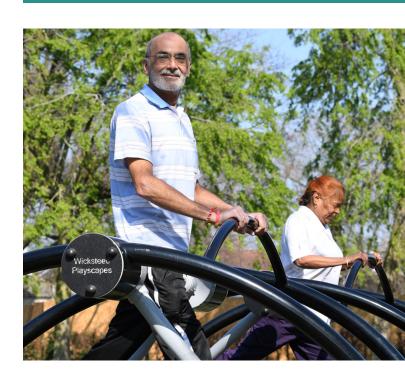
Healthy Goals timeline

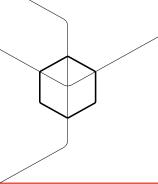
In 2017, it was announced that Leicester would become the first city in the UK and the third in Europe to join the global Cities Changing Diabetes programme.

The first Healthy Goals cohort kicked off on 20 August 2018 at a community centre.

The second cohort kicked off on 28 February 2019 at a health centre in Leicester.

The third cohort kicked off on 20 August 2019 at a health centre in Leicester.





Lessons learned

A number of lessons have been learned from the Healthy Goals initiative in Leicester that can inspire intervention planners in different cities:

- 1. It has been essential to **engage directly with the community**, to understand the obstacles to good health in the target group.
- **2. Peer and community support** has been crucial to the programme's success.
- **3. Wide collaboration** across health experts, the city and community outreach organisations demonstrates the value of building bridges between stakeholder groups.
- 4. A network of practitioners and academics provided an evidence-based programme syllabus that supported the programme's development.
- **5. Knowledge and best practice sharing** have played an important role in helping craft the right programme.
- **6.** A **focused and targeted intervention** programme (particularly aimed at older women from the South Asian community) tailored its approach accordingly.

Next steps

Shooting for more

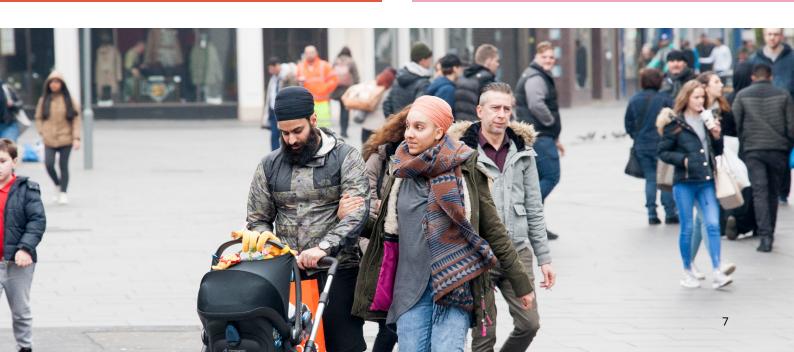
the Leicester Changing Diabetes team is looking to support the delivery of further sessions of the Healthy Goals programme in collaboration with Leicester City in the Community. However, local restrictions due to COVID-19 have forced the team to consider how they can do so in a safe manner. This may include running home exercise classes remotely as the physical activity element.

Beyond football... let's not forget about cricket

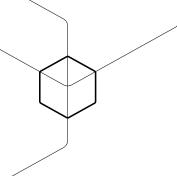
It is intended that the healthy lifestyle and nutritional education elements of the Healthy Goals intervention will be deployed in association with the Walking Cricket programme delivered by Leicestershire County Cricket Club. In this way, South Asian men can receive elements of the education plan at the same time as engaging in their preferred physical activity.

Passing the bal

The Women's Activity Centre in Halifax, West Yorkshire is also working in collaboration with the Leicester Diabetes Centre to pass on Healthy Goals to the local community there. The Leicester team will be training staff from the Women's Activity Centre in how to deliver the programme remotely. This will be a test case to assess the viability of taking the Healthy Goals programme beyond Leicester.



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Take more than one shot

Multiple targeted interventions can exist side by side. Cities Changing Diabetes Leicester demonstrates that running more than one programme in a city can reach a number of target groups effectively.

The Leicester Changing Diabetes umbrella programme has supported several interventions alongside Healthy Goals, enabling different groups to be targeted at the same time as raising awareness about type 2 diabetes in the local community and encouraging a more holistic approach to health. The setting of these interventions varies, ranging from primary schools to local workplaces and places of worship.

These other initiatives include: (a) Evaluating the implementation in Leicester of the Daily Mile, a national initiative to encourage schoolchildren to be active, (b) Walking Cricket, a slower-paced format of the game that is ideal for men and women over the age of 50, (c) United Leicester, a pilot programme delivered by local sports clubs to encourage primary school children to stay healthy, (d) Empowering Places of Work and Worship, leveraging these key settings as places where community champions can raise awareness of type 2 diabetes among their peers and (e) the Diabetes Pledge, which unites local professional sports clubs and the city council in a commitment to drive down the incidence of type 2 diabetes in Leicester.



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