

Leicester Changing Diabetes

Melanie J Davies CBE
on behalf of the CCD Team



University Hospitals of Leicester **NHS**
NHS Trust



Leicester Diabetes Centre

Agenda

- **Introducing CCD**
- **Why Leicester**
- **Leicester Changing Diabetes**



Diabetes

- **Diabetes is one of the most pressing health challenge of the decade**
- **As of 2017, 425 million people around the world have diabetes projected to reach 629 million by 2045**
- **Majority of them live in cities**

The rapid rise of urban diabetes

- Studies on the health impacts of urbanisation reveal that it can have both positive and adverse effects¹
- The increase in urban diabetes is driven by the ways people live, work, exercise, eat and sleep in cities
- Half of all people live in cities. By 2050 this figure will increase to two thirds ²



1. McMichael AJ. The urban environment and health in a world of increasing globalization: issues for developing countries. *Bull World Health Organ.* 2000;78(9):1117–1126.
2. UNDESA. United Nations Department of Economic and Social Affairs. World Urbanization Prospects, the 2014 Revision, Highlights. 2014. 978-92-1-151517-6.

The Cities Changing Diabetes partnership

- Launched in 2014.
- First-of-its-kind partnership platform for cross-disciplinary, cross-sector collaboration
- Initiated by Novo Nordisk
citieschangingdiabetes.com
- The programme sets out to
 - map the problem in five 'study cities'
 - to share learnings with many cities around the world
 - to act as a catalyst to meaningful action which can defeat the urban diabetes challenge



Cities Changing Diabetes



Copenhagen



Houston



Johannesburg



Rome



Xiamen



Mexico City



Shanghai



Vancouver



Tianjin



Beijing

and more joining



Leicester

**ETHNICALLY
AND
DIVERSE
CITY**

**23% OF
LEICESTER CITY
RESIDENTS
BORN OUTSIDE
OF UK – TWICE
THE UK
AVERAGE**

**28,500 (8.9%)
PEOPLE IN
LEICESTER
WITH
DIABETES**

**Over 1,000
news cases
of T2DM
every year**

Leicester Diabetes Centre (LDC)

Clinical delivery



A Centre built around a diverse and growing patient population



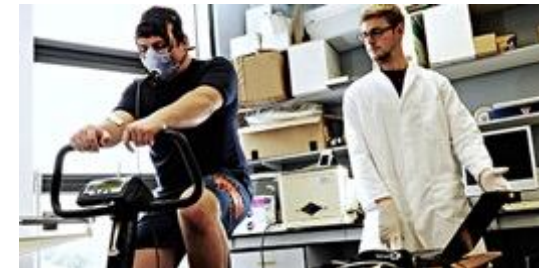
Patient and public involvement



Healthcare
Professional
training and
development



Physical activity
and
experimental
medicine



Clinical research,
environment and
infrastructure/
laboratory



Patient
education



Home of Diabetes Risk Score

- Leicester Diabetes Self-Assessment Risk Score project has seen the development of a diabetes risk assessment tool
- Available on the Diabetes UK website, Boots and Lloyds chemists and Tesco stores
- Used by more than **1,568,000** people
- Recommended for use in the NICE guidelines on preventing Type 2 diabetes

DiABETES UK
KNOW DIABETES. FIGHT DIABETES.




Lloydspharmacy

1,485,050
completed

An infographic titled 'DIABETES Know the Score' with Bengali text. It explains that Type 2 Diabetes can develop over time, often without symptoms, and can lead to heart, eye, and kidney problems. It states that 1 in 7 middle-aged adults have higher blood sugar levels, putting them at greater risk. The infographic encourages making small changes to prevent or delay diabetes and mentions a risk score test. It features a warning sign with an exclamation mark and the word 'ডায়াবিটিস' (Diabetes), and a 'Healthy Life' sign with an upward arrow. A photo shows three women sitting at a table, likely participating in a study or consultation.

DIABETES
Know the Score

You can do this risk score yourself and it only takes a few minutes. You may feel fine but Type 2 Diabetes can develop over a number of years before you feel unwell. By the time the problem is found, it can be quite advanced. Diabetes can cause heart, eye and kidney problems with your eyes, feet and kidneys managed early enough.

1 in 7 middle aged adults have a higher than normal blood sugar. This means they are at greater risk of diabetes.

Good news is that few small changes can prevent or delay Type 2 Diabetes. This test could be the first step to find out if you are having a higher risk of Type 2 Diabetes in the future?

শরীরে যখন রক্তের শর্করার (গ্লুকোজ) মাত্রা বেশি হয়, তখনই টাইপ ২ ডায়াবিটিস হয়। বেশির ভাগ ক্ষেত্রে, রক্তের শর্করার মাত্রা টাইপ ২ ডায়াবিটিস পূর্ণ হওয়ার পথে। আপনি এই প্রকল্পে নিয়ে আপনার নিজস্ব টাইপ ২ ডায়াবিটিস হওয়ার ঝুঁকি/সম্ভাবনা জানতে পারবেন।

ডায়াবিটিস

Healthy Life

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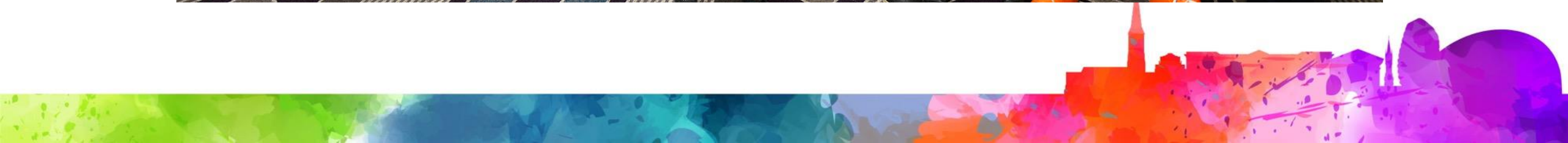
A vibrant watercolor splash in shades of green, blue, pink, and orange serves as a background for the text.

Leicester

Changing Diabetes



Launch May 2018



Our Urban Diabetes Challenge – those already with diabetes

People who have diabetes but are
undiagnosed ¹

About 6600

5.7% of those aged 40-75 years

1 in 17 of those aged 40-75 years

People known to already have
diagnosed diabetes in

Leicester: **28,500**

8.9%

1 in 11

This is just the tip of the
iceberg



Our Urban Diabetes Challenge – adults with Prediabetes

Large numbers for pre-diabetes
are lurking below the surface ¹⁻²

14.2% of adults aged 40-75 years

17,000 of adults aged 40-75 years

1 in 7 of adults aged 40-75 years



Our Urban Diabetes Challenge – risk factors in our youth

Large numbers for pre-diabetes

8.3% of those aged 12-14 years

1009 in Leicester

1 in 12

37%

of children in school year 6
(aged 10-11) overweight or obese ¹

1400

1 in 2.5

23%

are obese ¹

947

1 in 4



Creating a new paradigm for tackling diabetes

3 HOSPITALS

LEICESTER IS ONE OF THE
BIGGEST AND BUSIEST
NHS TRUSTS IN THE UK



Creating a new paradigm for tackling diabetes

HEALTHCARE SYSTEM

LEICESTER HAS:
63 GP SURGERIES
86 PHARMACIES

SCHOOLS

LEICESTER HAS
108 SCHOOLS
WITH OVER 57,000 PUPILS



Creating a new paradigm for tackling diabetes

FAITH

LEICESTER HAS:
193 PLACES OF WORSHIP
45 RELIGIOUS GROUPS

DIVERSITY

LEICESTER HAS 70 LANGUAGES
AND/OR DIALECTS SPOKEN AND
50% POPULATION OF ETHNIC
MINORITIES WITHIN THE CITY



Creating a new paradigm for tackling diabetes



Creating a new paradigm for tackling diabetes

6 BIG PLANS

LEICESTER CITY COUNCIL HAVE STRATEGIES IN PROGRESS THAT COVER HEALTH AND WELLBEING, LOCAL FOOD PLAN, CYCLE ACTION PLAN AND MANY MORE

4 TOP SPORTS TEAMS

LEICESTER IS HOME TO SPORTS TEAMS INCLUDING RUGBY UNION, FOOTBALL, BASKETBALL AND CRICKET.

ENVIRONMENT

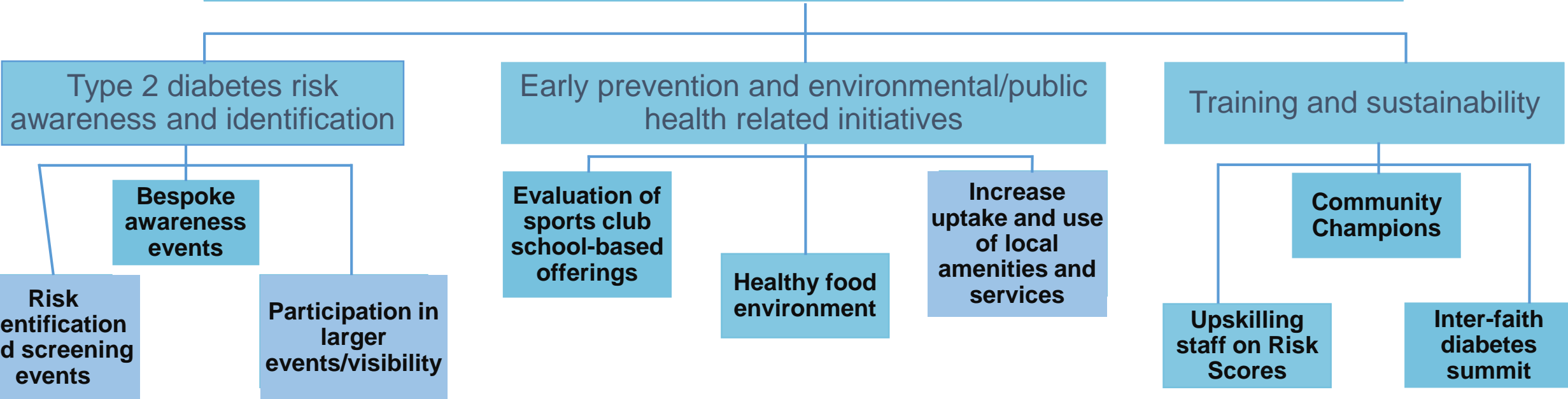
LEICESTER CITY COUNCIL OWNS AND OVERSEES 13 PARKS AND HAS INVESTED IN 31 OUTDOOR GYMS.



Leicester Changing Diabetes



To raise awareness, educate and train communities to deliver type 2 diabetes prevention and lifestyle education in Leicester City



Leicester Changing Diabetes

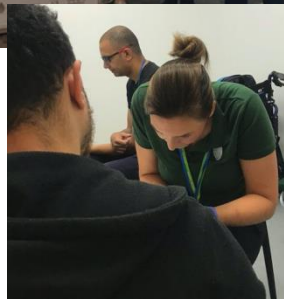


Type 2 diabetes risk awareness and identification

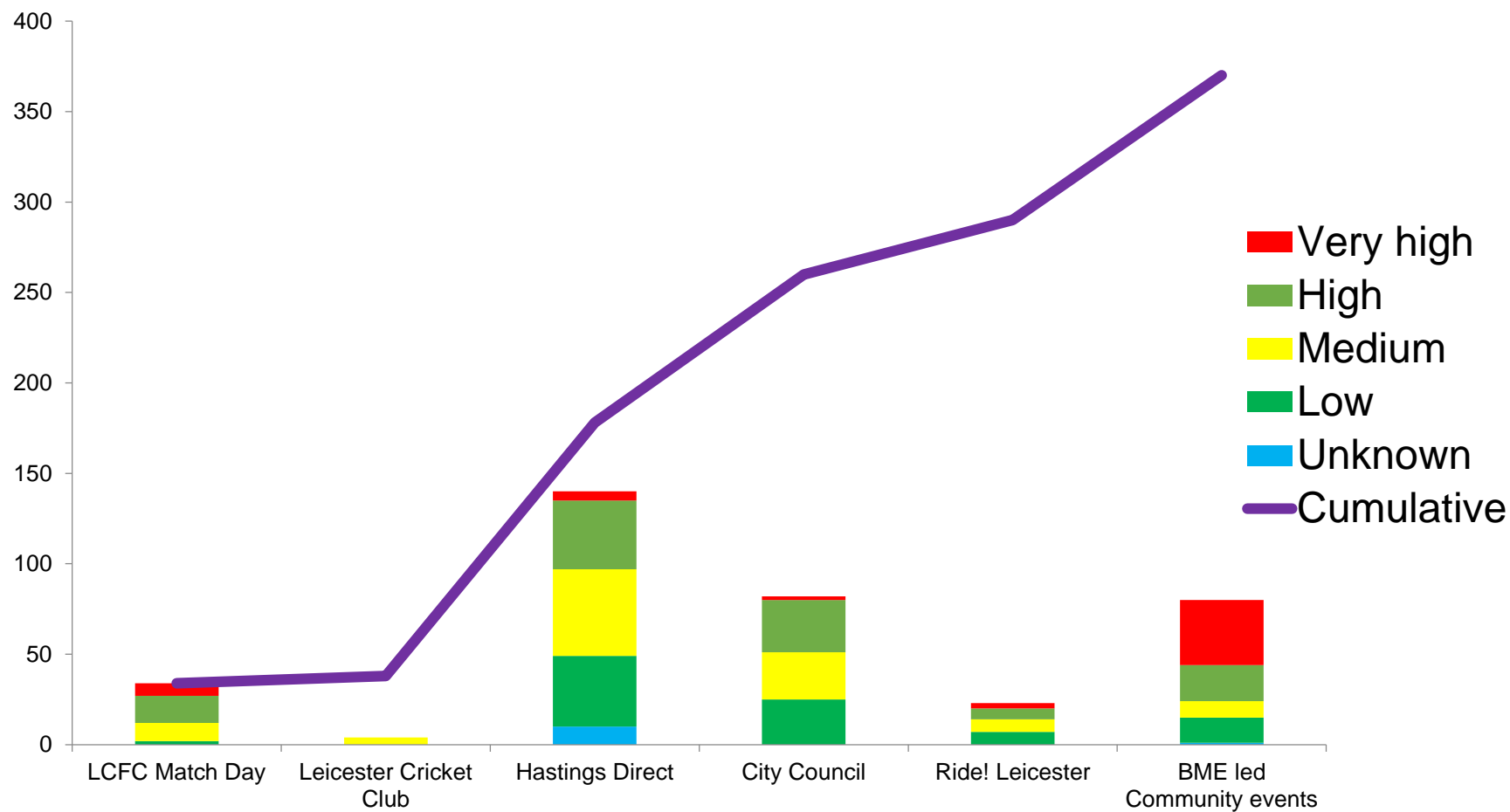
Bespoke awareness events

Risk identification and screening events

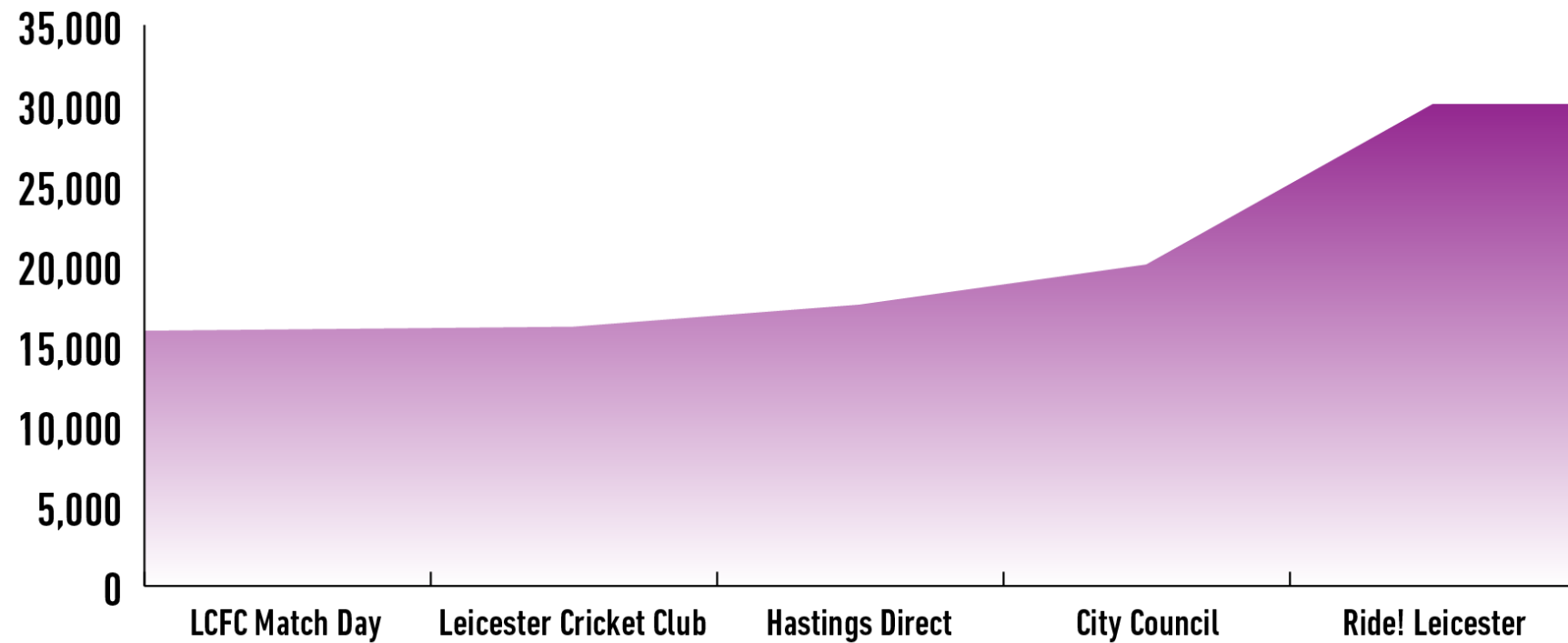
Participation in larger events/visibility



Screening Activity May-September



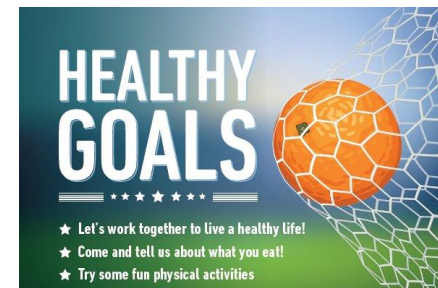
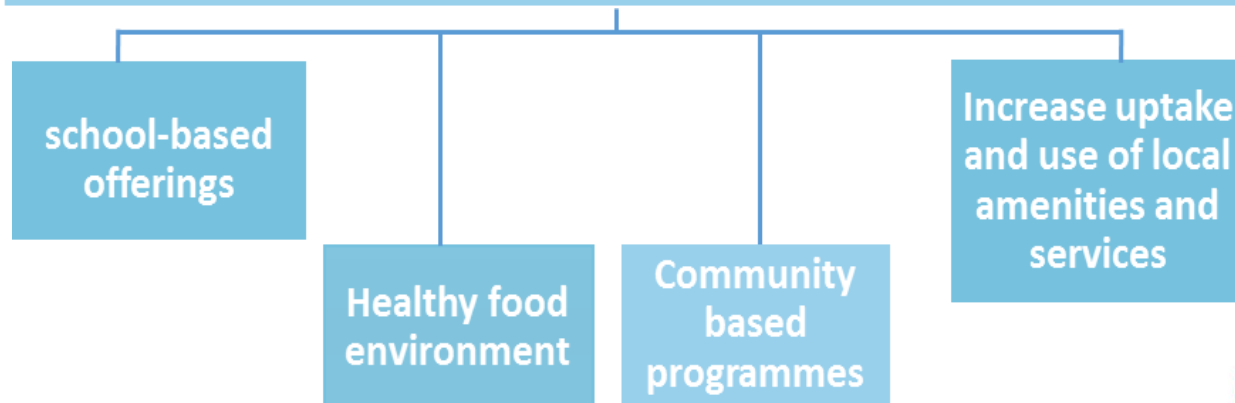
Awareness of CCD across Leicester May-August



Leicester Changing Diabetes



Early prevention and environmental/public health related initiatives



Environment makes a difference

- Higher number of cases of diabetes and obesity in Leicester if you live within 500 m² of a fast food outlet¹
- We know the prevalence of Type 2 diabetes in Leicester neighbourhoods with higher green space are 5% lower than areas with lowest green space²

1 Bodicoat DH et al Public Health Nutr 2015#

2 Bodicoat DH et al BMJ Open 2014

Working with the Walking and Cycling Team - Planning, Development and Transportation at Leicester City Council



Professional Sport Clubs Diabetes Pledge



Daily Mile evaluation in City schools

- Research funds received through the University of Leicester
- To lead on a process evaluation of how The Daily Mile is operating in Leicester City schools
- Provide case studies to schools
- Gather evidence to contribute to research knowledge of this rapidly expanding programme

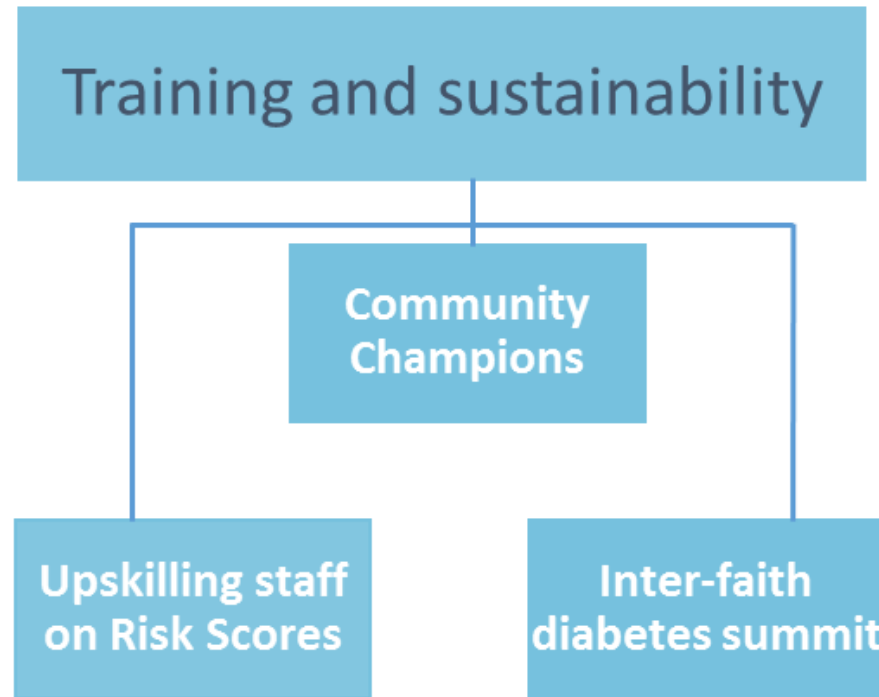


Leicester Changing Diabetes



TYPE 2 DIABETES
KNOW YOUR RISK

[https://riskscore.diabetes.org.uk/s
tart](https://riskscore.diabetes.org.uk/start)

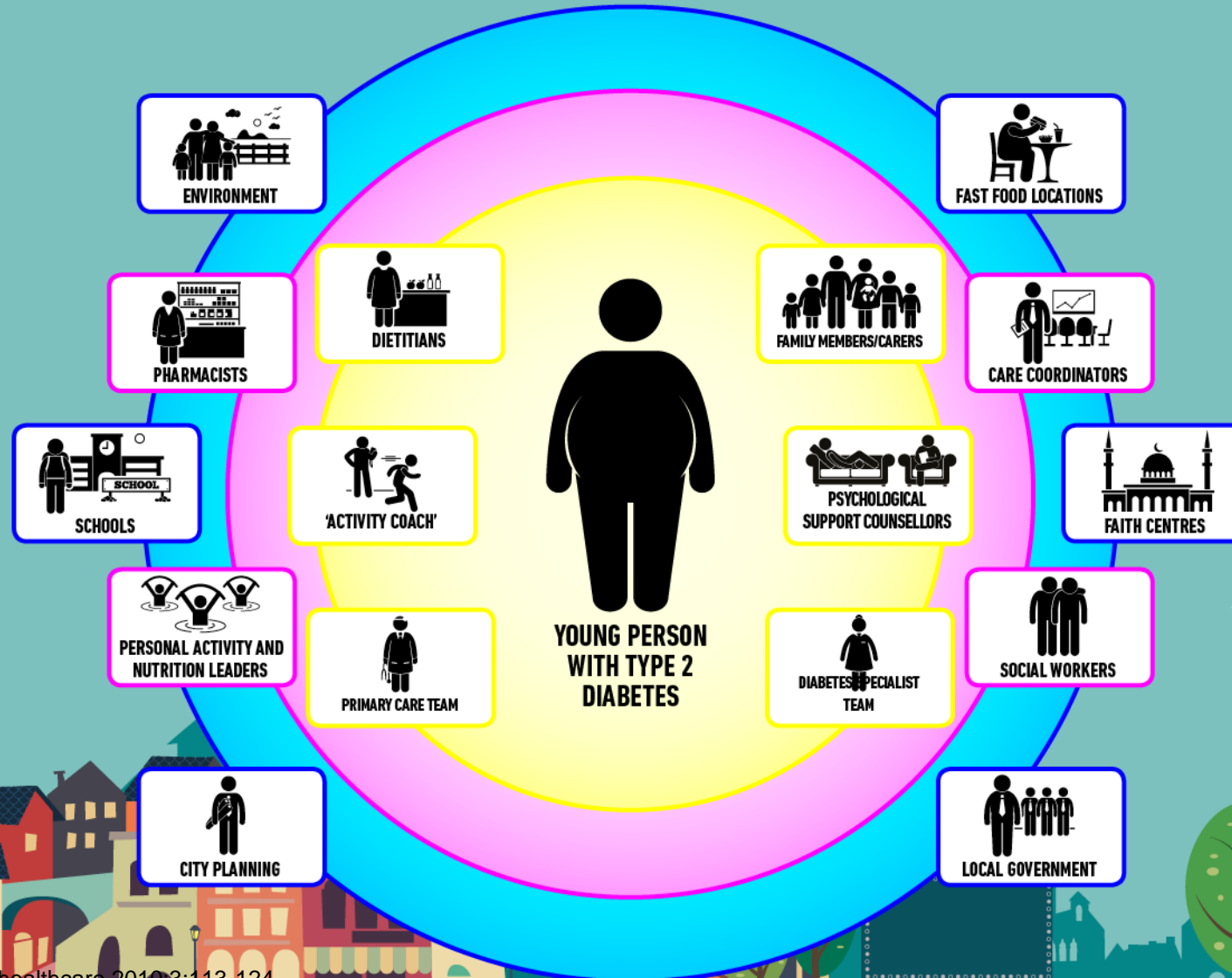


T2D risk identification and education in places of worship, work and community

- Identifying and training leaders from all communities to help Leicester Change Diabetes
- Bespoke training to enable change agents to deliver
 - Risk identification, education
 - Prevention messages
 - Sign-posting to existing City services, amenities and groups
- Understand individual and network sustainability needs
- Model can be used or adapted for any urban setting where people come together



Thinking differently about how we work together



International CCD partnerships

- Academic Lead Deidre Harrington presented our project plans at the CCD Global Academic Network meeting in Rome in June 2018
- International CCD summit at APPG Westminster in Dec
- Collaboration with Houston re faith centre project



Thank you



www.leicesterdiabetescentre.org.uk



www.facebook.com/LeicesterDiabetesCentre



@LDC_Tweets #LDCPathway
@LeicChangingDiabetes
@citiesdiabetes