Help us find the Top 10 research priorities for Type 2 diabetes

Last year we asked people living with Type 2 diabetes, carers and health care professionals to tell us the questions about Type 2 diabetes that they would like to see answered by research. Over 2,500 people replied, submitting over 8,000 questions.

We've turned those responses into research questions and combined the duplicates. We now have a long list of questions and need your help to find the Top 10.

What are we asking you to do?
We need you to select the 10 questions that matter to you the most from the list of 114 questions. You will complete your selection in more than one stage, which we hope will help you manage the long list.

Why are we doing this?
We want to give you a louder voice in research. People living with Type 2 diabetes or healthcare professionals working in the field know the issues that affect them most. We want to make sure that research addresses these issues and focuses on the right things.

Keeping your information secure
This is an anonymous survey but we will also ask for a little information about you. This is so we can understand who is responding and whether we're reaching as wide a range of people as possible. All of the questions in this section are optional. We won't be able to identify you in any of the survey results. We will keep the information you give us secure.

To find out more, go to **www.diabetes.org.uk/t2-top-10**

STAGE 1

First of all, please tell us a little bit about you:

Which of the following best describes you?

- ☐ A person living with Type 2 diabetes
- ☐ A carer or family member of someone living with Type 2 diabetes
- ☐ A health care professional

Have you ever been diagnosed with gestational diabetes (diabetes which develops during pregnancy)?

- ☐ Yes
- ☐ No

What type of health care professional are you?

- ☐ Doctor
- ☐ Nurse
- ☐ Allied Health Care Professional
- ☐ Other – Please specify

A. Doctor (tick the box which describes you best)

- ☐ Doctor in training
- ☐ Consultant Diabetologist/Associate Specialist/Staff Grade
- ☐ GP
- ☐ GP specialising in diabetes
- ☐ Public Health Physician
- ☐ Ophthalmologist
- ☐ Renal physician
- ☐ Obstetrician
- ☐ Other (please specify)

B. Nurse (tick the box which describes you best)

- ☐ Diabetes specialist nurse
- ☐ Practice nurse
- ☐ Psychiatric nurse
- ☐ District nurse
- ☐ Research nurse
- ☐ Other (please specify)

C. Allied Health Professional (tick the box which describes you best)

- ☐ Health Visitor
- ☐ Dietician
- ☐ Podiatrist
- ☐ Midwife
- ☐ Optometrist
- ☐ Physiotherapist
- ☐ Occupational Therapist
- ☐ Psychologist
- ☐ Health Care Assistant
- ☐ Other (please specify)

STAGE 2

Choose your priorities

Step 1: in the *left hand box* please tick the ten top questions where you think more research is needed. The list is fairly long so please make sure you read through to the end.

Step 2: In the *right hand box*, please rank the selected questions into order of importance (1 = most important and 10 = least important)

Tick the ten most important questions to you	Type 2 questions	Rank your selected top ten (1=most important, 10=least important)
	Can Type 2 diabetes be **cured or reversed**, what is the best way to achieve this and is there a point beyond which the condition can't be reversed?	
	How do external factors influence the **risk** of developing Type 2 diabetes? Those factors could include lifestyle, body weight, diet, exercise, other medications and the environment.	
	How can **care and advice** offered to people with Type 2 diabetes be improved and made more consistent, and what impact could this have on health?	
	How effective are different **diets and eating patterns** for managing Type 2 diabetes, who are they most effective in and what are the potential harms?	
	How can a better understanding of the relationship between our **genes and the environment** improve awareness of Type 2 diabetes and lead to better detection and prevention in different groups of people?	
	How can healthcare professionals be supported to deliver **better care** for people with Type 2 diabetes?	
	What are the best ways to **control and manage** Type 2 diabetes, and how do we find and overcome factors stopping people from managing their condition effectively?	
	What role do **fats, carbohydrates and proteins** play in managing Type 2 diabetes, and are there risks and benefits to using particular approaches?	
	Should **diet and exercise** be used as an alternative to medications for managing Type 2 diabetes, or alongside them?	

	What causes **nerve damage** in people with Type 2 diabetes, who does it affect most, how can we increase awareness of it and how can it be best prevented and treated?	
	What is the most effective way to get **evidence-based information** to different people depending on their need, and does this have a positive or negative impact on their Type 2 diabetes?	
	What is the best way to **raise awareness** of how to prevent, diagnose and manage Type 2 diabetes in different settings and groups of people?	
	What are the immediate and long-term **complications** of Type 2 diabetes, what causes them, and how are they best identified, prevented, treated and managed?	
	What is the most effective way to **screen** for Type 2 diabetes and at what scale should it happen (e.g. individuals or populations)?	
	What is the safest, most effective and cost-effective form of **physical activity** to help people with Type 2 diabetes manage their condition?	
	What is the best way to use **metformin** to gain the most benefit for people with Type 2 diabetes while minimising side effects?	
	Why does Type 2 diabetes get **progressively worse** over time, what is the most effective way to slow or prevent progression and how can this be best measured?	
	What are the **best new treatment approaches** for improving blood glucose control in people with Type 2 diabetes?	
	What are the best ways to **deliver insulin** and monitor its impact in people with Type 2 diabetes, and how can these be tailored better to the individual?	
	What are the pros and cons of **testing blood glucose levels** for people with Type 2 diabetes, and how often and when should it be done?	
	How can **psychological or social support** be best used to help people with, or at risk of Type 2 diabetes, and how should this delivered to account for individual needs?	
	What are the most effective characteristics of a Type 2 diabetes **education** programme?	
	What is the most effective approach to **weight loss** in people with Type 2 diabetes and what factors might affect this?	

	How can people with Type 2 diabetes be supported to make **lifestyle changes** to help them manage their condition, how effective are they and what stops them from working?	
	What are the best **devices for self-monitoring** blood glucose levels for people with Type 2 diabetes, and how can they be made available and more user-friendly?	
	What are the important interactions between Type 2 diabetes **medications** and other drugs, what are the side effects and how should they be managed?	
	What **support** do people with Type 2 diabetes need, how can support be best provided to individuals and their carers, and what is its impact?	
	How often should **regular checks** for people with Type 2 diabetes be carried out to improve health, without causing unnecessary inconvenience? These checks include blood tests, eye checks and urine tests.	
	What causes **eye disease** in people with Type 2 diabetes, who does it affect most, how can we increase awareness of it, and how can it be better prevented and treated?	
	How can **health during pregnancy**, such as gestational diabetes, help to establish the risk of Type 2 diabetes for women and their children, and how can this be used to reduce the risk?	
	What is the best way to accurately **differentiate between** Type 1 and Type 2 diabetes?	
	Do **personalised treatment plans** improve the health of people with Type 2 diabetes and what should those plans include?	
	What is the most effective way to provide **information** about Type 2 diabetes without stigmatising people living with the condition?	
	What is the link between Type 2 diabetes and **mental health conditions**, and how can they be best prevented, identified and treated?	
	To what degree does **bariatric surgery** improve weight loss, lead to remission from Type 2 diabetes and extend life expectancy in people with Type 2 diabetes?	
	Can **complementary medicines** be safely and effectively used in the prevention or management of Type 2 diabetes?	
	What is the most effective way to **prevent** Type 2 diabetes using diet and how can information about that diet be best delivered?	

	What is the best way to **diagnose** Type 2 diabetes as early as possible to improve long-term health?	
	What are the long-term benefits of Type 2 diabetes **education** programmes, how should they be measured, and what helps or blocks access to the programmes?	
	What role does the quantity and different types of **sugar**, including fruit sugars and substitute sugars, play in the management of Type 2 diabetes, and how should we better advise people on recommended amounts?	
	How effective are **very low calorie diets** at preventing or managing Type 2 diabetes, and what are the risks and benefits of this approach?	
	What factors increase the risk of **heart conditions** in people with Type 2 diabetes, and how effective are current treatments in preventing and managing these complications?	
	What is the most effective way to manage Type 2 diabetes in the **frail and elderly**?	
	What are the best ways to help people with Type 2 diabetes to cope with and manage their condition within the **community**, and how can these be made accessible?	
	Why do **blood glucose levels** vary day-to-day in people with Type 2 diabetes for no apparent reason (for example, the Dawn Effect), what is the impact and how can it be avoided?	
	How can **gene therapy or stem cell therapy** be used to treat Type 2 diabetes?	
	How can we improve care and treatment during **pregnancy** for women with Type 2 diabetes and their babies, and how should it be delivered and evaluated?	
	What are the benefits and harms of **statins** for different groups of people with Type 2 diabetes?	
	What are the **best approaches to managing** Type 2 diabetes, including the order in which drugs are prescribed and combined?	
	What is the best way to avoid or manage **episodes of hypoglycaemia** in people with Type 2 diabetes, including those that happen during the night?	
	How can people living with multiple **chronic conditions** be best supported to manage their Type 2 diabetes?	

	What is the **best HbA1c range** for people with, or at high risk of Type 2 diabetes, and what factors can influence this?	
	What is the best way to encourage people with Type 2 diabetes to **self-manage** their condition, including those in minority or hard-to-reach groups, and how should it be delivered?	
	What can help or hinder **finding people at risk** of Type 2 diabetes, and how can this knowledge be used to find more people earlier on?	
	How can we identify and consider **cultural or religious factors** that influence how a person manages their Type 2 diabetes?	
	How can we identify **genetics** linked to Type 2 diabetes and use these to find those at risk?	
	What causes **tiredness or fatigue** in people with Type 2 diabetes, what are the long-term consequences and what is the best way to manage it?	
	What is the link between different **endocrine conditions** (like polycystic ovary syndrome or thyroid disorder) and Type 2 diabetes, and should people with these conditions be regularly screened for Type 2?	
	How safe and effective are different **oral medications** for **reducing blood glucose levels** in people with Type 2 diabetes in comparison with each other?	
	How does **ethnicity** influence the **risk** of Type 2 diabetes and what is the best way to prevent Type 2 diabetes for different ethnic groups?	
	Can we identify **subtypes** of Type 2 diabetes and the factors that increase the risk of developing each subtype?	
	How do we identify people with Type 2 diabetes who are **unlikely to engage** with their treatment plans, including medication and lifestyle changes, and what are the best strategies to overcome this?	
	What are the most effective strategies for identifying, preventing, treating and raising awareness of **foot ulcers and Charcot foot** in people with Type 2 diabetes?	
	What is the most effective way to prevent or manage Type 2 diabetes in **children and young people**?	
	Could new treatment strategies be developed to overcome the **side effects of insulin therapy**, such as weight gain, for people with Type 2 diabetes while still having the same level of benefit?	

	What advice should women with or at risk of Type 2 diabetes receive around **pregnancy**, who should deliver it and what impact could it have?	
	What are the best times in a person's life to assess their **risk** of Type 2 diabetes and try to prevent it?	
	What is the most effective, cost-effective, and **needle-free way** to **monitor blood glucose levels** in people with Type 2 diabetes?	
	What effect do **conflicting recommendations** about **diet** have on people with Type 2 diabetes?	
	What causes **gestational diabetes**, how does the risk differ amongst women and can it be better identified and prevented?	
	What causes **amputations** in people with Type 2 diabetes, who does it affect most, how can we increase awareness of it, and how can it be better prevented and treated?	
	How does **stress and anxiety** influence the management of Type 2 diabetes and does a positive mental wellbeing have an effect?	
	How can we understand and reduce the **risk of complications** during **pregnancy** for women with Type 2 diabetes, including earlier diagnosis and better treatments?	
	What is the link between **sexual problems**, such as erectile dysfunction or loss of libido, and Type 2 diabetes, and how can people be supported to overcome them?	
	What are the best ways to encourage people with, or at risk of Type 2 diabetes to increase their **physical activity**?	
	Can we develop a tool to **calculate the likely course** of a person's Type 2 diabetes, including life expectancy and complications?	
	How does Type 2 diabetes **progress without medication**, when should certain treatments be started and what impact do they have on a patient's health?	
	What are the **right treatment targets**, such as insulin dose levels or weight, for people with Type 2 diabetes and how should they be communicated and achieved?	
	Are **islet or pancreas transplants** an effective treatment for Type 2 diabetes?	

	What is the link between **autoimmune conditions** and Type 2 diabetes?	
	What alternative ways are there to deliver **kidney dialysis** for people with Type 2 diabetes? For example, in a quicker or more mobile way.	
	What is the most effective way to **communicate** about the **rise** of Type 2 diabetes and its complications to different groups of people and do scare tactics help?	
	How do we **identify people at high risk** of Type 2 diabetes and help to prevent the condition from developing?	
	How should **information about nutrition**, including food labels and menus, be presented to help people with Type 2 diabetes to make healthy choices?	
	What are the benefits and harms of **GLP-1 analogues** for different groups of people with Type 2 diabetes?	
	How can we develop better ways to support **insulin dosing** for people with Type 2 diabetes in different situations, such as travel or during hospital stays?	
	How do different types of **alcohol** influence the **management** of Type 2 diabetes?	
	What is the safest and most effective way to **prevent or treat complications** affecting the kidney, heart, liver or pancreas in people with Type 2 diabetes?	
	What is the most effective way to **prevent** Type 2 diabetes in those at **high risk** (for example, at an individual or population level), including those with a healthy weight, and who should it be delivered by?	
	What is the link between **skin conditions** and Type 2 diabetes and how can these be best managed? This includes rashes, itching, soreness and excess skin.	
	What is the most effective way to manage Type 2 diabetes in an **inpatient (hospital) setting**, how can healthcare professionals be supported to do so, and what can best predict poor outcomes in hospital?	
	What is the link between **dietary fat** and the risk of **cardiovascular disease** in people with Type 2 diabetes?	
	What factors, such as ethnicity or age, increase the **risk of complications** in people with Type 2 diabetes?	

	What are the most effective strategies for raising awareness of **diabetic foot disease**, the role of self-foot checks, and the importance of annual foot checks in people with Type 2 diabetes?	
	What is the link between **cancer** and Type 2 diabetes?	
	What is the most effective way to care for people with Type 2 diabetes who have a **mental health** condition, and how can healthcare professionals be supported to do so?	
	Is there a link between **socio-economic status** and Type 2 diabetes in Black, Asian and Minority Ethnic (BAME) groups?	
	What is the relationship between Type 2 diabetes and **dementia** and how can it be prevented?	
	What causes **insulin resistance**, what are the symptoms and is there a way to test for it early on?	
	What causes different types of **chronic pain** in Type 2 diabetes and what is the best way to treat them?	
	What is the link between **inflammatory conditions** and Type 2 diabetes and how can they be best managed?	
	What causes **stomach conditions** in people with Type 2 diabetes and what is the best way to treat and manage them? This includes gastrointestinal neuropathy, reflux, diarrhoea, bloating, and hiatus hernia.	
	What is the link between **neurological conditions** and Type 2 diabetes?	
	What are the most appropriate biomarkers for **identifying people** with Type 2 diabetes at risk of **heart conditions or stroke**, and should these be screened for?	
	What is the most effective way to care for people with, or at risk of Type 2 diabetes who have an **eating disorder**? For example, through social or psychological support.	
	How can we establish whether a person with Type 2 diabetes is **permanently cured** or **has reversed** their condition?	
	What is the link between **gut bacteria** and Type 2 diabetes?	

	What is the most effective way to care for people with Type 2 diabetes who have **learning disabilities**, and how can healthcare professionals be supported to do so?	
	Does improving HbA1c in people with Type 2 diabetes improve the **outcomes of surgery**?	
	What is the link between **rare genetic disorders** and Type 2 diabetes?	
	What is the link between **chronic fatigue** and Type 2 diabetes?	
	What is the link between **tinnitus** and Type 2 diabetes?	
	What causes nephropathy (**kidney damage**) in **South Asian** people with Type 2 diabetes and how can we gain better insight into the development of the disease between different populations?	
	How can Type 2 diabetes be **prevented** in people who are at high risk due to **family history**?	

STAGE 3

It would be helpful for our research to know a little more about you to help us understand the range of people responding to the survey. We won't use your data for any other purposes.

Q1) Are you

- ☐ Male
- ☐ Female

Q2) What is your ethnic Group?

- ☐ White British
- ☐ Irish
- ☐ Gypsy or Irish Traveller
- ☐ White and Black African
- ☐ White and Black Caribbean
- ☐ Bangladeshi
- ☐ Pakistani
- ☐ Indian
- ☐ Chinese
- ☐ Caribbean
- ☐ African
- ☐ Arab
- ☐ Prefer not to say
- ☐ Any other ethnic group, please describe

Q3) What is your age?

- ☐ Under 20
- ☐ 20-29
- ☐ 30-49
- ☐ 50-69
- ☐ 70-79
- ☐ 80+

Q4) We want to make sure that we have received responses from all across the UK, therefore we would like to know the first part of your post code, which is the first three (or possibly four) characters.

Thank you very much for your time

What will happen to my choices?

We'll take the questions with the most votes forward to a final workshop. At this workshop we will bring together people with Type 2 diabetes, carers and healthcare professionals to decide on the most important questions, to produce a list of Top 10 list priorities. After that workshop, we'll announce the Top 10 research priorities for Type 2 diabetes. This will help us decide what to fund and we'll make sure other organisations that fund research know how important the priorities are. The Top 10, along with the long-list of questions in this survey, will be published on the James Lind Alliance website (http://www.jla.nihr.ac.uk/about-the-james-lind-alliance/). They can be accessed by anyone with an interest.

Thanks again for your time and keep an eye out for the final Top 10 later this year.