

What is diabetes?

- Serious condition where your blood glucose is too high.
- Associated with increased morbidity and mortality.
- In Scotland affects 5.5% of the population.

Type 1 diabetes
10%

Type 2 diabetes
90%

Autoimmune
The body does not produce insuline
Younger age

Obesity
The body produces insuline but is not used efficiently
Older age

- HEALTHY & BALANCED EATING**
- APPROPRIATE BODY WEIGHT**
- MODERATE PHYSICAL EXERCISE**
(E.G. WALKING 30 MINUTES A DAY)

HOW TO PREVENT?



NO

CAN BE PREVENTED

YES

17,000

Every year 17,000 people are diagnosed with type 2 diabetes in Scotland.¹⁵

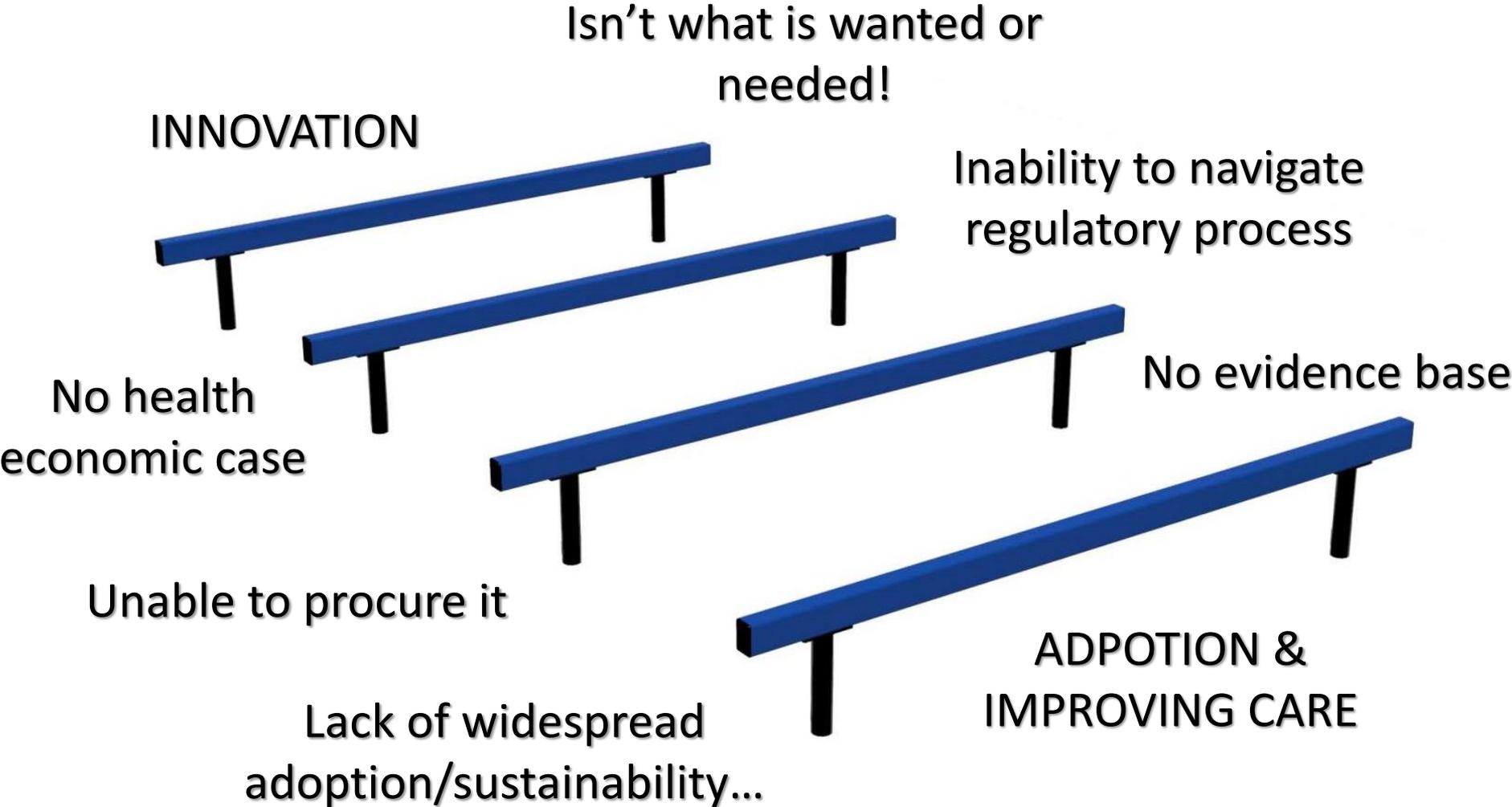


The NHS spends around 9% of its total health expenditure treating type 2 diabetes.¹⁹

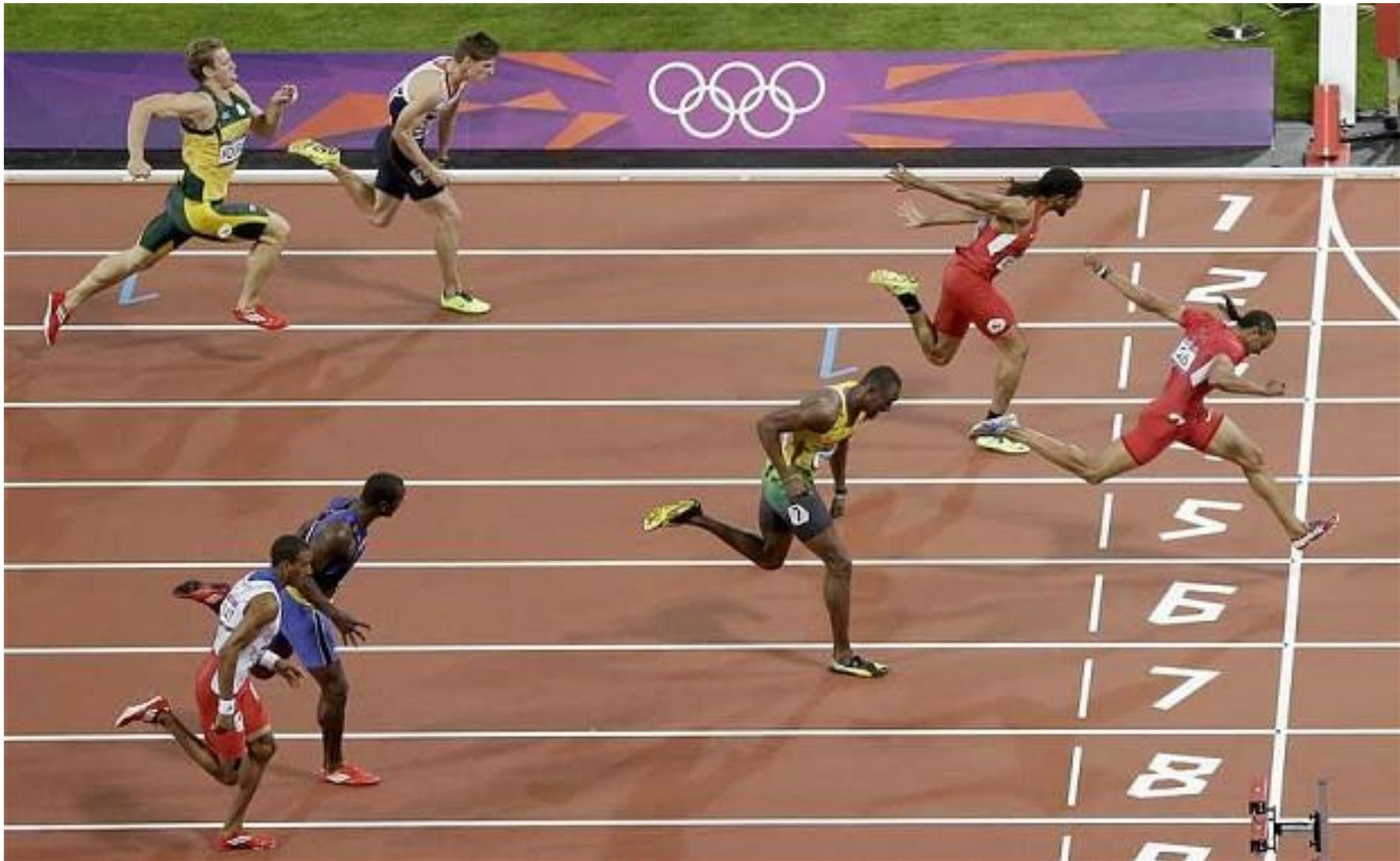
500,000

An estimated 500,000 people in Scotland are at high risk of developing type 2 diabetes.¹⁶

Innovation to Adoption Hurdles



Innovation to Adoption Outcomes



Diabetes Technologies & Innovation

Overcoming Hurdles



Coalition of the willing: Scottish Diabetes Technologies & Innovations Group

Representation

Clinical Community: Adult and Paediatric Diabetologists,
National Co-ordinator for Diabetes Technologies

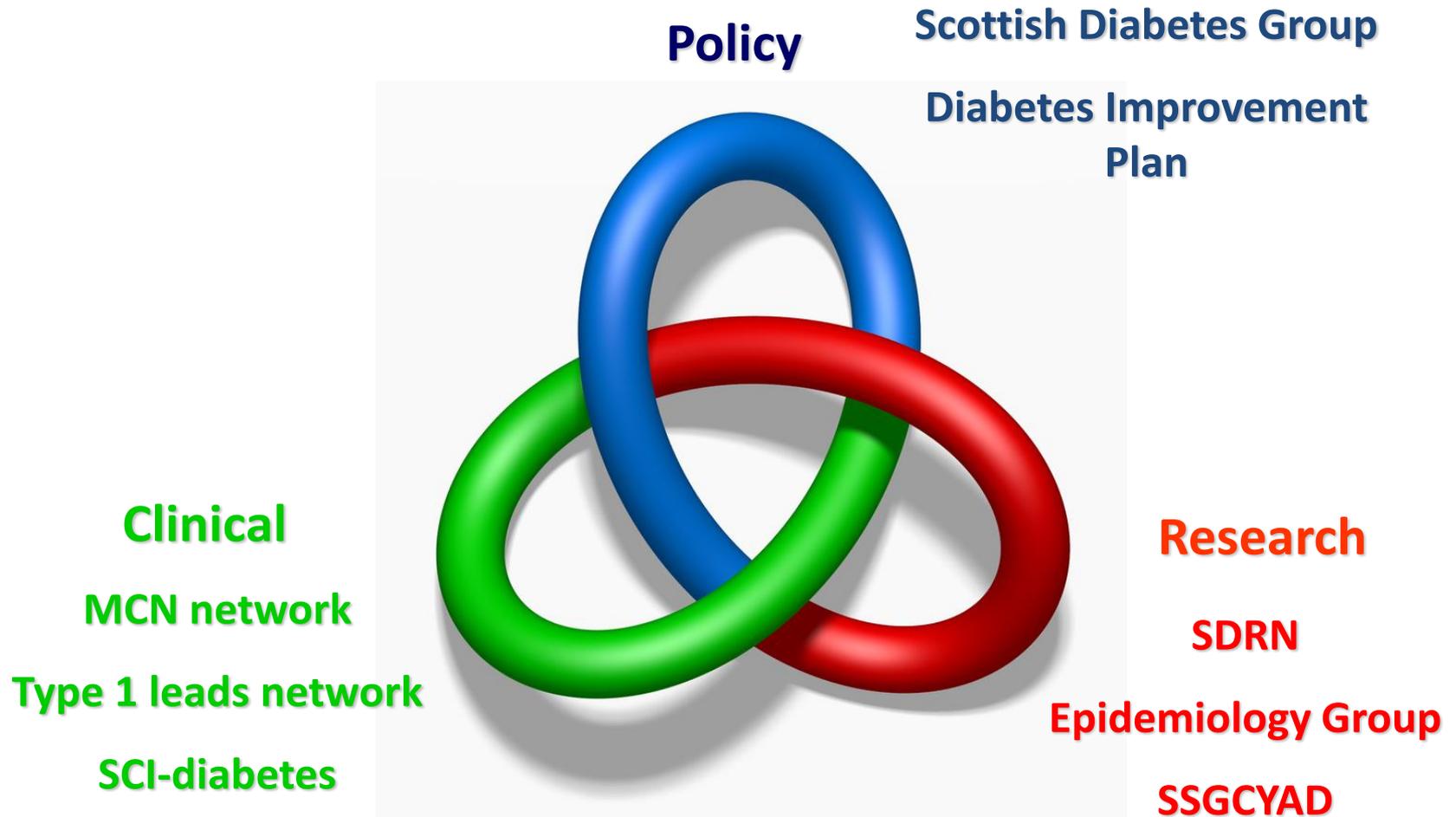
Research Community: Scottish Diabetes Research Network
Scottish Study Group Young with Diabetes

Scottish Government: Scottish Diabetes Group and Type 1 Diabetes Subgroup
CSO Office: Innovations
CMO Office: Specialty Adviser

Scottish Health Technologies Group
Procurement: Diabetes Technologies
SCI-Diabetes
My Diabetes My Way
Clinical Engineering Department GGC
Leads of ongoing Innovation Projects

Diabetes Technologies & Innovation Overcoming Hurdles

Existing Assets



Vision

- Develop the use of data, technologies and Artificial Intelligence (AI) to improve diabetes care and outcomes in Scotland.
- Scotland to become an internationally renowned 'test bed/research' arena for the development and assessment of technologies used in diabetes care.

Diabetes Technologies & Innovation

Overcoming Hurdles



Existing Assets

The screenshot shows the NHS Scotland website for diabetes management. The header includes the NHS Scotland logo and the site title 'my diabetes my way'. A navigation bar contains links for HOME, MY DIABETES, INFORMATION, LOCAL SERVICES, INVOLVEMENT, REGISTER, ABOUT US, NEWS, and FEEDBACK. A search bar is located on the left. The main content area features a green banner with the text: 'Welcome to My Diabetes My Way. The NHS Scotland interactive diabetes website to help support people who have diabetes and their family and friends. You'll find leaflets, videos, educational tools and games containing information about diabetes. You can now also use this website to view your own up-to-date diabetes clinic results, to help you manage your condition more effectively.' To the right of the banner is an 'Emergency Contact' section with a 'Read' button. Below the banner are two main sections: 'My Diabetes' with a 'Login' and 'Register' button, and 'Information' with an 'Explore' button.

Internationally renowned diabetes IT system

Used in the day to day care of individuals with diabetes

Complete population capture >99% of those with diabetes in Scotland

Macro and micro level data: developing clinical dashboard

Utilised to drive health improvements and produce world leading epidemiological research

Diabetes Innovations

'Accelerator' Infrastructure

- Innovation
- Regulation
- Trial work/evaluation
- Dedicated clinical/research 'test beds'.
- Formal assessment via the Scottish Health Technology Group
- Procurement: developmental approach
- Adoption
- 'Real world' evaluation at population, health board and individual level to ensure clinical and cost effectiveness for NHS Scotland.

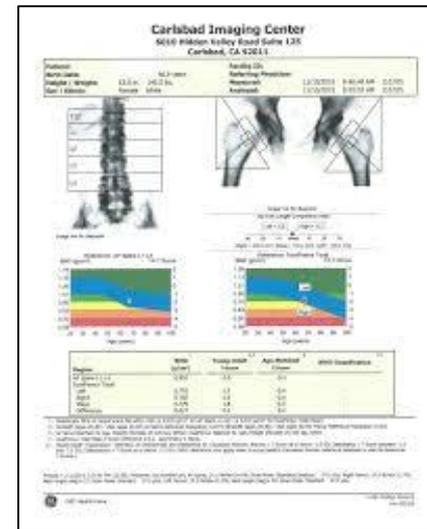
AIM: Ability to support an initiative at any point in the pathway

Diabetes & Endocrine Innovation Challenges

Improving the outcomes in Diabetes related foot disease



Osteoporosis Case Finding



Inpatient Care- Transforming Diabetes Care in Generic Hospital Ward Settings